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Faculty of Engineering & Information Technology

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Software Graduation Project

CraftBlend



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As we reach the milestone of our graduation, we are filled with deep gratitude. This project is more than just the result of our hard work, it is a reflection of the support, guidance, and encouragement we have received along the way.

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DISCLAIMER STATEMENT

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ABSTRACT

In the last few years, we noticed that people tend to open their own businesses and started promoting their work on social media. At the beginning, it was very effective, convenient and their content reached the targeted audience. This tempted many people to start their own businesses, which has led to an increase in the number of small business accounts on social media, resulting in businesses facing increasing pressure to have a widespread online presence.

Our project's objective is to develop a user-friendly platform for small businesses, giving them their own space to display and sell their work. By providing a platform customized to their needs, we aim to help these businesses grow and reach a wider audience. The platform will also organize the process of handling customer orders, ensuring efficiency and convenience for both the business owner and the customer.

We offer many features in our project, customers will be able browse through different categories, when they select their preferred category, the platform will display all the small business accounts available under that category. Customers can then explore the work of each business, view products, check details, and place orders directly. Additionally, customers will have the option to place special or custom orders, allowing them to request personalized products according to their preferences. Moreover, customers will have the option to interact with the business owners, ask questions, and leave feedback or reviews.

There are many applications today that focus on specific industries or individual businesses, but our project is designed to serve a broader range of small enterprises. Many of these businesses would need to create their own applications to meet their unique needs, which can be both time-consuming and costly.

Our project simplifies this process by offering a flexible platform that allows small businesses to easily join our system, providing them with the tools they need to increase their visibility and manage orders efficiently.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	i
Disclaimer Statement.....	ii
ABSTRACT	iii
INTRODUCTION.....	1
1.1 Problem	1
1.2 Objectives	1
1.3 Scope of The Work	2
1.4 Importance	4
1.5 Organization of The Reports.....	4
LITERATURE REVIEW	5
2.1 Introduction	5
2.2 Supporting Small Businesses with Social Media and E-Commerce.....	5
2.3 Community-Driven Platforms	5
2.4 Competitive Landscape	6
Methodology.....	7
3.1 Tools, Technologies and Programming Languages	7
3.1.1 Tools	7
3.1.2 Programming Languages	7
3.2 Database Design and Management.....	8
3.3 Features Implementation.....	9
3.3.1 Mobile Application	9
○ Welcome Page	9
○ Create Account	10
○ Create User Account	11
○ Create Business-Owner Account	12
○ Login	15
○ Location Selection	15
○ User Home Page	16

○	User Views Stores by Category	18
○	User Views Store’s Products	20
○	User View Product Details page	23
○	User’s Wishlist	25
○	User Makes a Special Order	26
○	User’s Profile	30
○	User Points	35
○	User’s Cart	36
○	Placing An Instant Order	37
○	Placing A Scheduled Order	40
○	User Views Previous Orders	42
○	User Rates Stores and Products	44
○	Search	45
○	Store-Owner Subscription	47
○	Adding New Product	50
○	Edit and Delete Product	57
○	Store Profile	59
○	Owner’s Profile Menu	62
○	Store Information Management	63
○	Managing Delivery Locations	64
○	Advertisements Management	65
○	Managing Special Orders	68
○	Managing Store Subscription	73
○	Managing Point System	74
○	Managing Sales	75
○	Managing Store’s Orders	79
○	Notifications	85
○	Feed Page	87
○	Admin View Platform Statistics	93
○	Admin Dashboard	93
○	Adding New Admin	94
○	Viewing Current Admins	94

○	Admin Manages Stores	96
○	Admin Manages Categories	96
○	Reviewing Category Suggestions	98
○	Managing Subscription Plans	98
○	Admin’s Profile	100
○	Chatting System	101
○	Other Pages	104
	3.3.2 Website	105
	Result and Discussion	123
4.1	Constraints	123
	Conclusion and Future Work	124
5.1	Summary	124
5.2	What We Have Learned	124
5.3	Future Work	124
	BIBLIOGRAPHY	125

LIST OF FIGURES

Figure	Page
Figure 1: Welcome.....	9
Figure 2: Account Type Selection	10
Figure 3: User Sign up-filling their information.....	11
Figure 4: User Sign Up -selecting their preferred categories.....	12
Figure 5: Store Sign Up-choosing store category.....	13
Figure 6: Store Sign Up- uploading store logo.....	13
Figure 7: Store Sign Up- filling their information.....	14
Figure 8: Login- User.....	15
Figure 9: Location Selection from Map.....	16
Figure 10: Home Page After Sign Up.....	17
Figure 11: Home Page After some time.....	18
Figure 12: Stores Displayed by Category	19
Figure 13: Stores Displayed by Category ‘another city’.....	20
Figure 14: Store’s Product Page Displayed to Users, Store Added to Favorites	21
Figure 15: Searching Through Store’s Product Page and Filtering Products by Price.....	22
Figure 16: User view product’s details.....	23
Figure 17: User Chooses Product’s Quantity, Product Added to User’s Wishlist.....	24
Figure 18: Stock Limit Notification.....	24
Figure 19: User’s Wishlist	25
Figure 20: User’s Wishlist with Filters Applied.....	26
Figure 21: Store’s Special-Order Options.....	27

Figure 22: User Fills Out the Custom-Made Cake Form.....	28
Figure 23: User Submits the Special-Order.....	29
Figure 24: User’s Profile Page.....	30
Figure 25: User Edits their Personal Information.....	31
Figure 26: User Adds Credit Card.....	32
Figure 27: User Adds Credit Card -Validation.....	33
Figure 28: Updated User Profile and Profile Navigation Drawer.....	34
Figure 29: User’s Points.....	35
Figure 30: User’s Cart.....	36
Figure 31: Checkout for Instant Products.....	38
Figure 32: Store Doesn’t Deliver to User’s City.....	38
Figure 33: Placing Instant Order.....	39
Figure 34: Checkout of Scheduled Products.....	40
Figure 35: Checkout of Scheduled Products.....	41
Figure 36: User View Previous Orders.....	42
Figure 37: User View Previous Orders.....	43
Figure 38: User rates Stores and Products after.....	44
Figure 39: Search Page showing most searched items and filtered results.....	45
Figure 40: Filtered search results.....	46
Figure 41:User Chooses Subscription Plan.....	47
Figure 42: Steps to Access Tutorials and Learn to Manage Your Store Features.....	48
Figure 43: Tutorial Videos.....	49
Figure 44: Adding New Product.....	50

Figure 45: Adding ‘Upon-Order’ Product with No Options.....	51
Figure 46: Adding Instant-Delivery Product with Options (1).....	53
Figure 47: Adding Instant-Delivery Product with Options (2).....	53
Figure 48: User View of Added Products.....	54
Figure 49: Adding a Product in a Store in a Different Category	55
Figure 50: Store Owner's View of Products	56
Figure 51: Editing Product Details and Options.....	57
Figure 52: Saving Edits, Deleting a Product from the Store.....	58
Figure 53: Store Profile.....	59
Figure 54: Insights Page.....	60
Figure 55: Store Profile-User view.....	61
Figure 56: Store Owner’s Profile Menu.....	62
Figure 57: Store Owner’s Account and Edit Store Profile.....	63
Figure 58: Configuring Delivery Locations and Charges.....	64
Figure 59: Adding a New Advertisement	65
Figure 60: Managing Active Advertisements, User View of the ad.....	66
Figure 61: Deleting an Advertisement.....	67
Figure 62: Enabling Special Orders.....	68
Figure 63: Setting Up a Special-Order Form.....	69
Figure 64: Adding Custom Fields to a Special Order.....	70
Figure 65: Adding Custom Fields to Complete the Special-Order Form.....	71
Figure 66: Final Special-Order Form Ready for Customers.....	72
Figure 67: Managing Store Subscription	73

Figure 68: updating the Shekel value per point in the store's Point System	74
Figure 69: Products Selection	75
Figure 70: Sales Configuration	76
Figure 71: Sales Preview.....	77
Figure 72: Product on Sale.....	78
Figure 73: Price Change in details 78	Figure 74: Sales Notification
Figure 75: Overview of regular orders - Instant Orders, categorized by their status.....	79
Figure 76: Overview of regular orders - Scheduled Orders, categorized by their status.....	80
Figure 77: Order Details Page, Marking Order as Shipped	81
Figure 78: Customer Receives Notification When Order Status Changes	81
Figure 79: Marking Order as Delivered.....	82
Figure 80: Store Owner Receives Notification When a Special-Order is received.....	83
Figure 81: Overview of Special-Orders categorized by their status.	83
Figure 82: Owner Confirms User's Special-Order, User receives Notification	84
Figure 83: Notification Icon with Unread Indicator	85
Figure 84: View Previous Notifications.....	86
Figure 85: Read and Unread Notifications	86
Figure 86: Post Structure.....	87
Figure 87: Filters.....	88
Figure 88: Home Filter	Figure 89: Popular Filter.....
Figure 90: Favorites Filter.....	89
Figure 91: Likes, Upvotes, Downvotes, Comments.	90
Figure 92: Create store post icon	90

Figure 93: Store Post Creation.....	91
Figure 94: Create Feedback floating button.....	91
Figure 95: Feedback Creation.....	92
Figure 96: Admin Dashboard Showing Platform Statistics.....	93
Figure 97: Main Admin vs. Other Admin Dashboards.....	94
Figure 98: Adding a New Admin.....	95
Figure 99: Viewing and Managing Admins.....	95
Figure 100: Managing Stores.....	96
Figure 101: Category Management, Adding New Category	97
Figure 102: Category Added, Deleting a Category.....	97
Figure 103: Reviewing Category Suggestions.....	98
Figure 104: Category Management, Adding New Category	99
Figure 105: Category Added, Deleting a Category.....	99
Figure 106: Admin’s Profile	100
Figure 107: All Chats Page.....	101
Figure 108: Chat Page.....	102
Figure 109: Uploading and taking a photo.....	102
Figure 110: Admin all-chats page.....	103
Figure 111: About us page, reset password page, forgot password page	104
Figure 112: Web – Welcome, Login.....	106
Figure 113: Web – Type Selection. User Signup.....	106
Figure 114: Web - Store Signup	107
Figure 115: Web – Admin’s Statistics page.....	108

Figure 116: WEB – Adding new admin, viewing all admins.....	108
Figure 117: Web – Admin Manages Categories.....	109
Figure 118: WEB – Admin manages stores, Admin manages Category reviews.....	109
Figure 119: Web – Admin’s profile, Admin’s dashboard	110
Figure 120: WEB – Admin manages subscription plans, edit admin profile	110
Figure 121: Web – Store home page, orders.....	111
Figure 122: WEB – Store order details page, special orders	111
Figure 123: WEB – Store feed page with filters.....	112
Figure 124: WEB – Chatting	112
Figure 125: WEB – Store Profile.....	113
Figure 126: WEB – Database interface.....	113
Figure 127: WEB – Insights Page.....	114
Figure 128: Side Menu + Your Account.....	114
Figure 129: WEB – Manage Delivery locations + Manage Advertisements.....	115
Figure 130: Manage special orders + Manage point system.....	115
Figure 131: WEB – Sales Management.....	116
Figure 132: Manage Subscriptions + Reset Password.....	116
Figure 133: WEB – Tutorials + About us.....	117
Figure 134: Web – User home page, Notification	118
Figure 135: WEB – Wishlist, Search.....	118
Figure 136: Web – User browse categories and stores.....	119
Figure 137: WEB – Product details page, add to Wishlist, add to cart.....	119
Figure 138: Web – user view special-order options and form.....	120

Figure 139: WEB – User’s profile.....	120
Figure 140: Web – user’s cart.....	121
Figure 141: WEB – checkout.....	121
Figure 142: WEB – user views previous orders, orders details page	122

CHAPTER 1

INTRODUCTION

1.1 Problem

With the growing number of small businesses operating online, especially through social media, both business owners and customers face several challenges. Business owners struggle with visibility, as social media algorithms make it difficult for them to consistently reach their audience. Managing orders, responding to customer's questions, and tracking customer engagement also become increasingly complicated. On the other hand, customers find it overwhelming to browse through multiple social media pages, compare different businesses, and place orders in a structured manner.

1.2 Objectives

- **User-Friendly Platform:** Develop an easy-to-use mobile and web application where small businesses can manage their stores, products, and orders seamlessly.
- **Organized Marketplace:** Categorize businesses by industry, making it easier for customers to browse and discover relevant stores.
- **Special Orders Feature:** Enable customers to place custom orders tailored to their needs, allowing businesses to offer personalized products.
- **Efficient Order Management:** Provide store owners with tools to manage, track, and update orders while ensuring smooth processing. Customers and stores will receive **real-time notifications** on order status updates.
- **Interactive Customer Experience:** Implement a chat system for direct communication between businesses and customers, enhancing support and engagement.
- **Interactive Business Feed:** Introduce a social feed where businesses can post updates, showcase new products, and interact with customers through likes and comments. Customers will also receive notifications for updates on posts they follow.
- **Loyalty & Rewards System:** Establish a points-based program where customers earn points with every purchase, which can be redeemed for discounts, encouraging repeat sales.
- **Sales Insights:** Provide businesses with analytics on sales performance and customer interactions.

- **Secure Transactions:** Support multiple payment methods to ensure a smooth and secure purchasing experience.
- **Implement a rating and review:** Customers can rate stores and products, leave feedback, and help ensure quality and trust.

1.3 Scope of The Work

- **Create Accounts:** Users and store owners can create accounts by filling in their personal and business details. The admin oversees platform management, including adding and managing new admins.
- **Edit Profile:** All user types can edit their personal or store information at any time.
- **Change Password:** All user types can update their passwords securely through the settings page.
- **Store Categories:** Store owners select a category for their business, and customers can browse stores based on these categories.
- **Store Management:** Store owners can update their store details, manage their product listings, and configure business settings.
- **Product Management:** Store owners can add, edit, or delete products, set product availability (in stock or upon order), and define product variations and options.
- **Subscription Feature:** Stores must select a subscription plan to activate their account. Admins can create and manage subscription plans.
- **Order Feature:**
 - Adding Items to Cart: Customers can browse a store's products, add items to their cart, and specify order details.
 - Placing an Order: Customers proceed to checkout and confirm their order.
 - Checkout: Customers provide their delivery details, select a payment method, and complete the purchase.
- **Order Types:**
 - Instant Orders: Orders processed immediately upon checkout.
 - Scheduled Orders: Orders that require a preparation time before delivery and allow customers to select a preferred delivery date and time.
 - Special Orders: Custom orders tailored to the customer's specific requests.
- **Order Status Management:** Orders go through different status updates to track progress:
 - Pending: The order is placed and awaiting processing.
 - Confirmed: The store accepts and begins preparing the order.
 - Shipped: The order has been dispatched.
 - Delivered: The order has reached the customer.
- **Special Orders Customization:** Store owners can create custom order forms, allowing customers to personalize their orders with different options.
- **Wishlist Feature:** Users can save their favorite products to a Wishlist for future purchases.
- **Map Page & Location Selection:** Users select their city from a map to customize their browsing experience. If users change their location, the available stores update dynamically.

- **Managing Delivery Locations:** Store owners select which cities they deliver to and set delivery fees. Customers will only see stores that deliver to their location.
- **Loyalty & Rewards System:** Customers earn points on purchases, which they can redeem for discounts. Store owners control the points-to-currency conversion rate.
- **Interactive Business Feed:** A social feed where businesses can post updates, promotions, and new products. Customers can interact through likes and comments.
- **Chat Feature:** Customers and store owners can communicate directly for inquiries, custom orders, or support.
- **Rating & Review System:** Customers can leave ratings and feedback for stores and products.
- **Search & Filters:** Users can search for stores and products by name. Advanced filters allow sorting results based on price, category, and availability. Location-based filtering ensures users only see stores that deliver to their city.
- Notification Feature:
 - User Notifications: Customers receive updates on order status, special-order confirmations, and engagement on their interactions.
 - Store Notifications: Store owners get notified about special-order requests, reviews, and interactions on their posts.
- **Advertisements Management:** Store owners can create ads for their products and display them on the homepage for a set period (maximum one week).
- **Sales Insights & Analytics:** Stores can track their sales performance, customer engagement, and order trends.
- **Favorites Feature:** Users can mark stores as favorites to receive updates and have easier access to their preferred stores.
- Admin Dashboard & Management:
 - Store & Category Management: Admins oversee stores and business categories, reviewing new category suggestions from store owners.
 - Subscription Management: Admins control and manage subscription plans.
 - Platform Analytics: Admins monitor platform-wide statistics, including the number of active users and stores.
- **Secure Transactions:** Multiple payment options are supported to ensure a smooth and secure purchasing process.

1.4 Importance

As CraftBlend is designed to make life easier for small business owners and their customers. With so many businesses relying on social media to sell their products, it has become harder for them to stand out and manage everything efficiently. Many struggles with visibility, handling orders, and engaging with customers in a structured way.

Our platform provides a dedicated space where small businesses can showcase their work, sell their products, and connect with customers, all in one place. It simplifies the buying process for customers, giving them an organized way to browse stores, place orders, and even request custom products. At the same time, businesses get the tools they need to manage their store, orders, and customer interactions more easily. By bringing businesses and customers together in a more structured way, CraftBlend supports local store owners, helps them grow, and makes shopping a smoother experience for everyone.

1.5 Organization of The Reports

- Chapter 1: This chapter introduces the project, outlining the problem CraftBlend aims to solve, the objectives of the platform, its scope, and its significance.
- Chapter 2: We explore existing solutions and related research, highlighting how other platforms support small businesses and where CraftBlend fits in the current market.
- Chapter 3: The methodology chapter, which describes the steps used to develop the system and discusses the tools, technologies, and approaches used to develop the system.
- Chapter 4: Results and discussion, it looks into the project's ultimate result and Constraints we faced.
- Chapter 5: The final chapter provides conclusions and future work, summarizing the project's outcomes and offering insights for potential future improvements.

1.

2. CHAPTER 2

LETERATURE REVIEW

2.1 Introduction

Small businesses face a number of challenges when it comes to growing and staying visible online, as they are often overshadowed by well-known brands that dominate these platforms. CraftBlend offers an e-commerce and social media platform for these small businesses to stand out, and it provide this by offering features such as placing orders, a personalized feed to showcase products, chat options for direct communication, a shopping cart, wish lists for saving items, the ability of making sales and a feed page and so many other features. These features work together to make the buying process easier and make the connection between business owners and customers better.

2.2 Supporting Small Businesses with Social Media and E-Commerce

Social media has become a very important tool for small businesses to reach wider audiences without having to pay extra expenses. However, there is several challenges that these small businesses face when using traditional social media platforms, such as algorithmic changes and competition between them and the well-known brands, they also lack the resources to manage social platforms effectively (Smith, 2020) [1]. Similarly, while e-commerce platforms like Etsy and Shopify provide sales solutions, their focus on providing community engagement is less, and researches shows that its crucial for small business growth (Jones & Kelly, 2021) [2]. CraftBlend fixes these issues by offering platform that it's a combination of e-commerce functionality and social features.

2.3 Community-Driven Platforms

Community-driven platforms provide small company owners with essential resources and a feeling of connection, which can lead to growth and success (Chen & Hu, 2022) [3]. By developing this feeling of community, CraftBlend provides business resources and support systems where small businesses can connect with one another, share their products and ideas and receive feedback from users.

2.4 Competitive Landscape

Although platforms such as Instagram and Facebook help small businesses expand their reach, they do not offer specialized services to help a business handle sale, customer interactions, and growth. CraftBlend combines the best aspects of social media engagement with e-commerce functionality, such as inventory management, order tracking, and integrated customer support. These set of features make CraftBlend a solution that caters to the specific needs of small businesses in the digital age.

3.

CHAPTER 3

Methodology

3.1 Tools, Technologies and Programming Languages

3.1.1 Tools

A number of advanced tools were used during the project's development to ensure accuracy, efficiency, and smooth collaboration across all aspects.

- **VS Code:** Served as the main IDE (Integrated Development Environment) for writing, debugging, and managing code efficiently.
- **Android Studio:** Used as an emulator to test and simulate the mobile application across various virtual environments.
- **MongoDB Compass:** Used as a graphical interface to manage, query, and interact with the MongoDB database, simplifying data handling and analysis.
- **Postman:** Used for making HTTP requests, testing APIs, and ensuring the reliability and performance of backend services.
- **Firebase:** Selected for its real-time database capabilities, Firebase was used for features like live chat and notifications due to its scalability and efficiency. Additionally, Firebase Storage was used to securely store images in the cloud, ensuring easy access and management of media files across the platform.
- **GitHub:** Facilitated version control and team collaboration, allowing seamless tracking of code changes, managing updates, and ensuring code integrity.

3.1.2 Programming Languages

We used Flutter for both the web and mobile applications. Flutter is a cross-platform framework that allows for smooth and high-performance UI development using a single codebase. Unlike traditional approaches that rely on native components, Flutter uses its own rendering engine, ensuring consistent design across different platforms. It is built on Dart, a programming language by Google, known for its efficiency in building scalable applications. In Flutter, widgets are essential components that fall into two primary categories: stateless widgets and stateful widgets, each of which has a different function.

For the backend, we used Node.js with Express.js as the framework. Node.js is event-driven and non-blocking, making it ideal for handling multiple requests efficiently. It allows the server to remain active without reinitializing for each request, leading to faster response times. Express.js simplifies backend development by providing a structured approach for routing, middleware integration, and request handling, reducing repetitive code and improving maintainability. To ensure secure authentication, we implemented JWT (JSON Web Tokens) for user authentication and session management. Tokens are generated upon login and included in requests to verify user identity. Additionally, password hashing was implemented using bcrypt to enhance security and protect user credentials.

3.2 Database Design and Management

For database management, we used MongoDB Compass with MongoDB, a NoSQL database that offers flexibility in handling unstructured and semi-structured data. Unlike relational databases, MongoDB stores data in JSON-like documents, making queries efficient and scalable. MongoDB Compass provided an intuitive way to manage, visualize, and analyze data, ensuring consistency and ease of use.

Additionally, we integrated Firebase for real-time data synchronization, specifically for handling live notifications and chat features. Firebase Realtime Database enables instant updates, ensuring that users receive notifications immediately when their order status changes or when they interact with posts in the feed. The combination of MongoDB for structured data storage and Firebase for real-time updates enhances both performance and user experience.

3.3 Features Implementation

3.3.1 Mobile Application

- **Welcome Page**

In this page the user can choose either to login or to create an account.



Figure 1: Welcome

- **Create Account**

The customer and the store-owner are the two user types that can create accounts. In the Account type selection page, they choose.

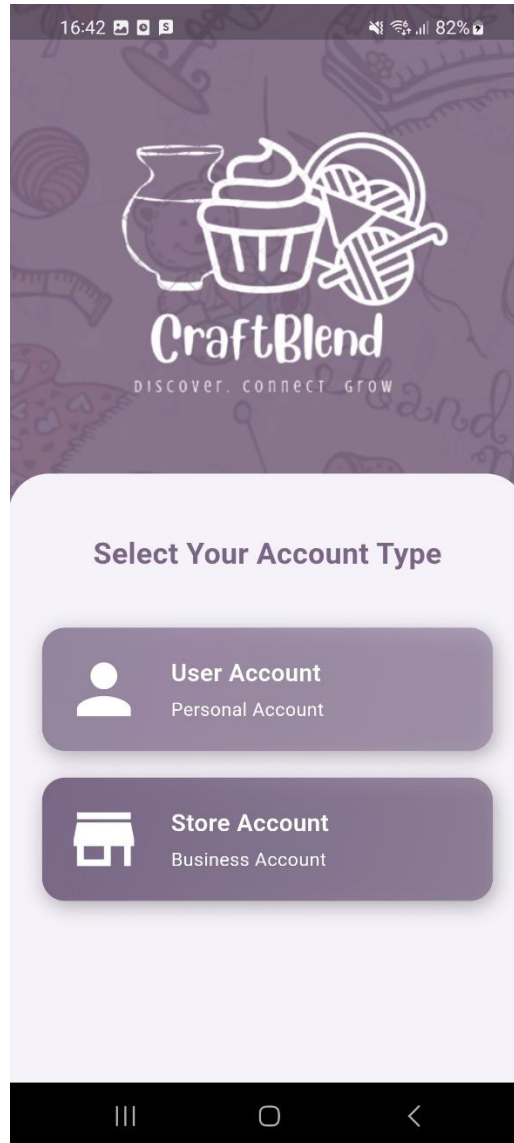


Figure 2: Account Type Selection

- **Create User Account**

User fills the sign-up form with their Information,

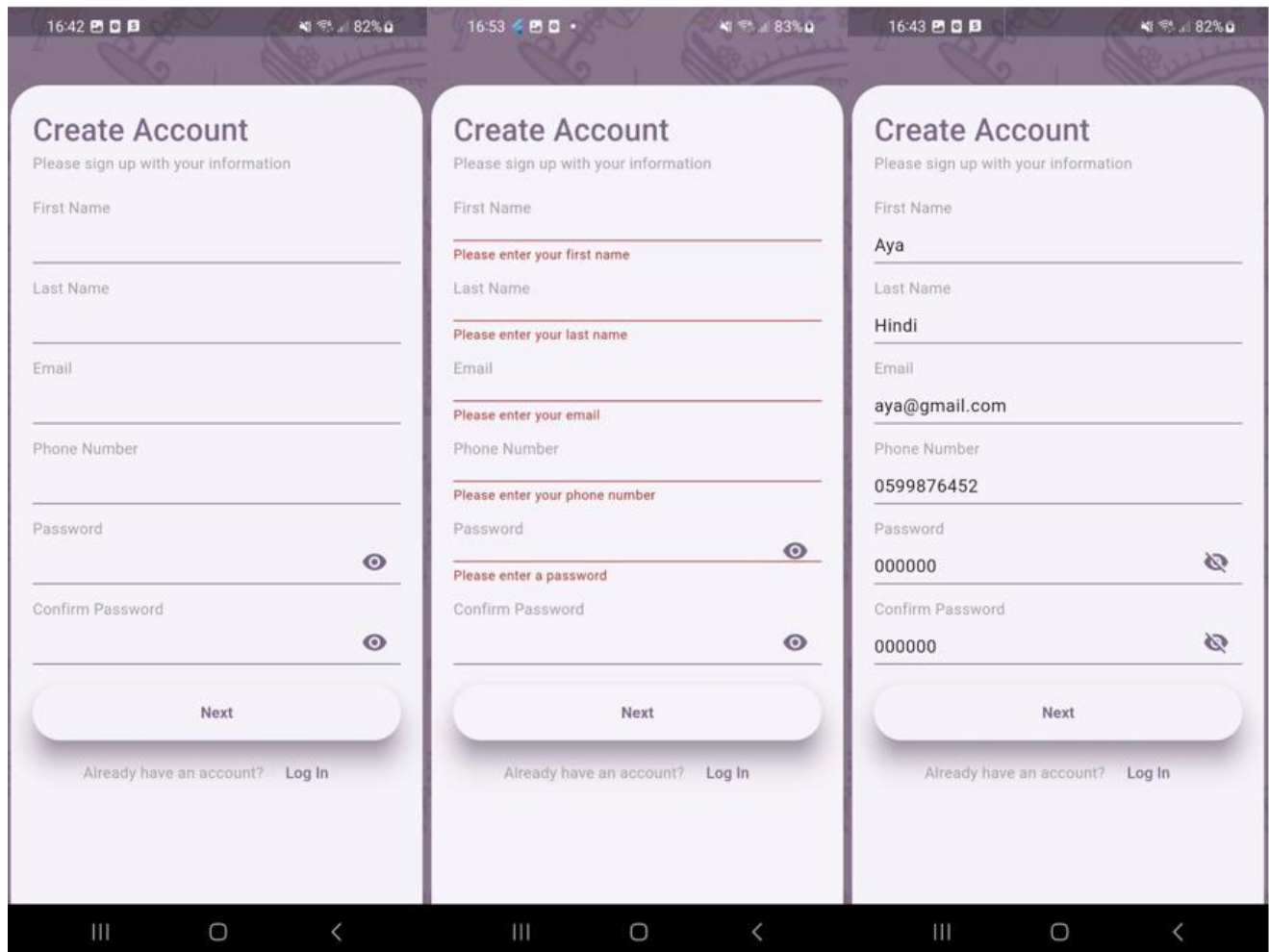


Figure 3: User Sign up-filling their information

As you can notice a validation for all fields was implemented to ensure reliability, When the user clicks on 'Next' button, they are directed to the 'Interest Selection' page, where they can customize their feed by selecting their areas of interest.

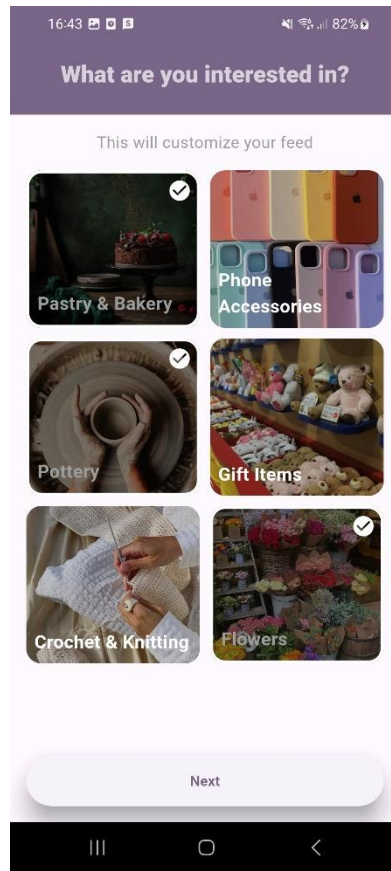


Figure 4: User Sign Up -selecting their preferred categories

When the user press ‘next’, the account will be created successfully.

- **Create Business-Owner Account**

First, the store owner selects the category that best describes their business. If no suitable category is available, they have the option to submit a suggestion for a new category. The admin will then review the suggestion and decide to either approve or reject it.

After selecting a category and clicking ‘Next,’ the owner is directed to the ‘Add Store Logo’ page. Adding a logo is optional at this stage and can be done later.

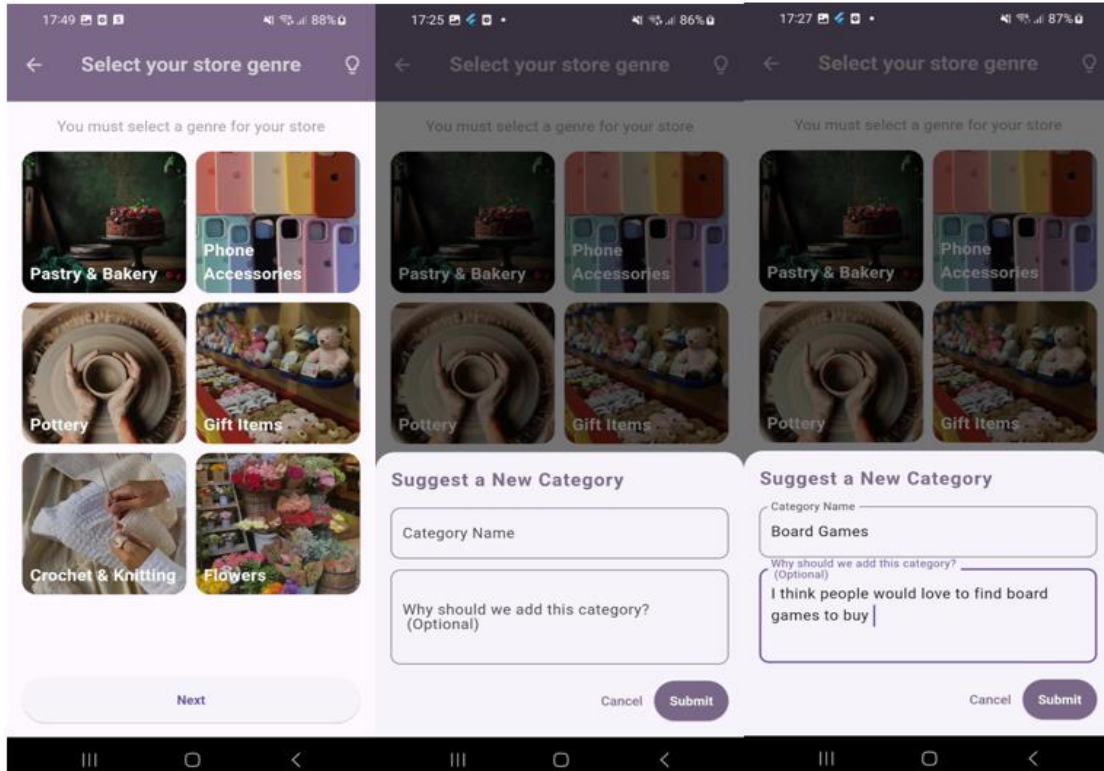


Figure 5: Store Sign Up-choosing store category

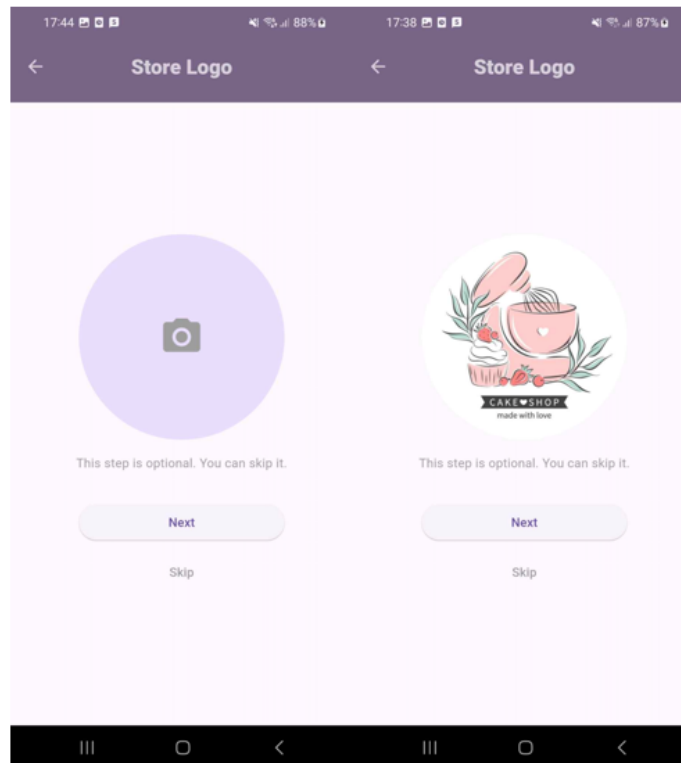


Figure 6: Store Sign Up- uploading store logo

Next, the owner fills out the sign-up form with key details about the store and themselves, including the city where the store is located, the owner's name, email, and contact information.

For now, the platform is limited to businesses located in Palestine, specifically in the cities shown in Figure 7.

Once all the information is verified, the store account is created successfully.

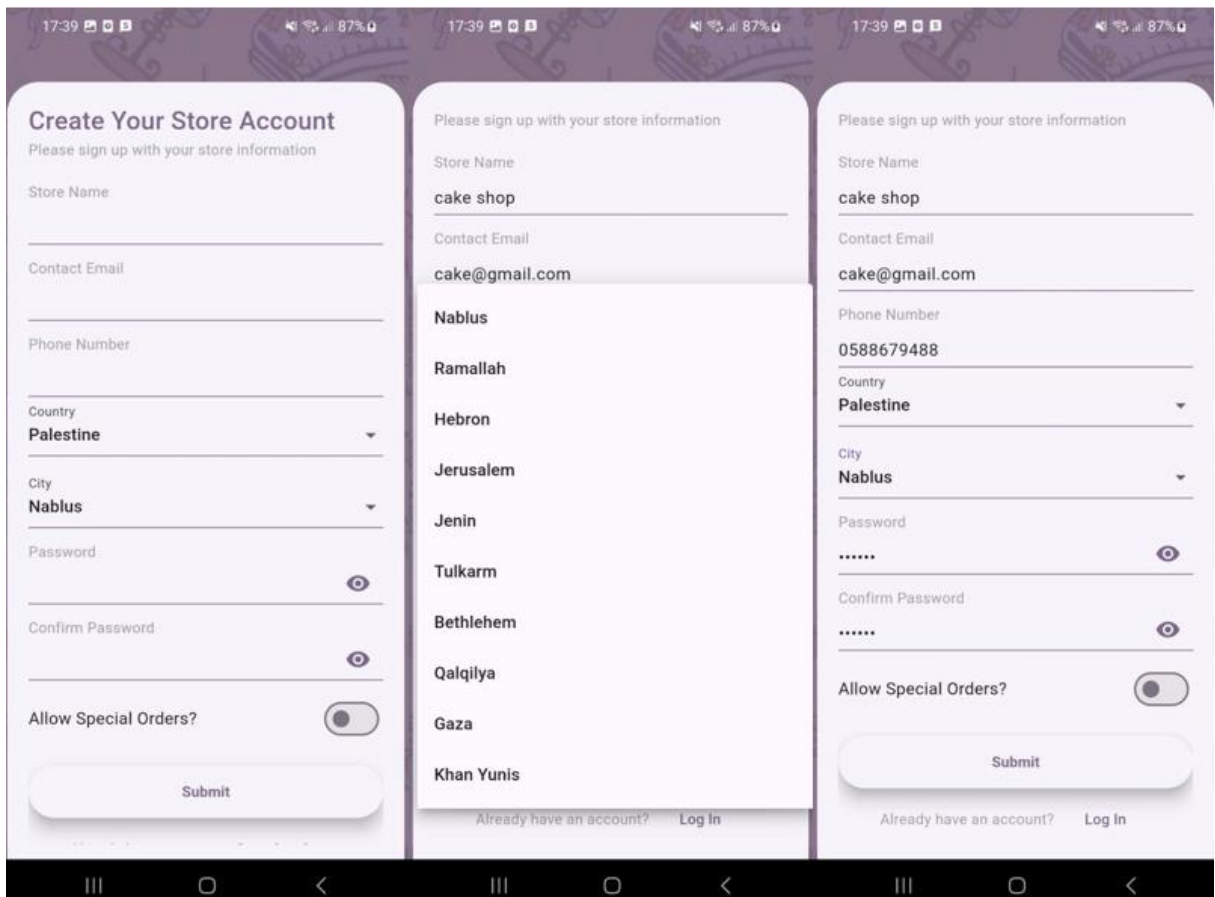


Figure 7: Store Sign Up- filling their information

- **Login**

The user enters a valid email address and password to access the account. While a backend validation was used to verify that the account existed, a frontend validation was used to verify the fields' requirements and syntax.

The "Remember Me" option provides a convenient way for users to save time. When selected, the app securely saves their login credentials, so they don't need to re-enter their email and password every time they open the application.

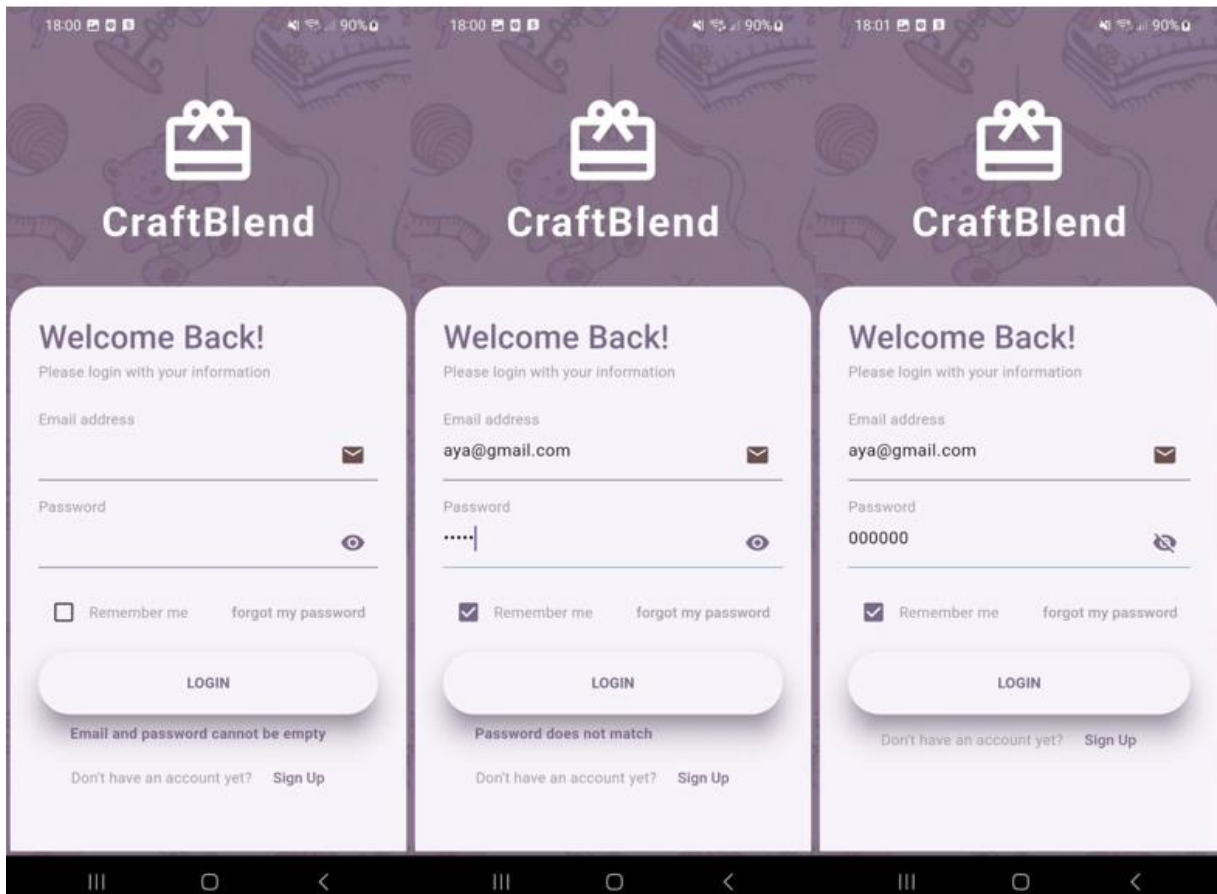


Figure 8: Login- User

- **Location Selection**

After logging in, the user will be directed to a map page. The map highlights cities with stores on our platform that offer delivery to those cities. When the user picks a city, we save this information for the current session to use it in future interaction. Alternatively, the user can share their location directly, but they need to grant access through their device settings.

If the user selects a city that isn't marked, a message will pop up letting them know that delivery isn't available in their area yet. "as shown on the right screen in Figure 9".

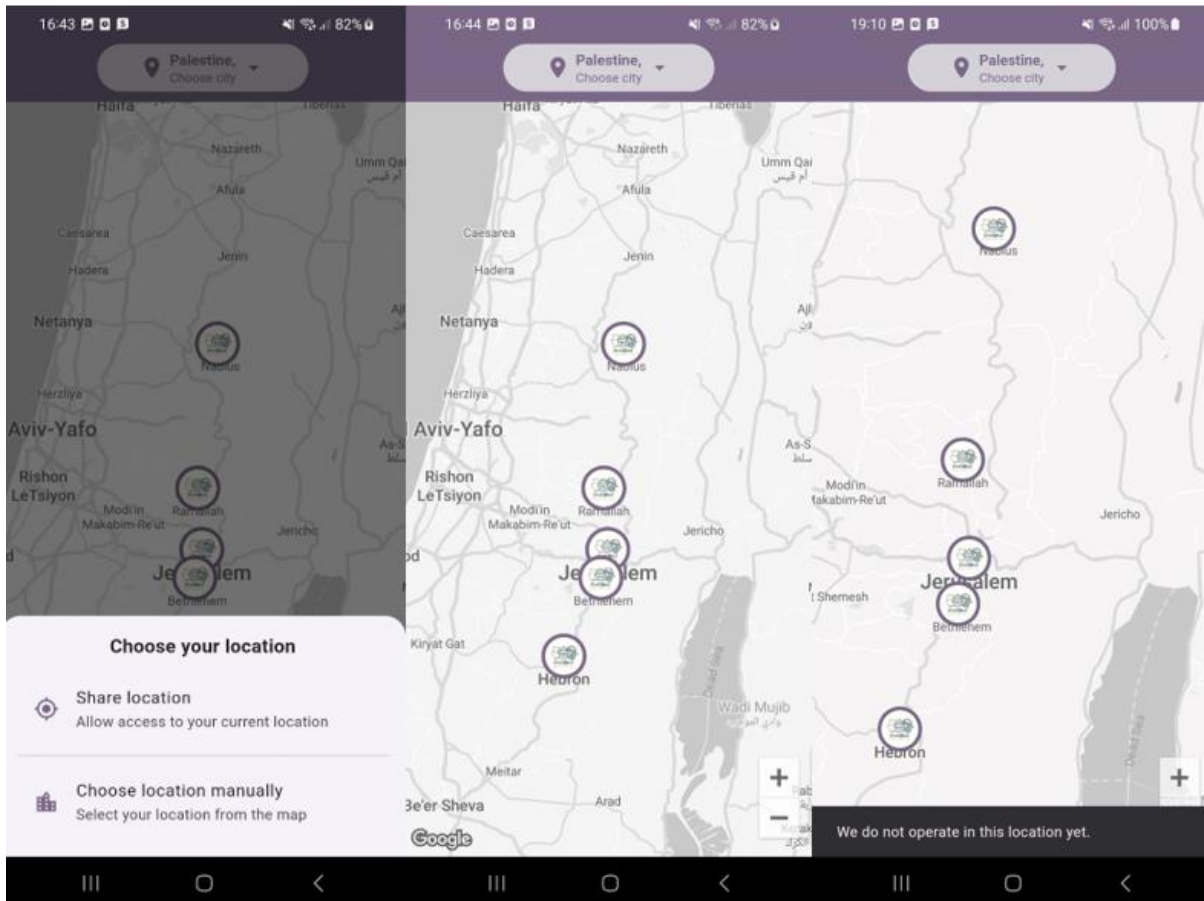


Figure 9: Location Selection from Map

○ **User Home Page**

After providing their location, users land on the Home Page, which is divided into three sections:

1- Top Section: ‘Advertisements’

This section showcases store advertisements. If a user clicks on an ad, they’ll be taken directly to that store’s product page.

2- Middle Section: ‘Categories’

users can browse through the available categories on the platform. Selecting a category takes them to a page displaying all the stores under that category.

3- Bottom Section: ‘Personalized’

This section is tailored for each user and consists of rows of products and stores:

- Recently Viewed Products: Based on the user’s activity across the platform.
- Suggested Products: A mix of products the user has viewed multiple times, items from their Wishlist, and trending best-sellers.
- Most Searched Products: Popular products searched by all users.

- Favorites: Best-sellers from stores the user has marked as favorites.
- Recommended Stores: Based on the categories the user selected during sign-up, we suggest stores tailored to their interests.

After signing up, since the user doesn't have any activity yet, we display a mix of the most searched products, top-rated and best-selling products, as well as stores from the categories they showed interest in during sign-up. This gives them a great starting point to explore the platform.

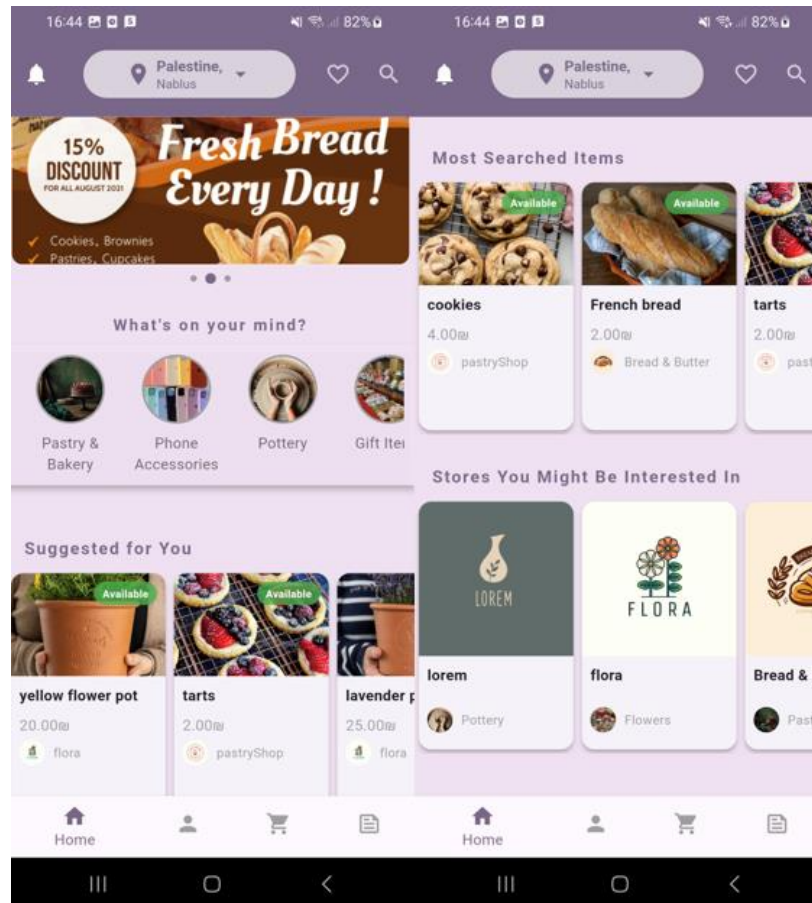


Figure 10: Home Page After Sign Up

Using the heart-shaped icon in the app bar, users can access their Wishlist. The search icon directs them to a search page, while the notification icon allows them to view the notifications they've received. These features will be explained later in the Report.

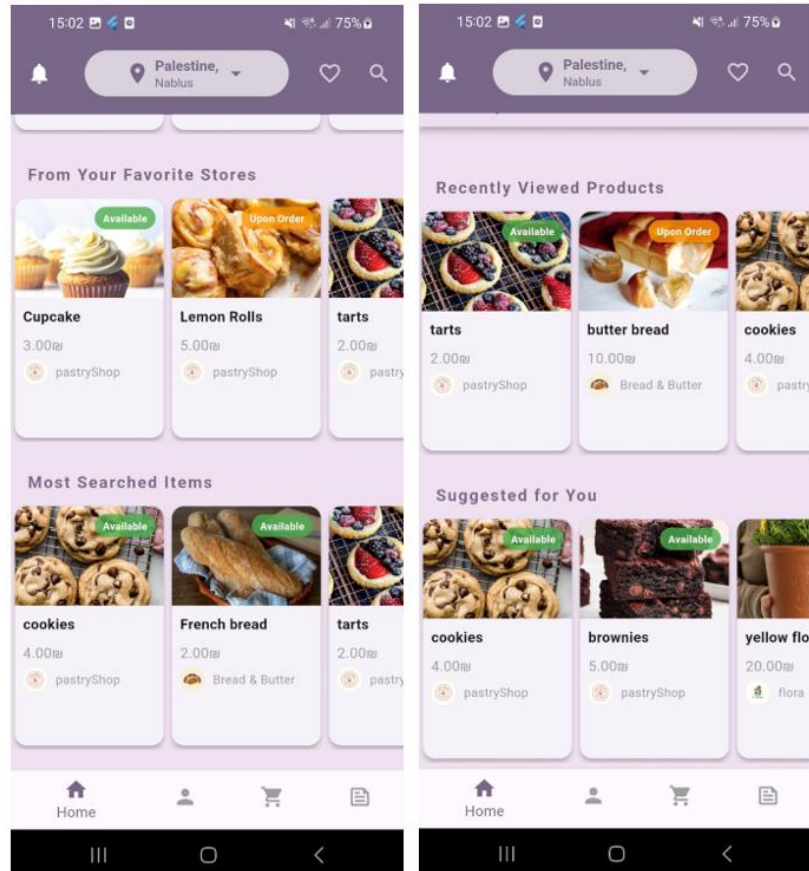


Figure 11: Home Page After some time

○ **User Views Stores by Category**

When a user selects a category on the home page, they're taken to a page showing stores that deliver to their location.

For example, in Figure 12, user's city is 'Nablus,' so only stores that deliver to Nablus are displayed. In Figure 13, the user changes their location to a different city, and the displayed stores update accordingly to match the new location.

In both figures, the displayed stores fall under the categories "Pastry & Bakery" and "Flowers."

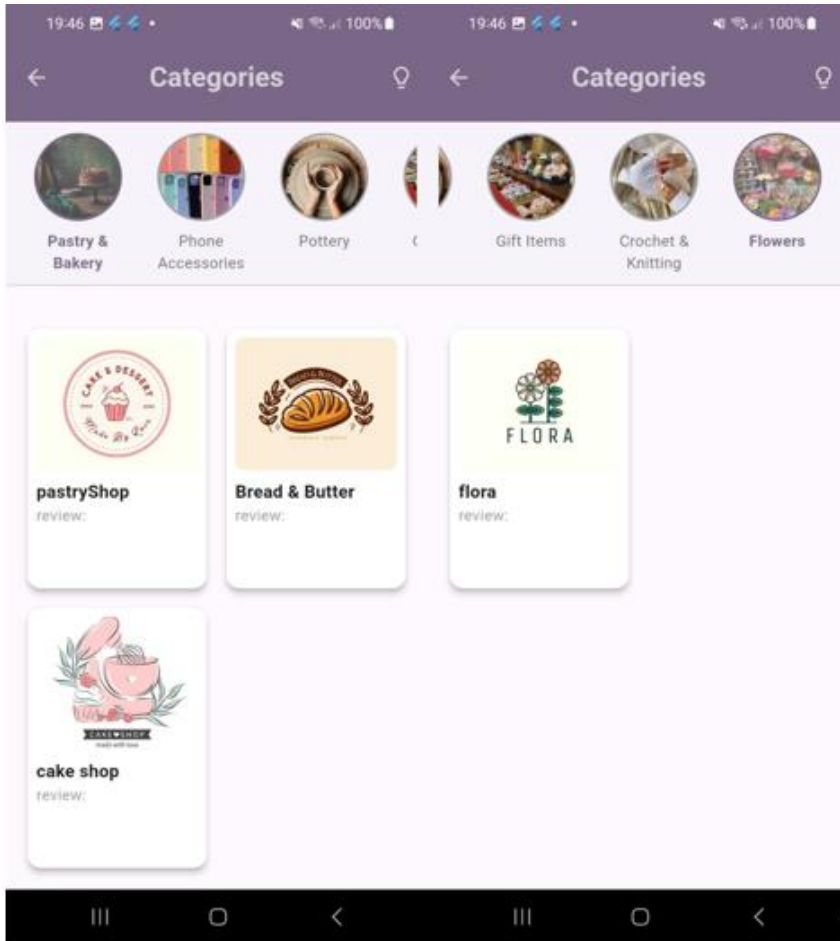


Figure 12: Stores Displayed by Category

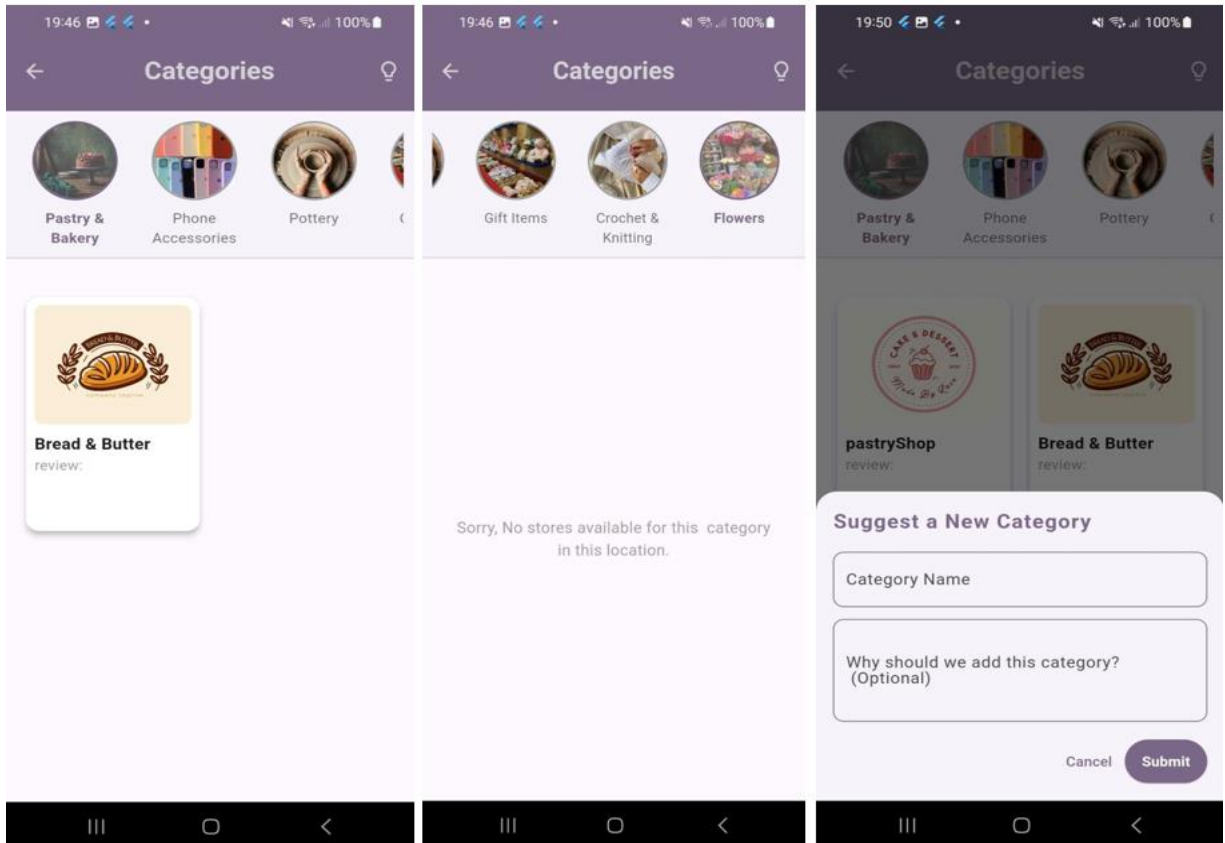


Figure 13: Stores Displayed by Category ‘another city’

○ **User Views Store’s Products**

When a user selects a store from either the Categories page or the Home page, they are directed to the store’s product page. This page displays all the store’s products, with badges on specific items to highlight important details:

- **Upon Order:** Indicates that the product requires preparation time and must be ordered in advance before a specified time.
- **Out of Stock:** Shows that the product is currently unavailable for ordering until it’s restocked
- **On Sale:** Highlights products that are currently discounted.
- **Available:** Marks products that are readily available for immediate purchase.

Users can add a store to their favorite stores list by tapping the floating heart icon. Additionally, they can filter products by price and search for specific products using the search functionality, making it easier to find exactly what they’re looking for.

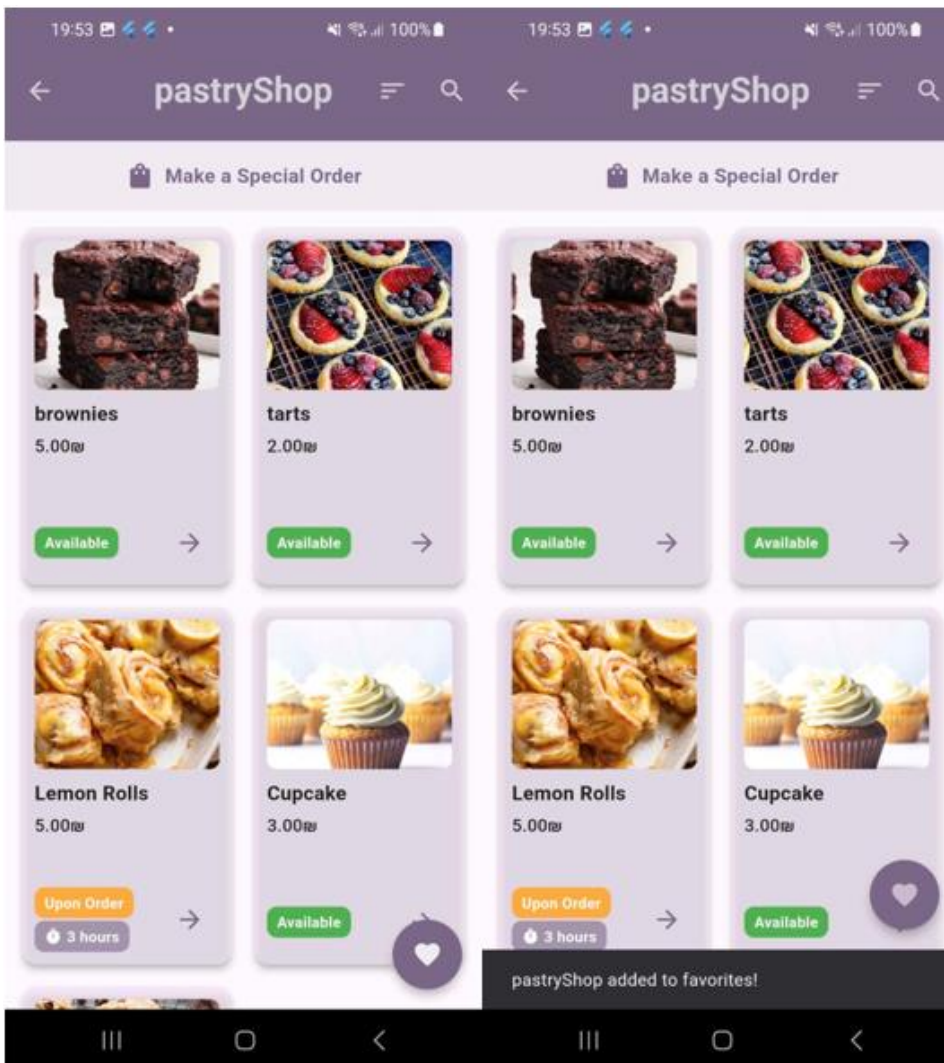


Figure 14: Store's Product Page Displayed to Users, Store Added to Favorites

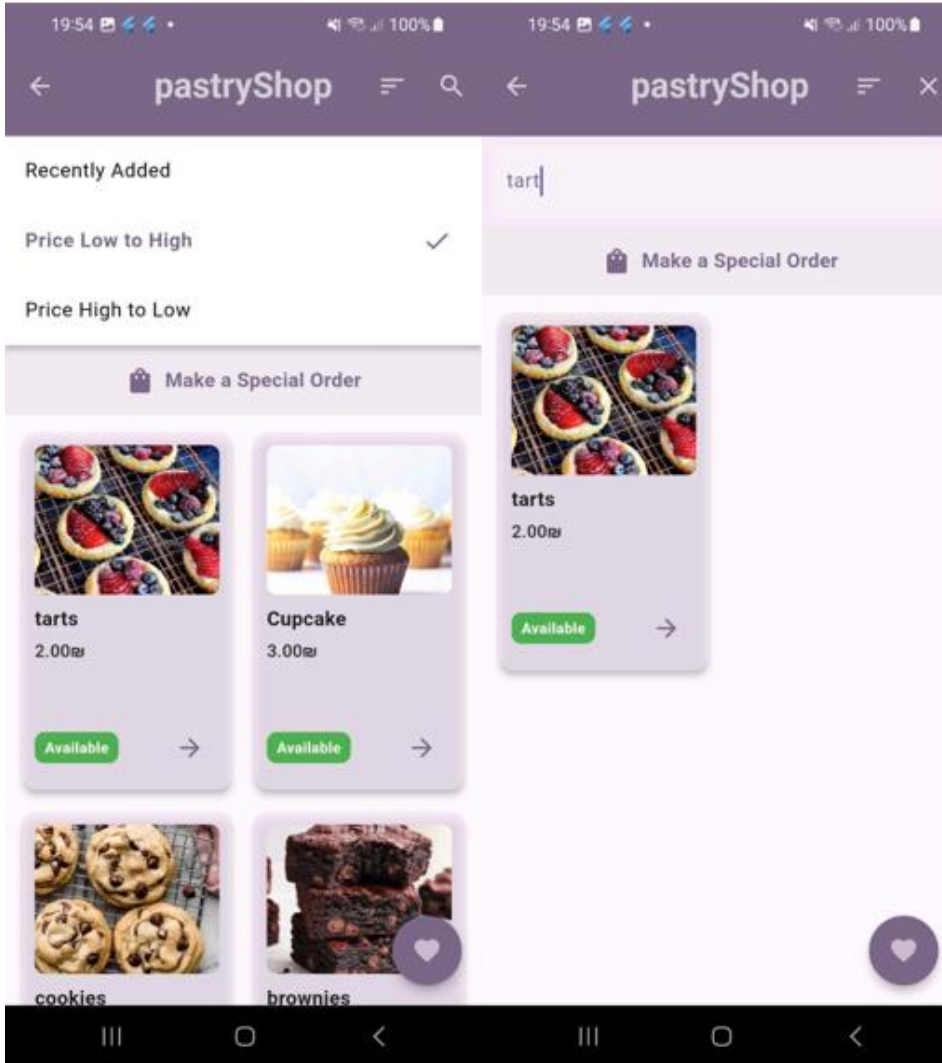


Figure 15: Searching Through Store's Product Page and Filtering Products by Price

- **User View Product Details page**

When users tap on a product, they are taken to a detailed product page displaying the product's name, price, description, rating and status badges. The page also shows available options provided by the store owner, allowing users to customize their selection. Users can adjust the quantity, and the price dynamically updates if an option with an extra cost is chosen.

Through the heart icon, users can add the product to their Wishlist, “also they can remove it from their Wishlist the same way”, they can also add it to their cart for ordering.

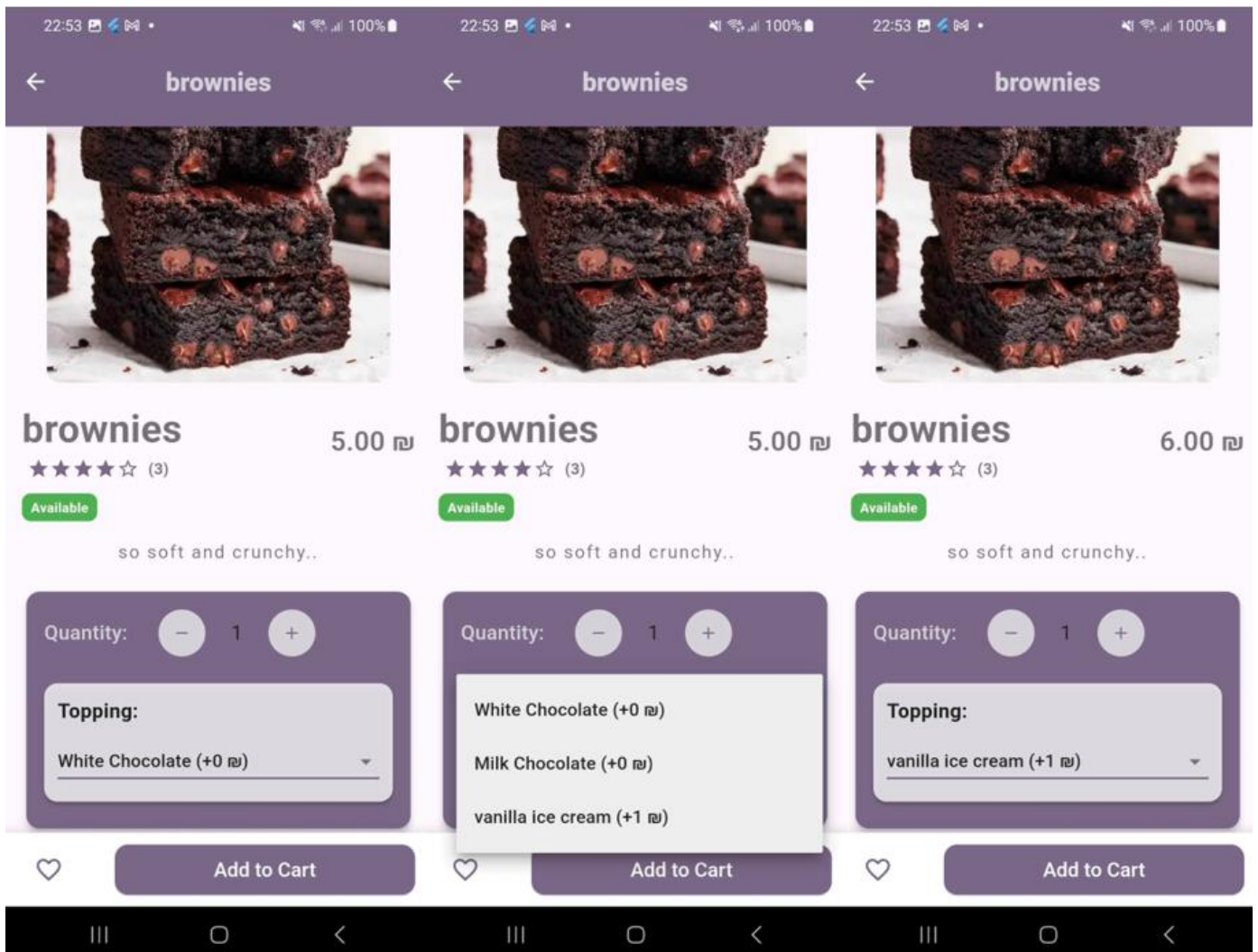


Figure 16: User view product’s details

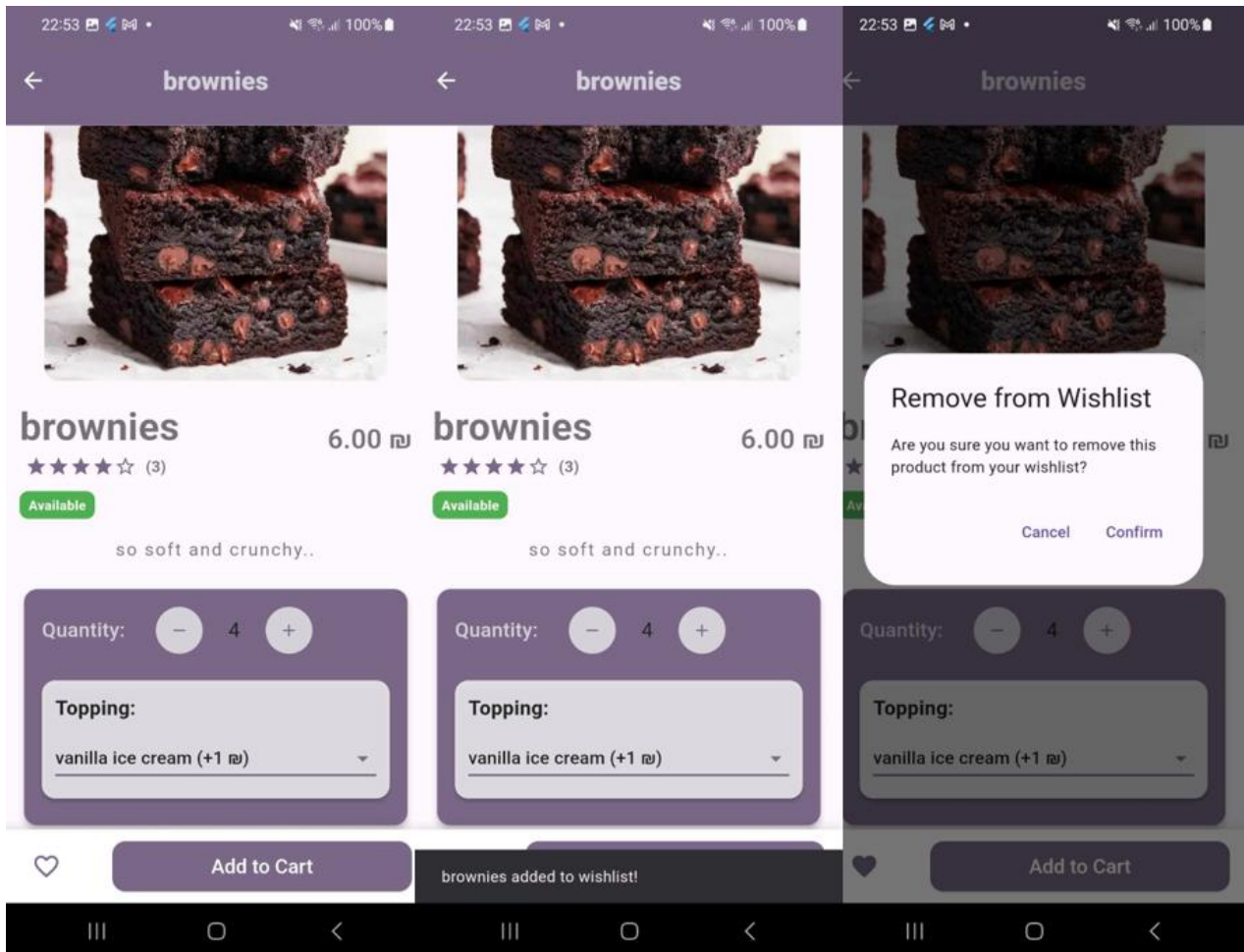


Figure 17: User Chooses Product’s Quantity, Product Added to User’s Wishlist

If a customer tries to add more items than what's available in stock, a message appears letting them know the maximum they can purchase.

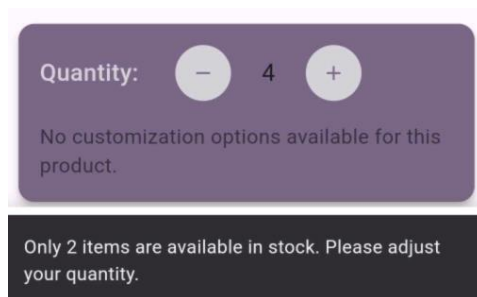


Figure 18: Stock Limit Notification

○ **User's Wishlist**

Users can view the products they added to their Wishlist here.

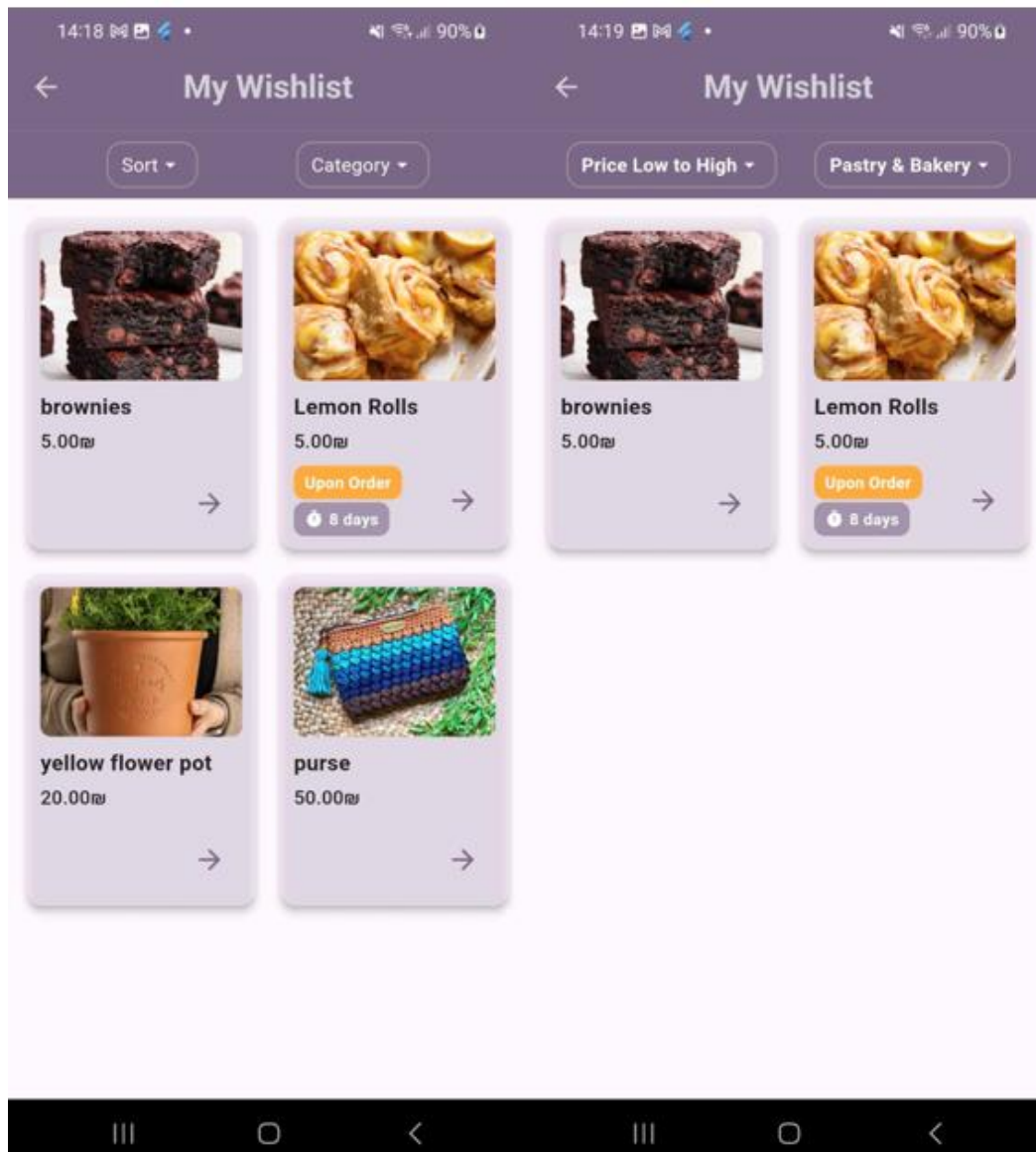


Figure 19: User's Wishlist

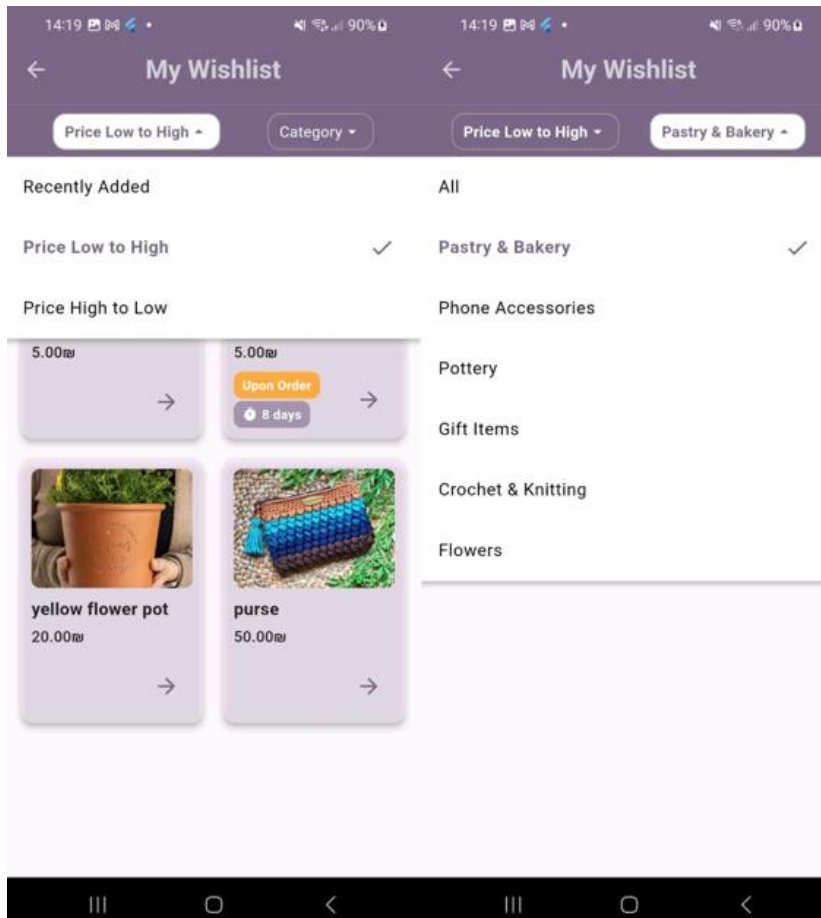


Figure 20: User's Wishlist with Filters Applied

- **User Makes a Special Order**

As Shown in Figure 14 if a store offers the **Special Orders** feature, users can access it from the store's product page.

Then they will be directed to this page that displays the available special-order options offered by the selected store. For example, the 'PastryShop' store offers a "Custom-Made

Cake" option. By selecting it, the user is taken to the form for customizing their order. This feature allows users to tailor their order to their needs.

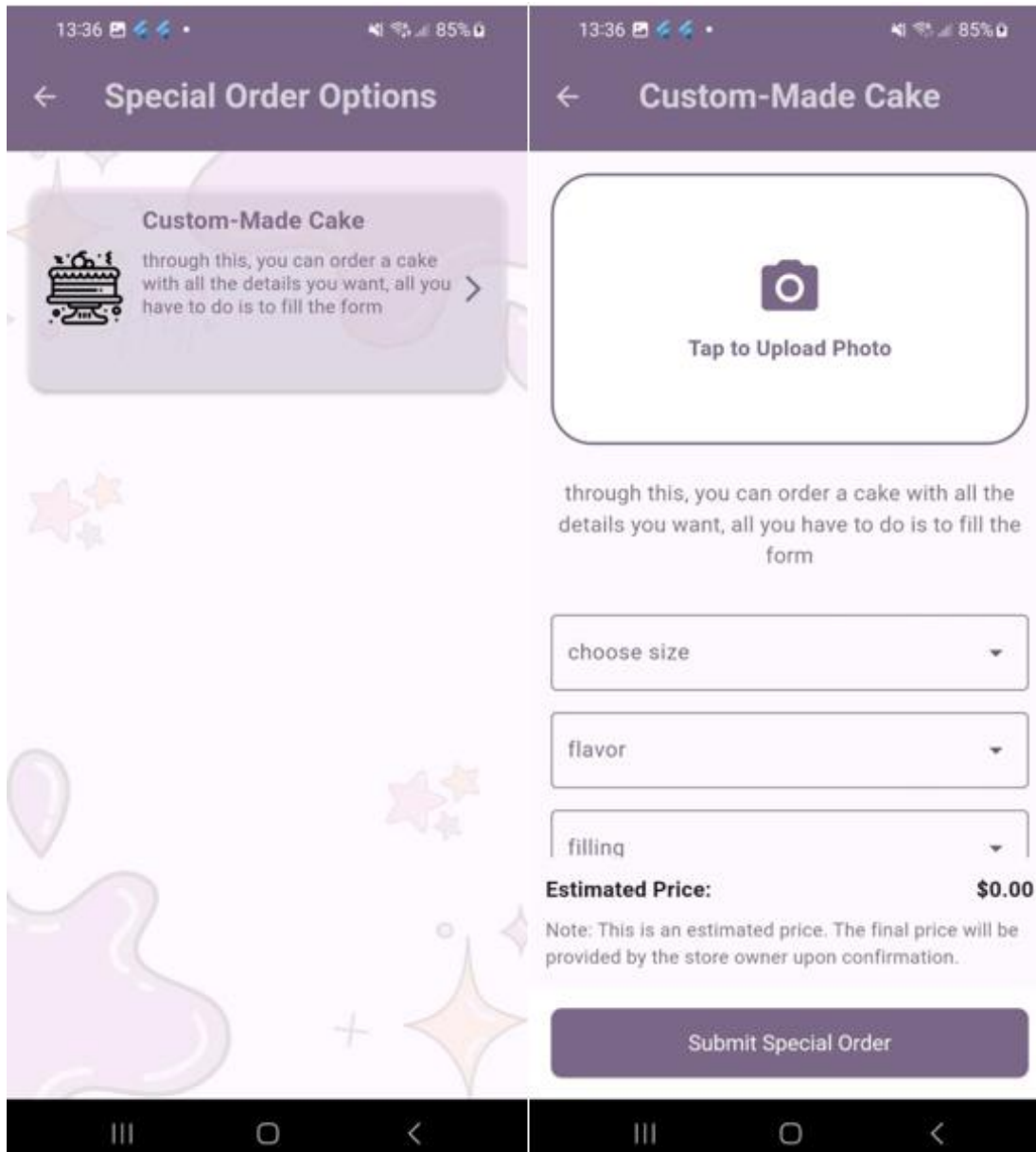


Figure 21: Store's Special-Order Options

The user can personalize their "Custom-Made Cake" by picking options like size, flavor, and filling. As they make their selections, the estimated price updates automatically, so they know how much the cake will cost. For example, choosing the "Medium (7 people)" size adds 55.00₱, and adding a "Kinder" filling increases the price by 7.00₱. This makes

it super easy for users to customize their order while keeping track of the cost. (Note: the form was prepared by the store owner)

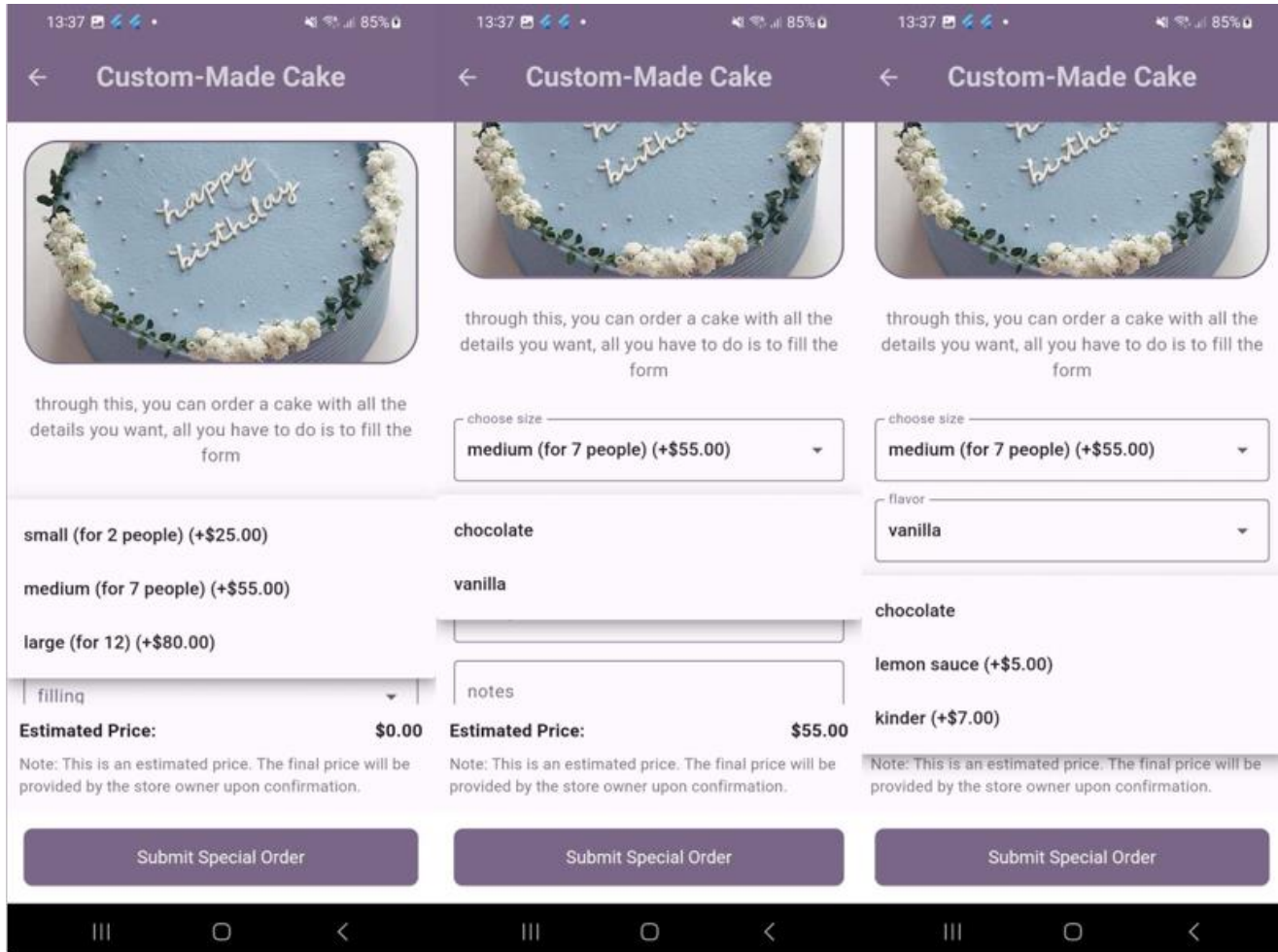


Figure 22: User Fills Out the Custom-Made Cake Form

The final step where the user completes the form, adds any notes or requests, selects a pick-up date, and submits the order. A confirmation message then appears, informing the user that their request has been submitted successfully.

The note highlights that the final price will be confirmed by the store owner after reviewing the order. Once it's approved, the user will get notified, and can move forward with checkout.

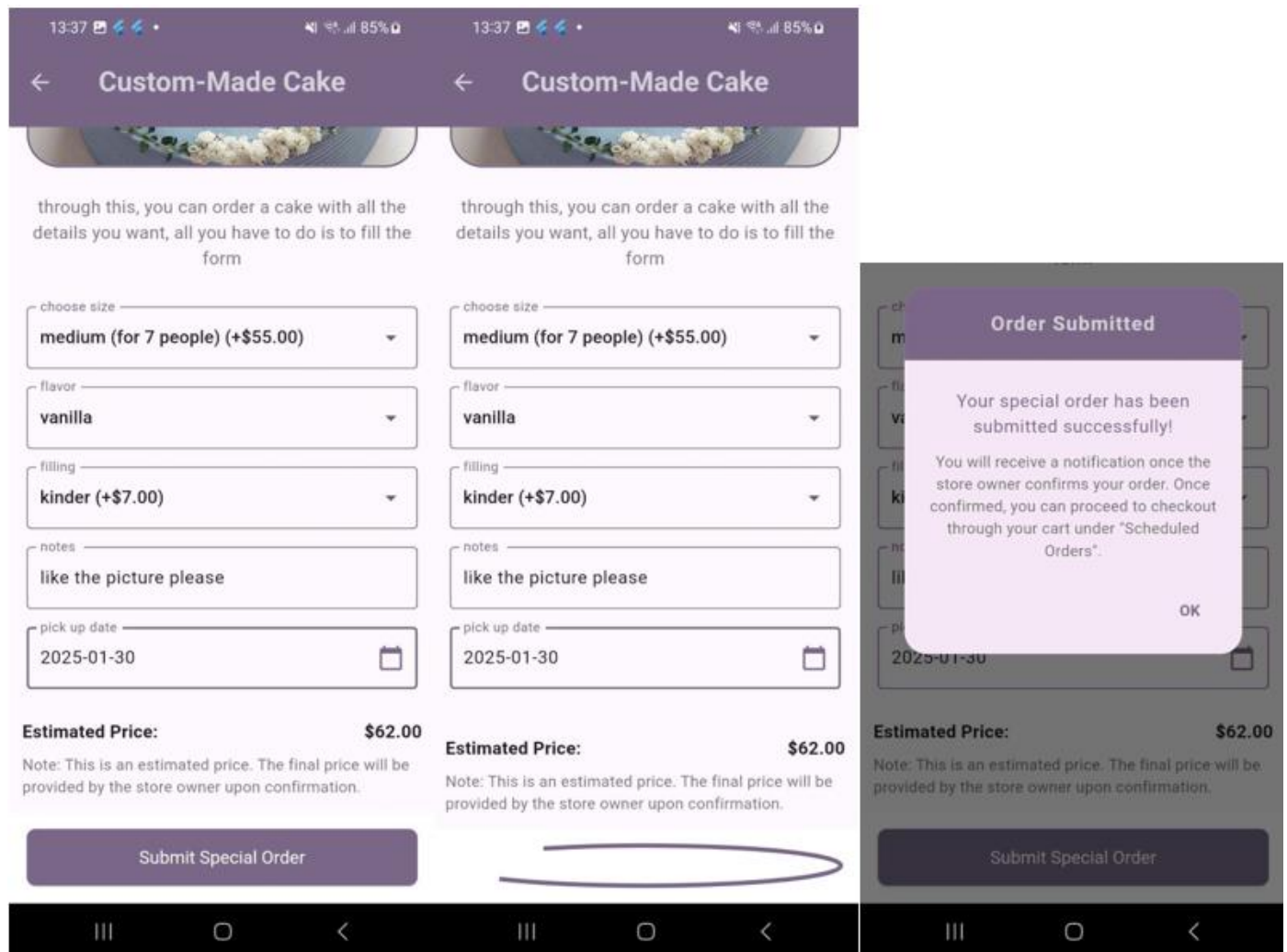


Figure 23: User Submits the Special-Order

- **User's Profile**

The user profile page is where users can view and manage their personal information and payment details. At the top of the page, users can see their profile picture, name, and a button to check their points. Below that, the page is divided into two sections:

-Personal Information: This section displays the user's first name, last name, phone number, and email address. If any of this information needs to be updated, users can easily do so by tapping the "Edit Personal Information" button.

-Payment Information: This section shows the user's saved payment details, such as credit card information, expiry date, and CVV. If no payment details are provided yet, users can add them by tapping the "Add Payment Information" button.

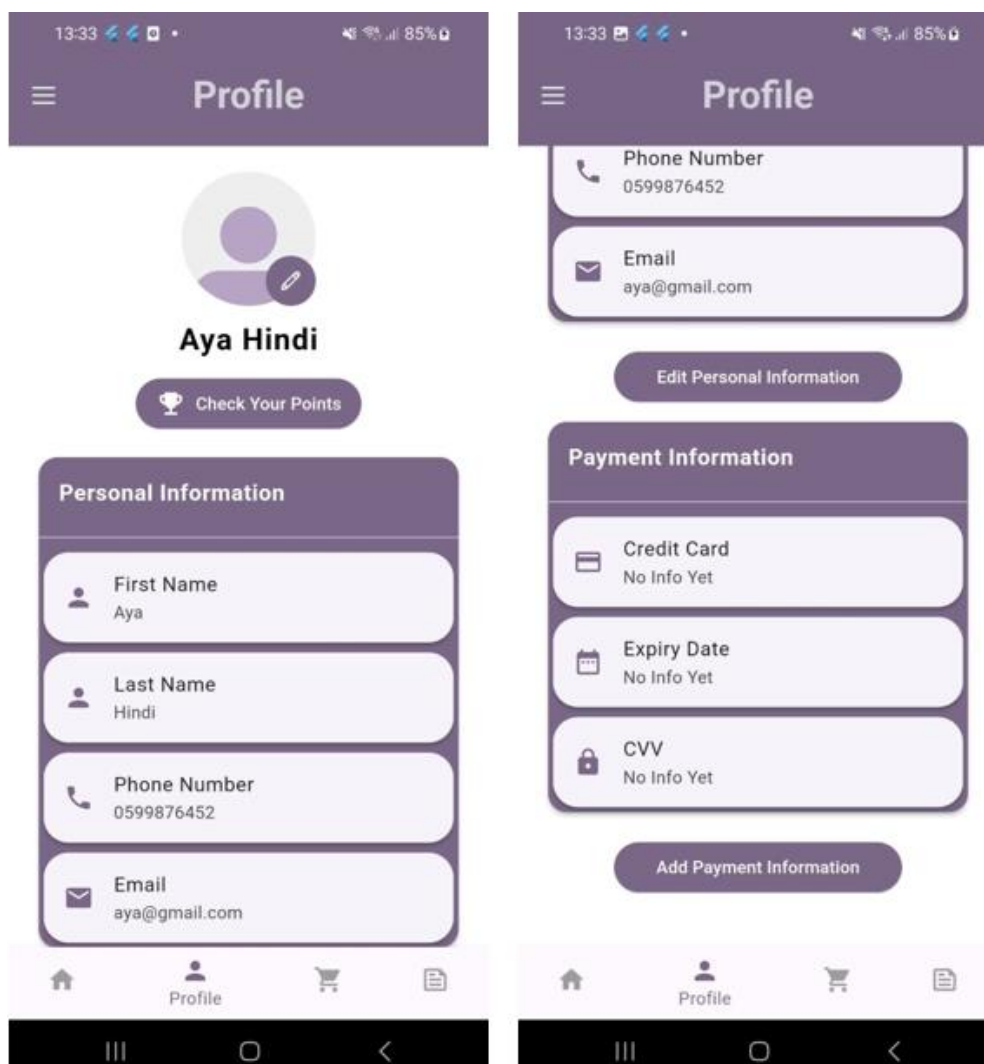


Figure 24: User's Profile Page

Let's edit user's phone number:

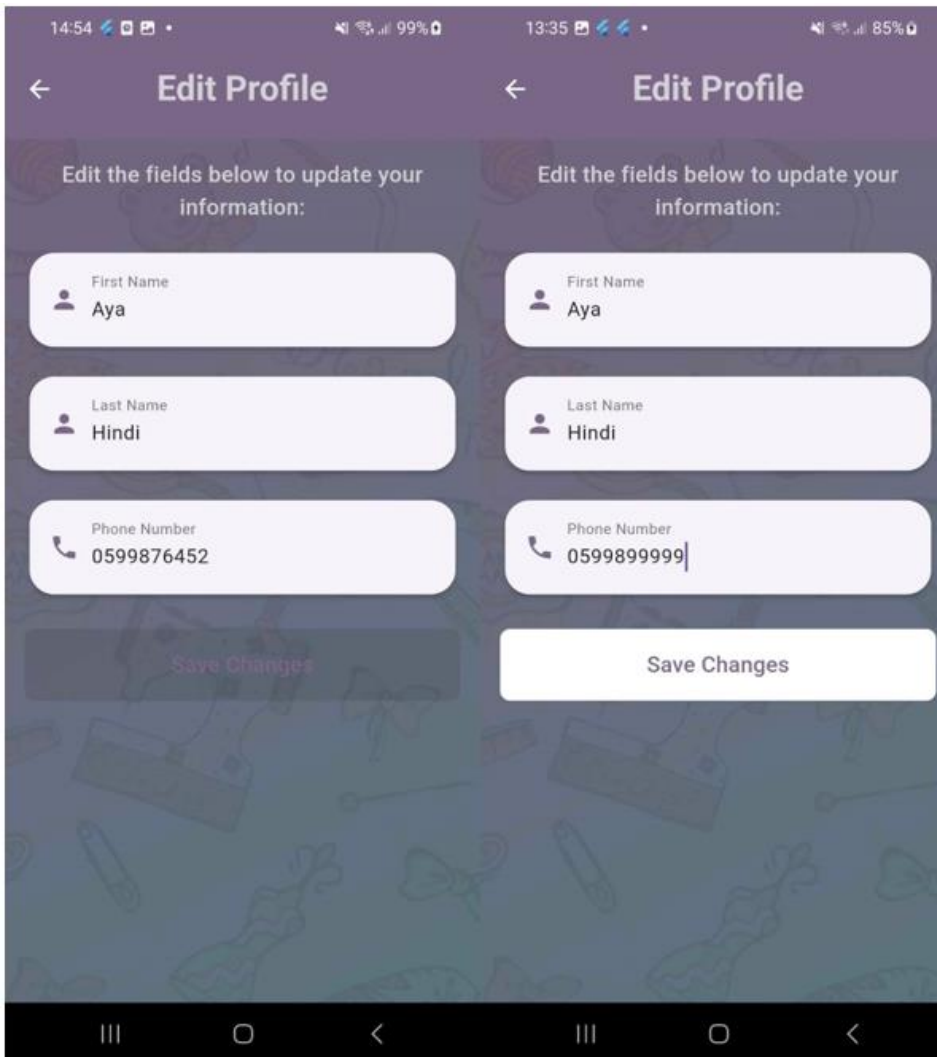


Figure 25: User Edits their Personal Information

Users can easily add credit cards to their profile, making checkout quicker and more convenient. They can save multiple cards and choose which one to use when making a purchase. If they prefer, they can also add a card directly at checkout without saving it to their profile

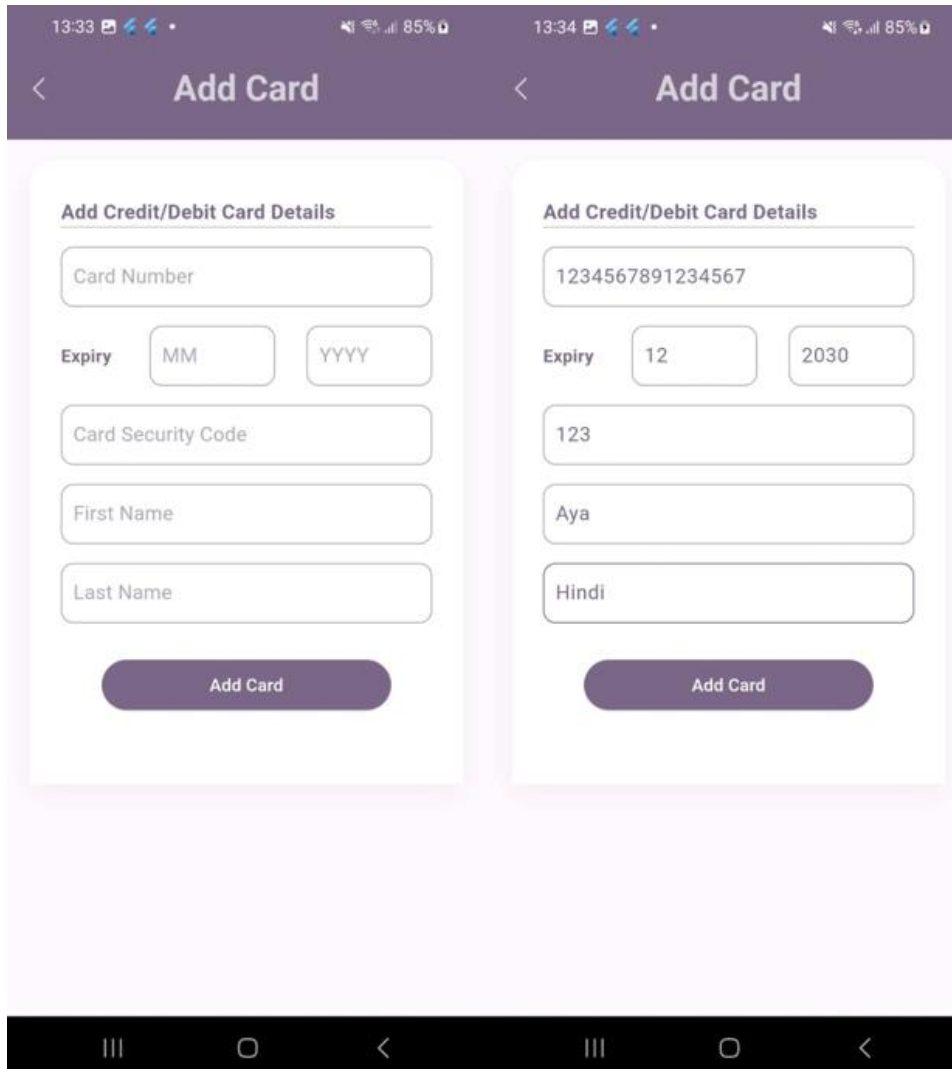


Figure 26: User Adds Credit Card

The form includes fields for the card number, expiry date, security code, and the cardholder's name. To ensure accuracy and security, validations are implemented for all fields. For instance:

- The card number must be a valid 16-digit number.
- The expiry date must be in the correct format and not in the past.
- The security code (CVV) must be a valid 3-digit number.
- The first and last names cannot be left blank.

If any field is incomplete or invalid, the user will see a message guiding them to fix it before they can continue. This ensures the card details are accurate and complete.

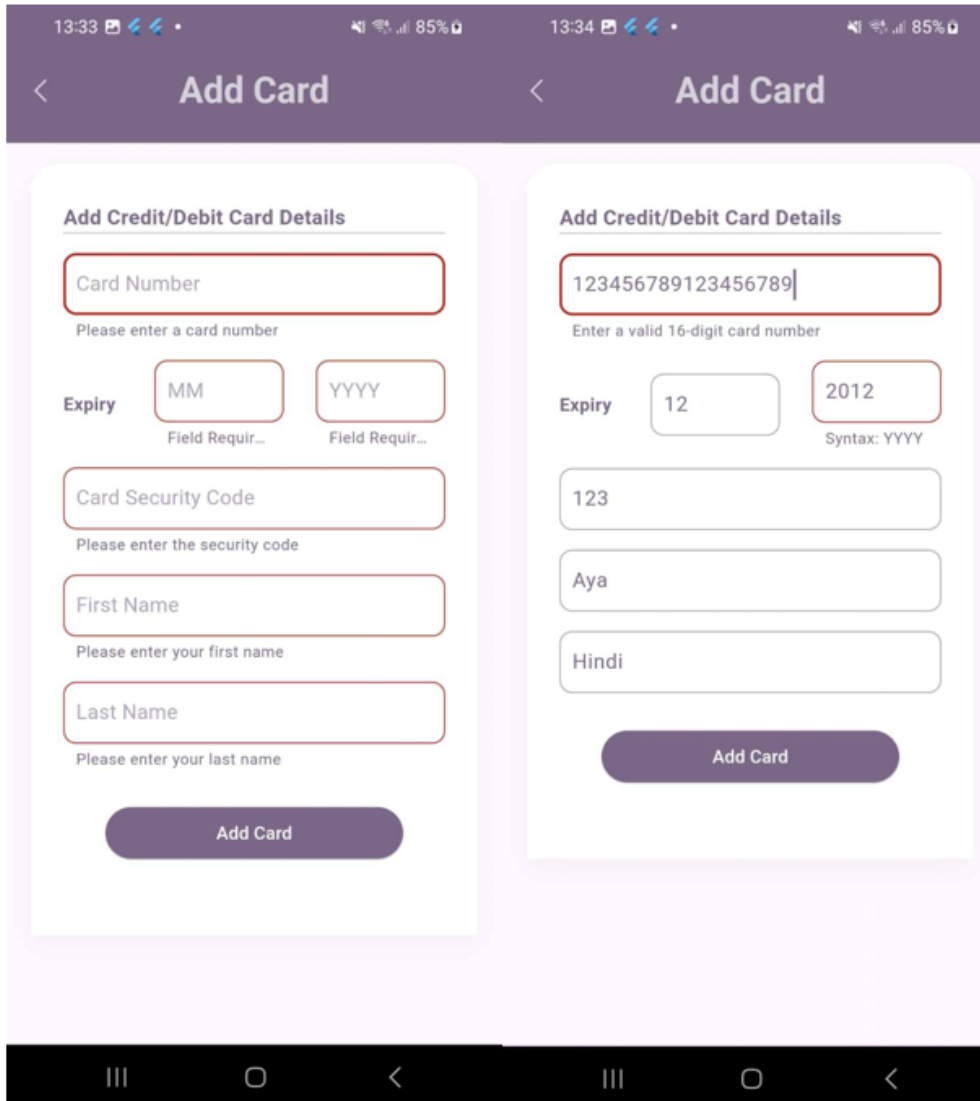


Figure 27: User Adds Credit Card -Validation

Shown in Figure 28 is the updated profile page after the user edits their personal information and adds a credit card.

The profile page includes a side navigation drawer, accessible through the menu icon in the app bar. The drawer provides quick access to key options like changing the password, logging out, or viewing the 'About Us' page.

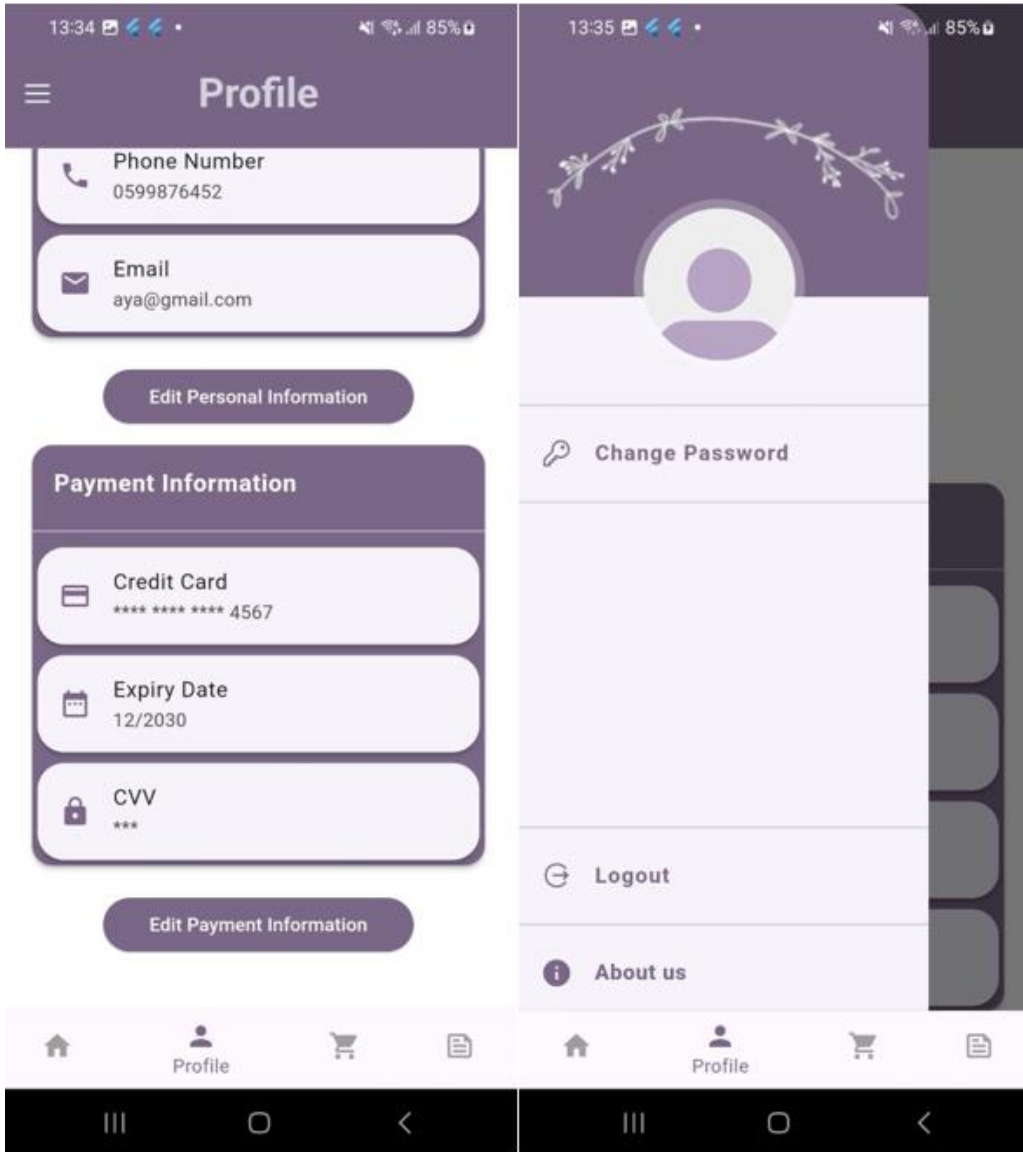


Figure 28: Updated User Profile and Profile Navigation Drawer

- **User Points**

To motivate customers to shop through our platform, we've introduced a point system. Users earn points when they place orders, with each store setting its own point rules. For example, a store's policy is to give 1 point for every 20 ₺ spent, those points can be redeemed in future orders for discounts (e.g., 1-point equals 1 ₺).

On the "My Points" page, users can check how many points they've earned from each store. If they haven't earned any points yet, the page will encourage them to start shopping (as shown in the first image). Once they place an order, their points will appear under the corresponding store (as seen in the second image). This makes it easy for users to track their rewards and plan their next purchases.

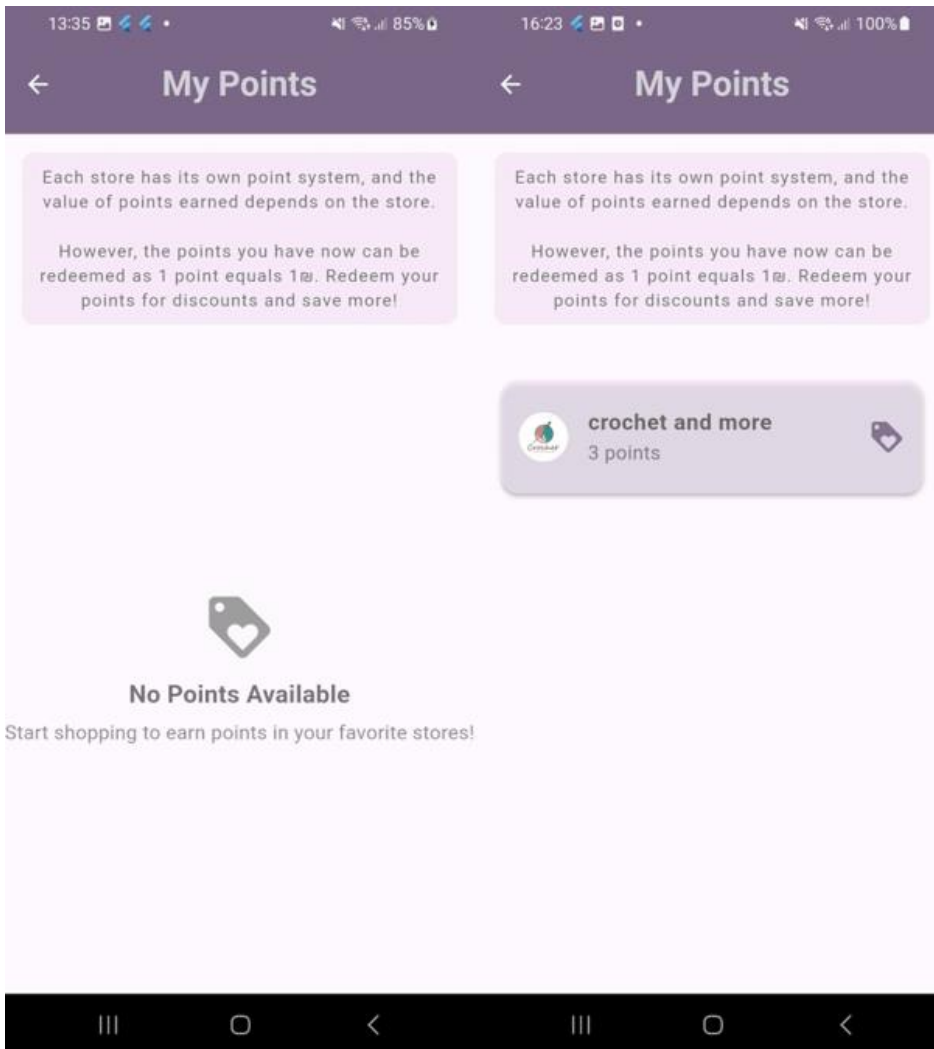


Figure 29: User's Points

- **User's Cart**

Once users are done browsing, they can head to their cart to review its contents. In the cart, they can adjust product quantities or remove items as needed. The cart is divided into two sections for clarity:

- **Instant Delivery Products:** These are items that can be shipped right away after the order is placed.

- **Scheduled Delivery Products:** This section includes:

- "Upon Order" products, which require preparation or have specific delivery schedules.

- Special Orders that need confirmation and arrangement from the store.

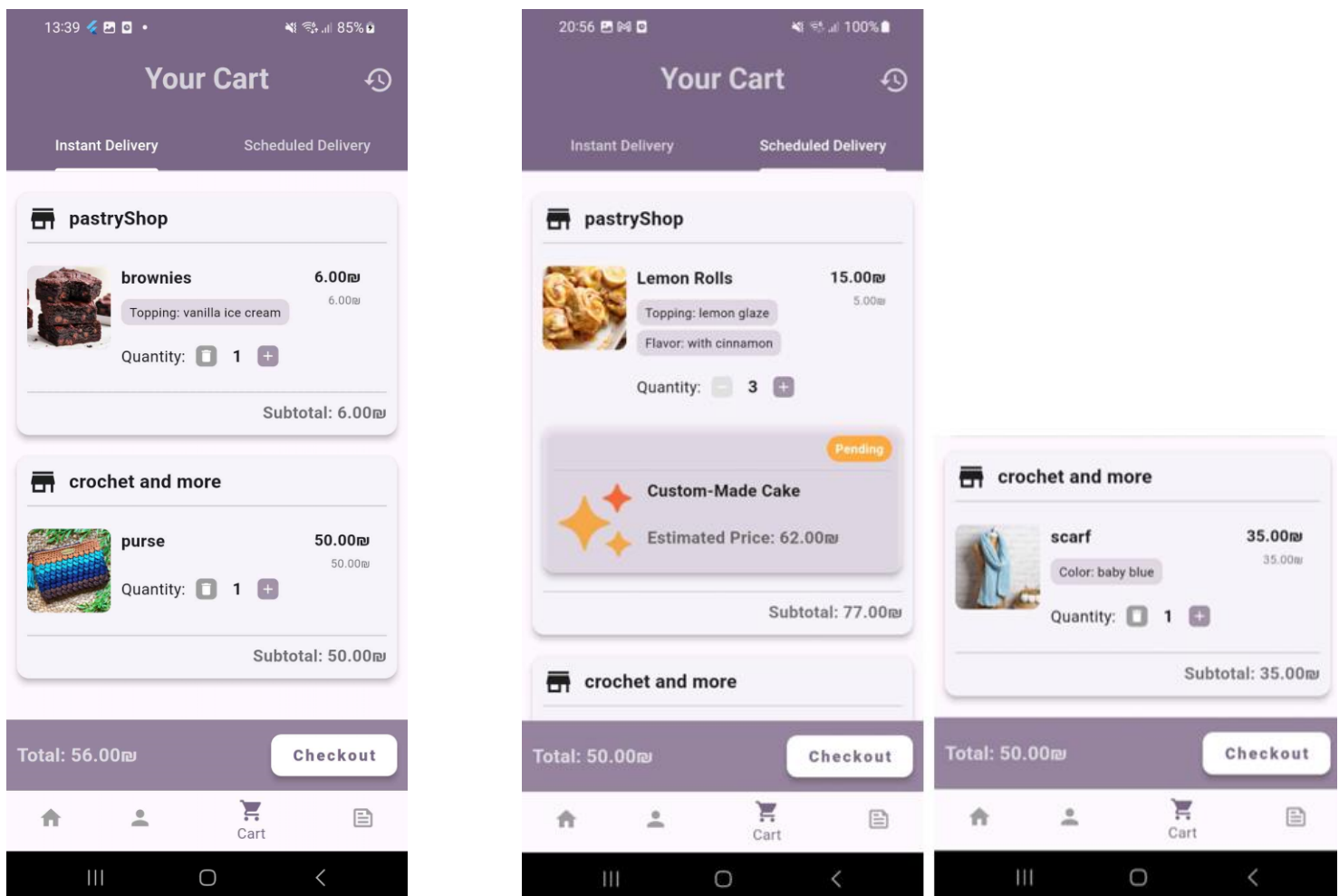


Figure 30: User's Cart

when users tap on a product in the cart, they are taken to its details page, where they can review the product's information and make any necessary changes.

Products in the cart are grouped by store, and each store displays its own total. At the bottom, there is a grand total summarizing the entire cart, giving users a clear view of their expenses. (The user can place an order with items from different stores)

This separation ensures that if there are instant products like food, they can be delivered immediately, while scheduled items will follow the store's delivery arrangements. This makes the process smoother for both customers and stores.

Additionally, each section has its own separate checkout process. This means users can place an order for instant delivery products without waiting for scheduled items to be ready, and vice versa. It provides flexibility, allowing customers to receive what they need as soon as possible while still making room for items that require more time to prepare or deliver.

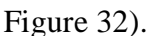
Right now, there's a special order in the "Scheduled Delivery Products" section, but it's still pending confirmation from the store. Until the store approves the order and provides a final price, it won't be included in the checkout process. Once confirmed, the special order will appear in the checkout for scheduled delivery. This ensures accuracy in pricing and avoids confusion for users.

- **Placing An Instant Order**

When users proceed to checkout, the city field is automatically pre-filled with the city they previously selected on the map. However, they still have the flexibility to change it if needed. Similarly, the contact number provided during signup is displayed but can be updated if required.

In the order summary, users can see the breakdown of costs for each store they are ordering from. Each store has its own delivery cost, which may vary depending on the selected city.

If the user has earned any points from previous orders, these points will appear here and can be redeemed as a discount. The summary ensures transparency, showing product totals, delivery fees, and the grand total for the order.

If user changes the city to another where one or more stores cannot deliver, an error message is displayed (like in ).

The app informs the user which stores in their cart are unable to deliver to the selected location. This ensures that users are aware of any delivery limitations before placing their order.

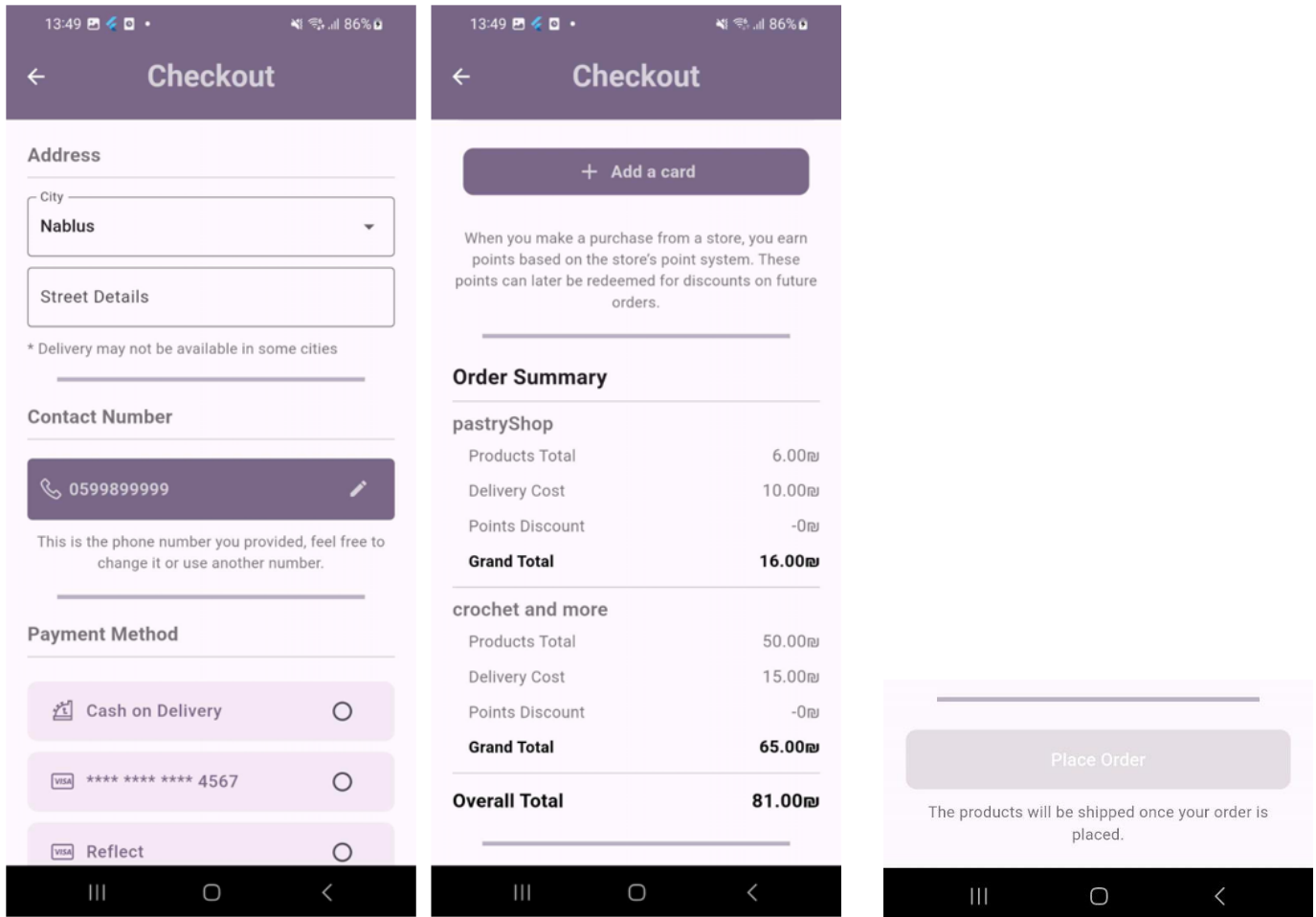


Figure 31: Checkout for Instant Products

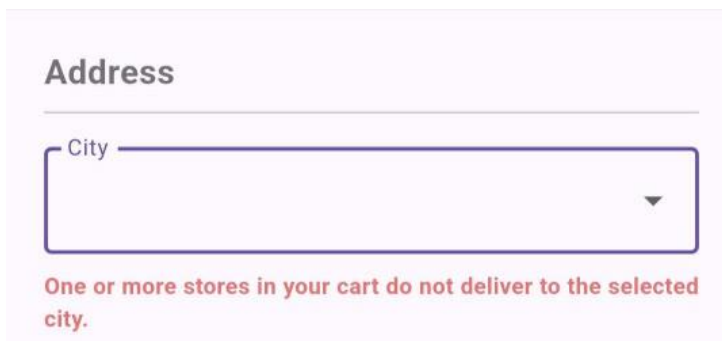


Figure 32: Store Doesn't Deliver to User's City

After successfully placing an order, users receive a confirmation message thanking them for their purchase. If any points were earned from the current order, they are clearly displayed here. For example, users can see how many points they earned from specific stores.

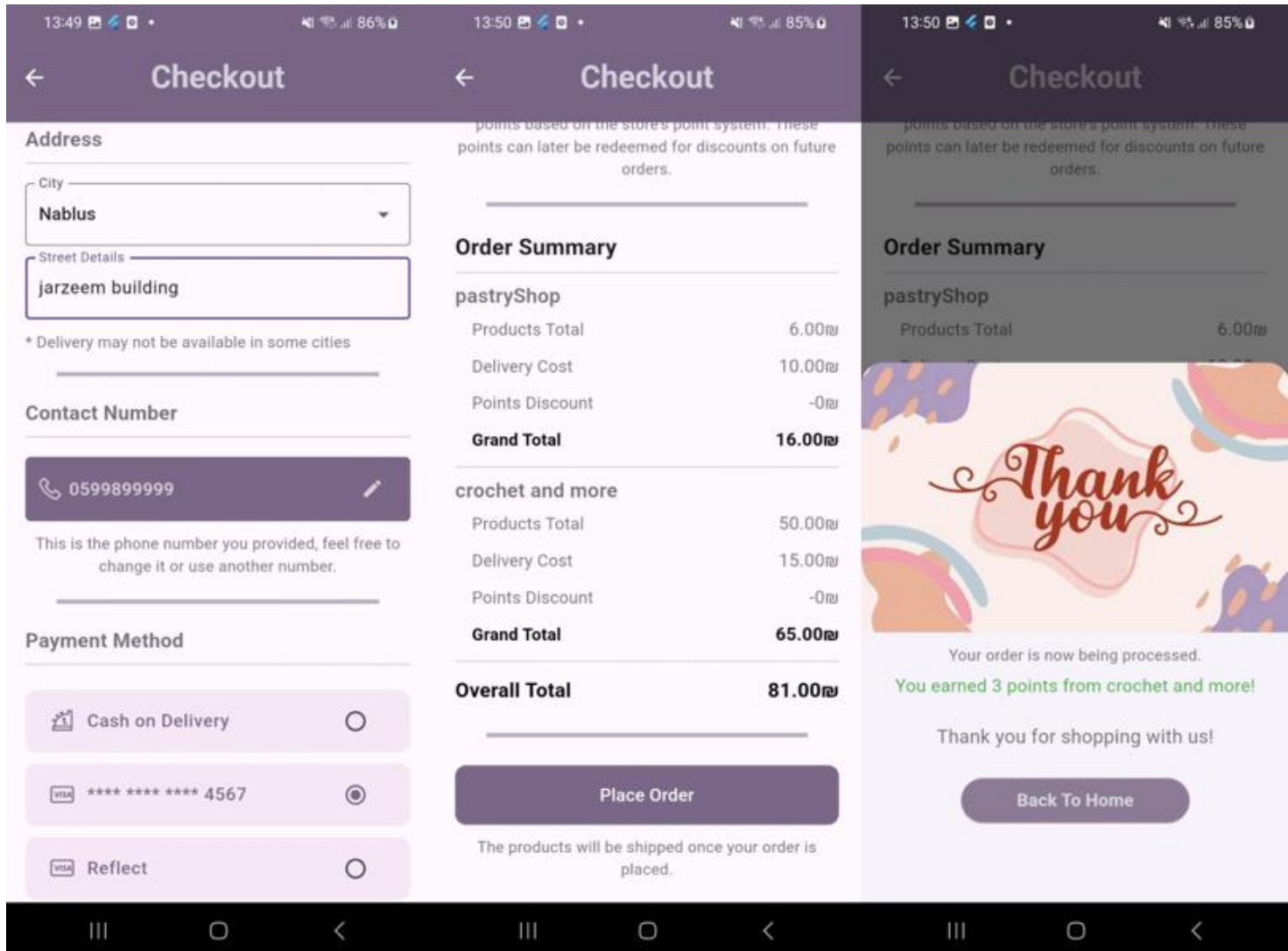


Figure 33: Placing Instant Order

- **Placing A Scheduled Order**

The process of placing a scheduled order is very similar to placing an instant order. However, there's one key difference: scheduled orders include products that the store owner has allowed the user to choose a delivery time for.

In addition, there's an option for Delivery Preference when the user has multiple items from the same store. This option lets the user choose between:

- Deliver All Together: Products will be delivered at the same time, based on the item with the longest preparation time.

- Deliver When Ready: Products will be delivered as soon as they are prepared, potentially resulting in higher delivery costs.

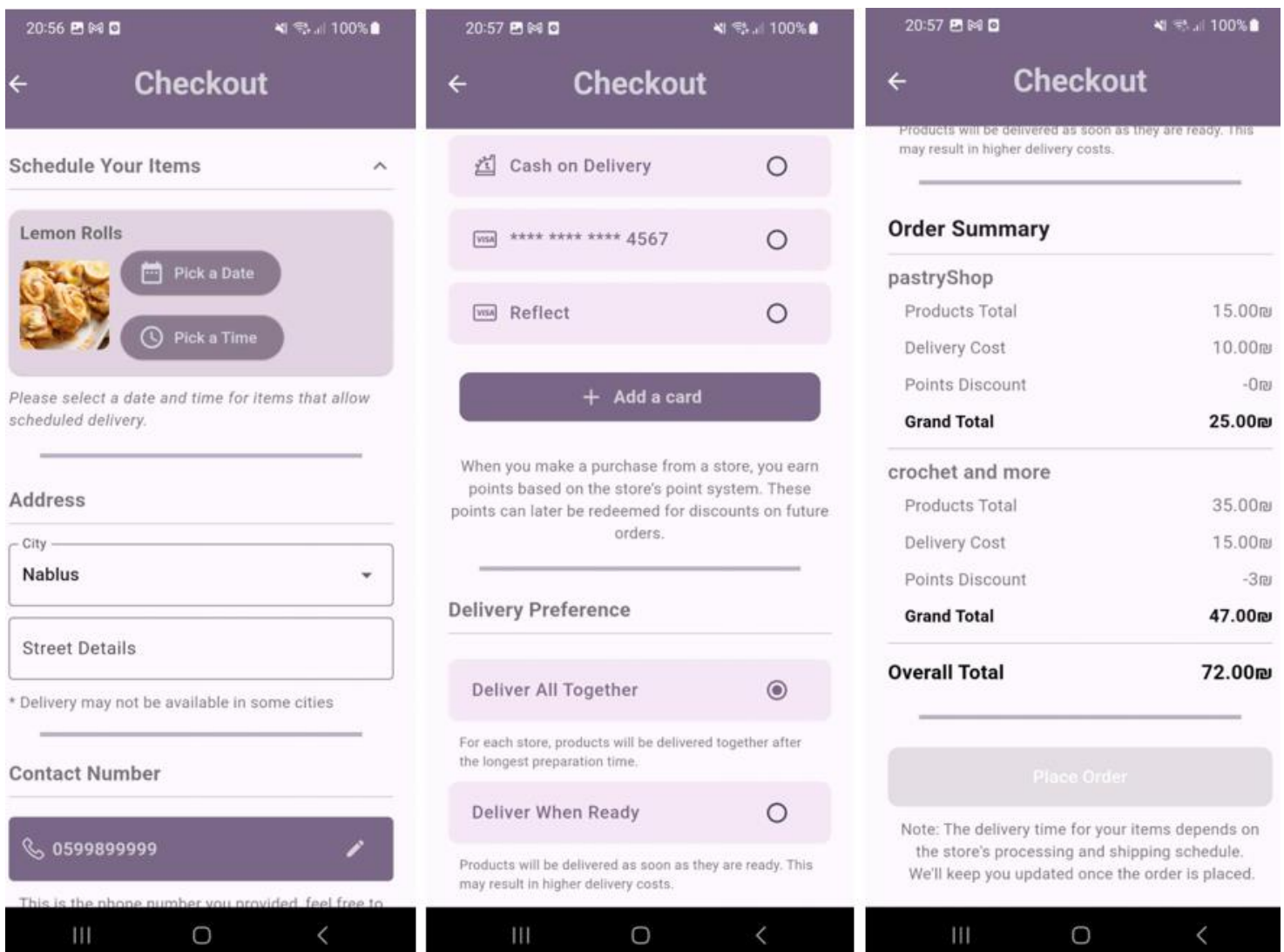


Figure 34: Checkout of Scheduled Products

In the example shown, the user has **previously earned points**, which are automatically applied as a discount in the order summary. The points are visible under the store's totals, reducing the final amount for this order. This shows the benefits of earning points while shopping on the platform.

Also, as shown, only the product **“Lemon Rolls”** in the cart has the feature to select a specific delivery date and time. This indicates that the store owner has allowed scheduling for this product, while the other products in the cart will follow the default delivery arrangements.

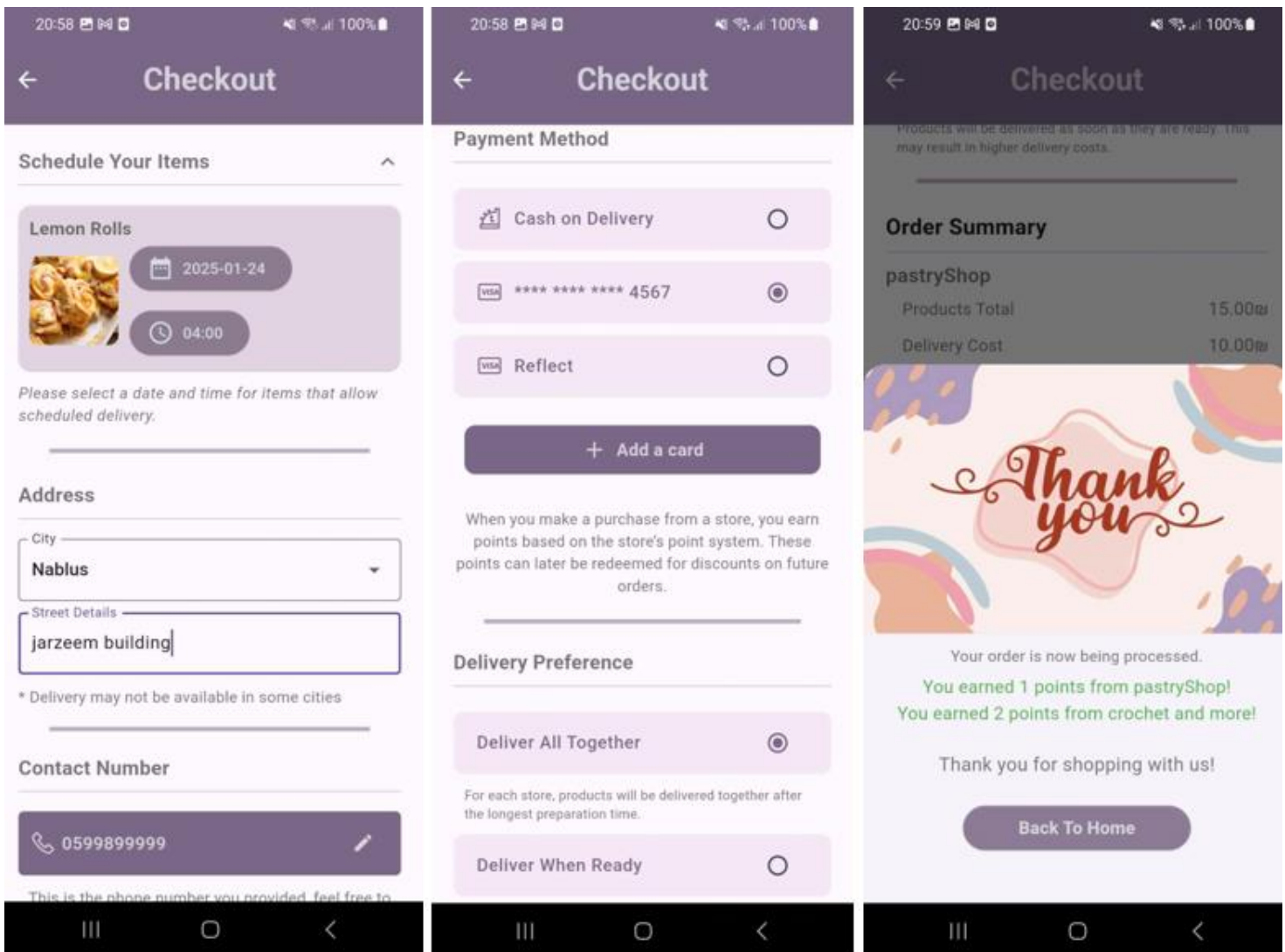


Figure 35: Checkout of Scheduled Products

Later, when the special order is confirmed, the checkout process will follow the same steps.

- **User Views Previous Orders**

Users can easily access their previous orders in the app through the icon in the app bar of the Cart page. This feature provides a detailed summary of all past purchases, allowing users to review their order history whenever needed. along with the option to filter orders based on their status, such as pending, delivered...

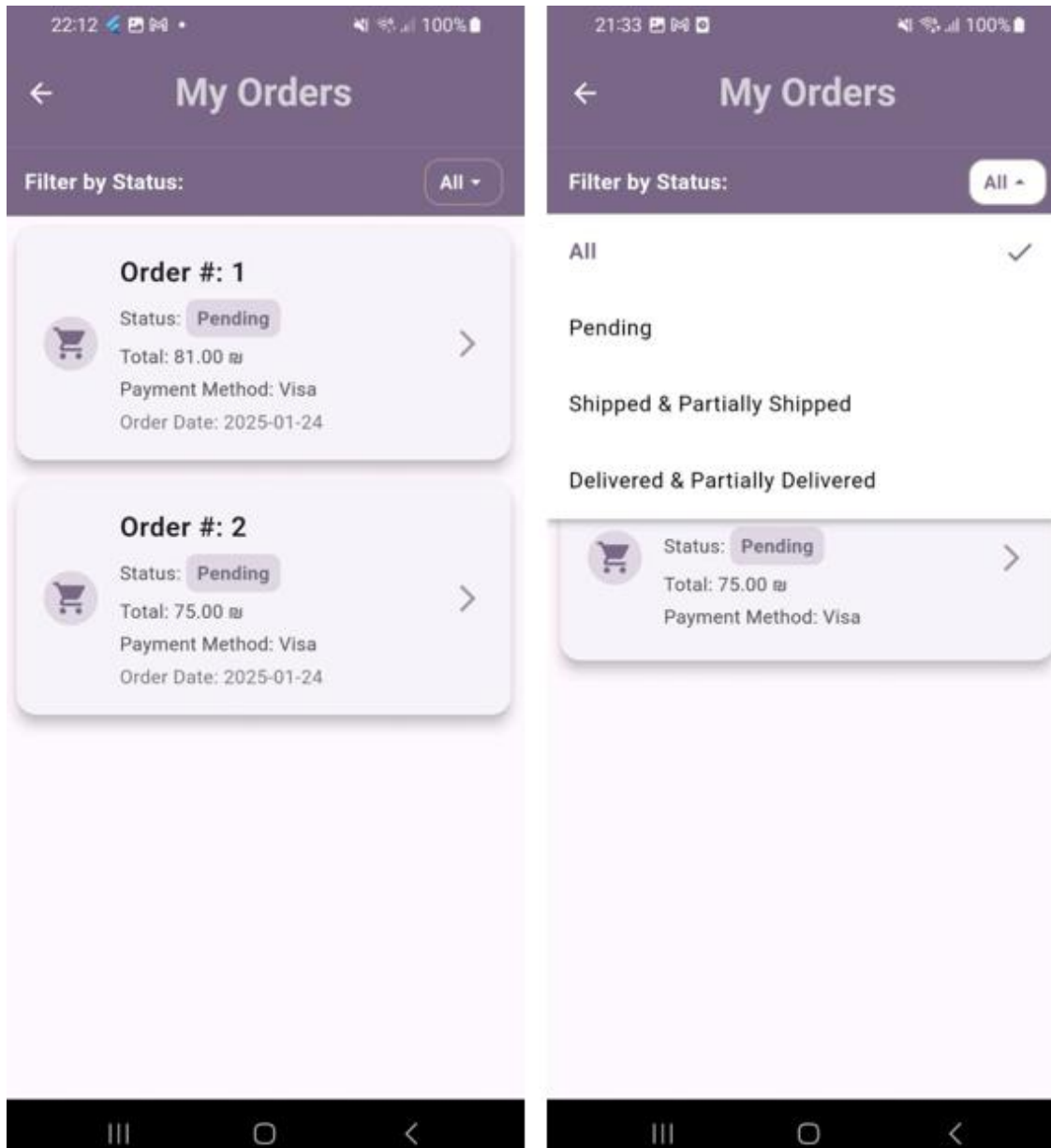


Figure 36: User View Previous Orders

Each order includes: Order Date, Ordered Items, Order Status and Total Price

Users can tap on an order to see more details, such as the items' quantities and prices. This is useful for reordering or checking delivery information.

When the user receives their order, they have the option to mark it as 'Received' and leave a rating for both the store and the products.

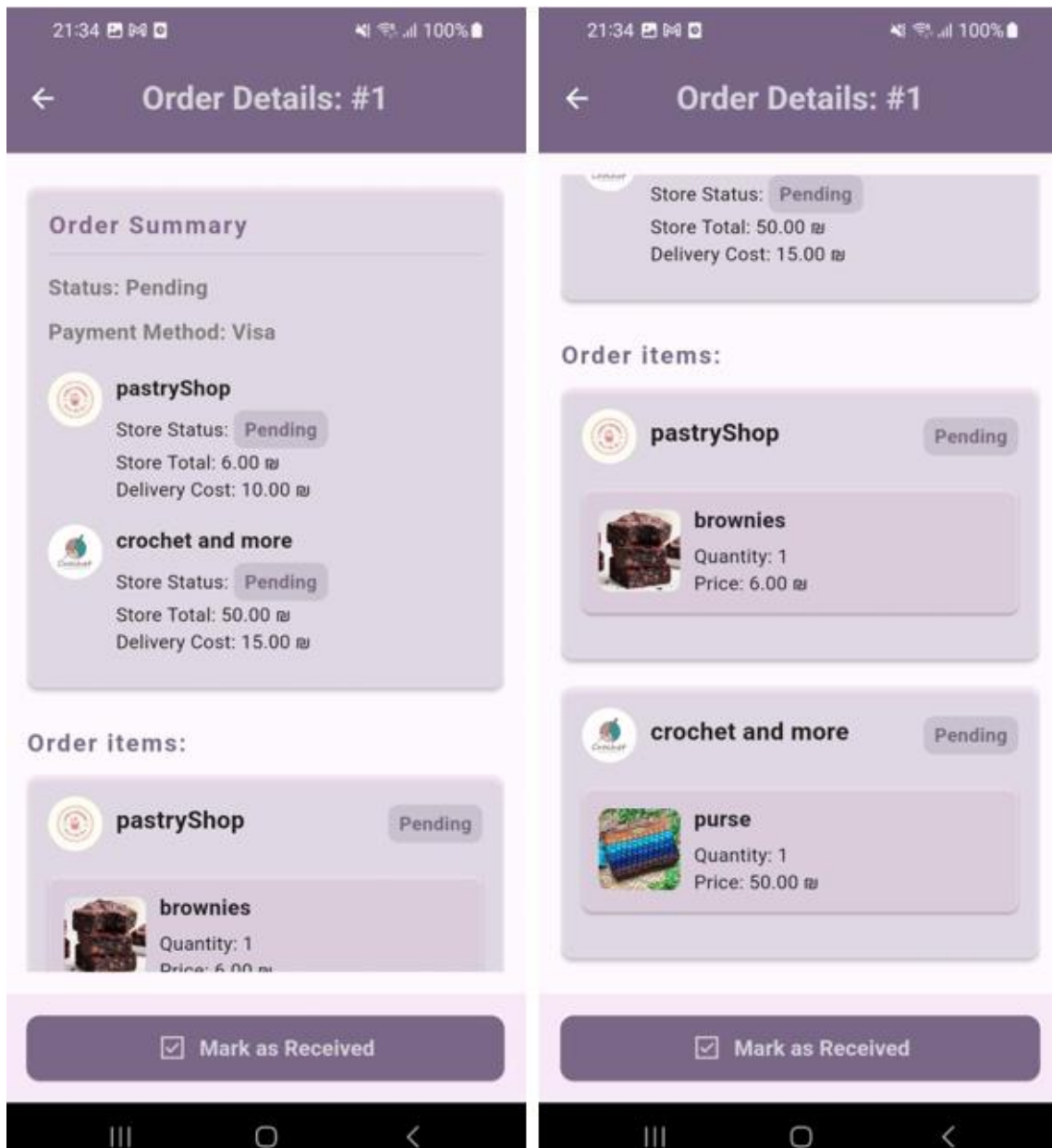


Figure 37: User View Previous Orders

- **User Rates Stores and Products**

Once the order is marked as "Received" or "Delivered," users can provide feedback by rating both the store and the products. This feature allows users to share their experience and helps improve the quality of service on the platform.

The Right picture is after both stores are rated.

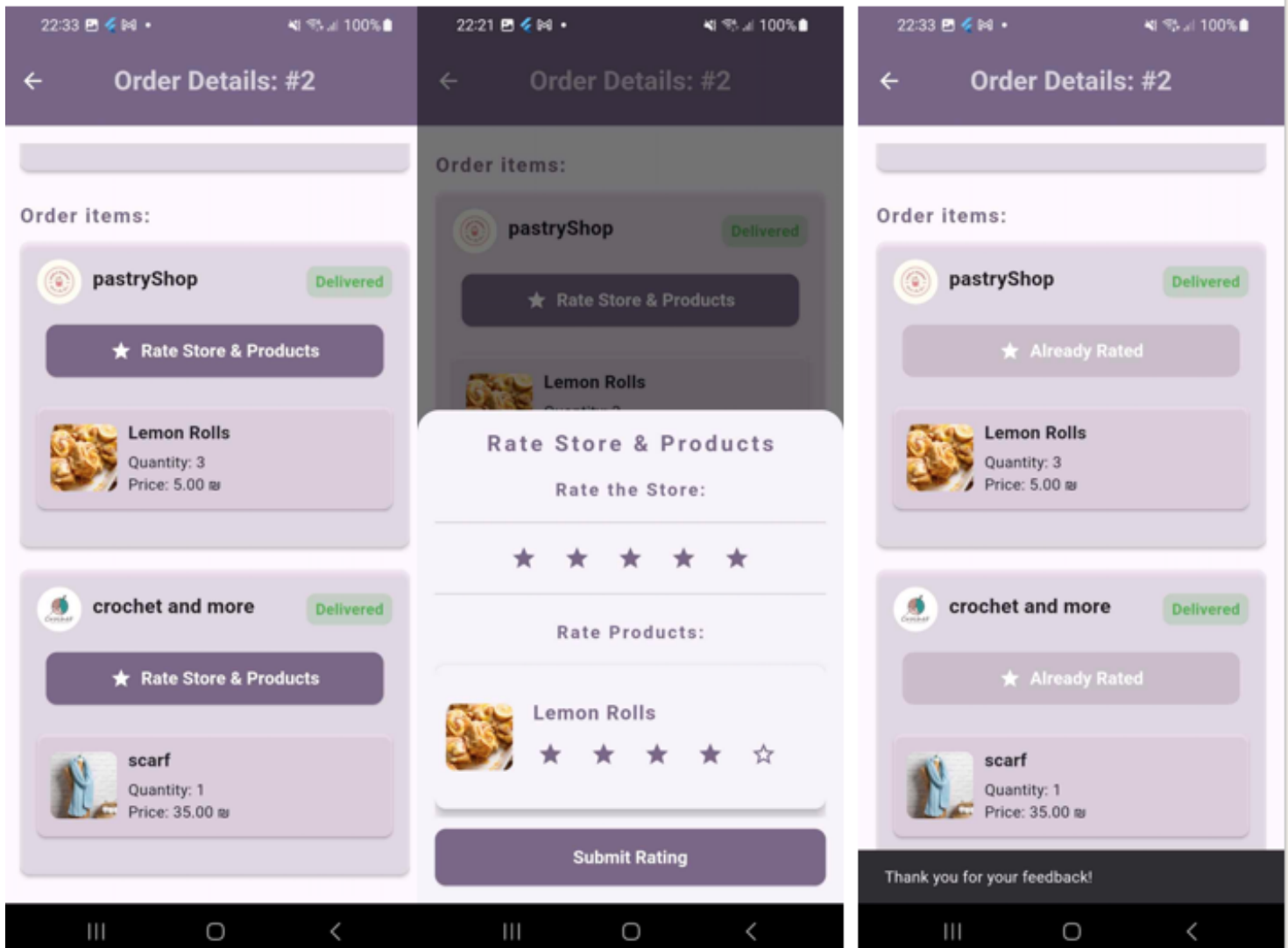


Figure 38: User rates Stores and Products after.

- **Search**

From home page, users can search for a product or a store. At first we display the most searched products and stores in the platform.

There's also filters:

Stores: Displays only store results.

Products: Displays only products results.

Deliverable: Filters results to show only stores (or products) that can deliver to the user's location.

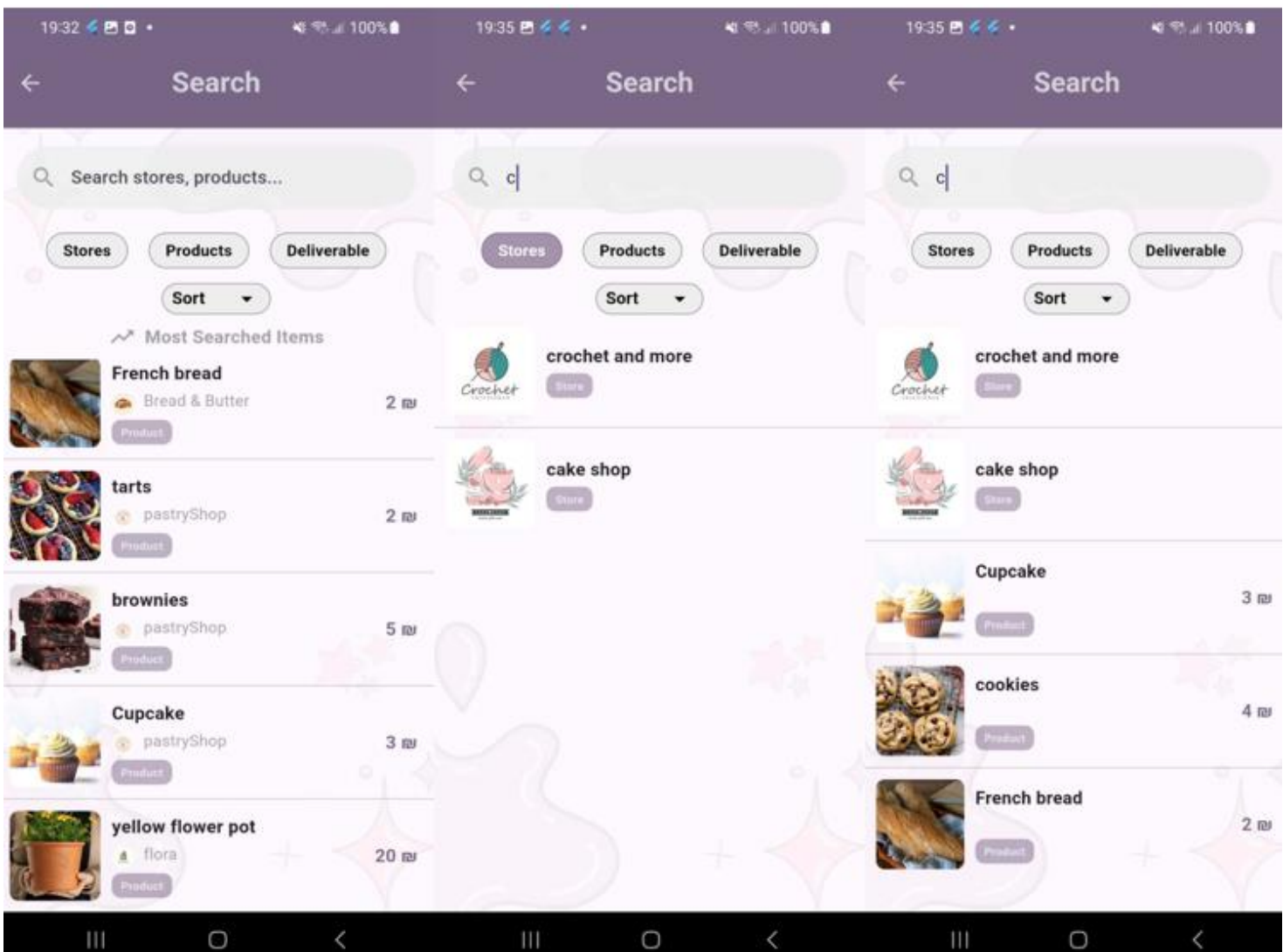


Figure 39: Search Page showing most searched items and filtered results.

Price: Sorts and filters results based on price, helping users find options within their budget.

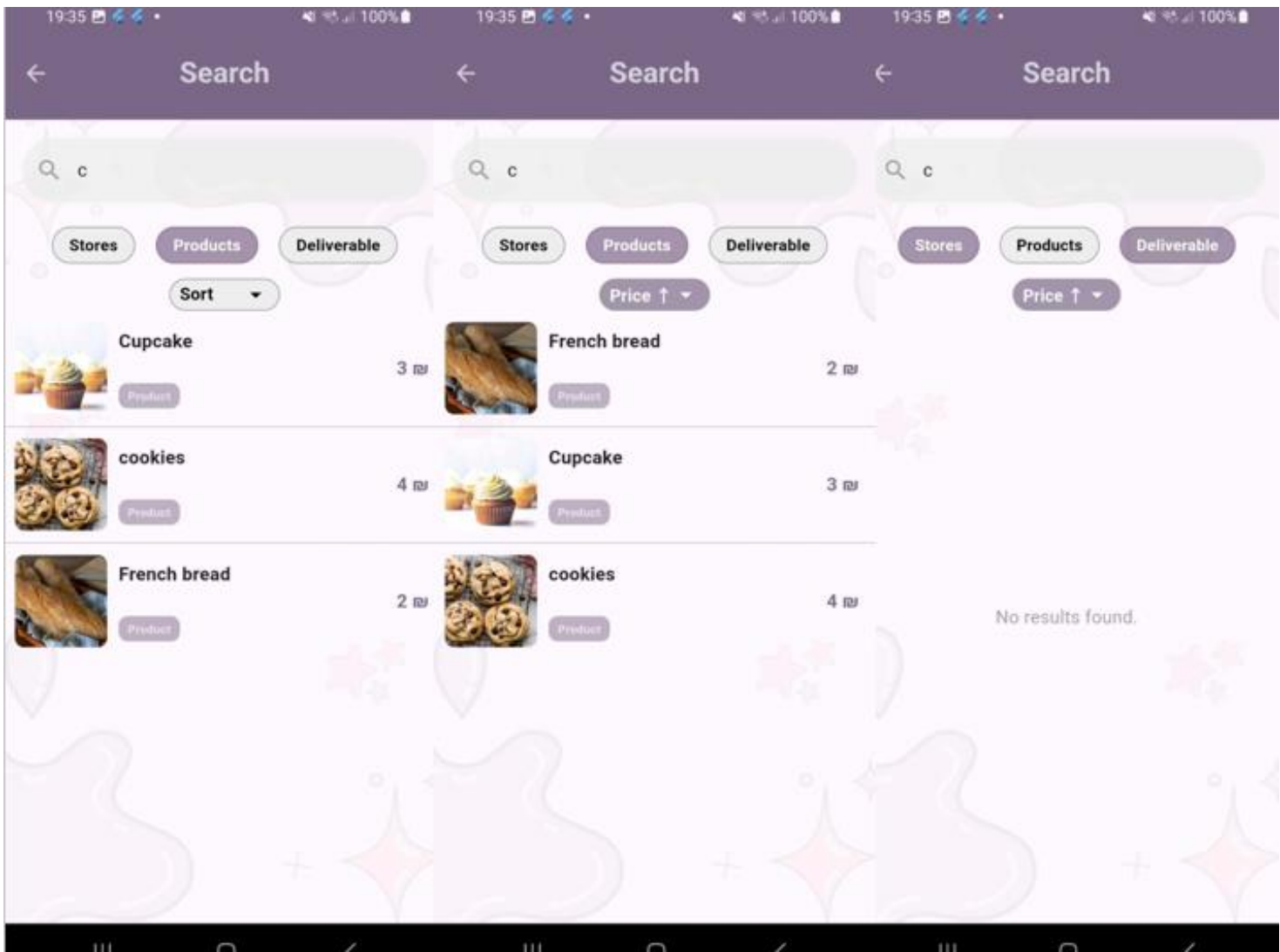


Figure 40: Filtered search results.

- **Store-Owner Subscription**

When a store logs in for the first time, a subscription prompt appears, informing them that they need to join a subscription plan before they can start adding products to their store page.

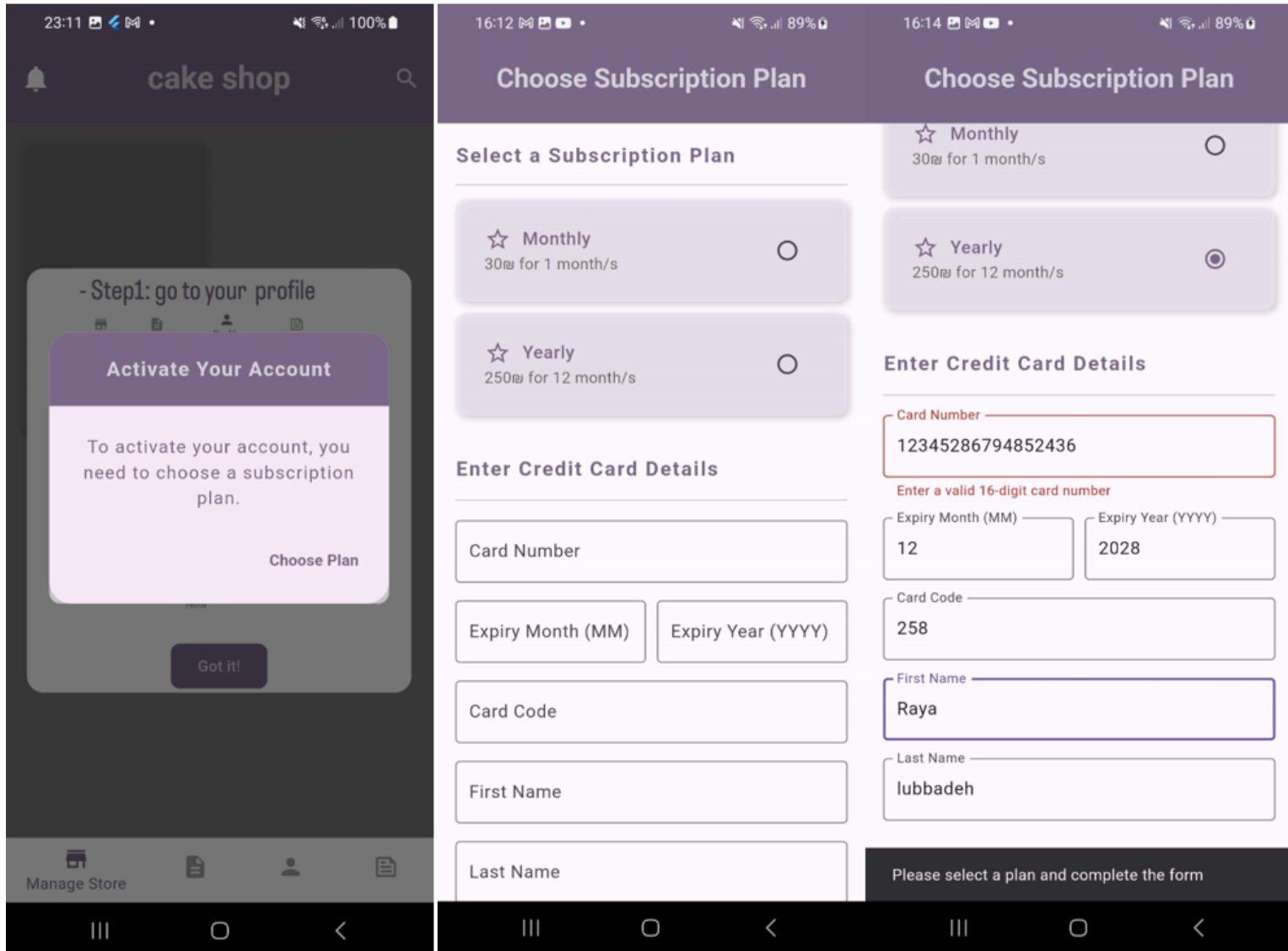


Figure 41:User Chooses Subscription Plan.

After a store owner chooses one of the available subscription plans, they are greeted with a helpful prompt that guides them on what to do next. This prompt explains how to access the **Tutorials Page**, where they can find a collection of easy-to-follow videos that explain how to use platform’s features effectively.

The videos show how to do things like adding new products to the store, making advertisements to attract more customers, customizing special order forms for buyers and managing delivery locations. Each video is easy to understand, so even new users can quickly learn how to manage their stores and use the platform without any trouble.

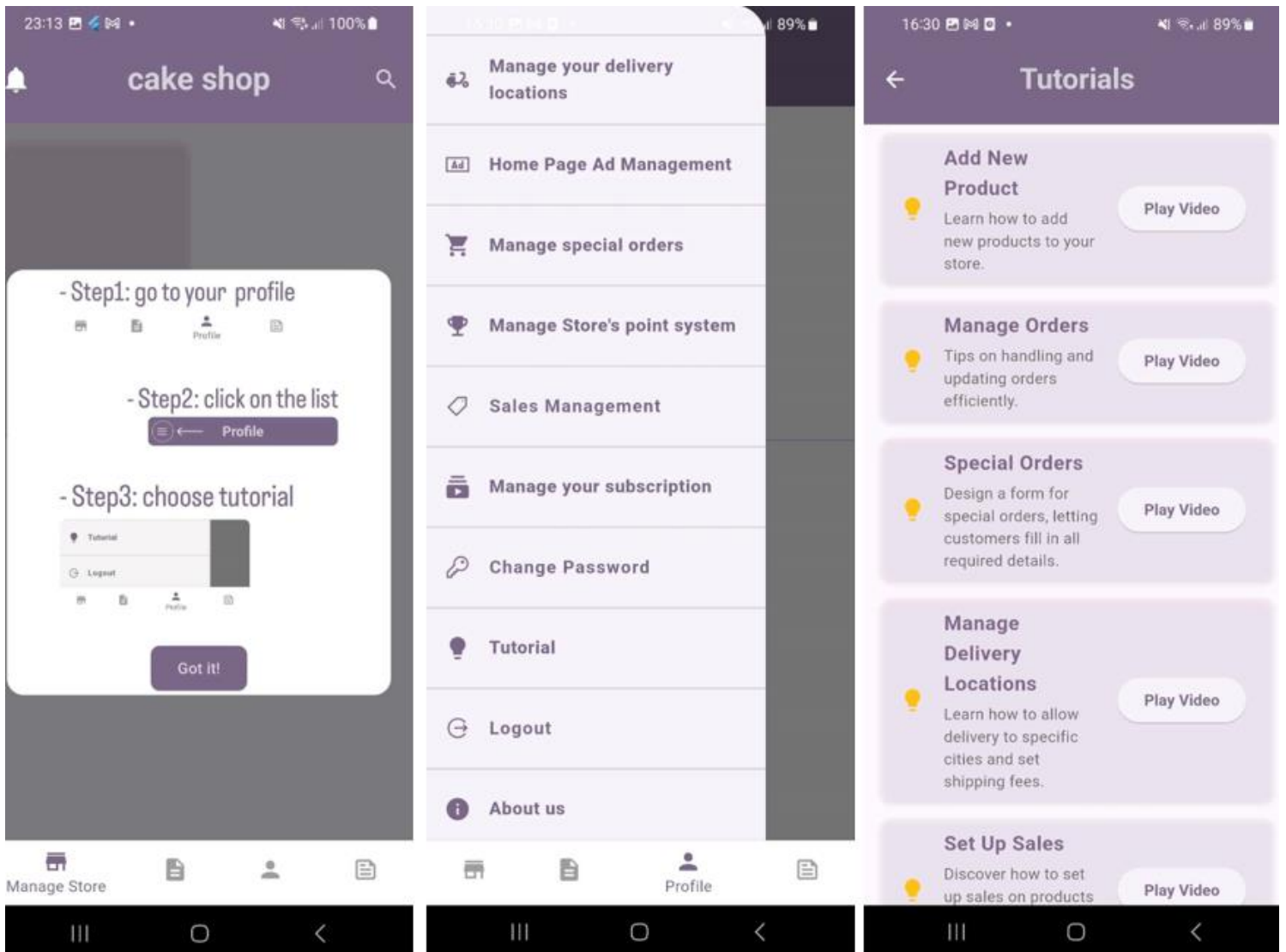


Figure 42: Steps to Access Tutorials and Learn to Manage Your Store Features

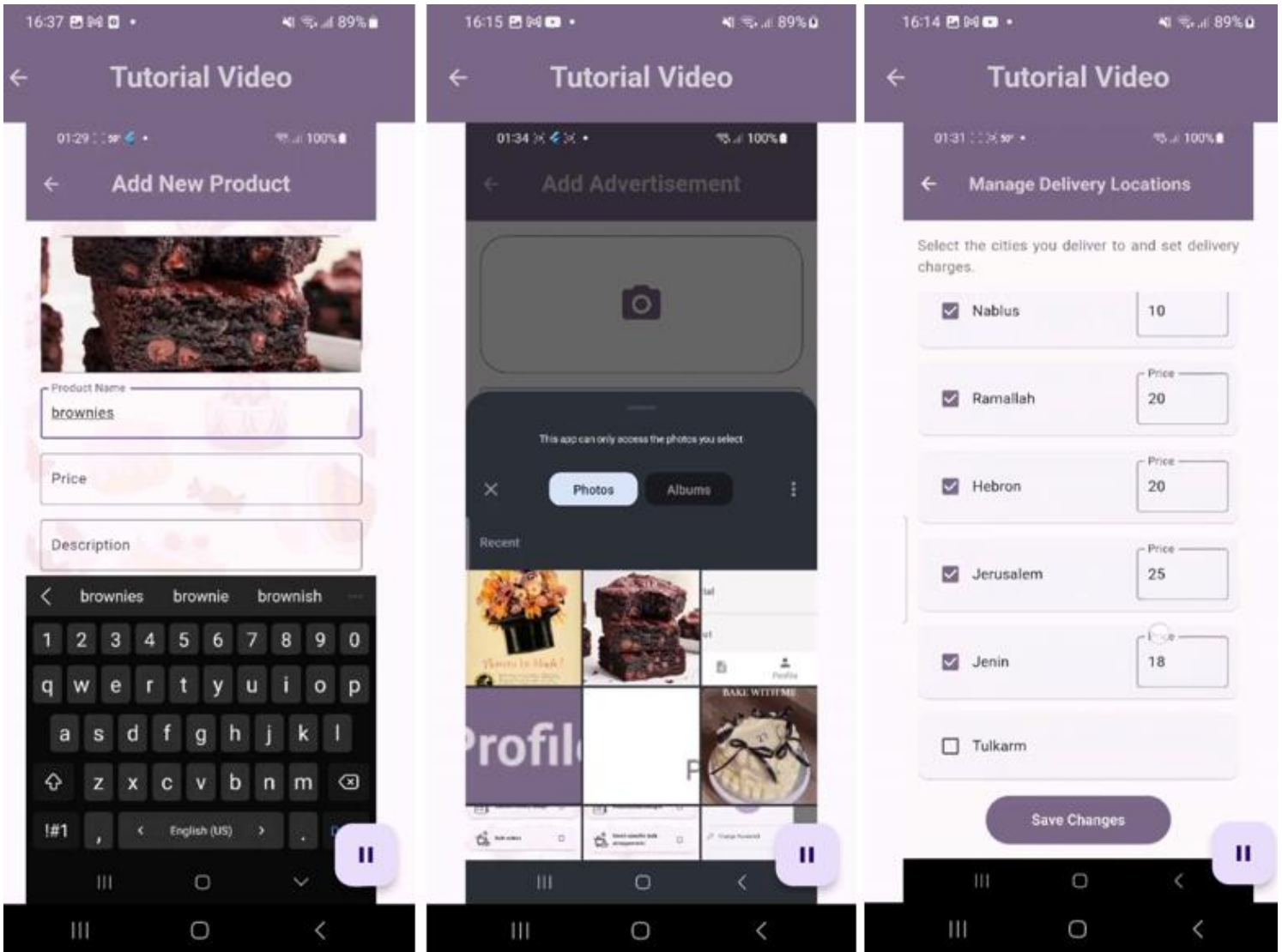


Figure 43: Tutorial Videos

- **Adding New Product**

The **Add Product** feature is designed to give store owners maximum flexibility when creating and customizing their products. It allows the owner to define all the important details of their products, such as the name, price, and description...

Owner can decide whether the availability of the product whether it's "In Stock," meaning it's ready to be purchased and delivered immediately, or "Upon Order," where the product is made only after a customer place an order.

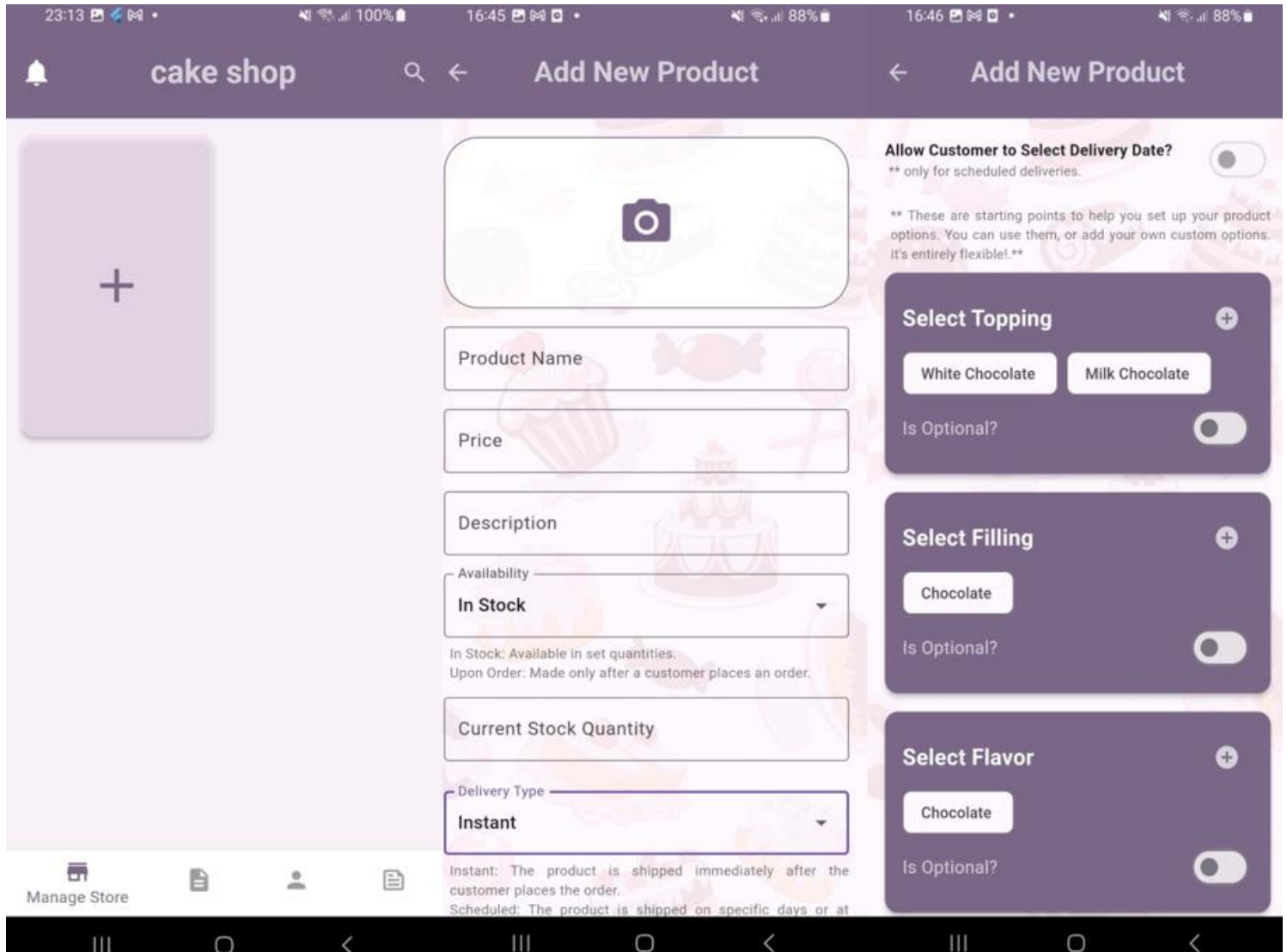


Figure 44: Adding New Product

If the product is made upon order, you can specify how much time the owner needs to prepare it. For example, a product is to be ready in 1 day, 2 hours, or even just 30

minutes, it's completely up to the owner. And if it's in stock then the owner provides the current quantity of the product.

The owner can also choose the delivery type that works best for their business. For instance, if the product can be sent out immediately, the owner can select **"Instant Delivery"**. However, for products that require scheduling, such as upon order products and special-order items, the **"Scheduled Delivery"** option is available.

Additionally, the owner has the flexibility to offer customizable options for their products. Each product category includes default option groups to help the owner get started easily. For example, in the **Pastry and Bakery** category, there might be a group for **Fillings** with options like "Chocolate" or "Vanilla."...

These options are completely optional, nothing is preselected. The owner can choose an option simply by clicking on it, and it will appear as selected.

If the owner wants to add more options, they can easily create new options by clicking the **"+" icon** at the top-right corner of the option group. For instance, they might add "Cream Cheese" as additional fillings. The same applies to other option groups, like toppings, where they can start with suggestions like "White Chocolate" or "Milk Chocolate" and add new ones like "Sprinkles."

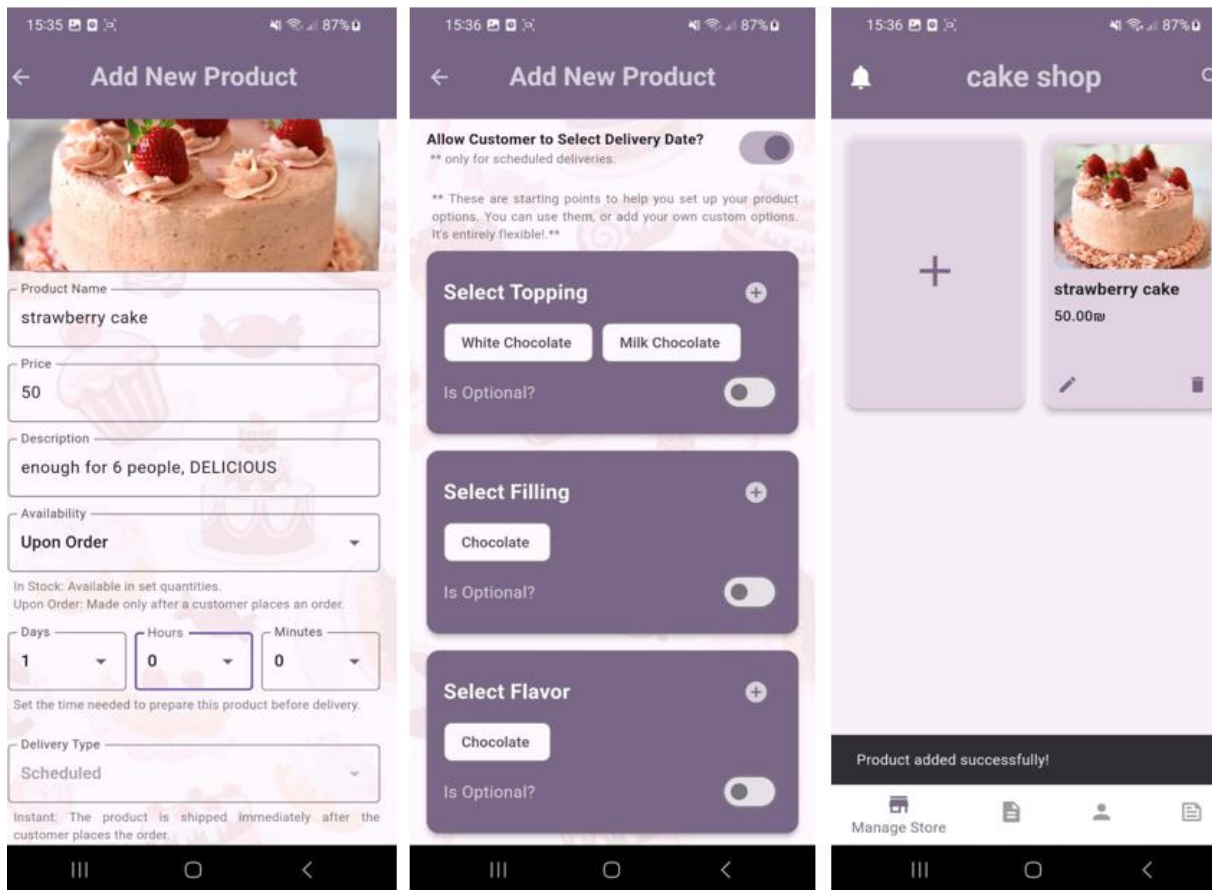


Figure 45: Adding 'Upon-Order' Product with No Options

In Figure 45, we added Strawberry Cake with the availability set to **'Upon Order'**, meaning the product will only be prepared after the customer places an order. (*By default, when the product is upon order the delivery type is set to 'Scheduled'*). The preparation time required for this product was set to **1 day**, giving the owner enough time to fulfill the order.

No options, such as toppings or fillings, were selected for this product.

Now, let's add cookies, with availability set to **'In Stock'** and a current stock quantity of **20 units**. The delivery type is set to **Instant**, meaning the product is ready to be purchased and delivered immediately without any delays.

For this product, the owner used the **default topping options**, such as "White Chocolate" and "Milk Chocolate," and added a new topping option, **'Oreo,'** to provide customers with more choices. Similarly, for the **filling options**, the owner chose the default option and added **'Nutella'** with an extra cost. (*If no extra cost is provided, the default value is 0.*) For the **flavor options**, only the default options were selected.

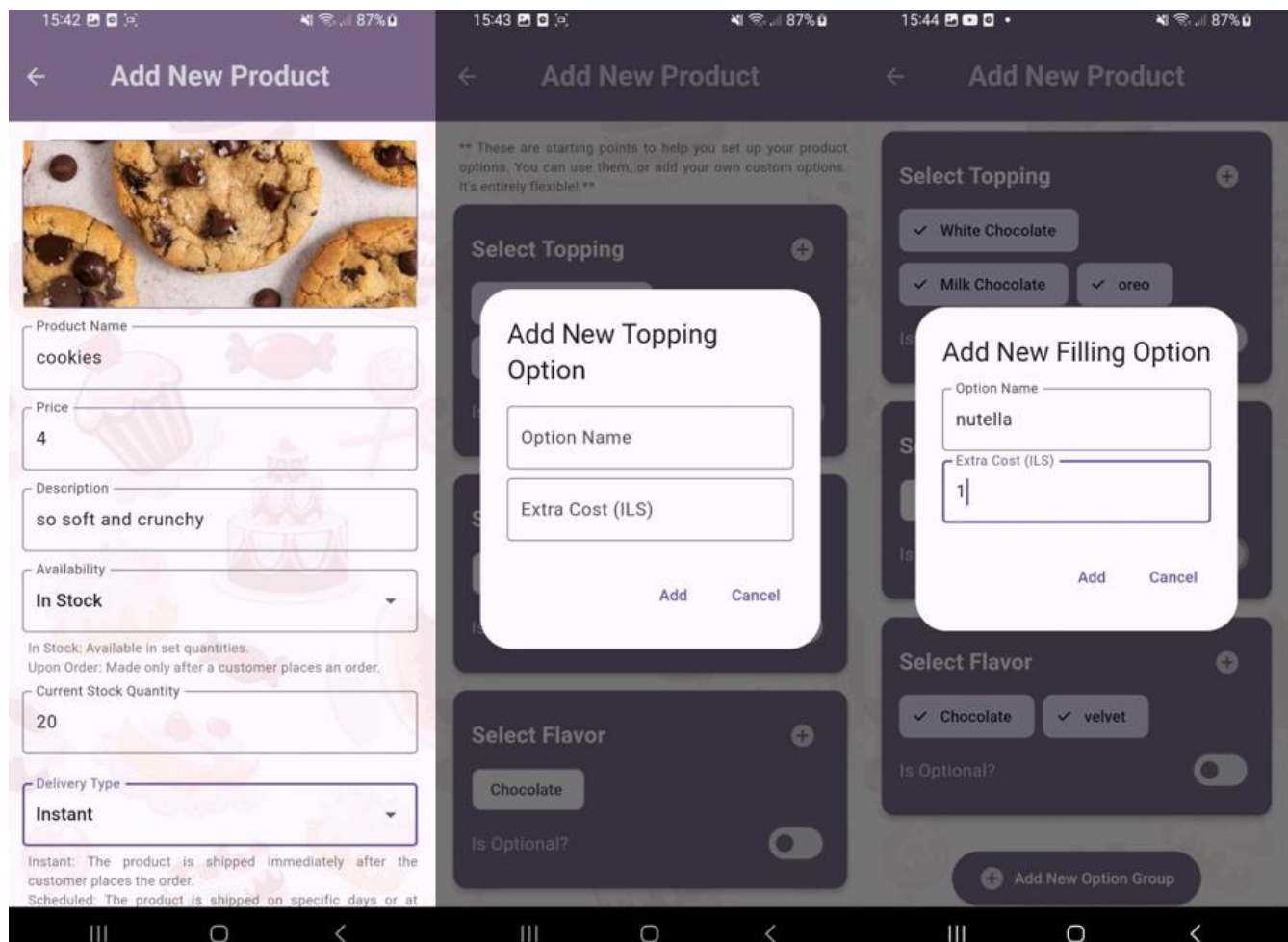


Figure 46: Adding Instant-Delivery Product with Options (1)

It's important to note that including all three option groups—topping, filling, and flavor is not mandatory. In this case, it was simply convenient to include them for this product.

Also, a new option group named '**Extra**' was added to the product. The group was marked as **optional**, giving customers the flexibility to choose whether they want to include any extras in their order.

Within the new group, an option for '**Vanilla Ice Cream**' was added with an extra cost of **1 ILS**. This demonstrates how the owner can easily create and customize new option groups to enhance their product offerings. The flexibility to name the group, set it as optional or mandatory, and add specific options with or without additional costs allows store owners to tailor the product to meet their customers' needs.

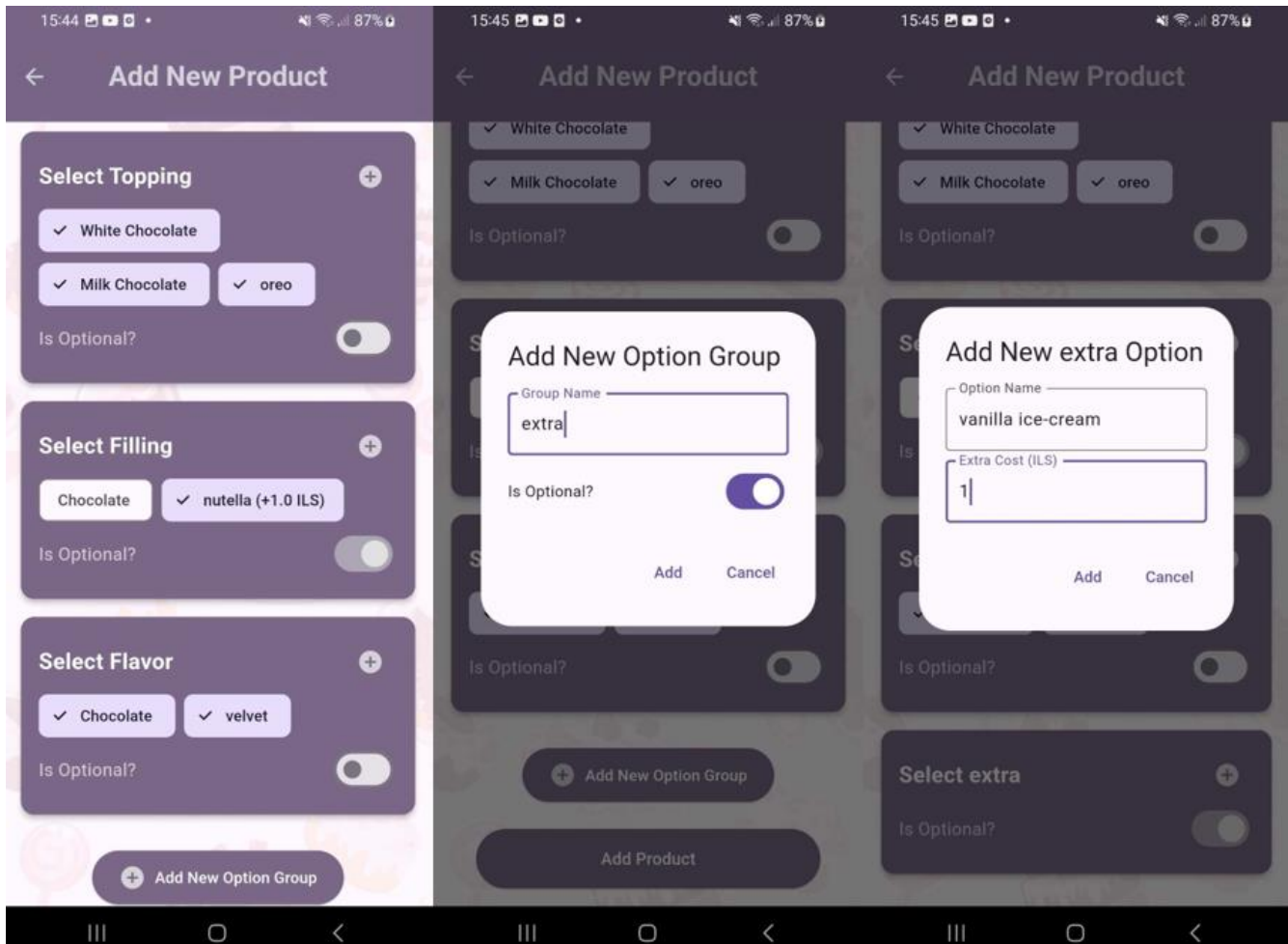
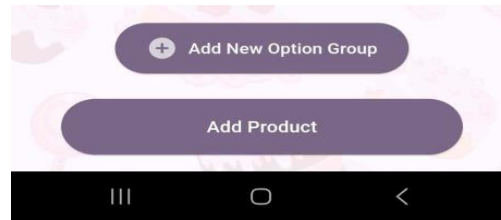


Figure 47: Adding Instant-Delivery Product with Options (2)

When all details are finalized, the owner clicks the **Add Product** button to save the new product, making it available for customers to view and purchase.



After adding the products, this is how they appear to the user. For the **Strawberry Cake**, marked as '**Upon Order**,' the user is informed about the required preparation time before ordering (1 day).

For the **Cookies**, users select from the provided options. They can choose a topping (e.g., **White Chocolate**), a filling (e.g., **Nutella** with an extra cost of 1 ₪), a flavor (e.g., **Chocolate**), or any additional extras.

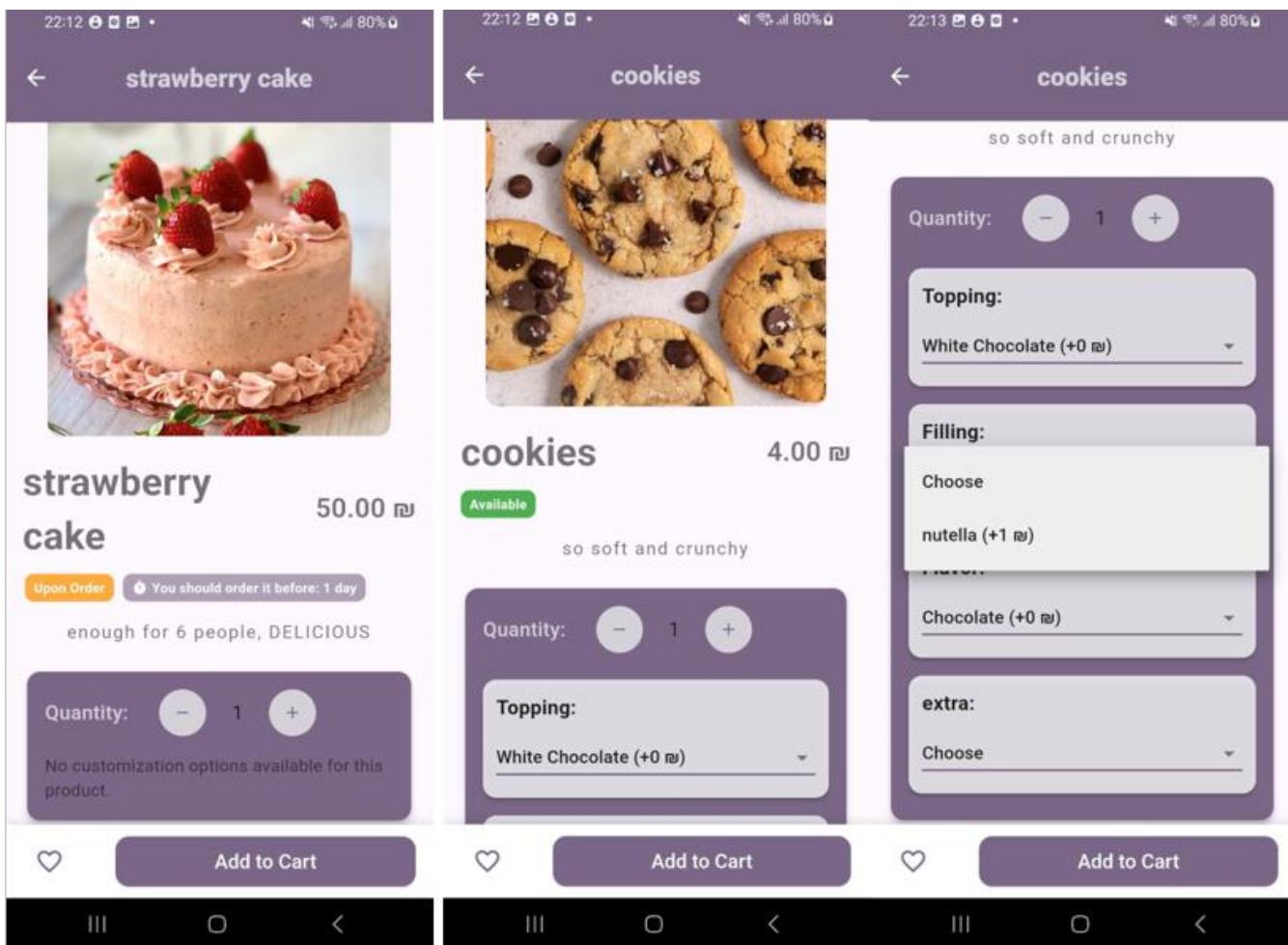


Figure 48: User View of Added Products

Now let's add a product in a different category. The **Available Sizes** group is provided as a **default option** for this category, then we added new options and another option group.

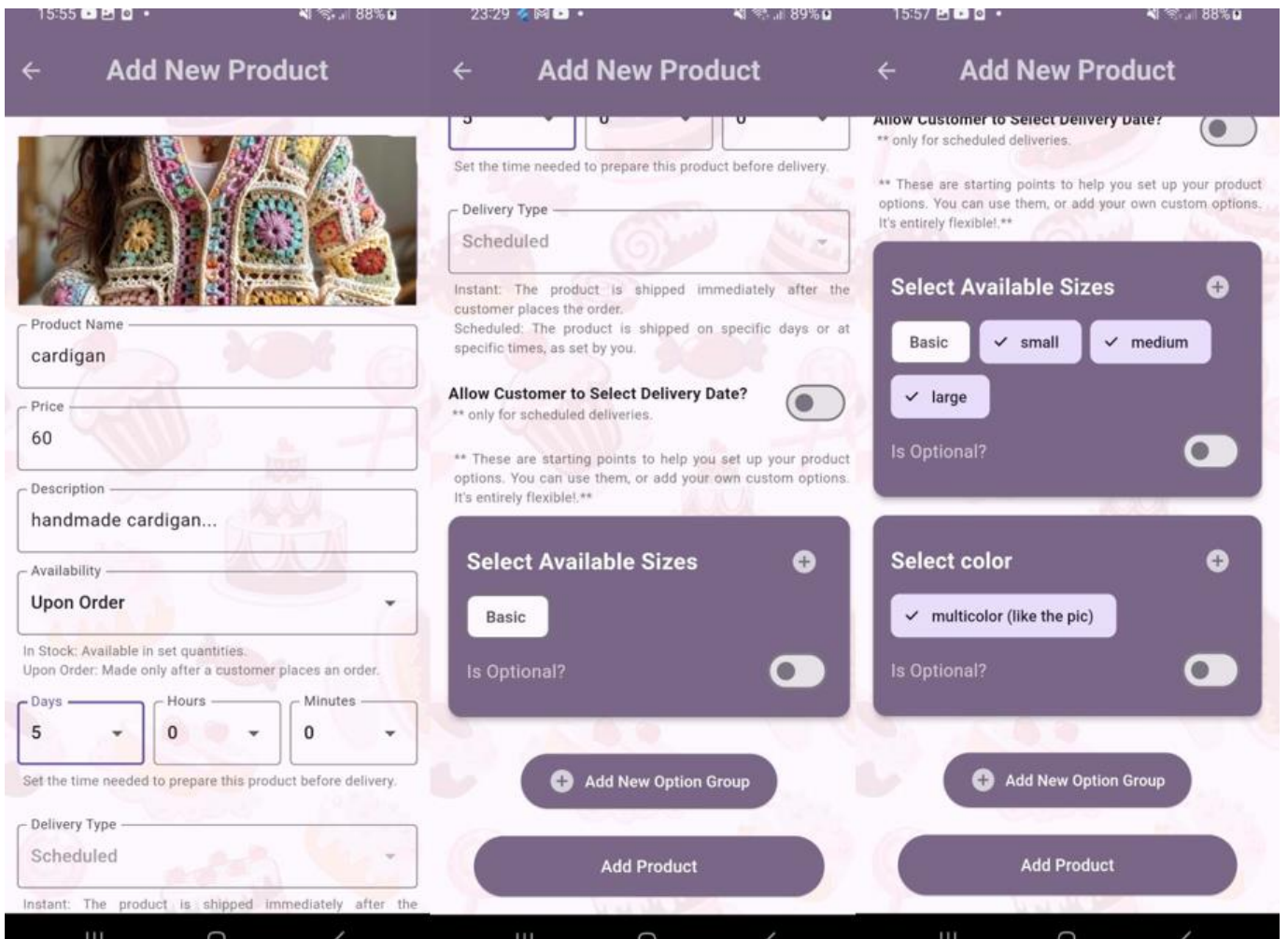


Figure 49: Adding a Product in a Store in a Different Category

After adding the products, this is how store owners view them in their dashboard.

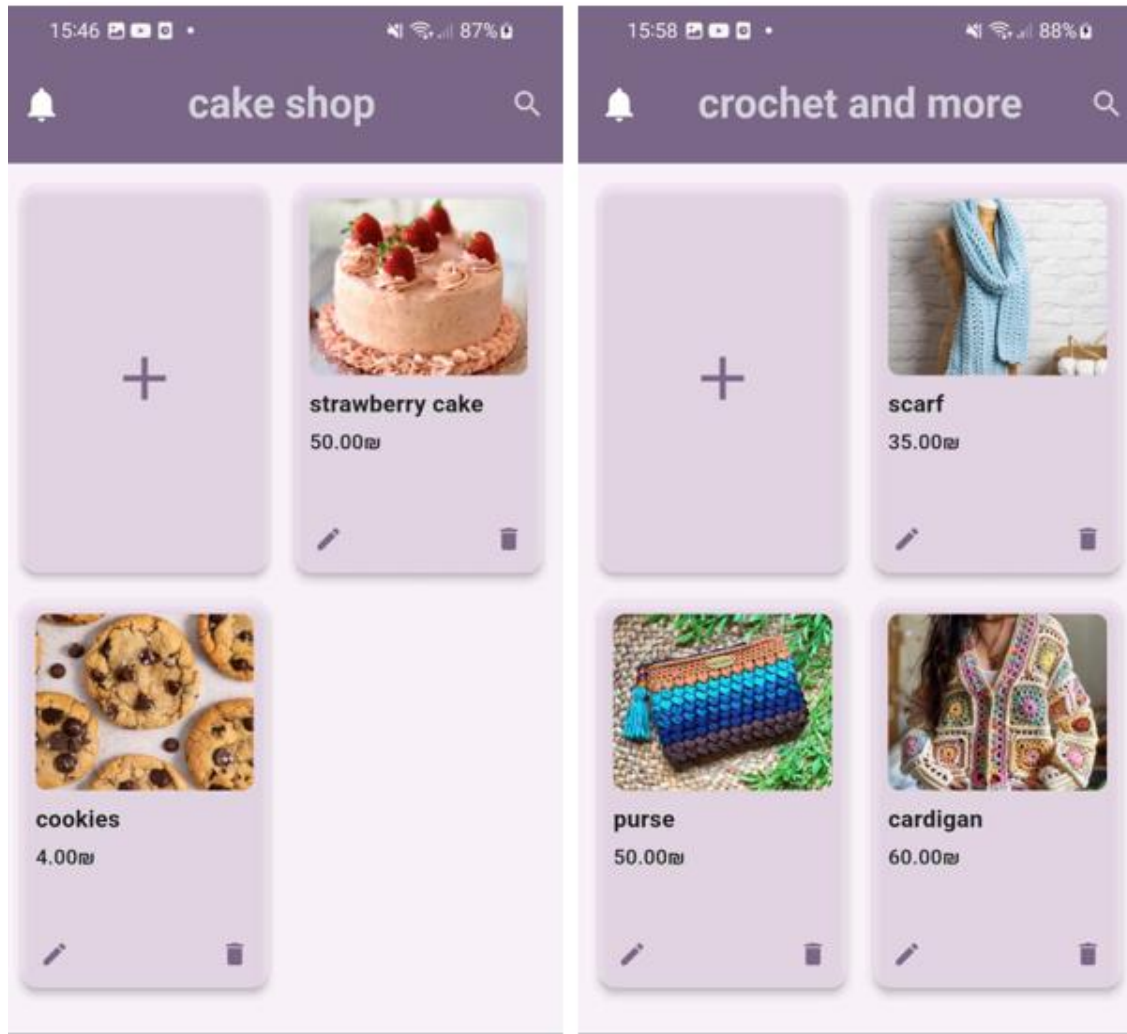


Figure 50: Store Owner's View of Products

- **Edit and Delete Product**

The **Edit Product** feature allows the store owner to update a product's details, like name, price, stock, and options after clicking the edit icon.

They can also add or remove options, such as toppings or extras, with a simple confirmation before deleting any item.

Here we want to delete the "Oreo" option from the toppings:

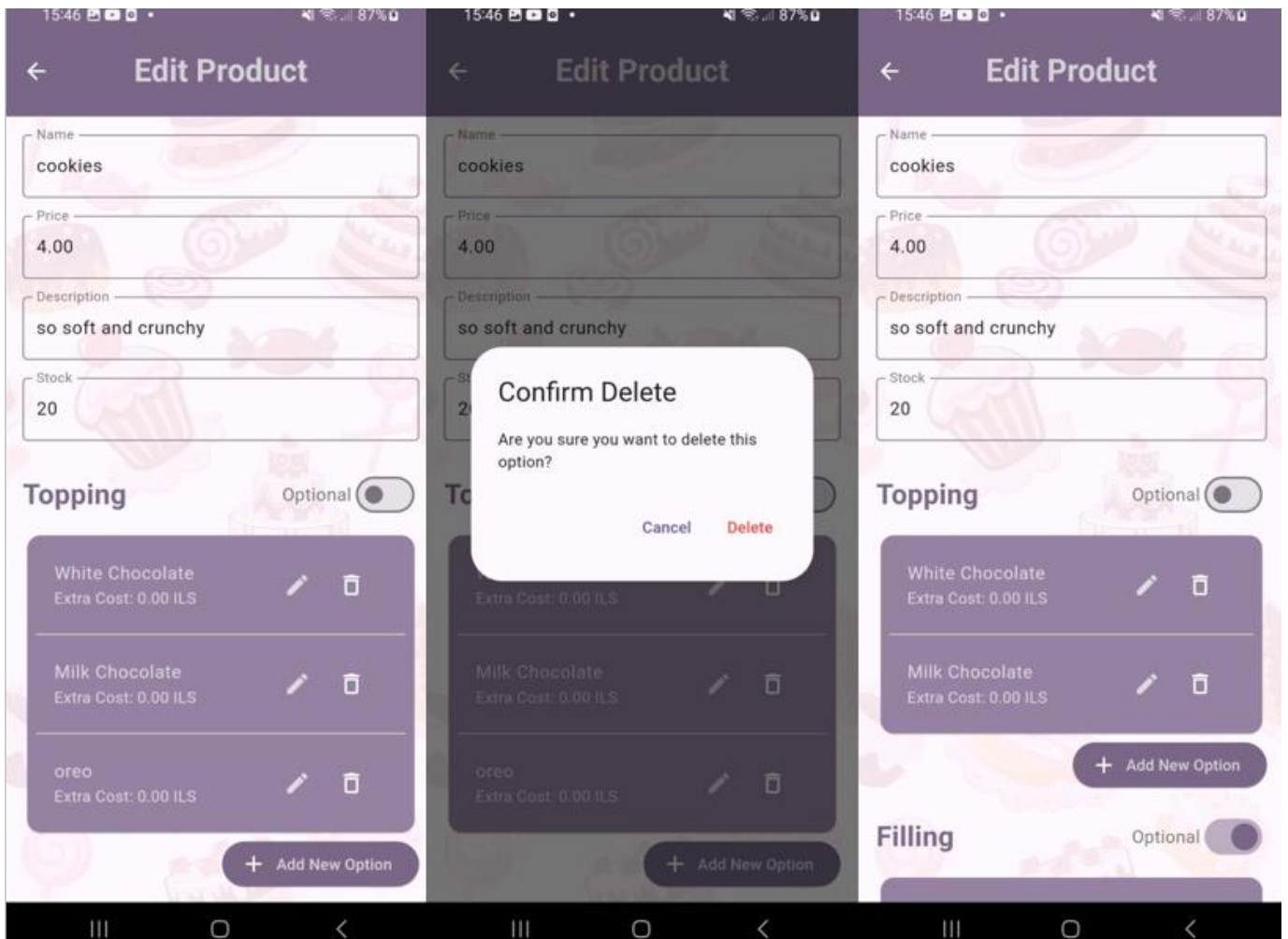


Figure 51: Editing Product Details and Options

Store owner can delete a product entirely. After clicking the delete icon, a confirmation dialog appears to prevent accidental deletions. Once confirmed, the product is removed, and the dashboard updates instantly to reflect the change.

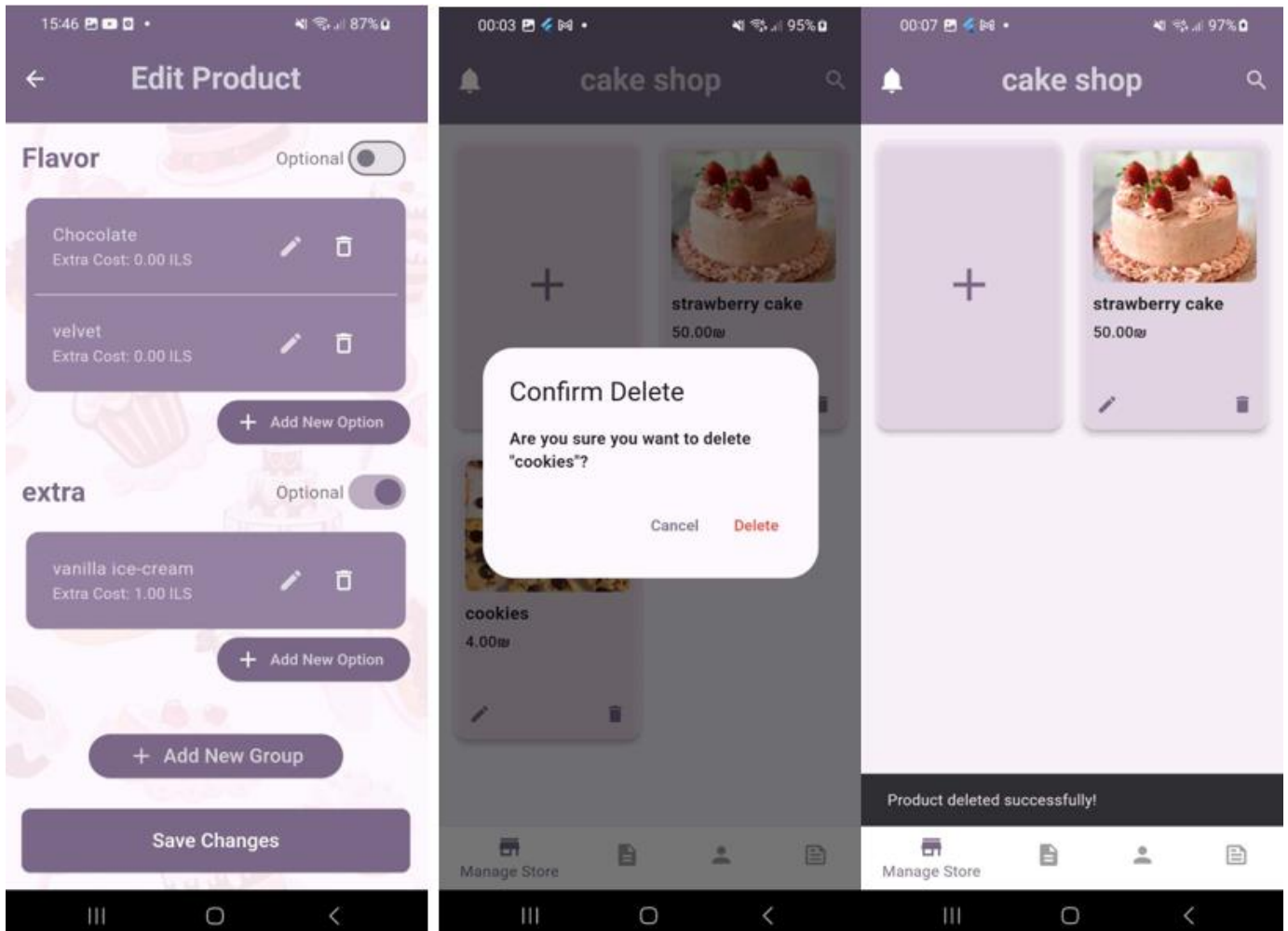


Figure 52: Saving Edits, Deleting a Product from the Store

- **Store Profile**

In the store profile page, many things are displayed such as store logo, store name, bio, the date of account creation and a button that navigate the store owner to his Insights page.

Below that, there is a tab bar with two sections, a section that displays the account posts, and the other section for displaying the feedbacks on that store.

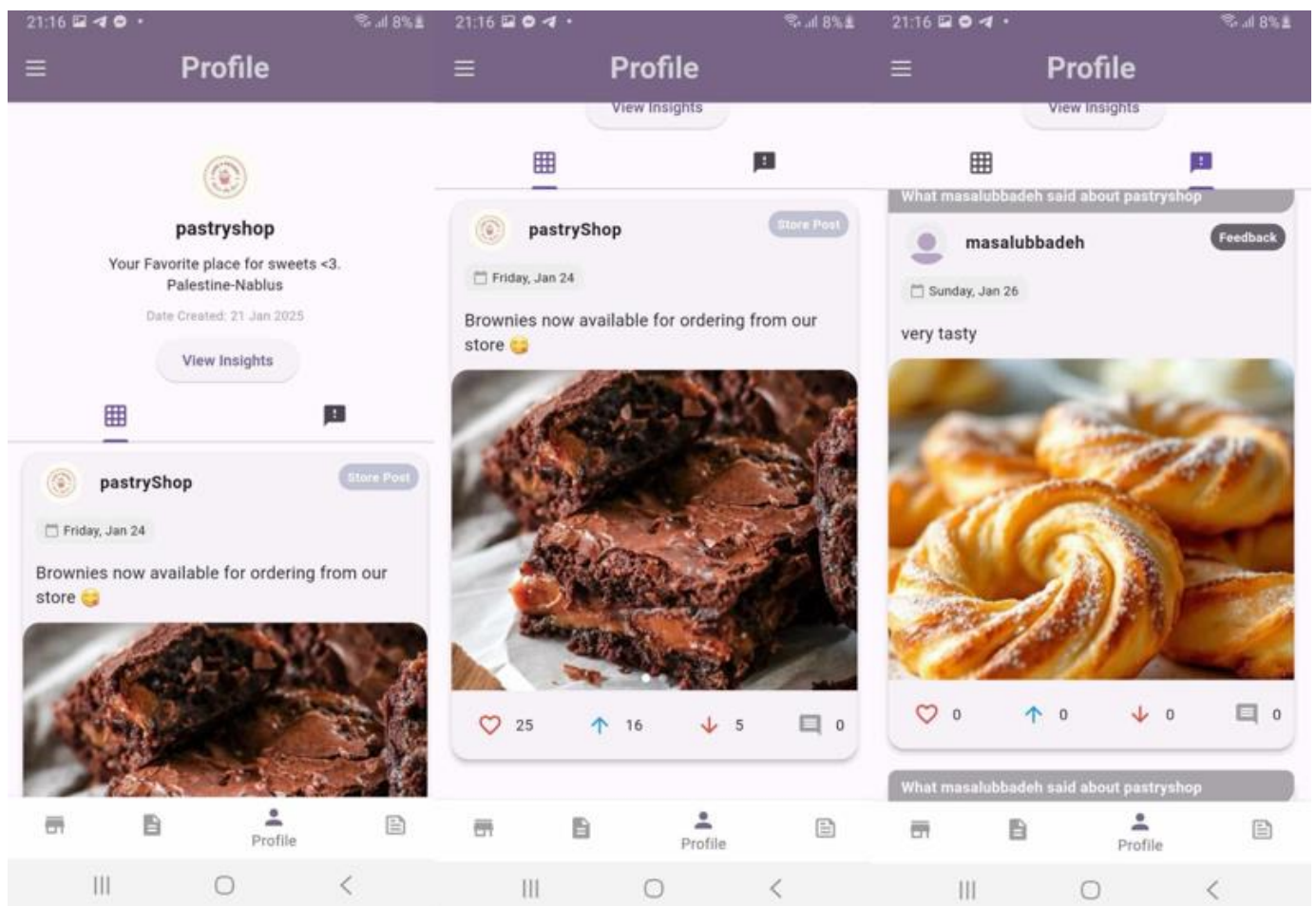


Figure 53: Store Profile

As for the insights page, the main goal behind it is that the store owner can keep up with his store progress. Many things are displayed within this page, such as the rating the store got, how many orders the store received so far, most ordered product and the most searched product.

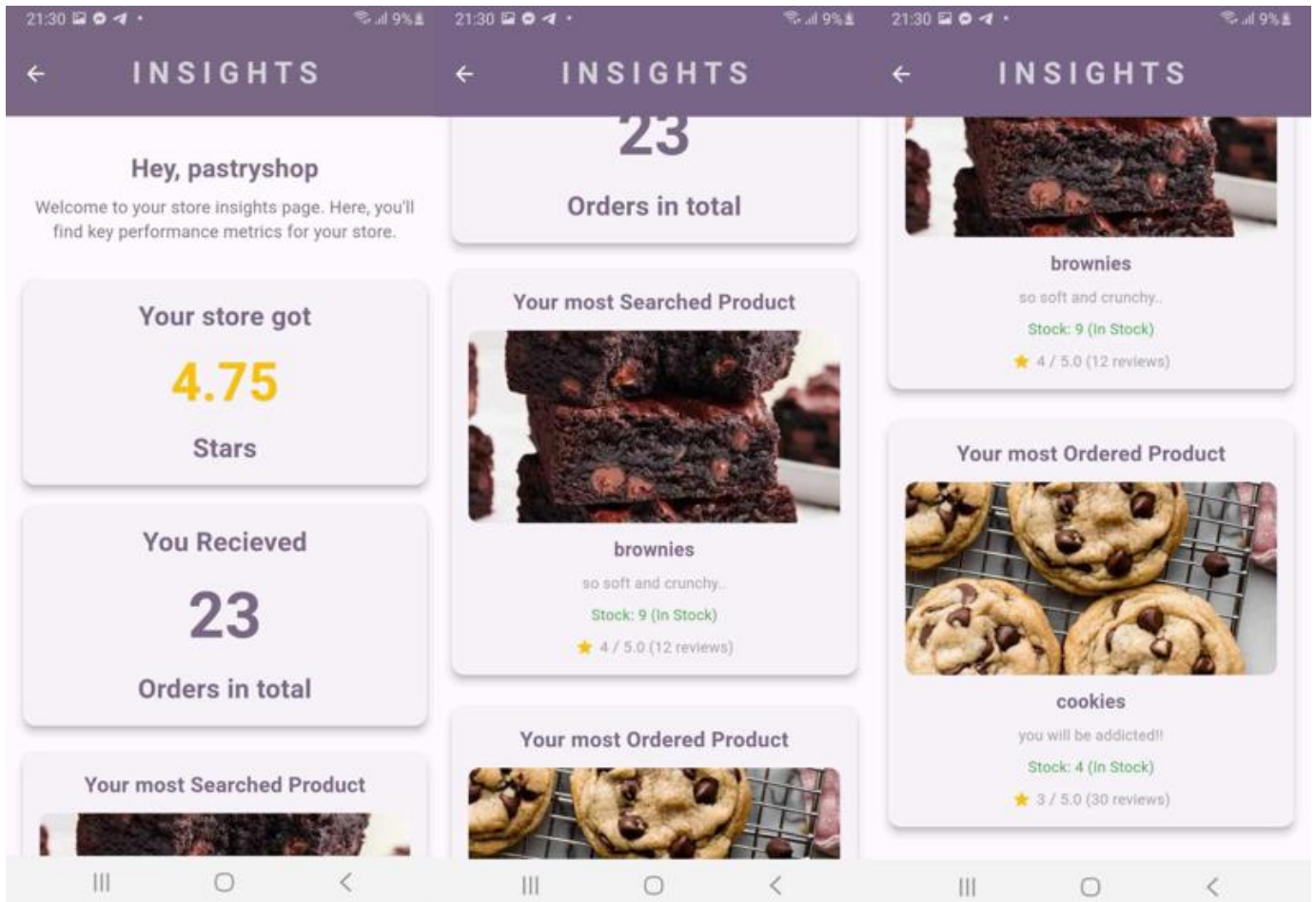


Figure 54: Insights Page

Also, when a user views the store profile, he can view the same things except for the insights page. Instead, he can view the store products, create feedback about the store, start a conversation with the store. The feedback and conversation features will be explained later.

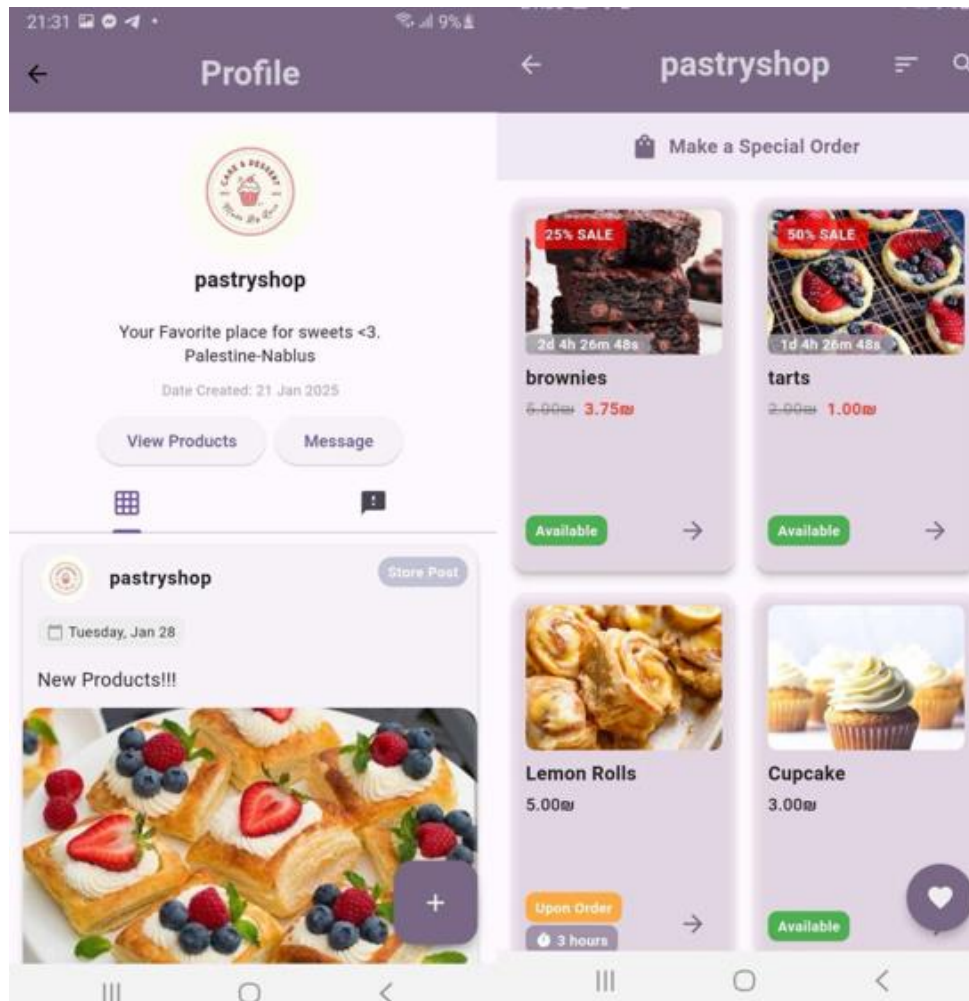


Figure 55: Store Profile-User view

- **Owner's Profile Menu**

Through this menu, the store owner can easily navigate and manage many things related to their store. They can update their store profile, manage delivery locations, and handle homepage advertisements. Additionally, they can set up and manage special orders, configure store's point system, and manage sales and subscription plans. The menu also provides options for changing the store's password, accessing helpful tutorials, logging out, and viewing the "About Us" section for platform details.

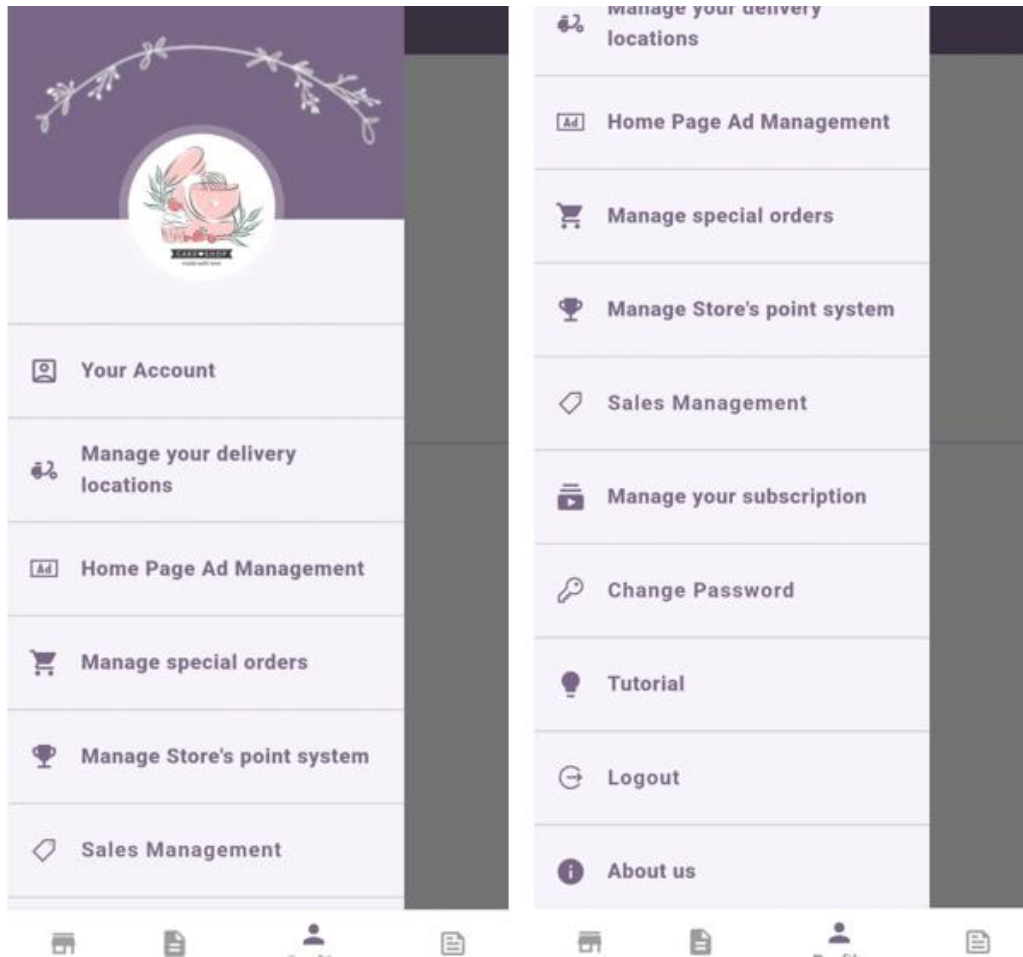


Figure 56: Store Owner's Profile Menu

- **Store Information Management**

When the store owner accesses their account, they can view their store's profile details, including the store name, contact email, phone number, and city. If any updates are needed, they can click on the **"Edit Store Information"** button, which allows them to modify these details.

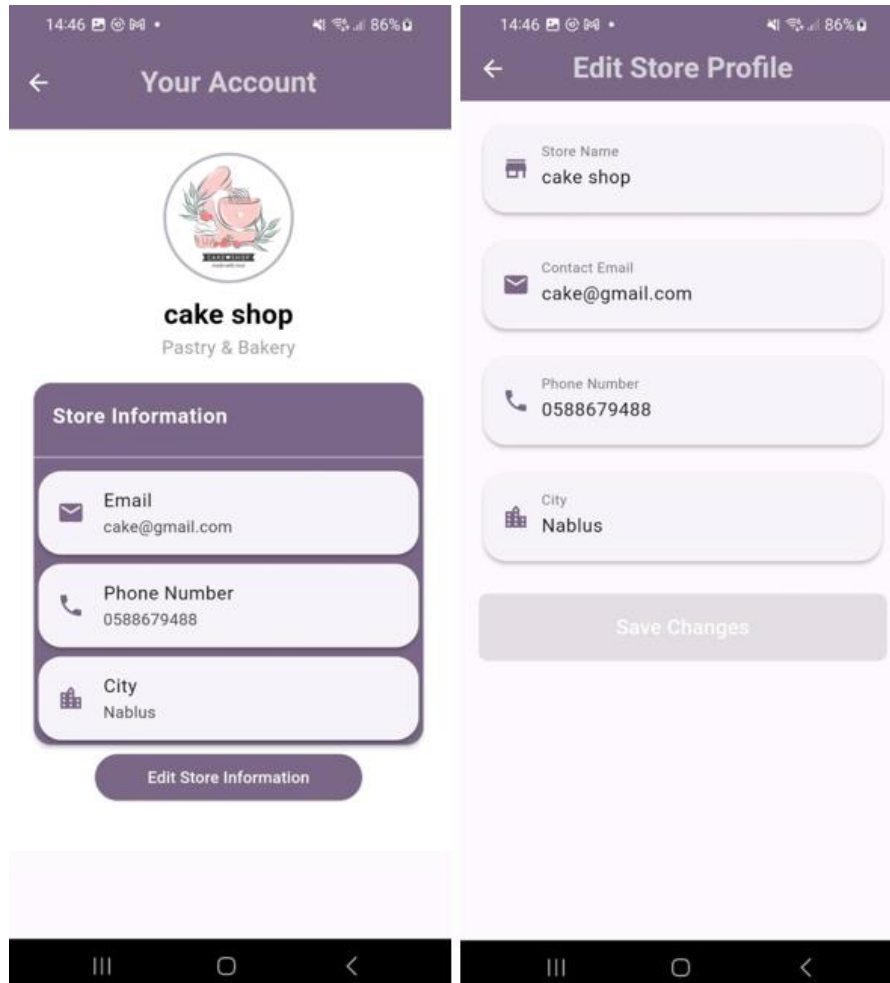


Figure 57: Store Owner's Account and Edit Store Profile

- **Managing Delivery Locations**

Store owners can easily choose to which cities they deliver to by selecting the cities and setting delivery fees for each one. At first, they see a list of available cities, and by simply checking a city, they can enter the delivery cost. Once they hit **"Save Changes,"** the updates are applied immediately. They can edit or remove delivery locations at any time, giving them full control over their delivery areas.

This makes things smoother for both the store and the customer. Customers will only see stores that deliver to their location, so they won't waste time browsing stores that don't. Additionally, during checkout, the delivery details are already set, reducing any confusion or unexpected issues.

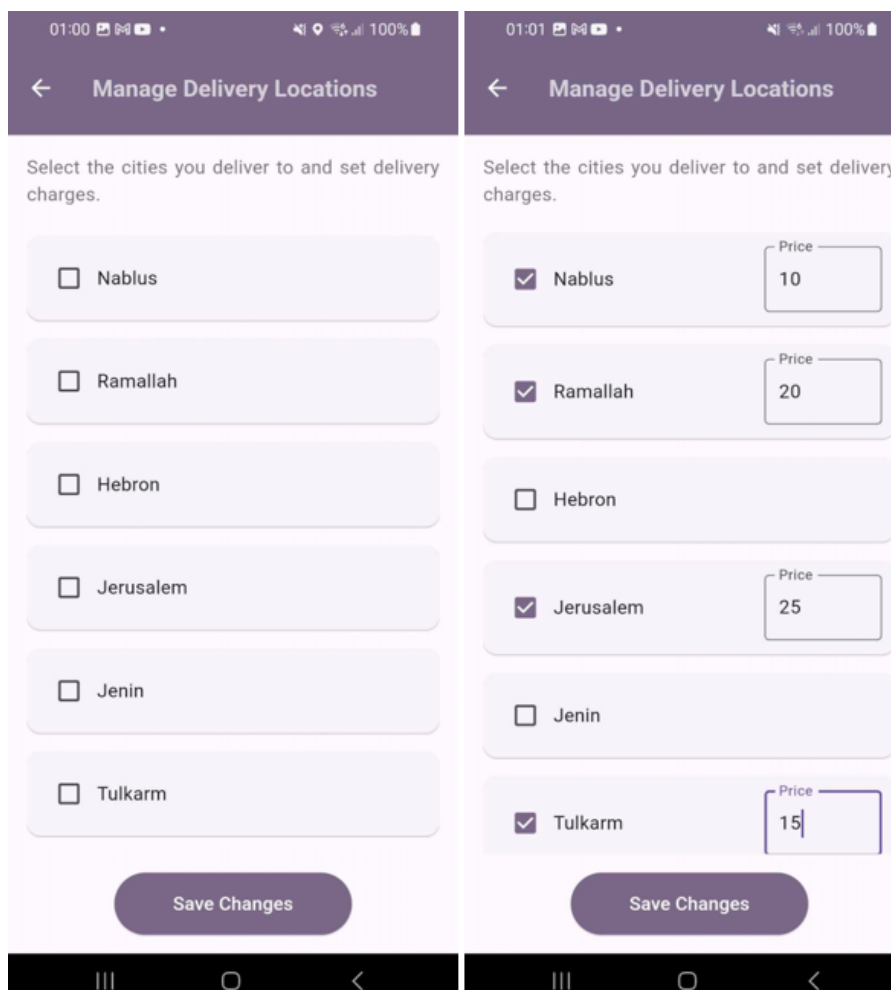


Figure 58: Configuring Delivery Locations and Charges

- **Advertisements Management**

Store owners can promote their store and products by adding advertisements. They can upload an image, select a start and end date, and submit the ad. To keep the homepage dynamic and engaging, each advertisement can run for a maximum of **one week**. When selecting the start and end dates, the system ensures that the duration does not exceed seven days.

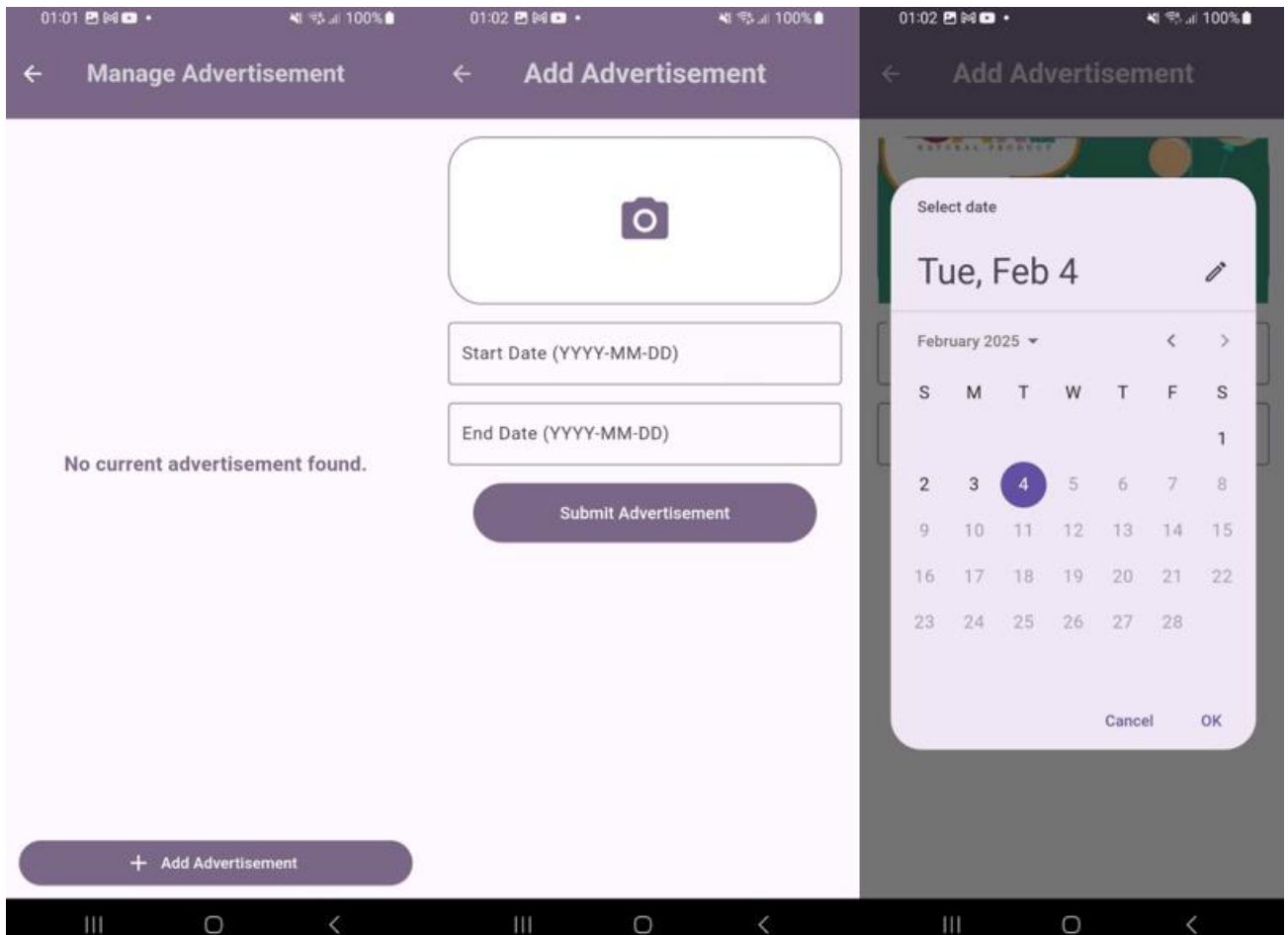


Figure 59: Adding a New Advertisement

If an owner wants to add multiple ads, they will receive a confirmation about extra charges before proceeding. They can also remove an ad at any time with just one click.

Once an ad is live, customers browsing the app will see it displayed prominently on the homepage (as shown in Figure 60), which increases store visibility and attracts more buyers.

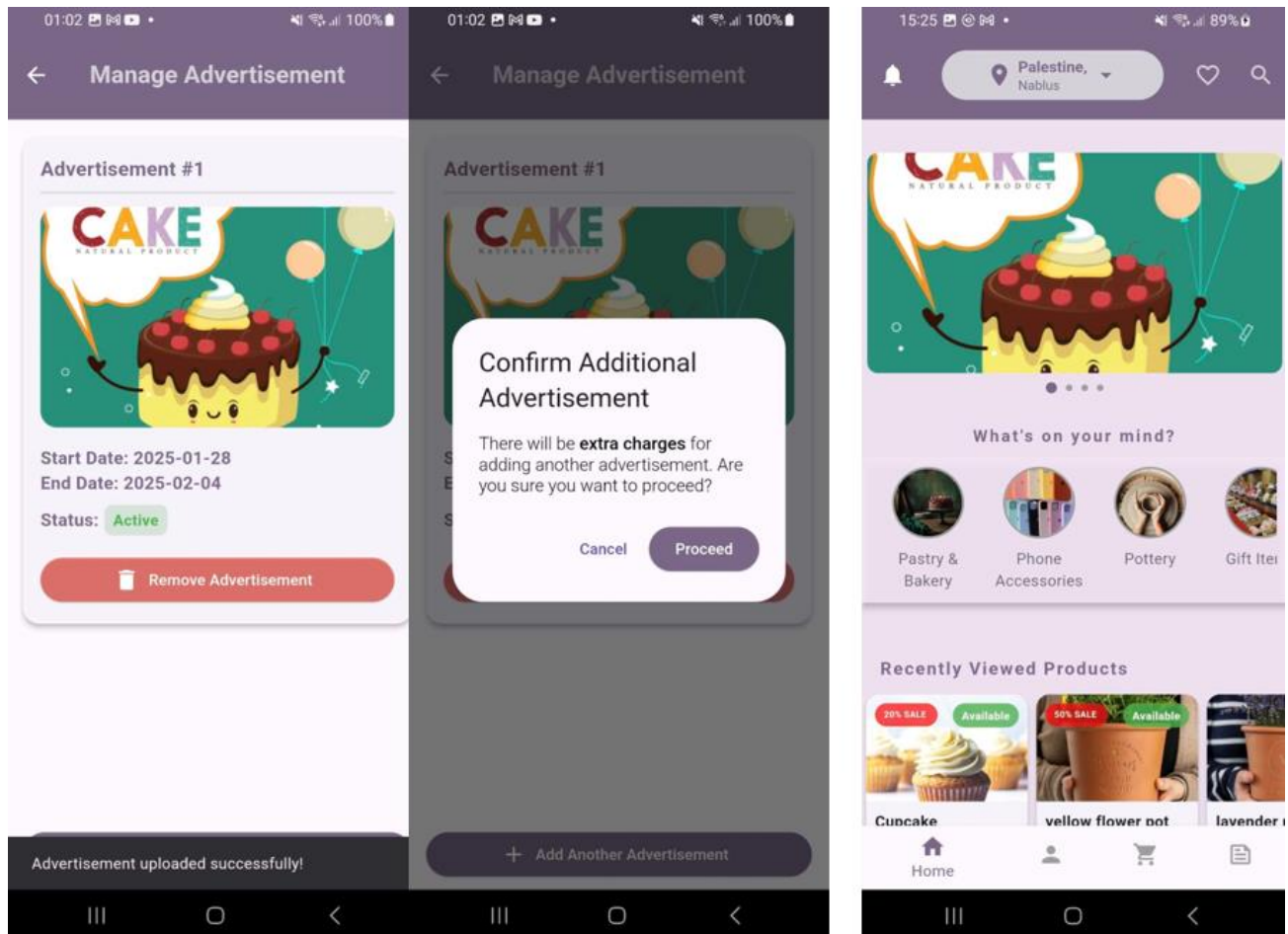


Figure 60: Managing Active Advertisements, User View of the ad.

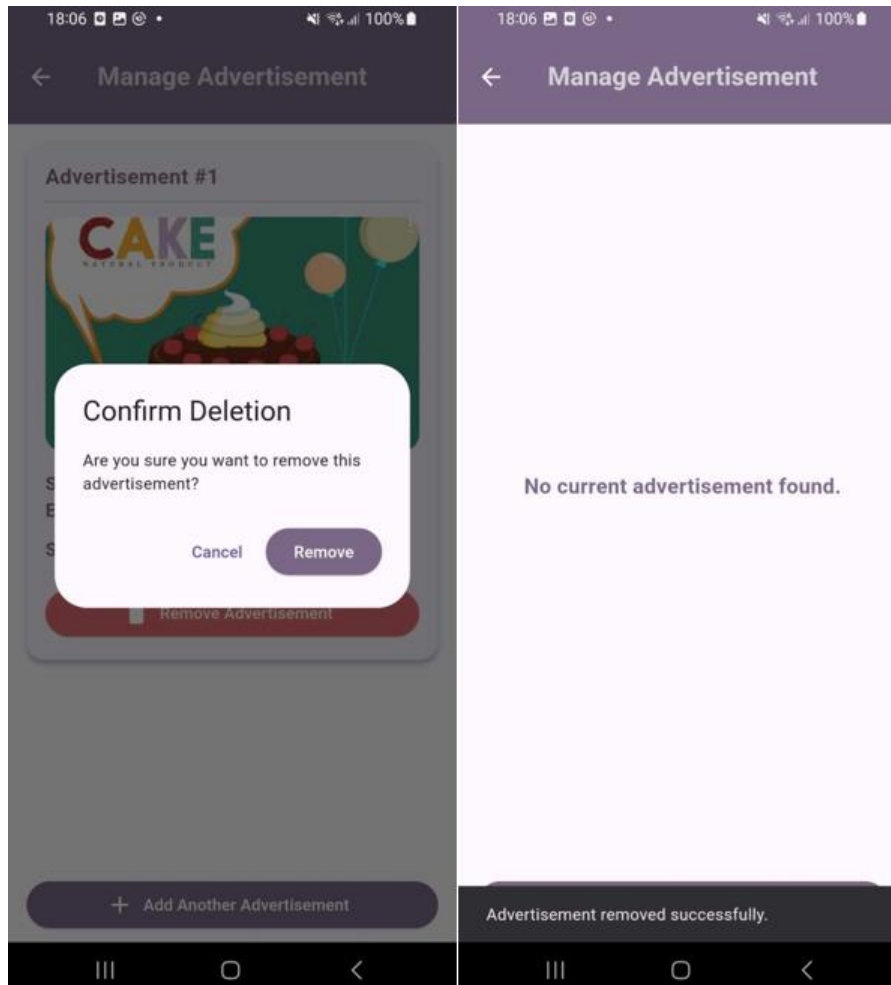


Figure 61: Deleting an Advertisement

- **Managing Special Orders**

The Special Orders feature gives store owners full control over how they accept and customize special requests from customers. Instead of offering only fixed products, stores can allow customers to personalize their orders based on different options. This feature is also useful for **large orders**, as it may not be convenient for customers to place them through the regular ordering process.

Store owners can enable or disable special orders at any time. If disabled, customers won't be able to place new special orders, but previous configurations will be saved.

Owners can set up different types of **special orders** based on their category. For example, a bakery might offer "**Custom-Made Cakes**" or "**Large Orders**," while a florist might allow "**Personalized Bouquets**."

To make the setup easier, **each category comes with default special order types**. For example, in the **Pastry & Bakery category**, a store will automatically see options like "**Custom-Made Cake**" or "**Large Orders**." These are just **predefined suggestions** to help store owners get started quickly, nothing is pre-selected or required.

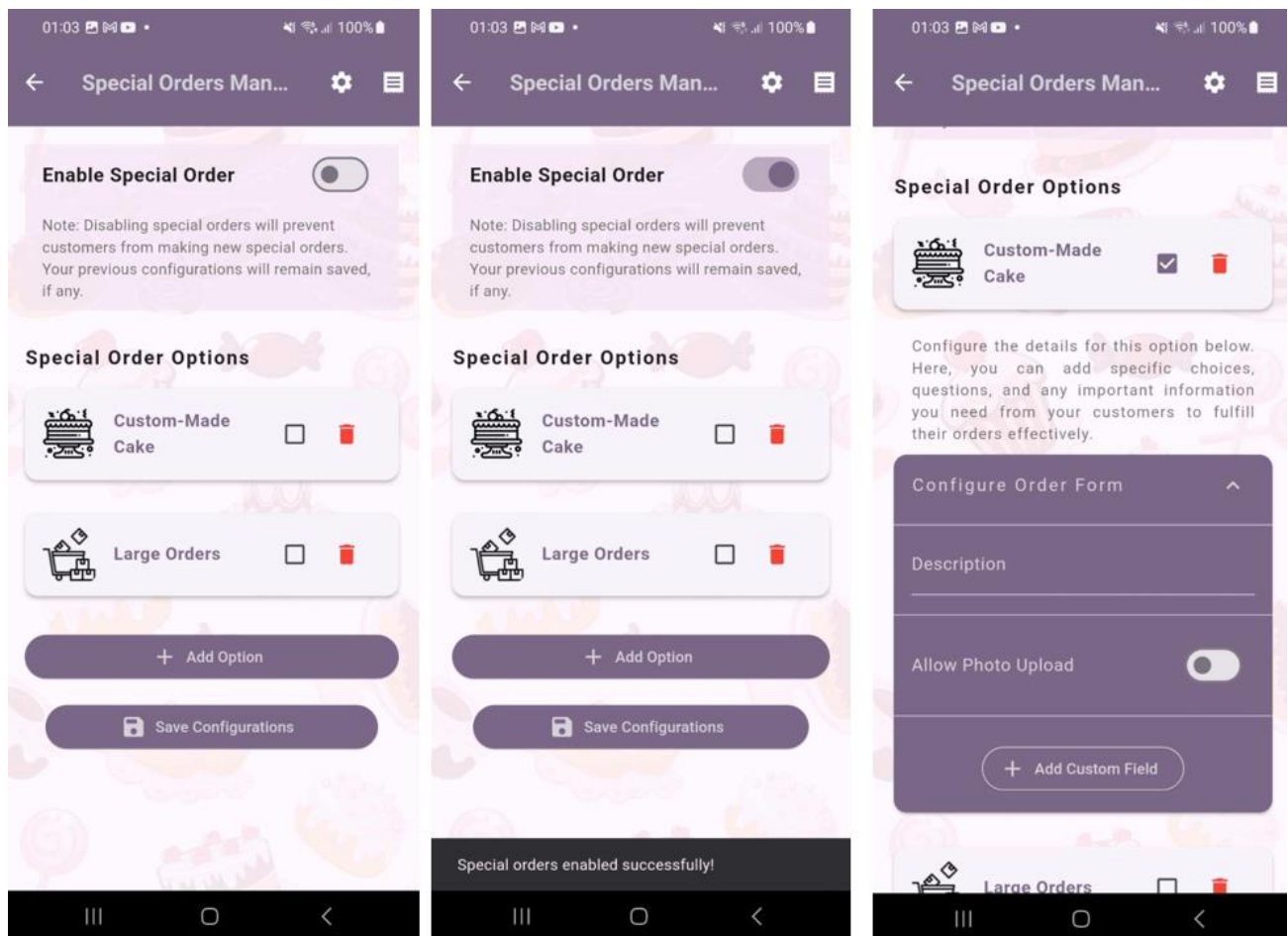


Figure 62: Enabling Special Orders.

Inside each special-order type, store owners can **add custom fields** to ask for specific details from customers. If a bakery offers "**Custom-Made Cakes**," they might include fields for "**Cake Size**," "**Filling**," or "**Pick-up Date**." If a florist offers "**Personalized Bouquets**," they could ask for "**Flower Type**," "**Number of Flowers**," or "**Special Instructions**."

The entire setup is **fully flexible**, store owners can modify, remove, or create anything they need to offer a smooth and personalized ordering experience.

Before adding fields, store owners can set a **description** to explain the purpose of the special order, giving customers clear instructions on what to expect. They can also choose to **allow photo uploads**, which lets customers attach reference images for their order. If enabled, the owner can add a **caption** to guide customers on what type of photo to upload.

Now let's **create a form** for the **Custom-Made Cake** special order:

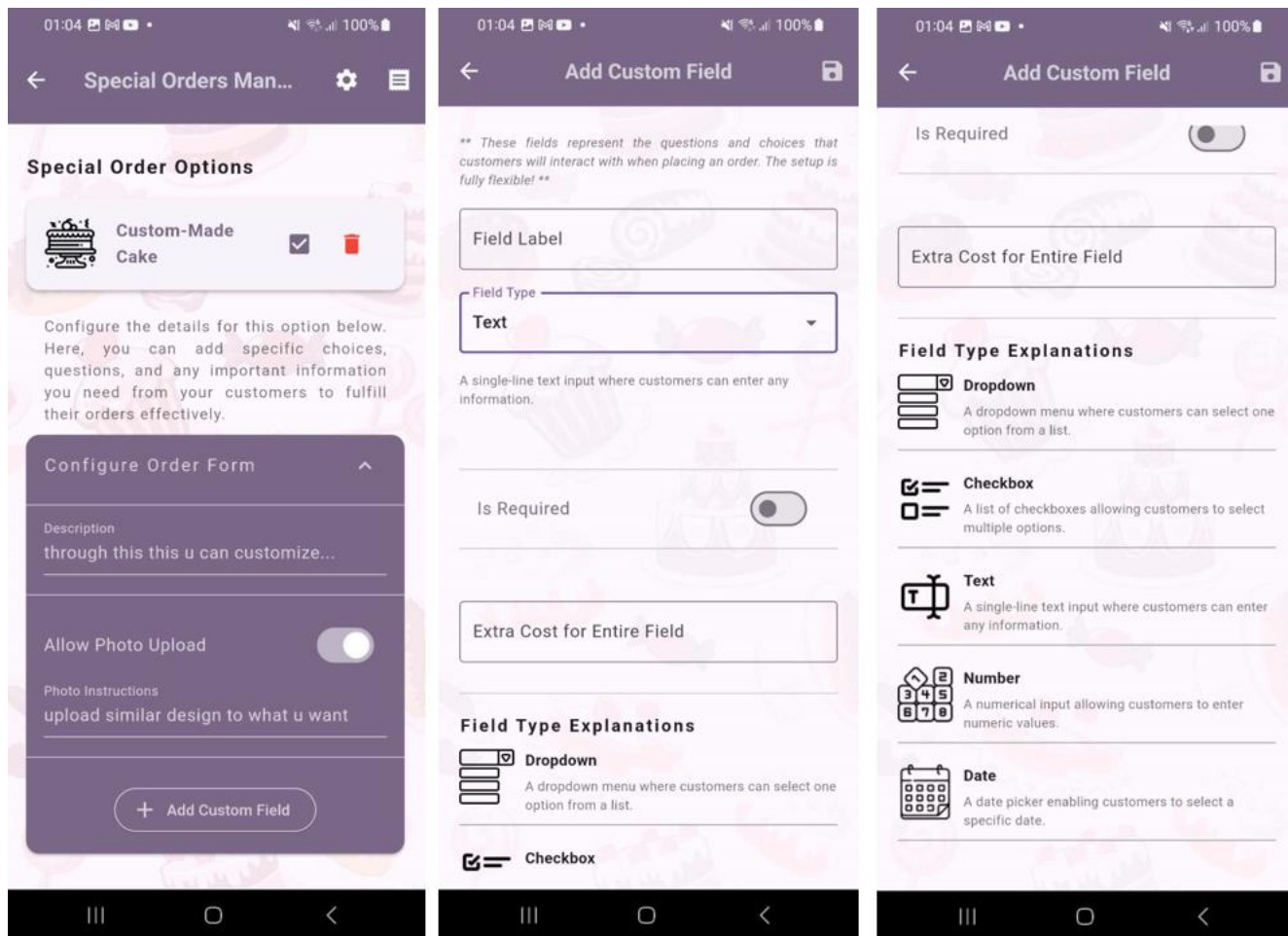


Figure 63: Setting Up a Special-Order Form.

Store owners can **customize the form fields** to gather the needed details from customers. By default, the form is empty, but owners can **add custom fields** like:

- **Dropdown fields** for selecting options (e.g., "Cake Size" with choices like Small, Medium, Large).
- **Text fields** for notes or additional requests.
- **Date pickers** for choosing a pickup or delivery date.
- **Checkboxes or multiple-choice fields** for customizable options.

If store owners are unfamiliar with these field types, we provided explanation about them as shown in Figure 63.

Now let's add the **"Choose Size"** field with the options that this store provides.

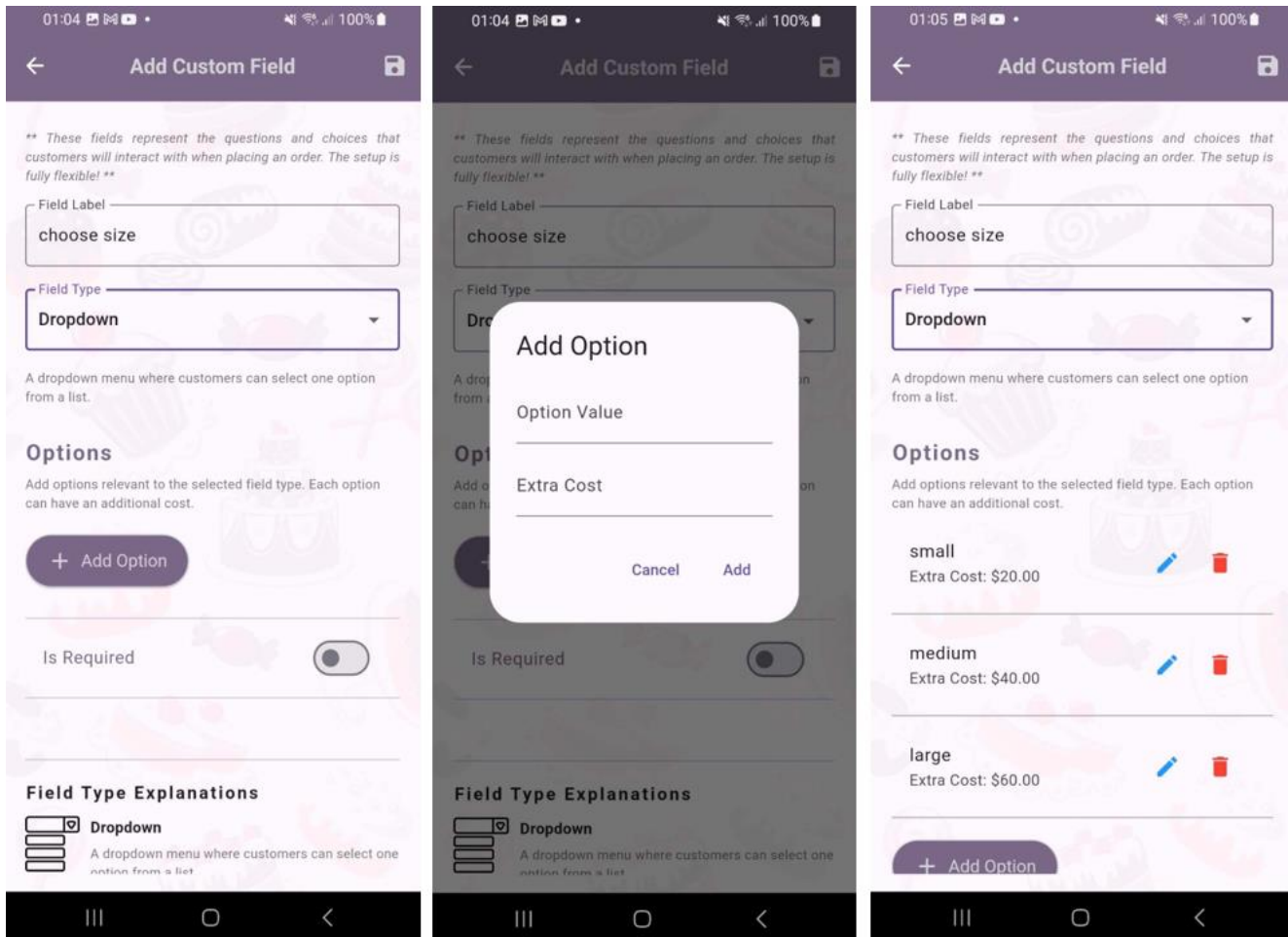


Figure 64: Adding Custom Fields to a Special Order

Each field can have **extra costs** if needed. Store owners can add different **choices within a single field**. For example, in a cake order, the **"Filling"** field could include options like "Lemon," "Nutella," or "Kinder" with additional costs. These options can be edited or deleted at any time.

Store owners can also decide whether a field is required or optional, ensuring they get all the necessary details from customers while keeping the form flexible.

And now, we added these options to complete the form:

- **Filling** (Dropdown) with choices like Lemon, Kinder, and Lotus, each with an extra cost.
- **Notes** (Text) for customers to add special requests.
- **Pick-up Date** (Date) to let customers choose when they want their order ready.

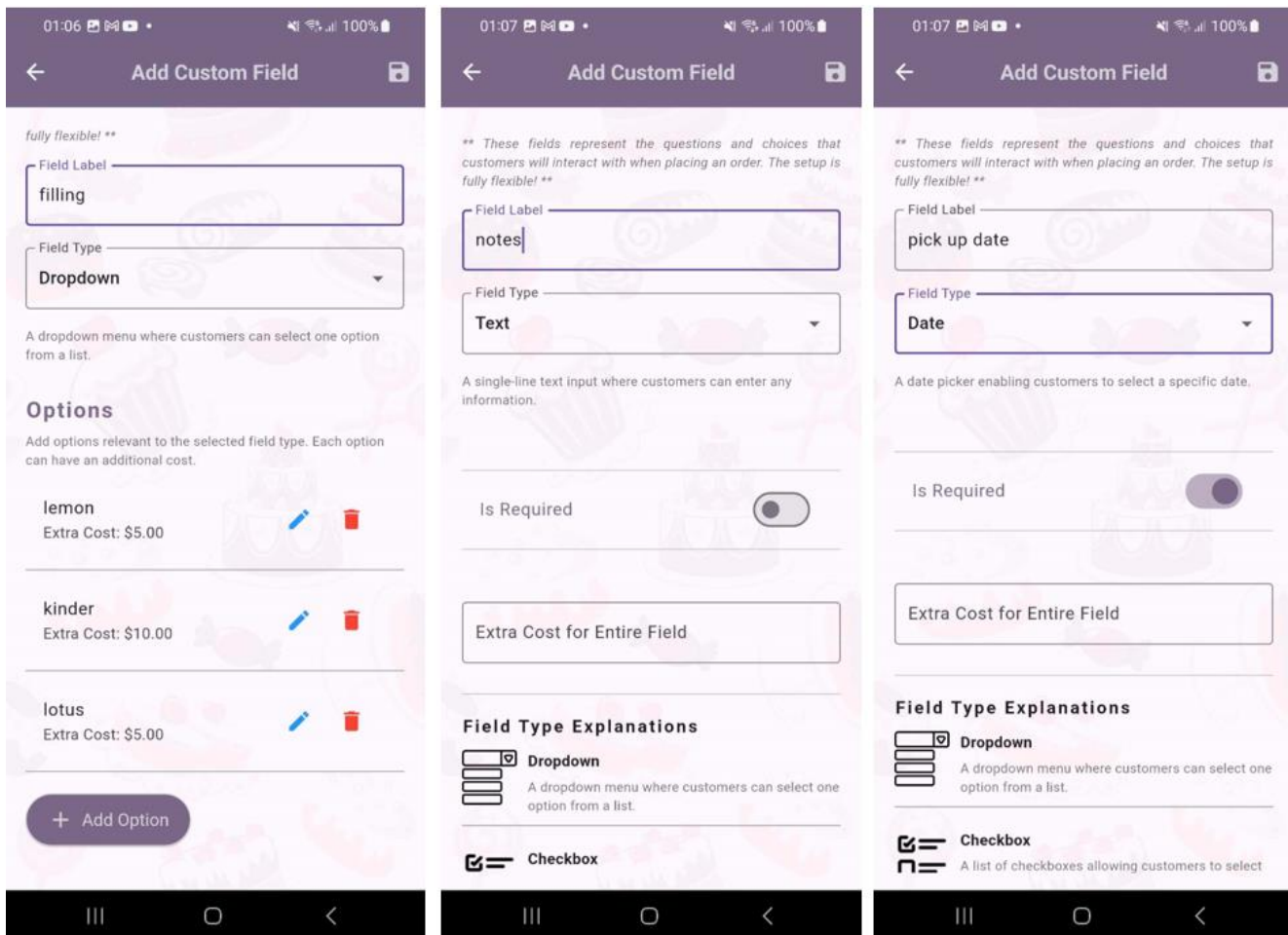


Figure 65: Adding Custom Fields to Complete the Special-Order Form

Now that the custom fields have been added, the special-order form is fully set up and ready for customers to use. Once the **"Save Configurations"** button is pressed, the form is saved and becomes available for customers to fill out.

Customers can now personalize their orders by selecting options like size, filling, or other details relevant to their request. If photo uploads are enabled, they can also attach a reference image for better customization.

The estimated price is displayed, but the final cost will be confirmed by the store owner before completing the order. Once everything is filled in, the customer can submit their special-order request.

In the image, we also show another special-order form created by a store in the **flowers** category. This form allows customers to customize their bouquet by selecting the flower type, number of flowers, and pickup date, making it easy for businesses to tailor the ordering process to their specific needs.

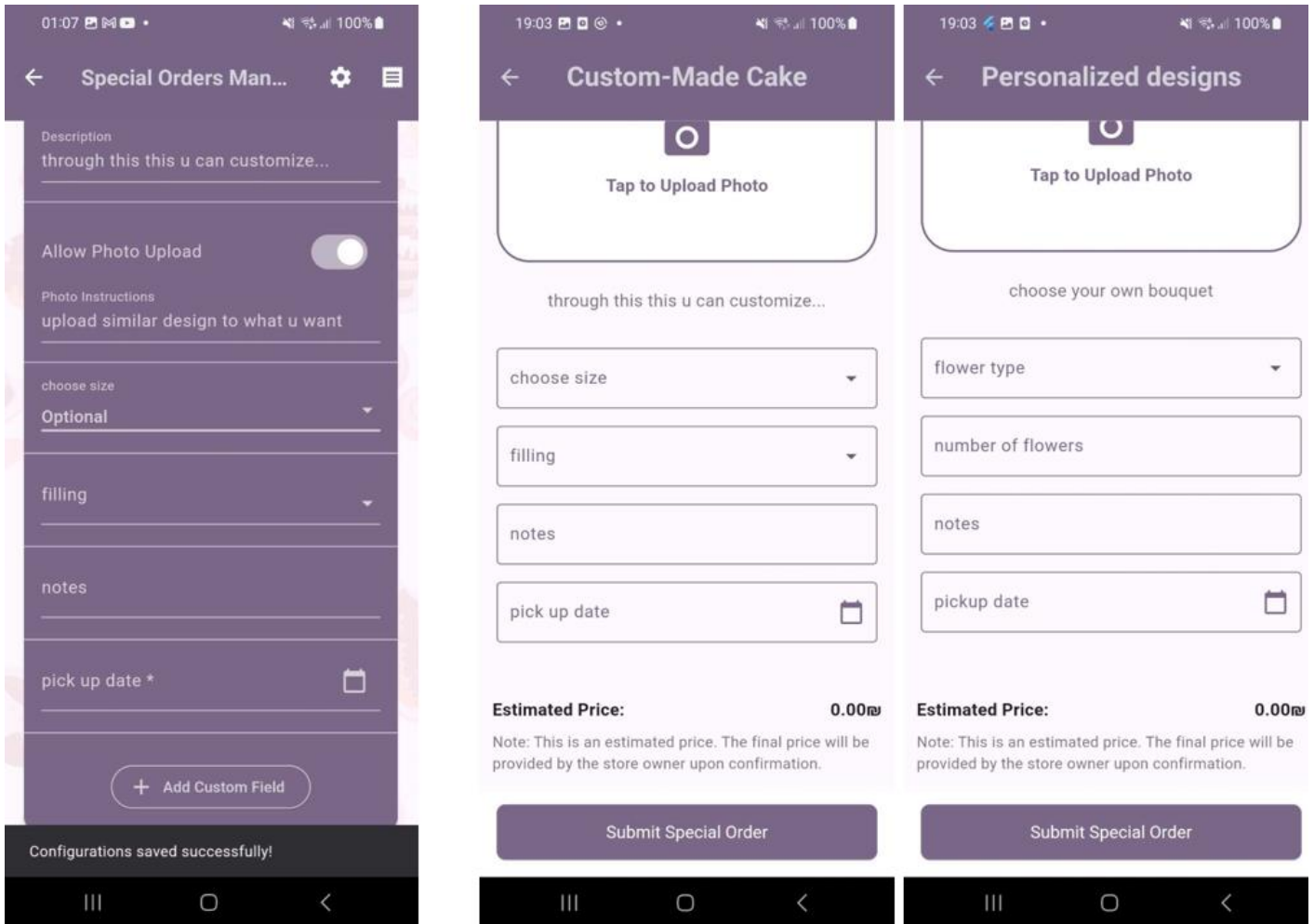


Figure 66: Final Special-Order Form Ready for Customers

- **Managing Store Subscription**

Store owners can easily keep track of their subscription plan, including the type, price, and expiration date. Since subscriptions do not renew automatically, owners need to manually renew them when they expire. By pressing "Renew Subscription", they can extend their plan and continue using the platform without interruptions.

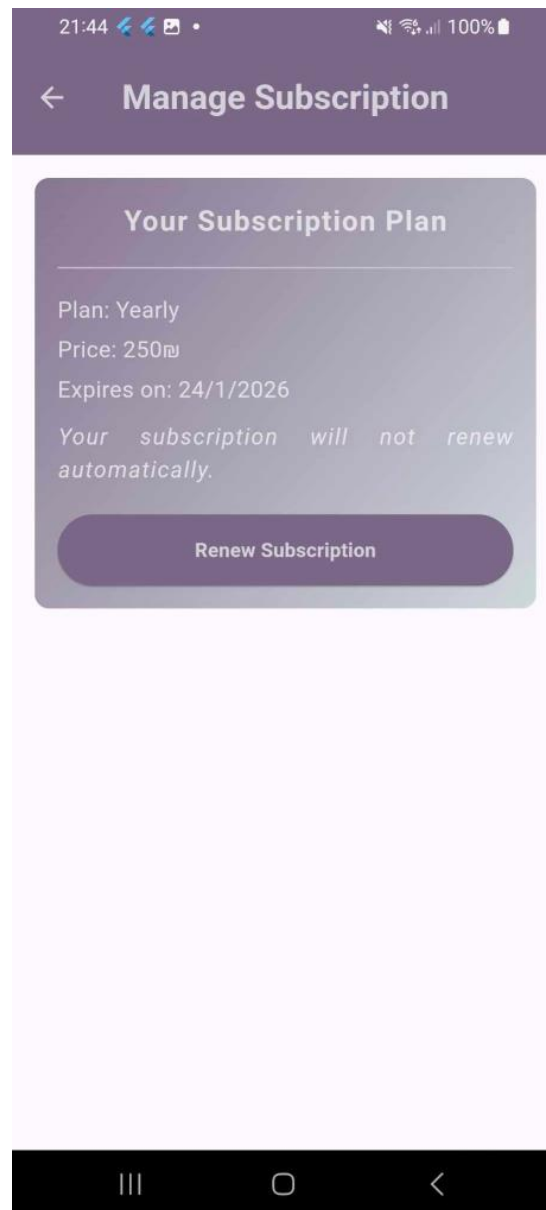


Figure 67: Managing Store Subscription

- **Managing Point System**

This feature helps encourage customers to keep shopping while giving store owners full control over how points are earned.

By default, every 20 Shekels spent by the customer equals 1 point, but owners can change this to fit their needs. They can decide how much each point is worth and update it anytime.

Once they hit "Save Changes," the new rate is applied immediately. The earned points act as Shekels, so customers can use them as discounts on future purchases. This way, when users buy, they benefit from their old points while earning new ones.

Let's change it from 20 to 30:

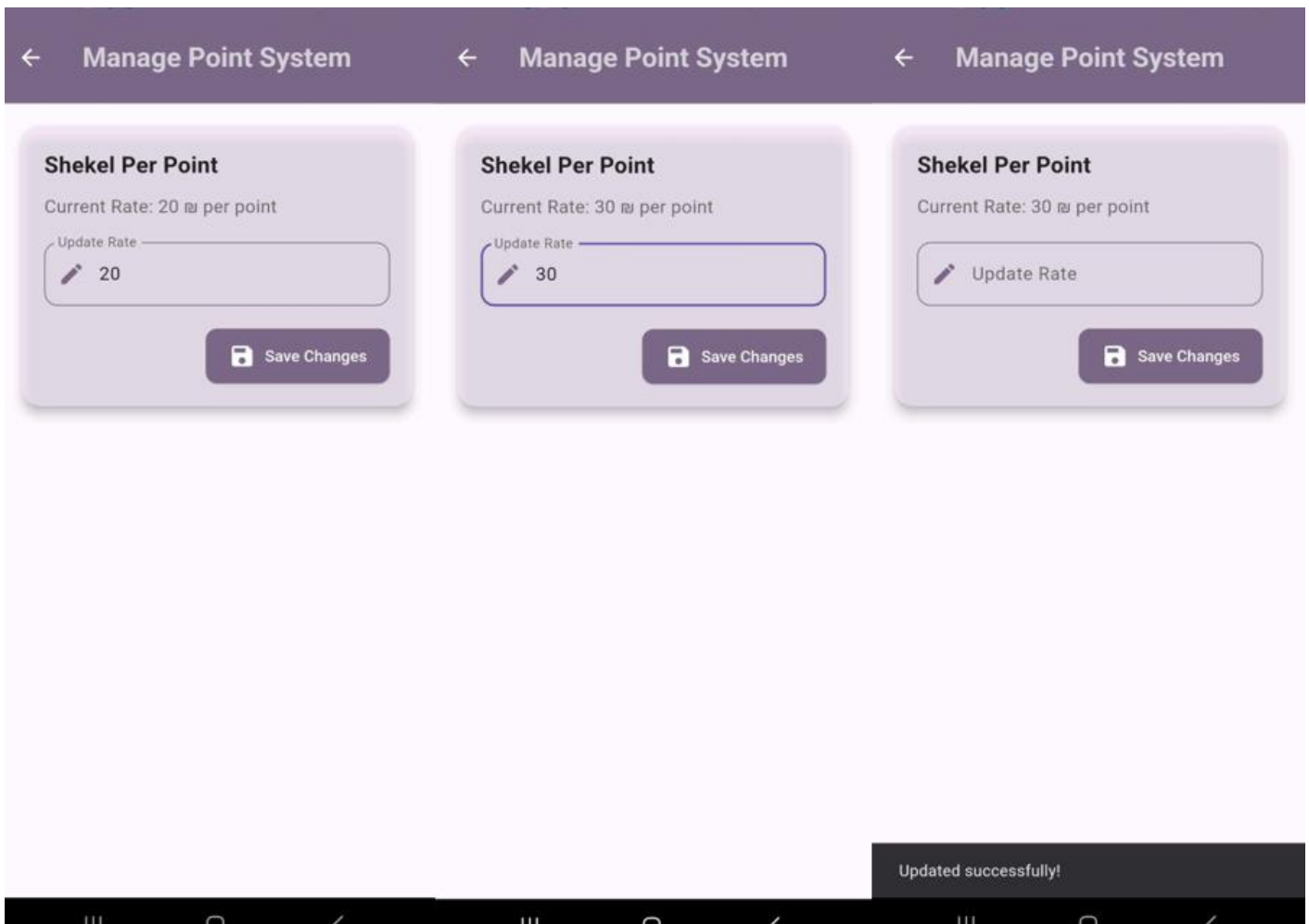


Figure 68: updating the Shekel value per point in the store's Point System

- **Managing Sales**

From this page, the store owner can make sales on his products, he could choose on what products he wants to make a sale on, he could select all products or multiple or one.

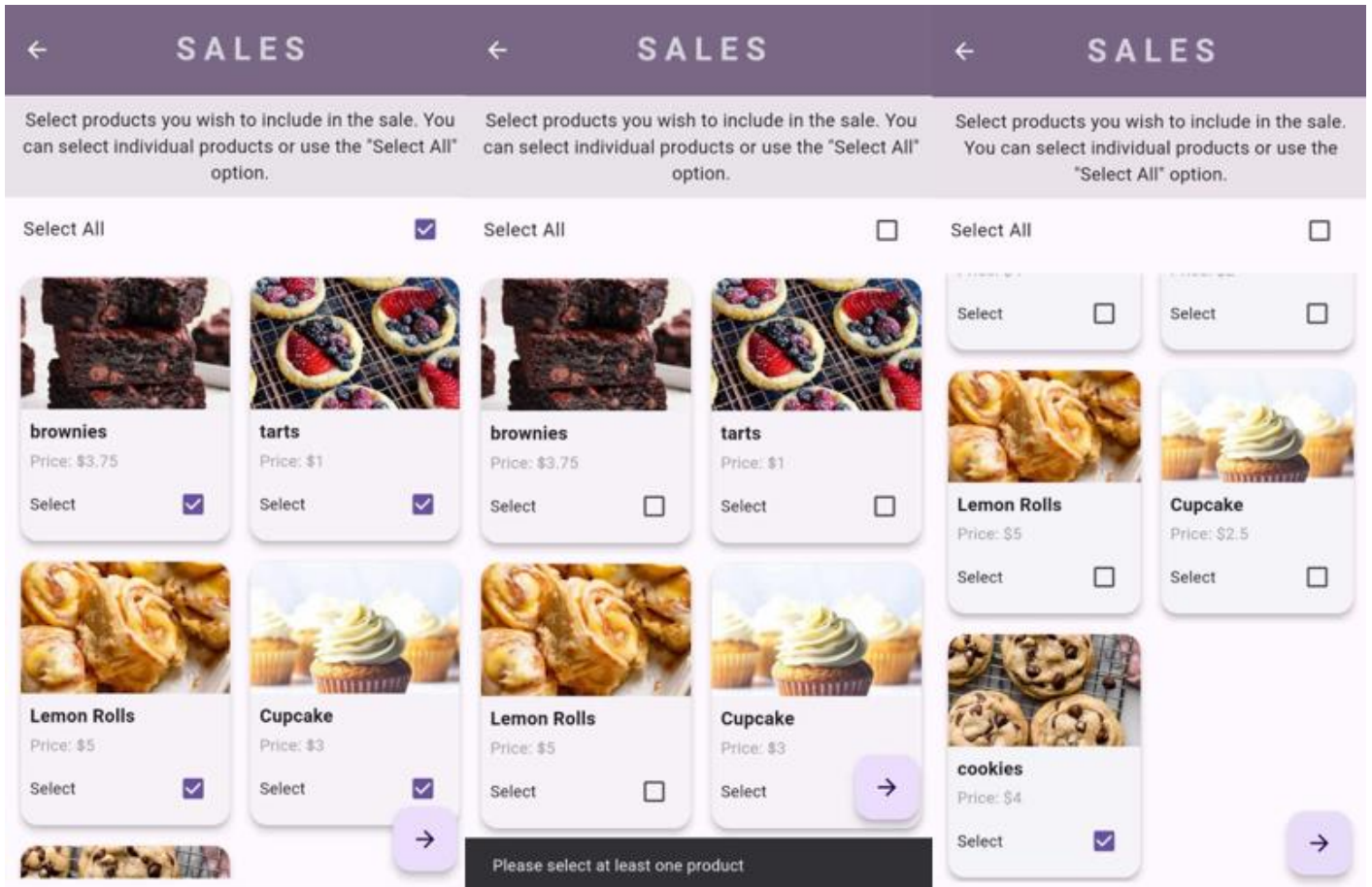


Figure 69: Products Selection

After selecting the products, he gets navigated to the sales configuration page. There, he will specify the sale amount, duration and if he wants to send push notification to all users, if he selects this option he must specify the body of the notification, the title is fixed which is: SALES in 'store name' UP TO 'sale amount', see Figure 74.

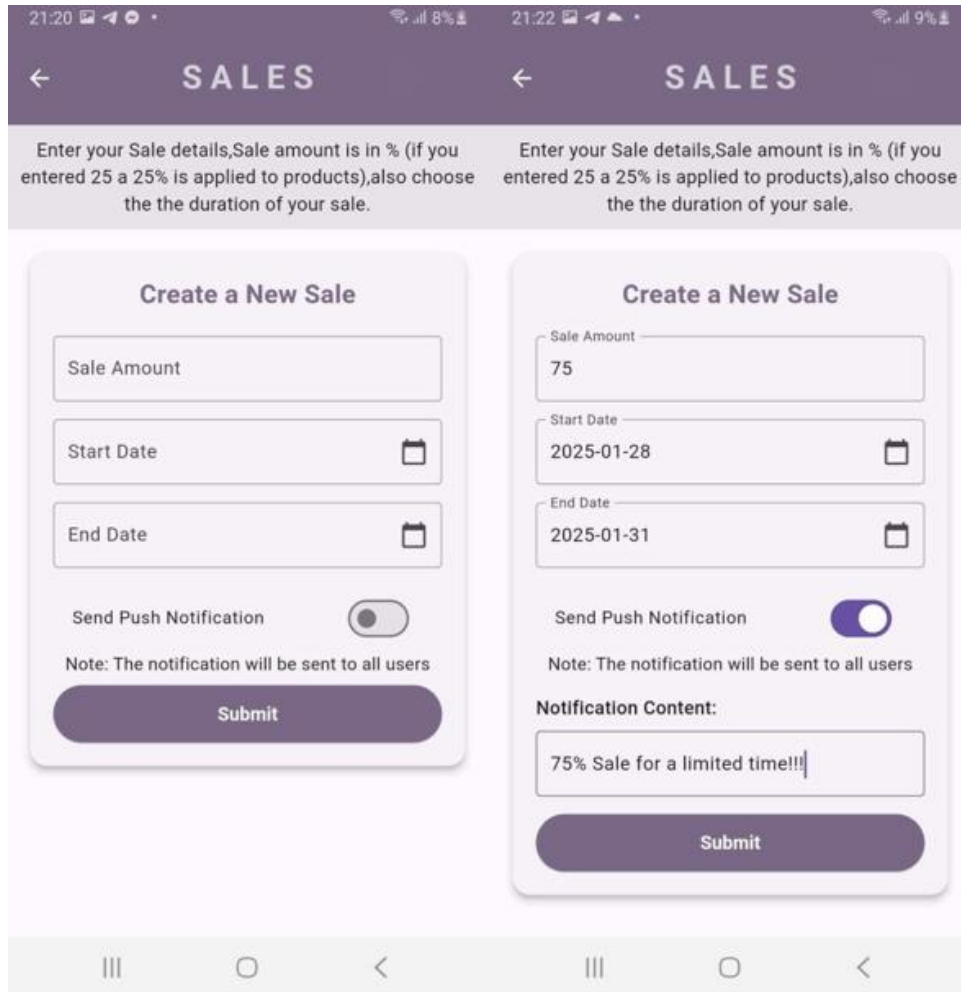


Figure 70: Sales Configuration

When the sale is created, it appears on several pages, such as the owner home page, user home page and the store products page, see Figure 71. The product with the sale displays a badge that says SALE along with the sale percentage, a stripe of how much remaining time left for the sale and the price before and after the sale, see Figure 72. Also, the product price is changed in the product details page and returns to the original price after the sale ends, see Figure 73.

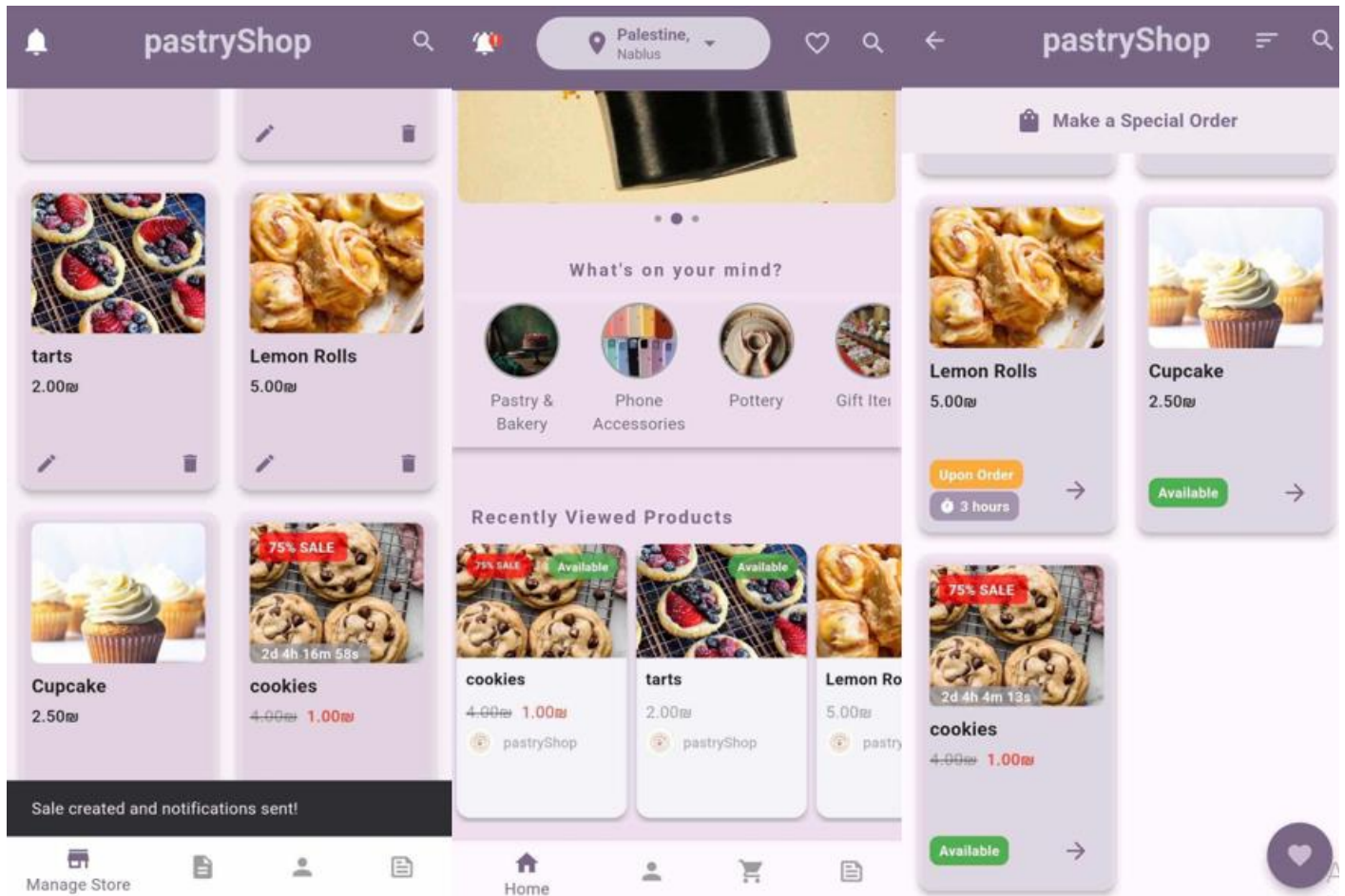


Figure 71: Sales Preview



Figure 72: Product on Sale

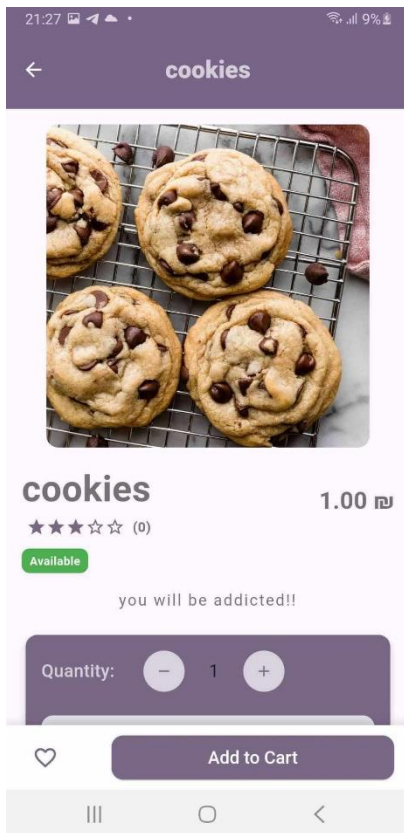


Figure 73: Price Change in details

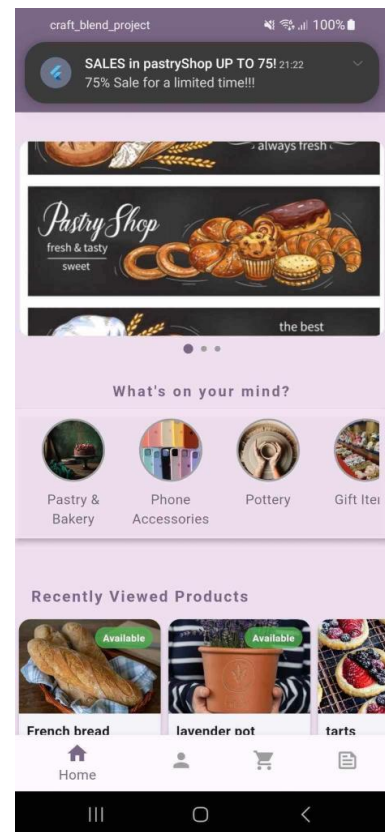


Figure 74: Sales Notification

- **Managing Store's Orders**

Orders are divided into two main sections: **Regular Orders** and **Special Orders**.

Regular Orders include:

- **Instant Orders** – orders that are processed immediately.
- **Scheduled Orders** – orders set for a later time.

Both types follow the same structure and status filters, which is why they are grouped together.

Each order is organized by its status, making it easy for store owners to track and manage them efficiently. Every order displays important details, including the **customer's name, order status, order number, total price, delivery cost, and payment method**. The **date and time** of the order are shown to help keep things organized. Orders with the earliest ones appearing first, so store owners can prioritize and handle them efficiently.

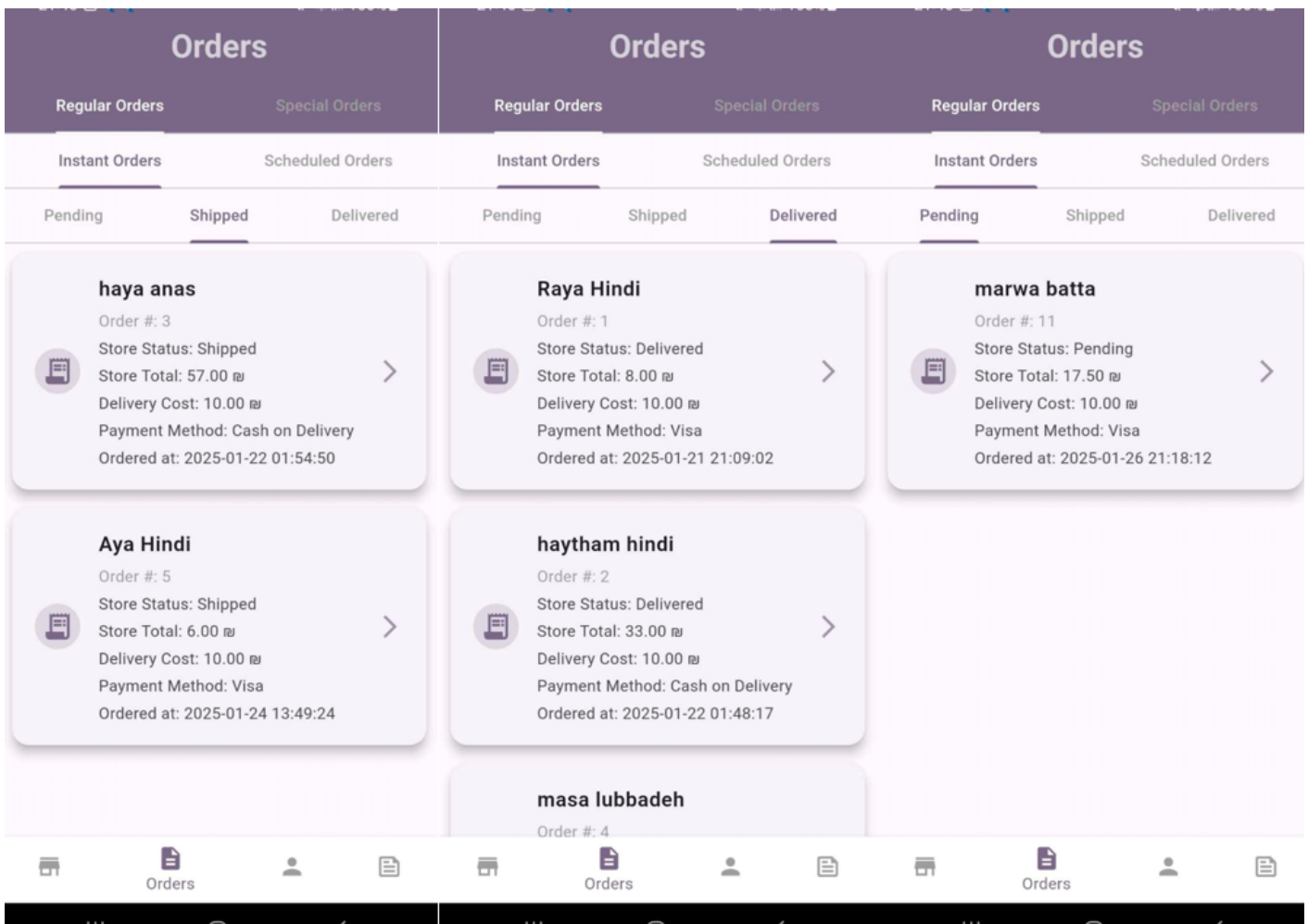


Figure 75: Overview of regular orders - Instant Orders, categorized by their status.

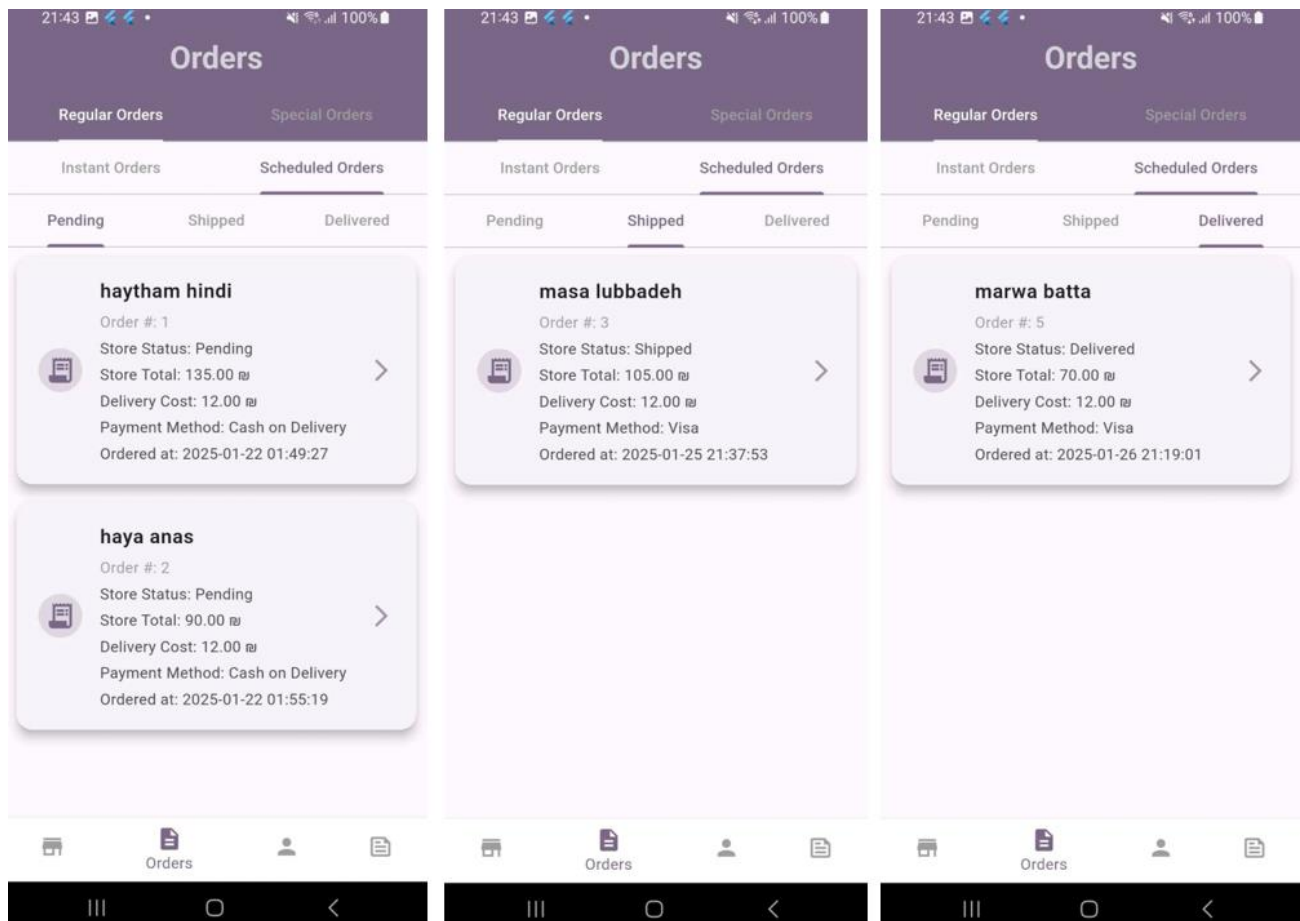


Figure 76: Overview of regular orders - Scheduled Orders, categorized by their status.

Each order has a detailed page where store owners can see everything about the order in one place. It includes the customer's delivery details, payment method, total cost, and ordered products. If the order is still pending, the store owner can **mark it as shipped** once it's ready to go. If it's already shipped, they can **mark it as delivered** when the customer receives it. This helps keep track of each order's progress, especially if a delivery service is handling the shipment.

Each time an order's status is updated, the customer receives a notification, keeping them informed about their order's progress.

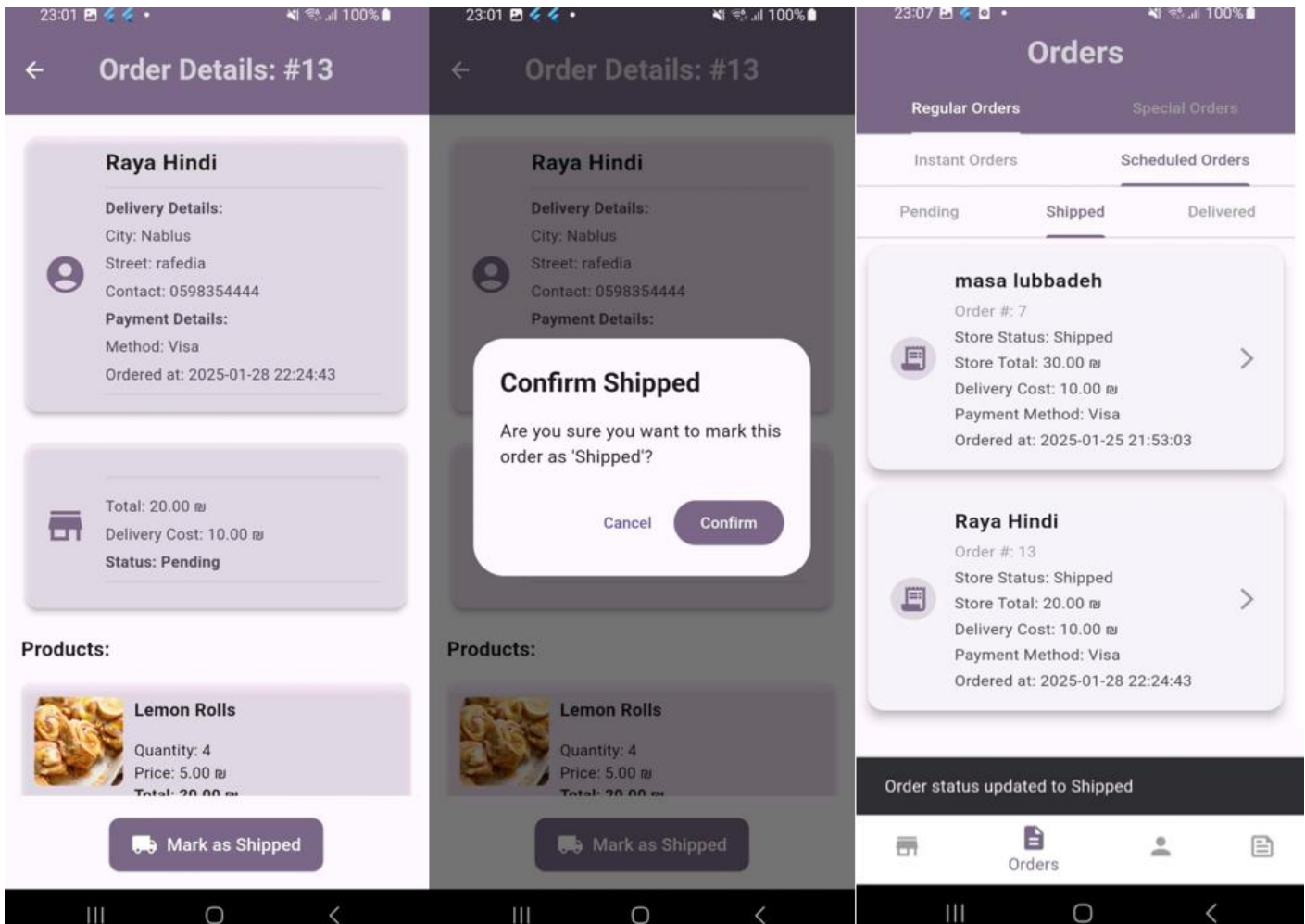


Figure 77: Order Details Page, Marking Order as Shipped

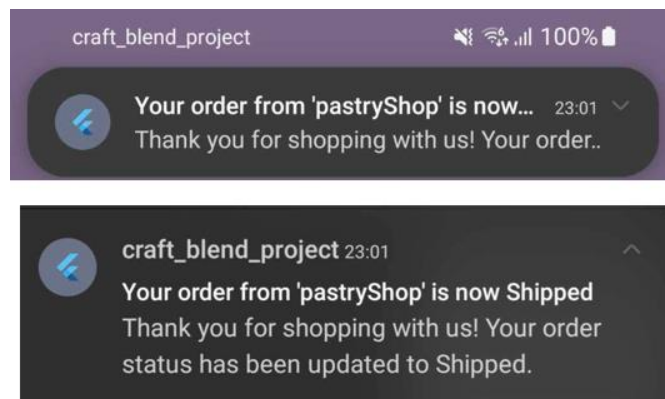


Figure 78: Customer Receives Notification When Order Status Changes

The same process applies when marking an order as delivered. If an order has already been shipped, the store owner can confirm its delivery once the customer receives it. (Also, the customer receives a notification.)

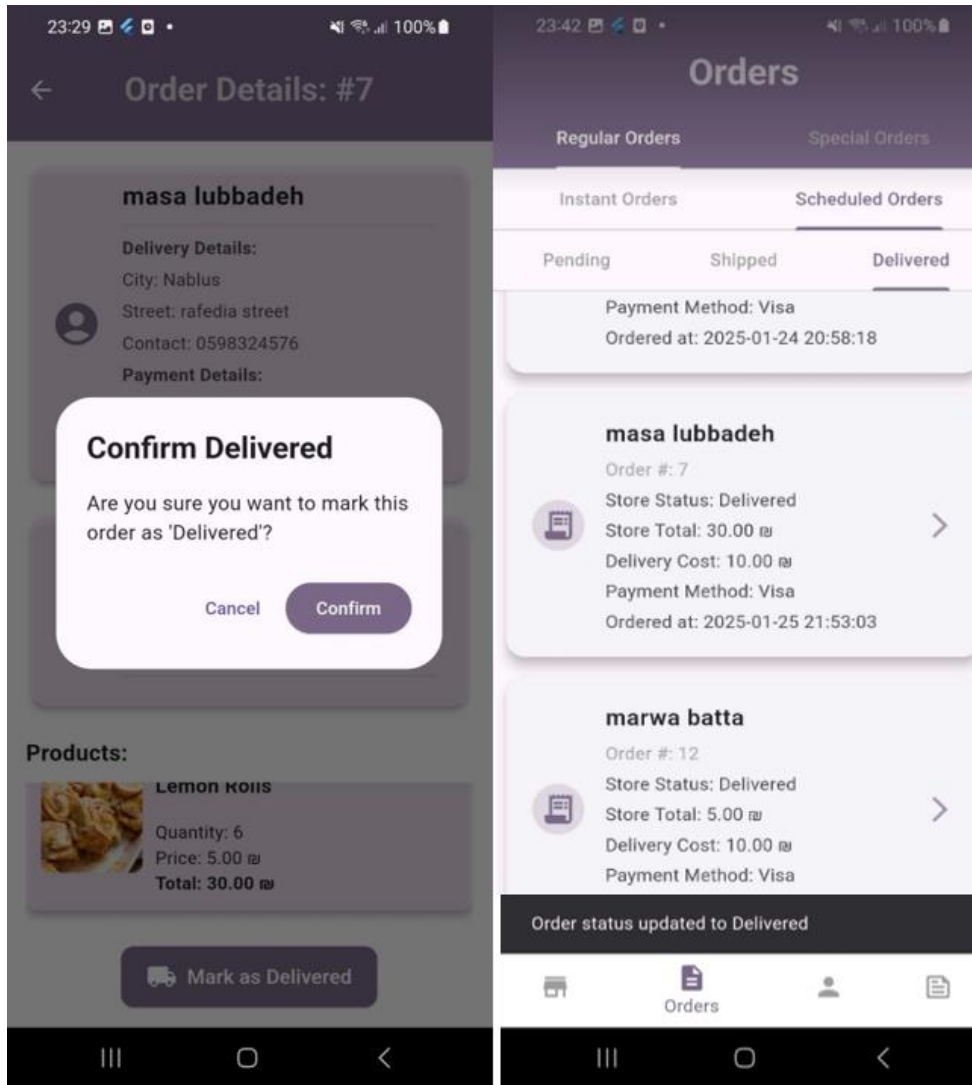


Figure 79: Marking Order as Delivered

For scheduled orders, the same system is followed, but the key difference is that they are not shipped immediately. Store owners can still update their status as pending, shipped, and delivered, but these orders are planned ahead rather than being processed instantly.

Special orders are different from regular orders because they are personalized based on the customer's requests. Since these orders require confirmation from the store before finalizing the price, they go through additional steps. When a store receives a special order, the get notified.

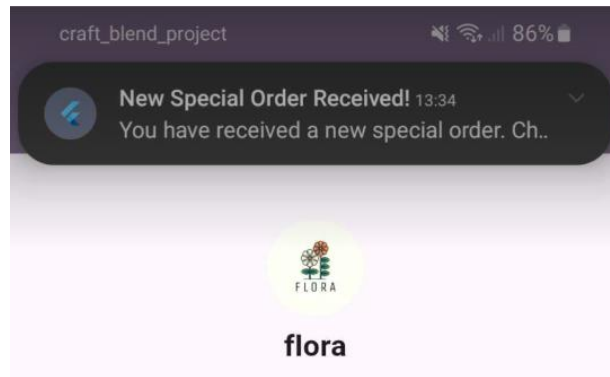


Figure 80: Store Owner Receives Notification When a Special-Order is received

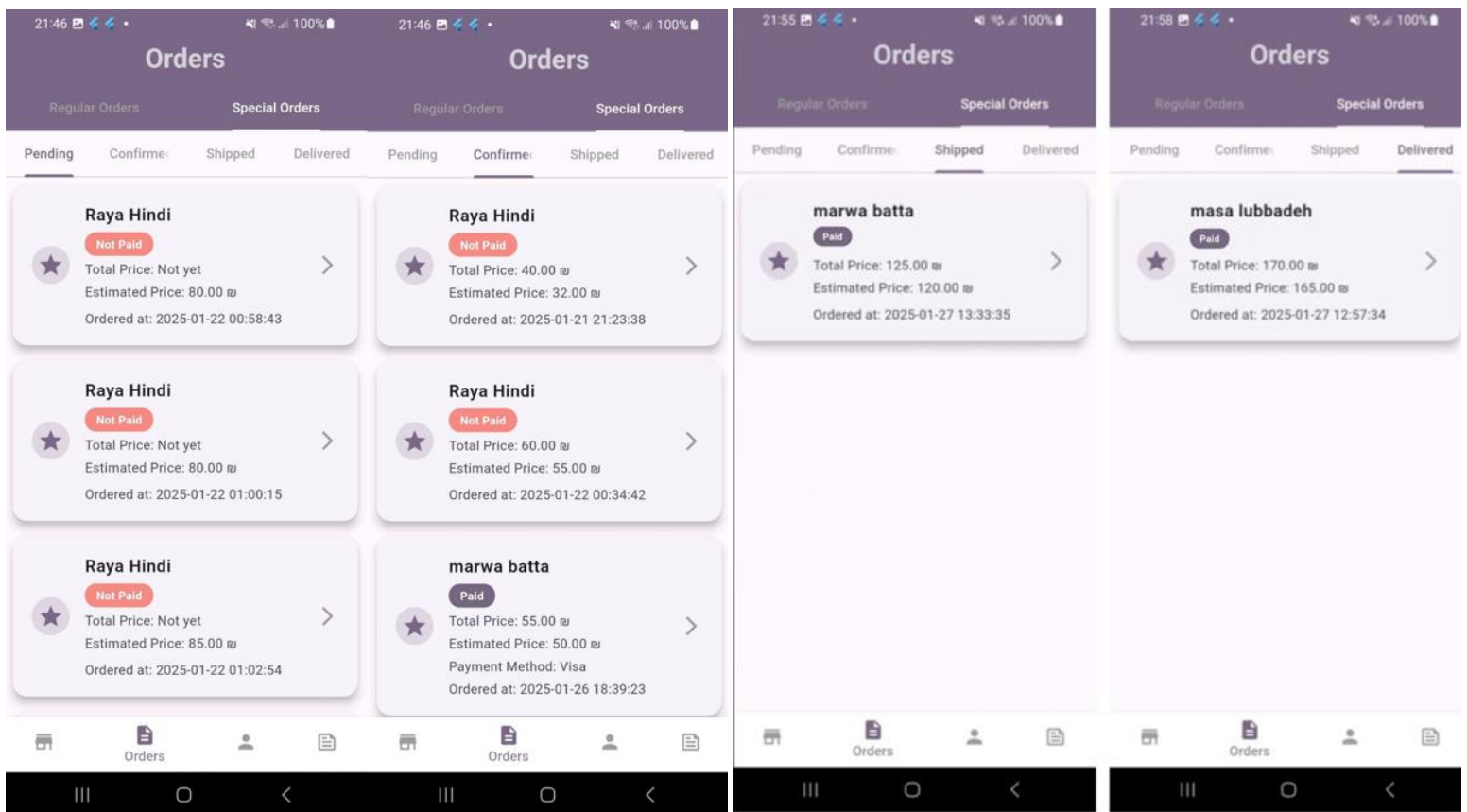


Figure 81: Overview of Special-Orders categorized by their status.

At first, when a customer places a special order, it appears in the Pending section. The owner reviews the details, confirms the final price, and updates the status to Confirmed (which allow the customer to continue through checkout to pay). If the order is being

prepared and sent out for delivery, it moves to Shipped, and when it reaches the customer, it is marked as Delivered.

Special orders also include a payment status badge, which shows store owners whether the customer has paid or not. If an order is marked as Not Paid, the owner knows they shouldn't proceed until payment is confirmed. Once the customer completes the payment, the order updates accordingly,

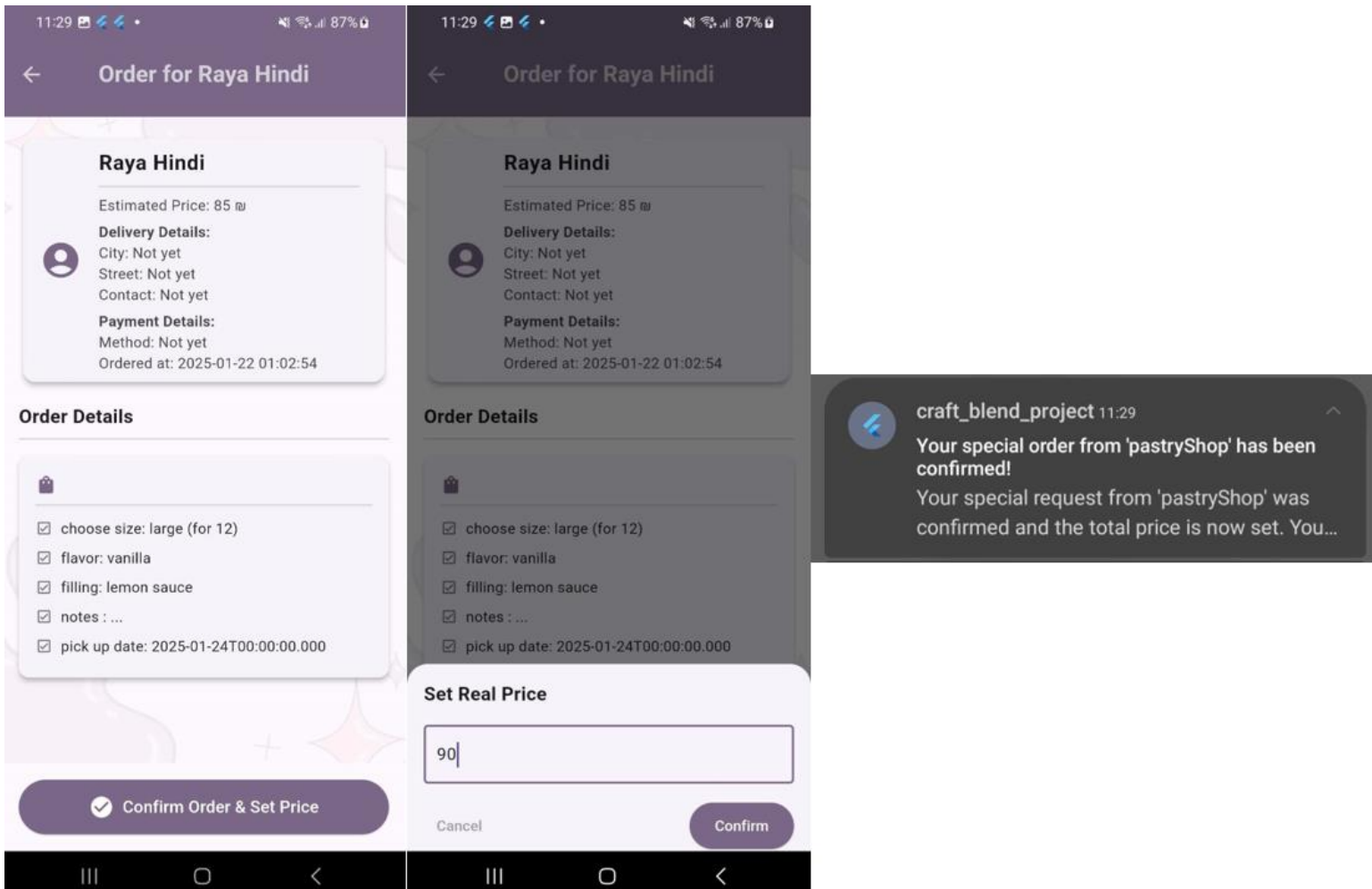


Figure 82: Owner Confirms User's Special-Order, User receives Notification

- **Notifications**

Store owners receive notifications to help them manage their business efficiently. They get notified whenever a new order is placed, so they can start preparing it right away. Special order requests also trigger a notification, letting them know a customer has made a personalized request. Additionally, when their post has new updates, they receive a notification, helping them engage with their customers. **Customers** receive notifications to keep them updated on their activity and orders. As their order progresses, they receive updates when its status changes (e.g., shipped or delivered). For special orders, they get a notification when the store confirms the request and provides the final price, also when their post has new updates, they receive a notification.

Through their home page, both can easily access their notifications through the icon at the top left. If there are any unread notifications, a red indicator appears, letting them know there's something new to check. As soon as they open and read the notifications, the red indicator disappears, making it clear that everything has been seen.

In The first image shows the store's home page with the notification icon at the top left, but there are no new notifications, so it appears as a simple bell.

In the second image shows user's home page with the red dot on the bell icon indicates that there are unread notifications. This lets the user owner know that there's something new to check.

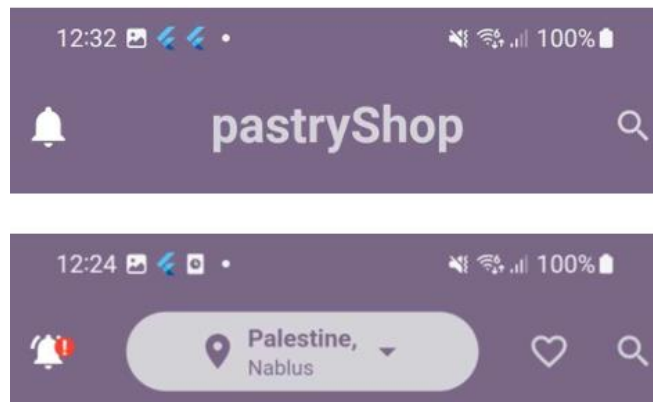


Figure 83: Notification Icon with Unread Indicator

In the notifications page, users can see all their recent updates. A small detail to note is that when there are unread notifications, the bell icon appears darker to indicate new updates. Once all notifications are read, the bell returns to its normal lighter state.

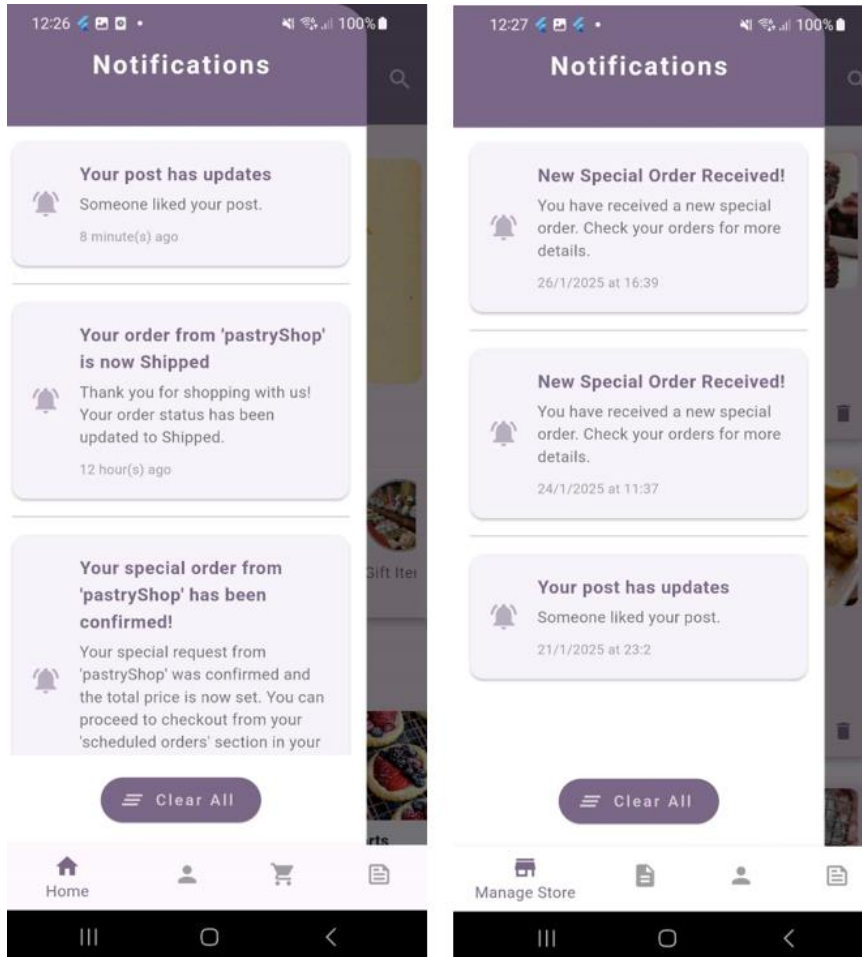


Figure 84: View Previous Notifications

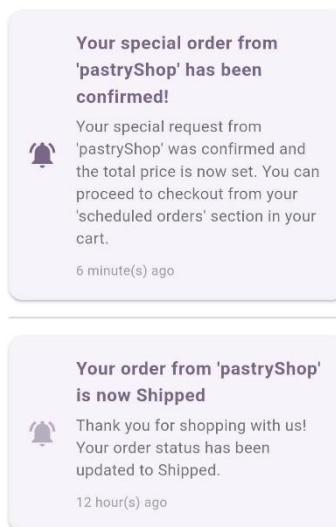


Figure 85: Read and Unread Notifications

- **Feed Page**

For the social media part, the user or the store owner can view and interact with posts from stores or feedbacks from users on the stores, with the ability to filter the results using a dropdown menu in the app bar.

There are two types of posts in the feed page, a store post and feedback from a user on a store, and the post type is shown at the top right corner of the post card as shown in Figure 86.

As for the post structure, it displays the profile photo and user name of the creator, a badge for specifying the post type, day and date of when the post was created, a place for the content of the post, a place for displaying photos, with a carousel indicator for showing that there are multiple photos available for viewing, four icon buttons for allowing interactions with the post. Also, if the post type is feedback, then a band above the post card is shown and it specifies from who the feedback is and on what store it is, a post could include content or up to five photos or both. See Figure 86.

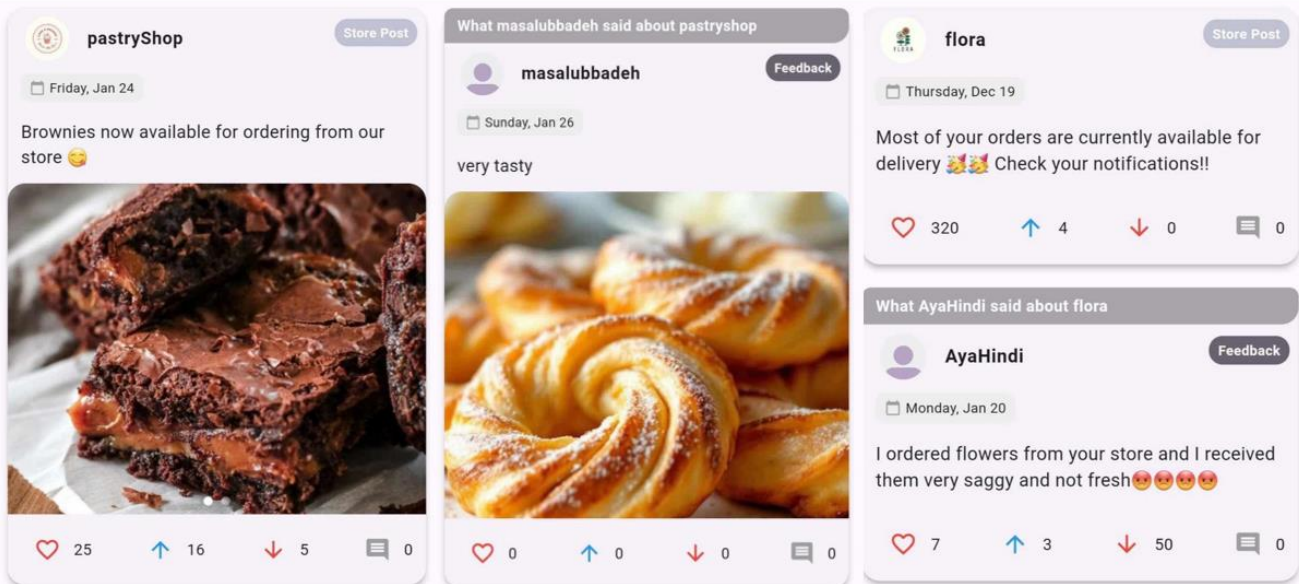


Figure 86: Post Structure

For the user feed page, the user can use filters to control his feed page by three filters: Home, Popular and Favorites (see Figure 87). The Home filter displays posts sorted based on the most recent posts (see Figure 88). The Popular filter displays posts based on how many upvotes and downvotes are on the post, where the posts with more upvotes at the top, and posts with more downvotes at the bottom (its shown in the figure for store feed but it's the same for both except for the app bar) (see Figure 88), a ratio between the upvotes and downvotes for the same post is calculated so it takes its right place on the page, this helps the users to have an idea about the store from his posts and feedbacks about it, so if

someone tried to spread rumors about a store it would be obvious because the feedback would have many downvotes from other users.

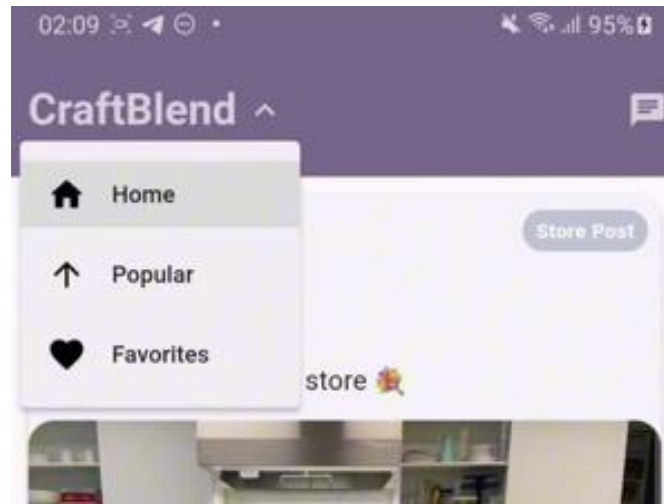


Figure 87: Filters

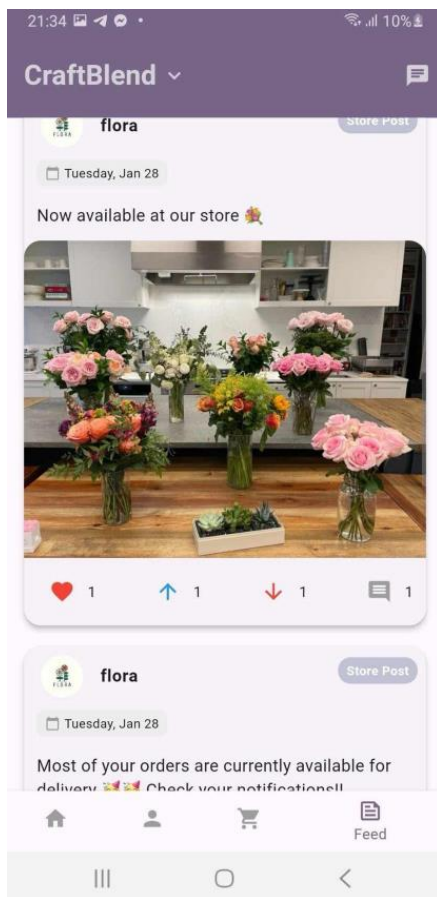


Figure 88: Home Filter

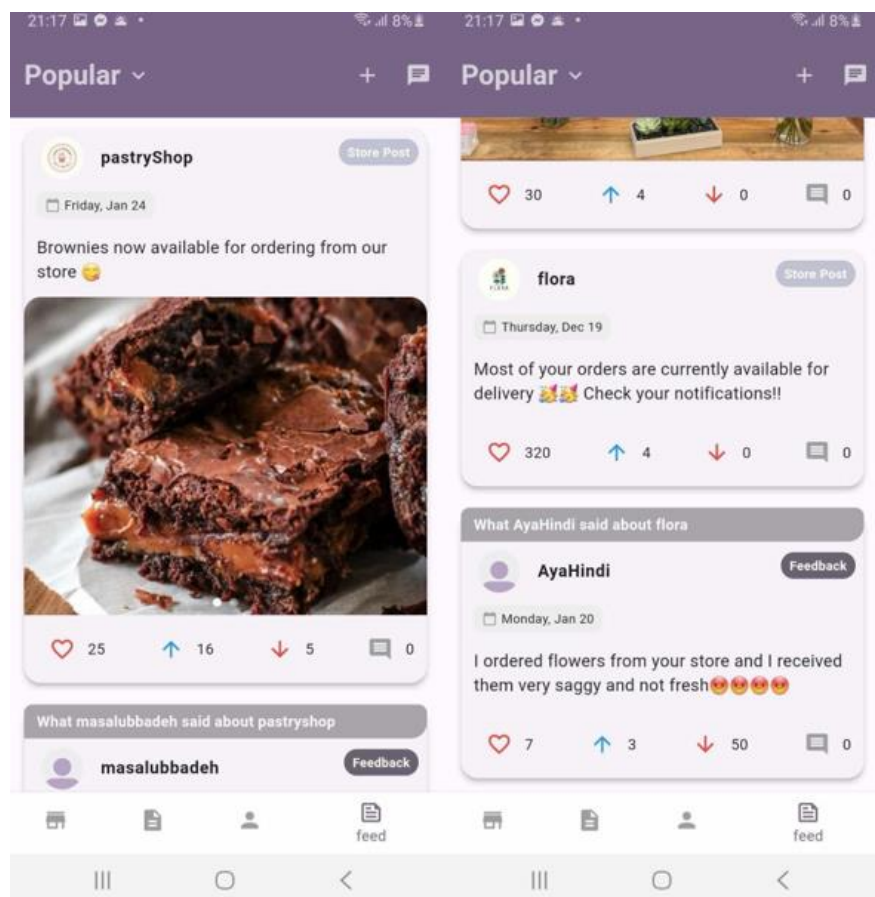


Figure 89: Popular Filter

The favorites filter brings to the feed page posts and feedbacks from the favorite stores of the user, if the user doesn't have favorite stores, then the page would be empty. Figure 90

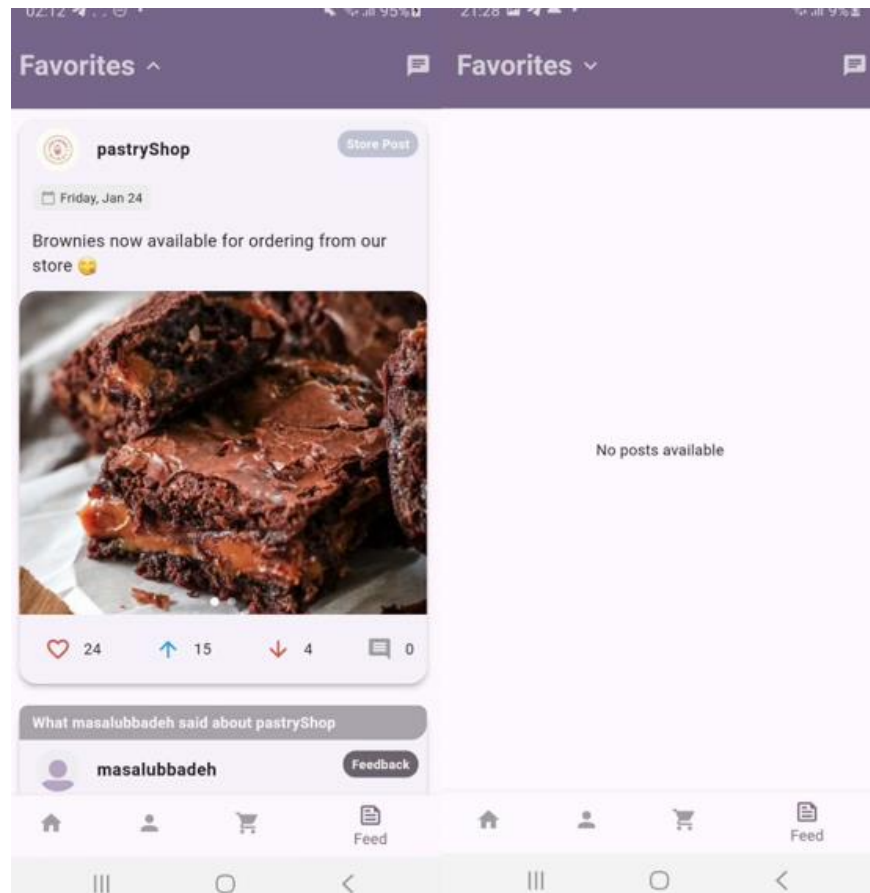


Figure 90: Favorites Filter

Users and store owners can also interact with posts with likes, upvotes, downvotes and comments. See Figure 91 .

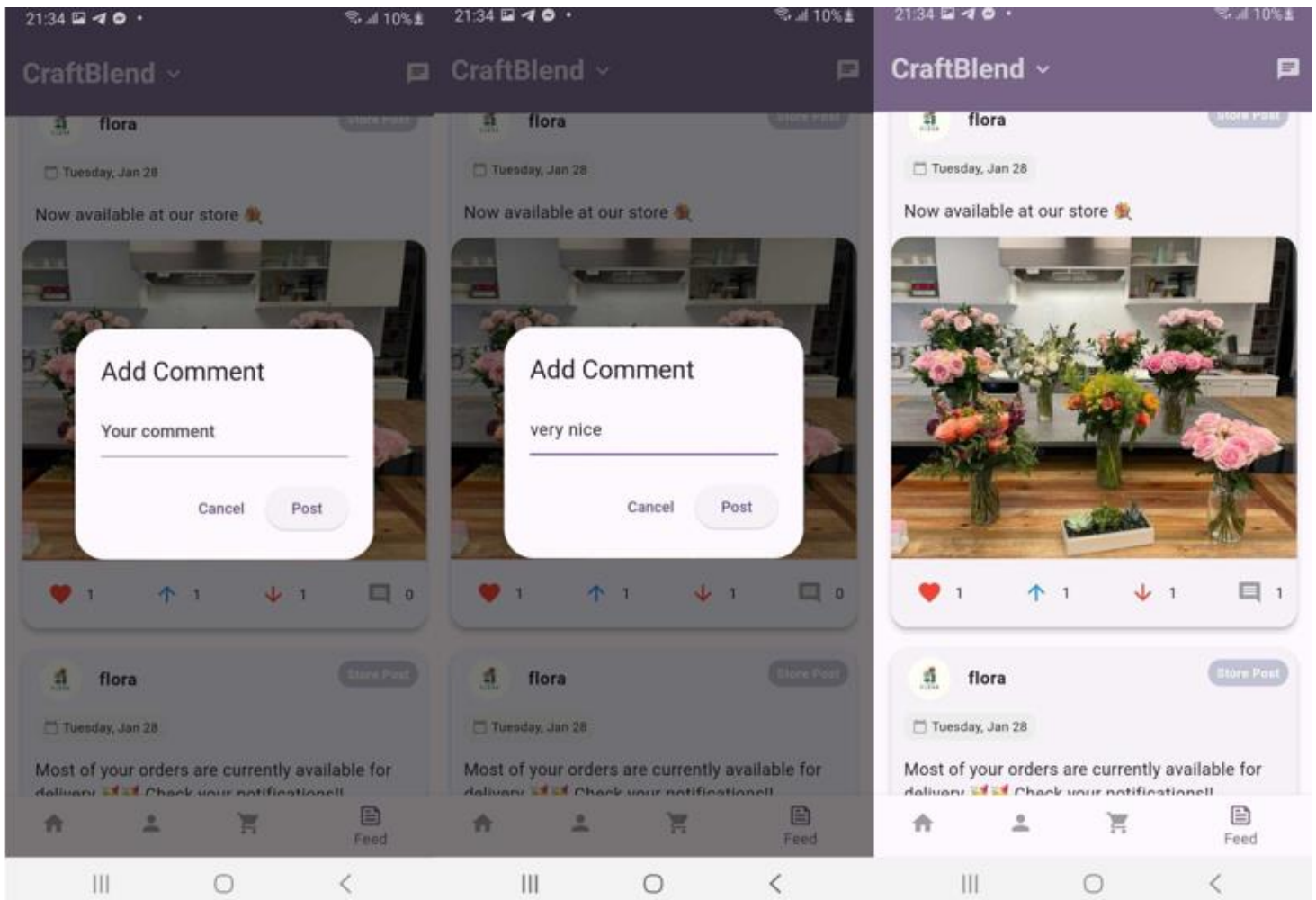


Figure 91: Likes, Upvotes, Downvotes, Comments.

As for the store feed page, it's very similar to user feed page, except that store owners don't have access to Favorites filter. Also, from the feed page a store owner can create a post from there.

When a store owner wants to create a post, he presses on the add icon in the app bar (see Figure 92)

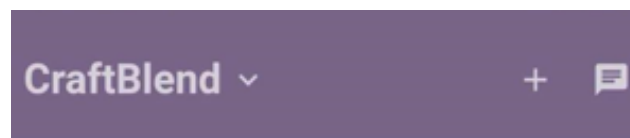


Figure 92: Create store post icon

For creating a post, you could add up to five photos along with the content, or you could only add photos or content. Also, when the post is created it appears in the user and store owner feed and on the store profile. See Figure 84

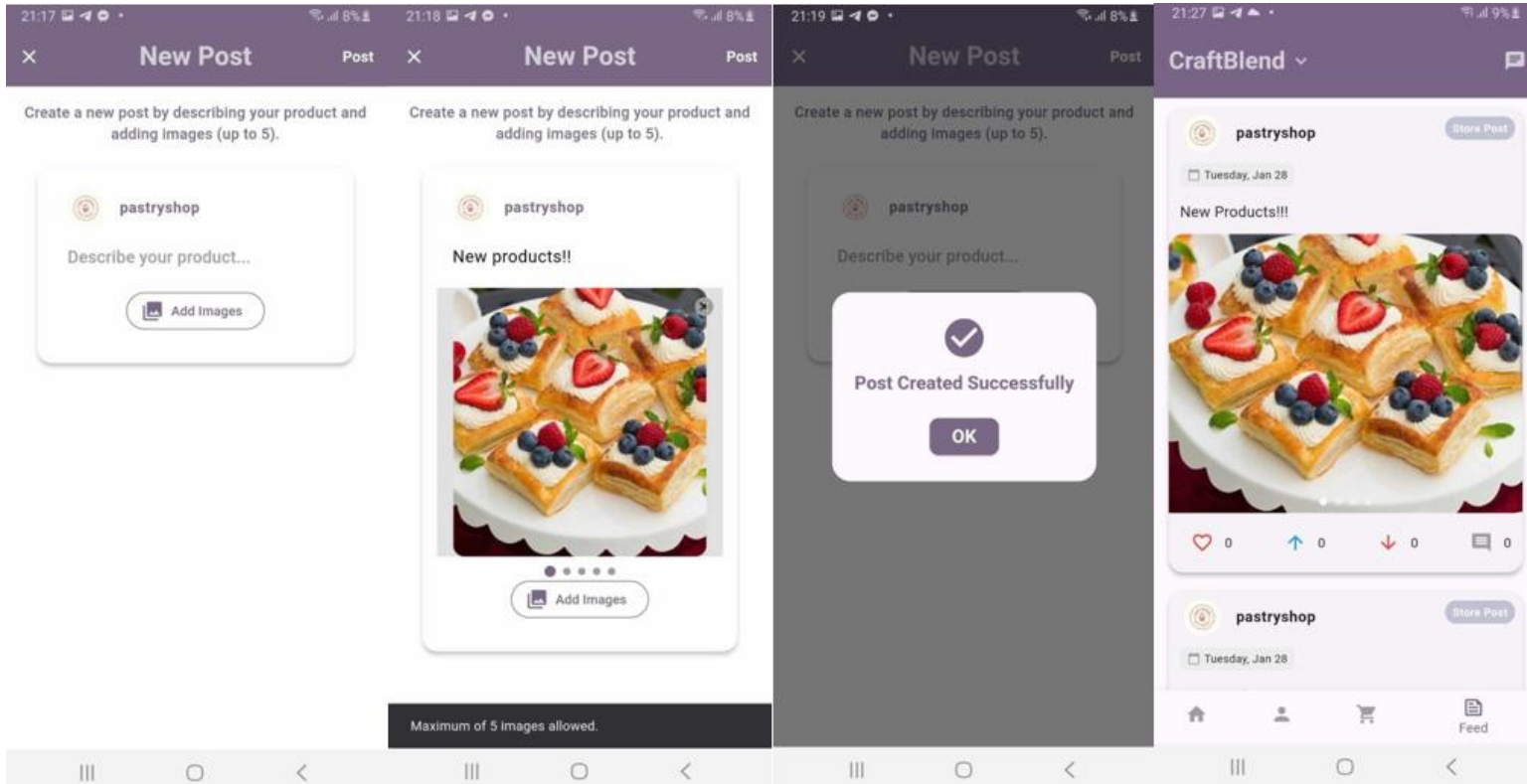


Figure 93
Figure 93: Store Post Creation

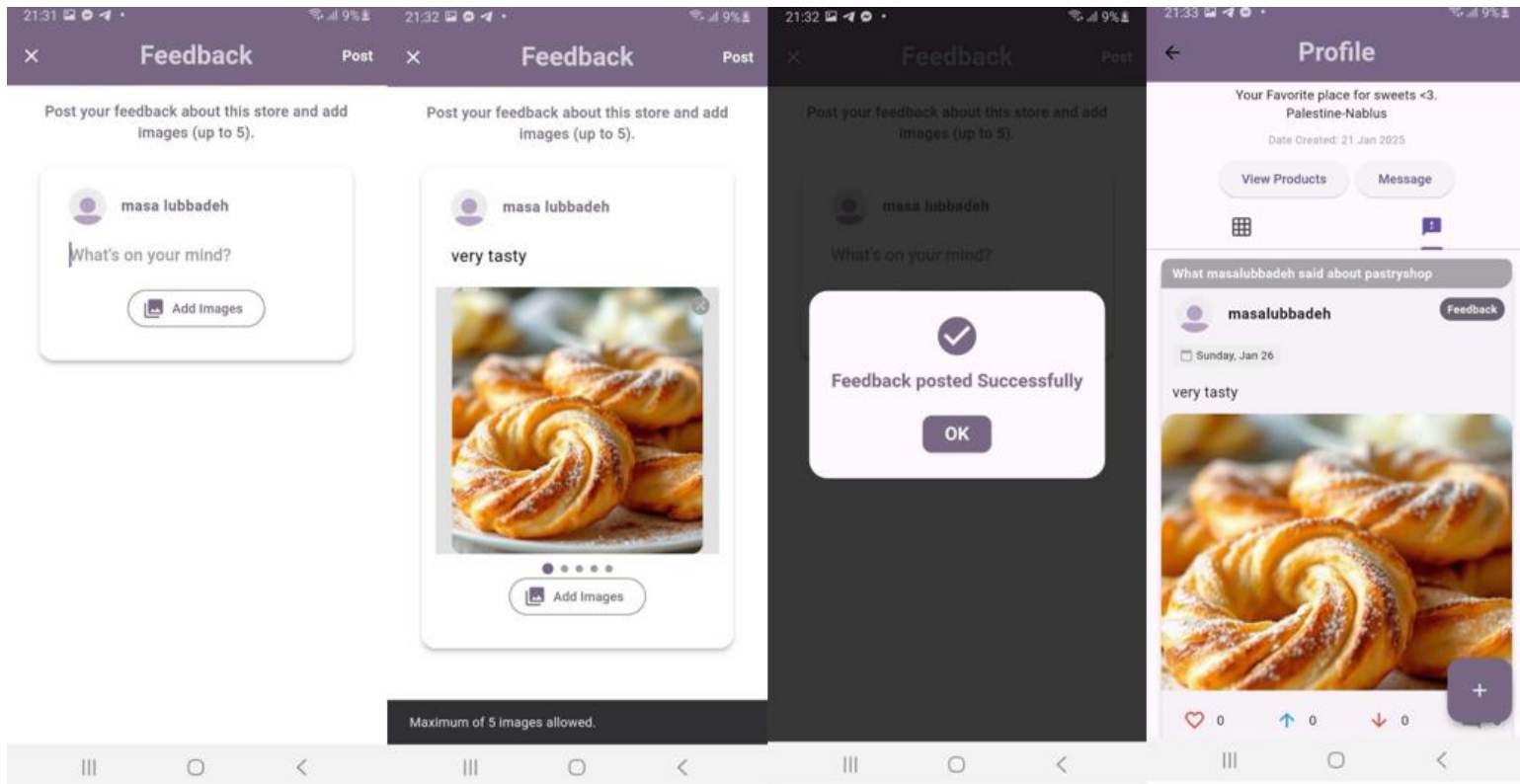
Users can also navigate to the store profile page by pressing on the store post or feedback about the store. From there, a user can post feedback about that store by pressing on the floating add icon button.

Figure 94: Create Feedback floating button



Many things can be accessed from the store profile page which I mentioned earlier. Feedback from a user has similar features for a store post. When the feedback is created it appears in the user and store owner feed and on the store profile.

Figure 95: Feedback Creation



- **Admin View Platform Statistics**

Admins can easily track platform activity with detailed statistics. They can see how many users and stores are registered, which user has placed the most orders, and the top-performing store based on received orders and ratings. Additionally, they get insights into where stores are located through a visual breakdown of store distribution by city.

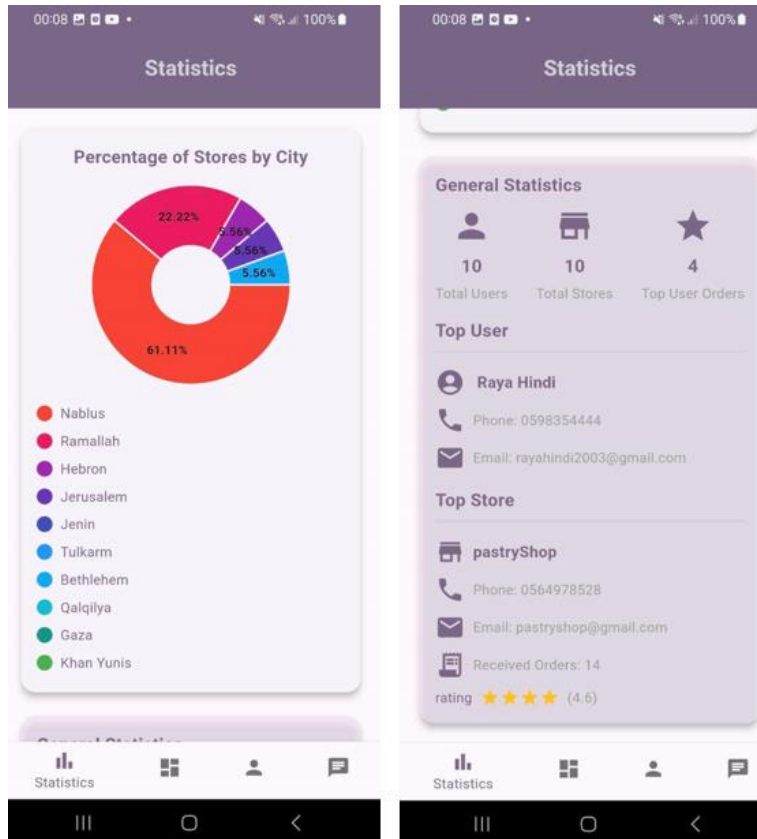


Figure 96: Admin Dashboard Showing Platform Statistics

- **Admin Dashboard**

The main admin has full control over the platform and can manage everything, including adding new admins. On the left is the main admin's dashboard, where they can add and view admins, manage categories and stores, review category suggestions and oversee store subscriptions. On the right is the dashboard for other admins, who handle store categories, manage stores, review suggestions, and oversee store subscriptions.

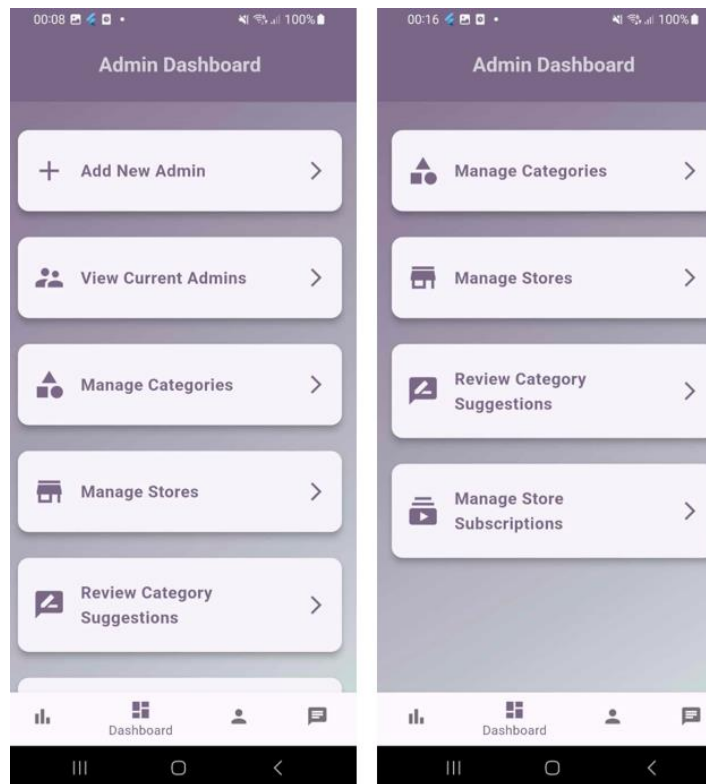


Figure 97: Main Admin vs. Other Admin Dashboards

- **Adding New Admin**

The **Add New Admin** feature lets the main admin create new admin accounts by entering their name, email, phone number, and password. Once added, the new admin gets access to the admin dashboard.

- **Viewing Current Admins**

The **View Current Admins** feature displays a list of all existing admins, along with their contact details. The main admin can also remove any admin if needed by clicking the delete icon.

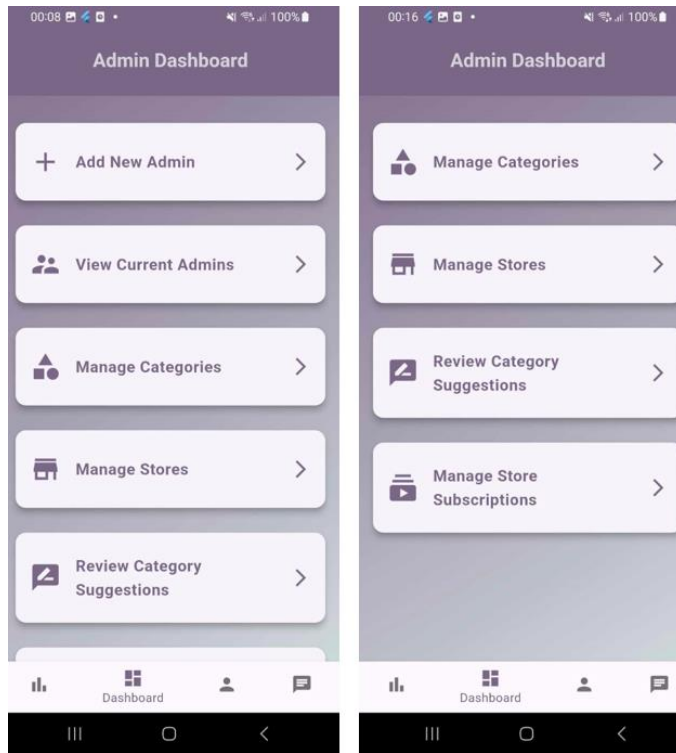


Figure 98: Adding a New Admin

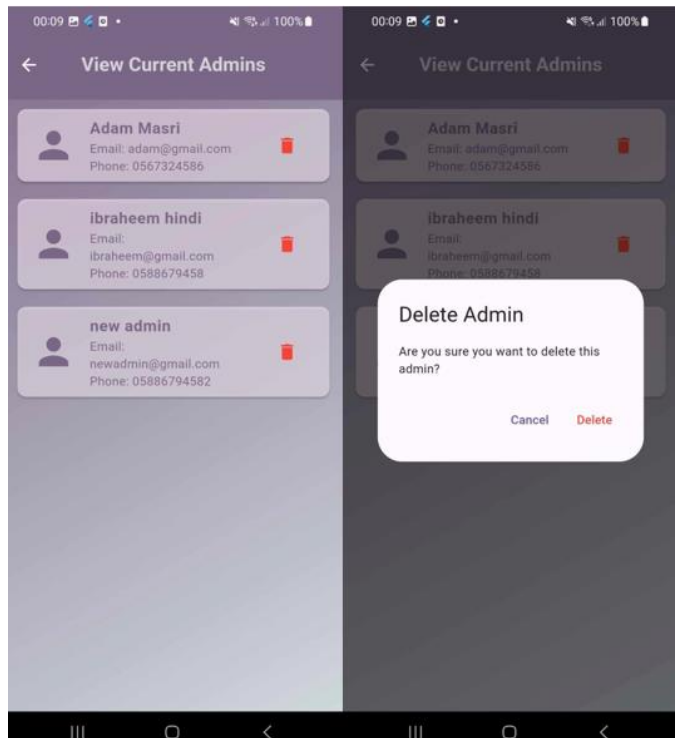


Figure 99: Viewing and Managing Admins

- **Admin Manages Stores**

The admin can view and manage all stores, organized by category. They can see store details like name, email, and phone number, making it easy to track and oversee stores in different business sectors.

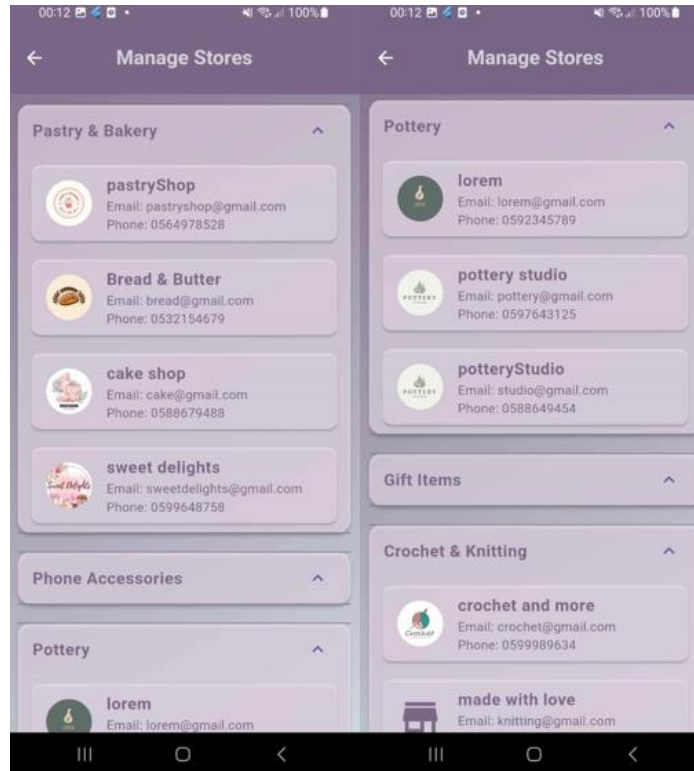


Figure 100: Managing Stores

- **Admin Manages Categories**

Store categories help organize stores based on their type, making it easier for customers to browse. Admins have full control over categories, allowing them to add, edit, and delete them as needed.

Admins can create a new category by entering its name, adding a description, and uploading an image. Once added, the category appears in the list, and stores can be assigned to it.

If a category is no longer needed, it can be deleted. However, if there are stores assigned to that category, the admin must **contact all store owners first** before deleting it to ensure a smooth transition. A confirmation message appears before deletion to prevent accidental removal.

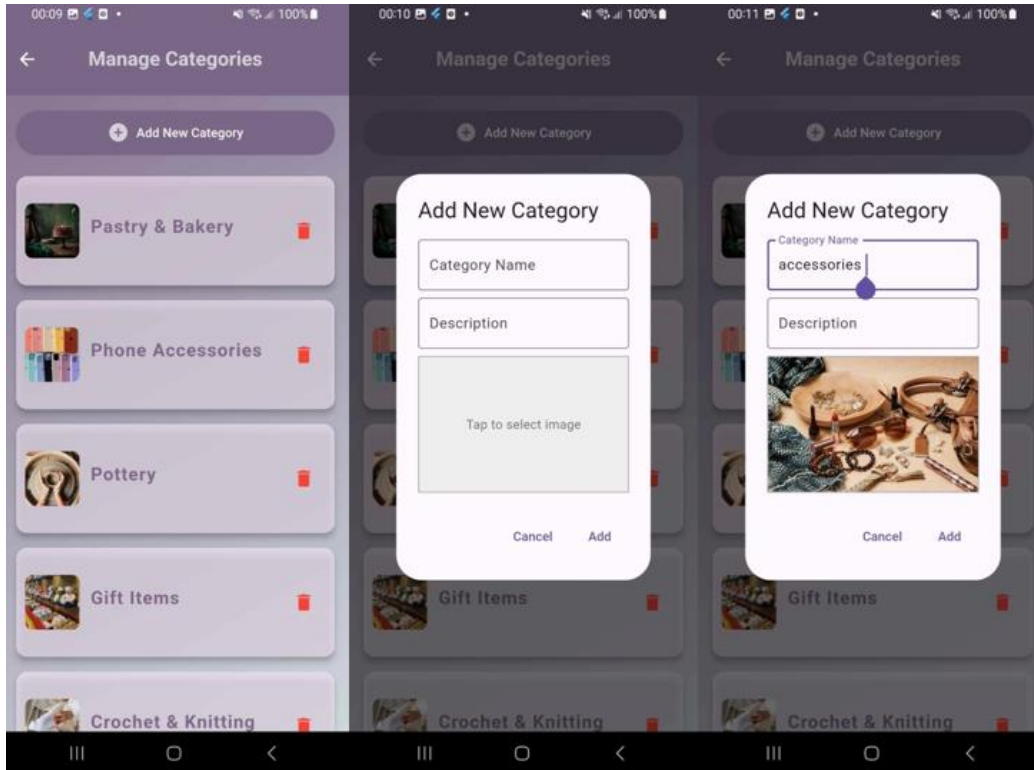


Figure 101: Category Management, Adding New Category

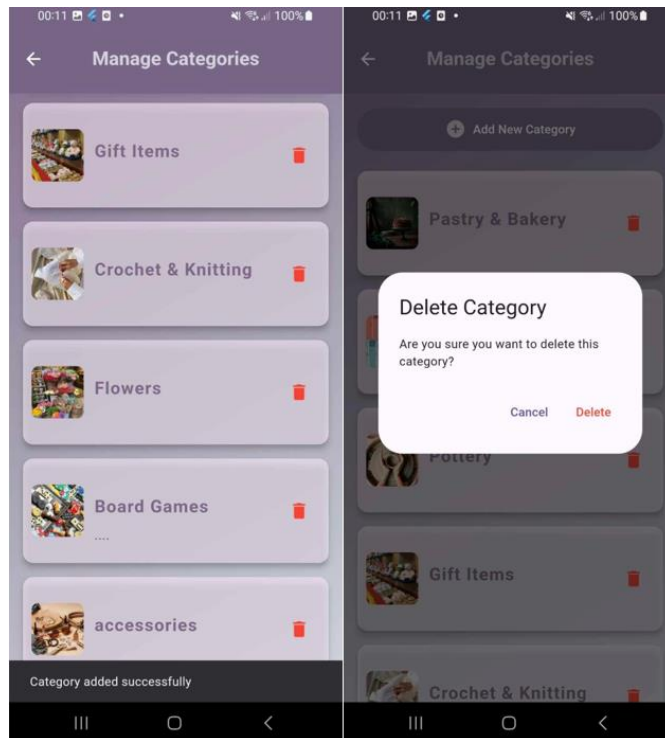


Figure 102: Category Added, Deleting a Category

- **Reviewing Category Suggestions**

Admins can review category suggestions submitted by users and stores to keep the platform relevant and organized. If a store wants to join but can't find a suitable category, they can suggest a new one. Each suggestion includes a name and a short reason explaining why it should be added. Admins have the option to approve the suggestion, making it an official category, or reject it if it doesn't fit the platform.

Approved categories are marked in green, while pending ones remain under review until a decision is made.

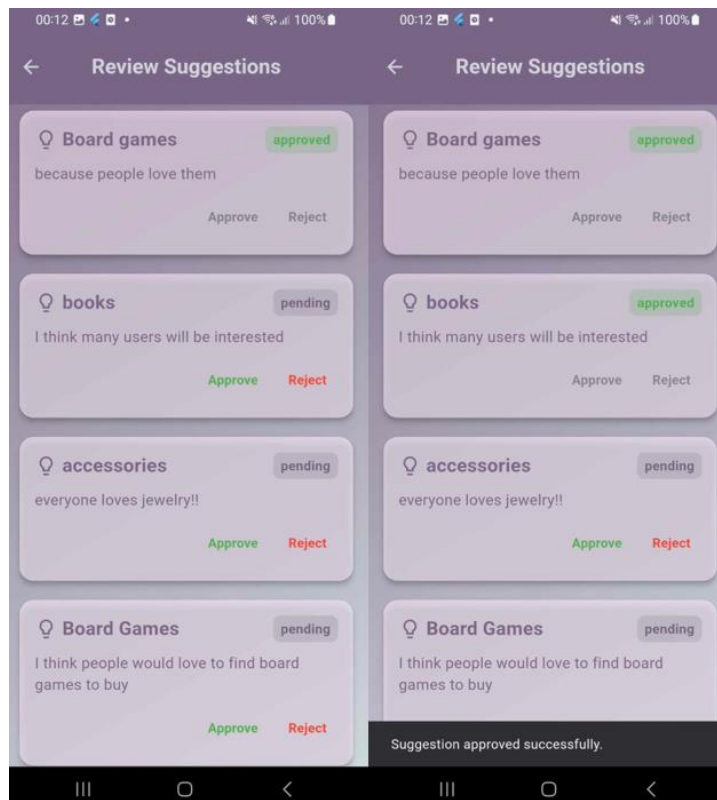


Figure 103: Reviewing Category Suggestions

- **Managing Subscription Plans**

This feature allows admins to manage subscription plans for store activation after sign-up. They can create, edit, or remove plans, setting details like price, duration, and features. Stores must choose a subscription plan to activate their account.

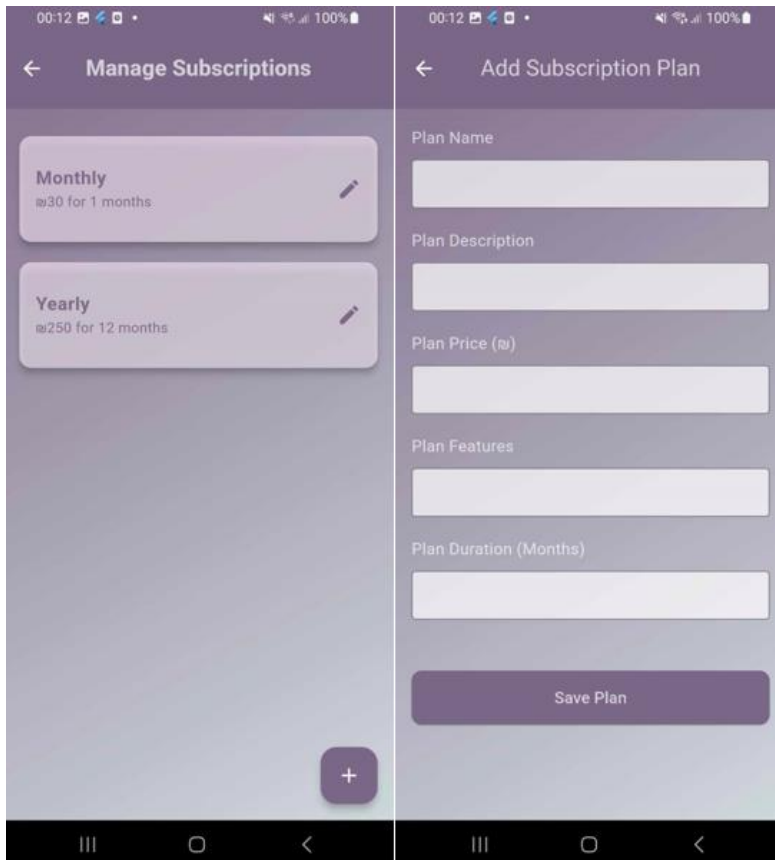


Figure 104: Category Management, Adding New Category

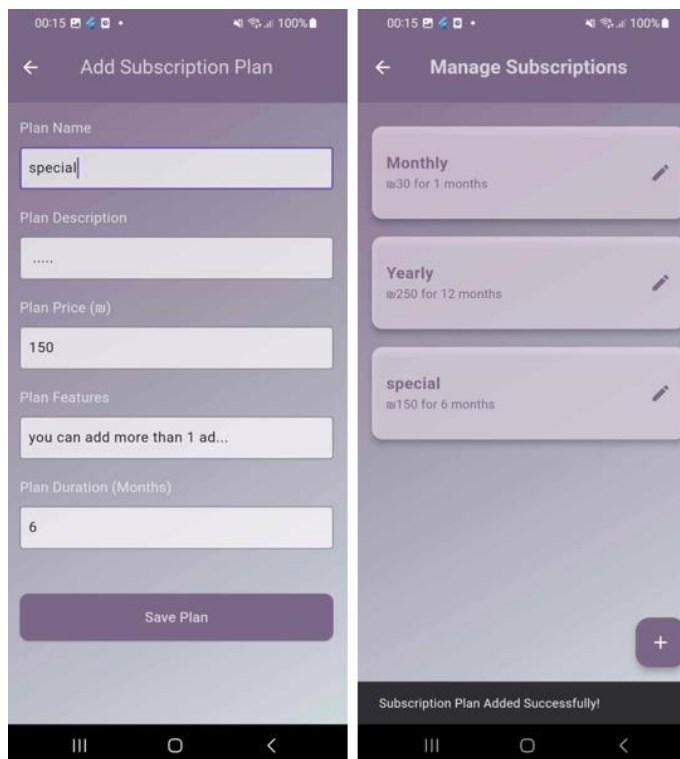


Figure 105: Category Added, Deleting a Category

○ Admin's Profile

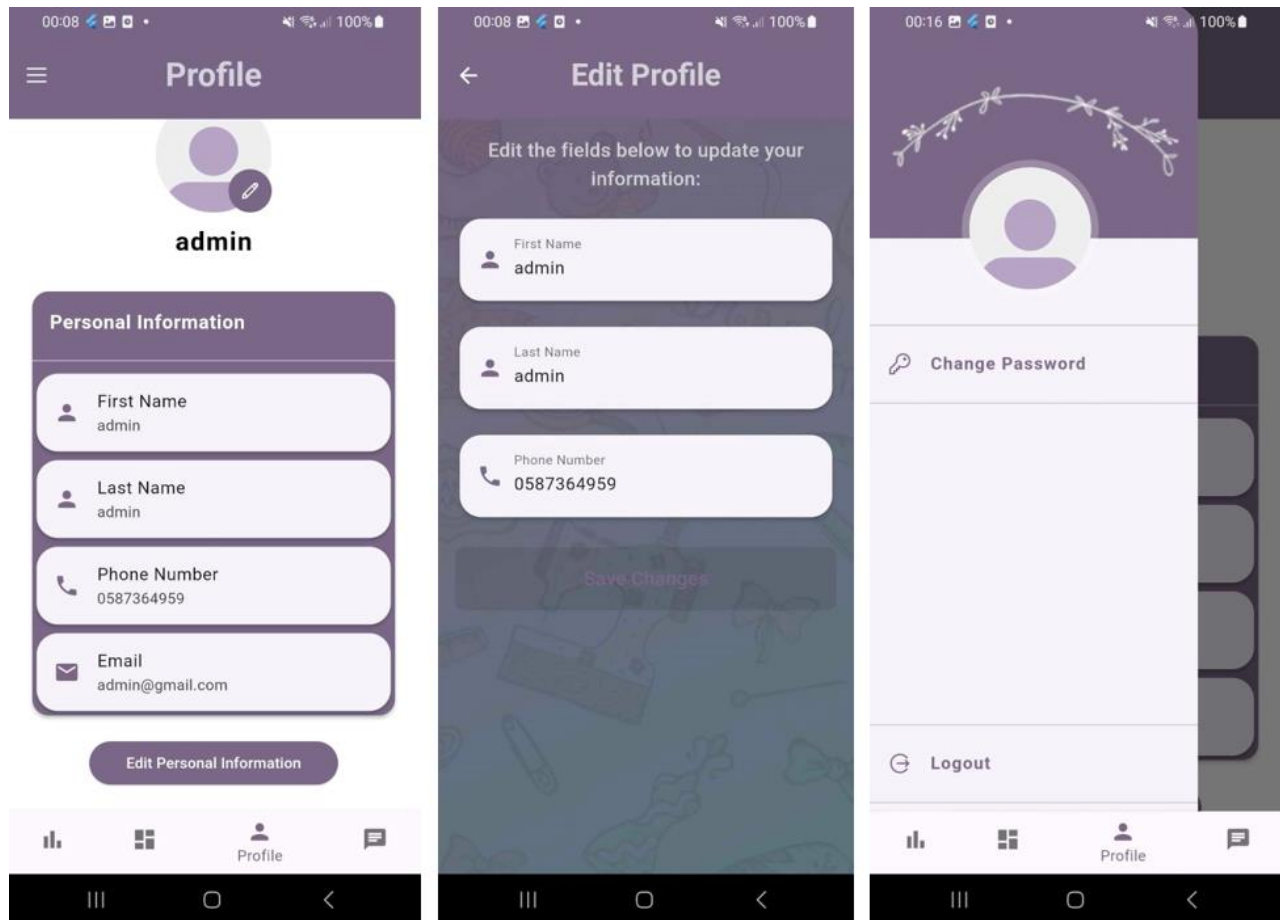


Figure 106: Admin's Profile

○ Chatting System

We provided a chatting system to strengthen the connection between the store owners and their customers. Also to provide a way for the admin to have a connection with the stores.

To access the chatting feature, a user or store owner can navigate to all chats that belongs to them from the feed page using the chat icon on the top right section of the app bar.

If the user/store owner hasn't contacted with anybody, his all-chats page would be empty. However, in the all-chats page the previously contacted accounts would be displayed, see Figure 107. When clicking on the chat card, it navigates to the chat page. From a chat page, user/store owner can do many things see Figure 108, such as sending a message, uploading a photo from camera roll, taking a picture and sending it into chat see Figure 109.

For creating a chat-room between two accounts, from the store profile there is a message button that navigates the user into the chat page between him and the store.

As for the admin, the only difference is that in his all-chats page, all of the store accounts are displayed, see Figure 110.

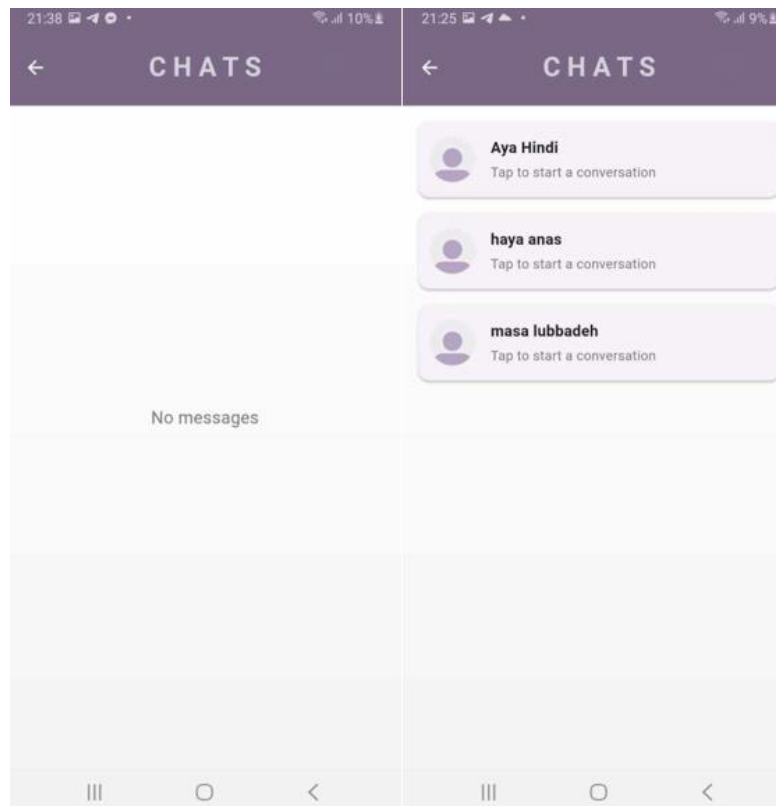


Figure 107: All Chats Page

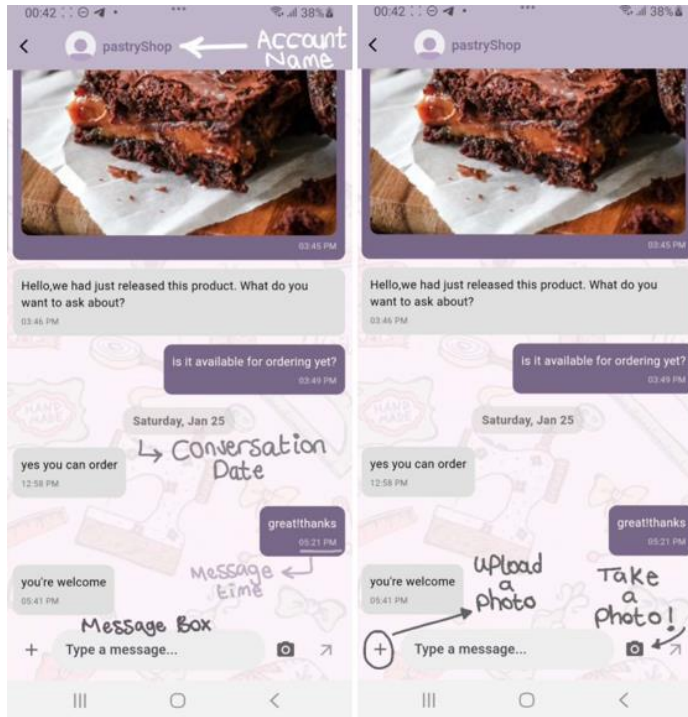


Figure 108: Chat Page

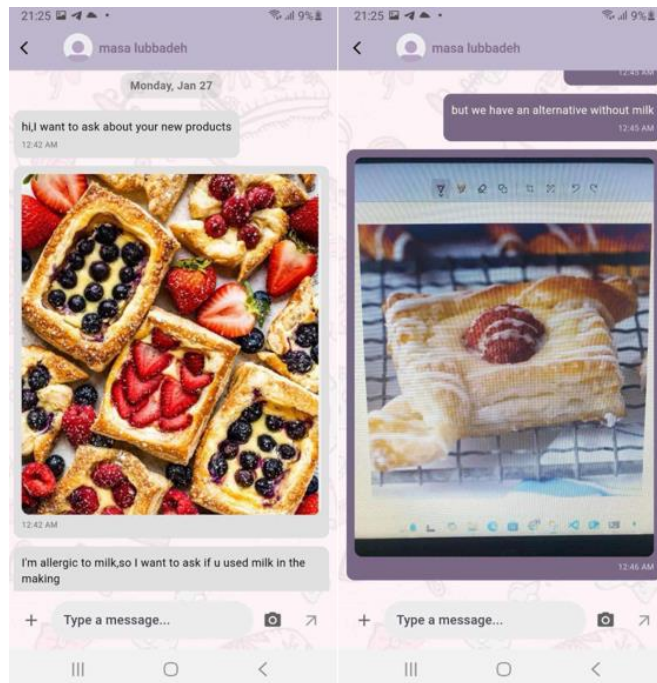


Figure 109: Uploading and taking a photo

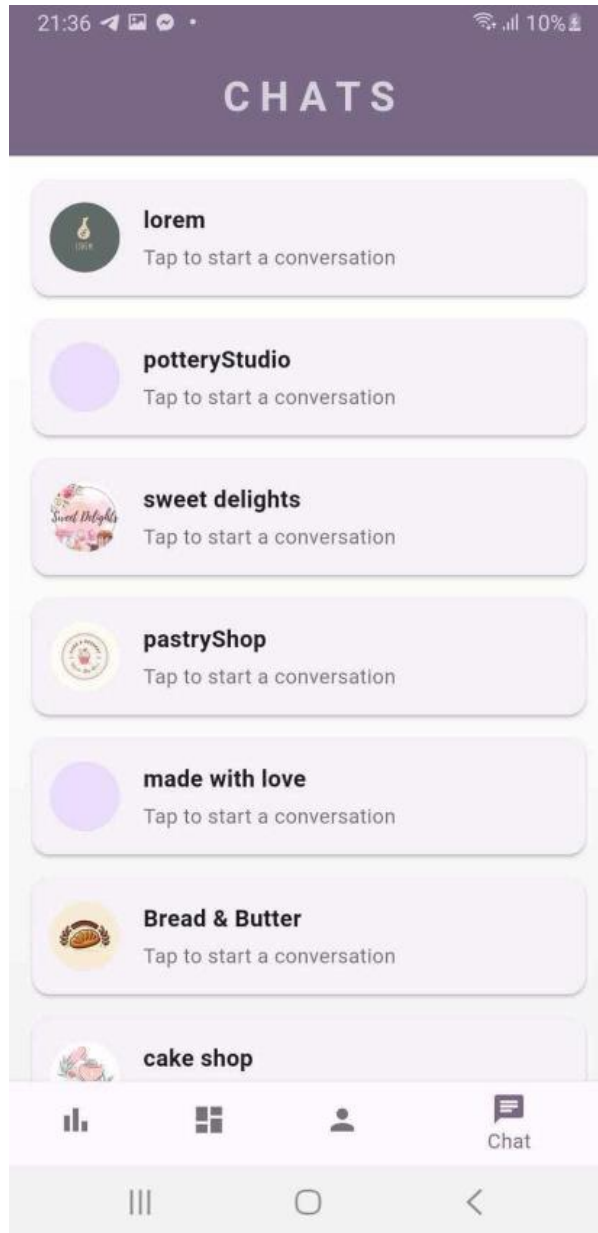


Figure 110: Admin all-chats page

- **Other Pages**

- Password Reset (Forgot Password):

This feature allows users to recover their account access in case they forget their password. By entering their registered email, they receive a reset link, guiding them to create a new password securely. This ensures a smooth recovery process while maintaining account security.

- Change Password (Inside Account):

Users who are already logged in can update their password through the Change Password feature. They need to enter their current password followed by a new password for verification.

- About Us Page:

The About Us page provides users with an introduction to Craft Blend, explaining its purpose and core features. It highlights how the platform connects stores and customers, facilitates product discovery, and enables special orders. The page also includes contact information, allowing users to reach out via email or phone, and credits the developers behind the project.

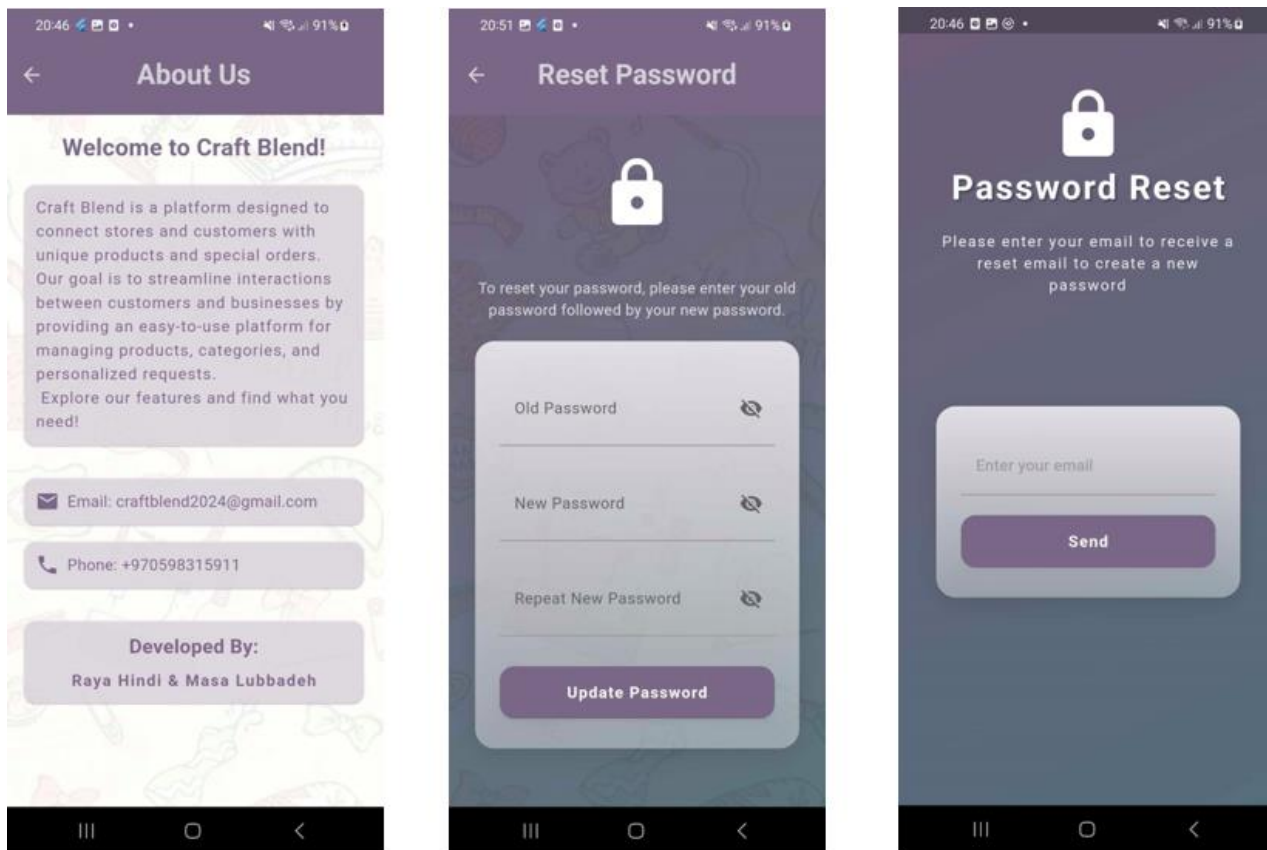


Figure 111: About us page, reset password page, forgot password page

3.3.2 Website

For the website, we used flutter as a cross-platform language. We have the same features on web and mobile, except for small changes to the chats interface (see Figure 124) and an additional feature which is the Database interface (see Figure 126), we implemented this feature for the store owners; because most of these small businesses use tools like excel or paper to keep track of their inventory, so we made this feature to make it easier for them.

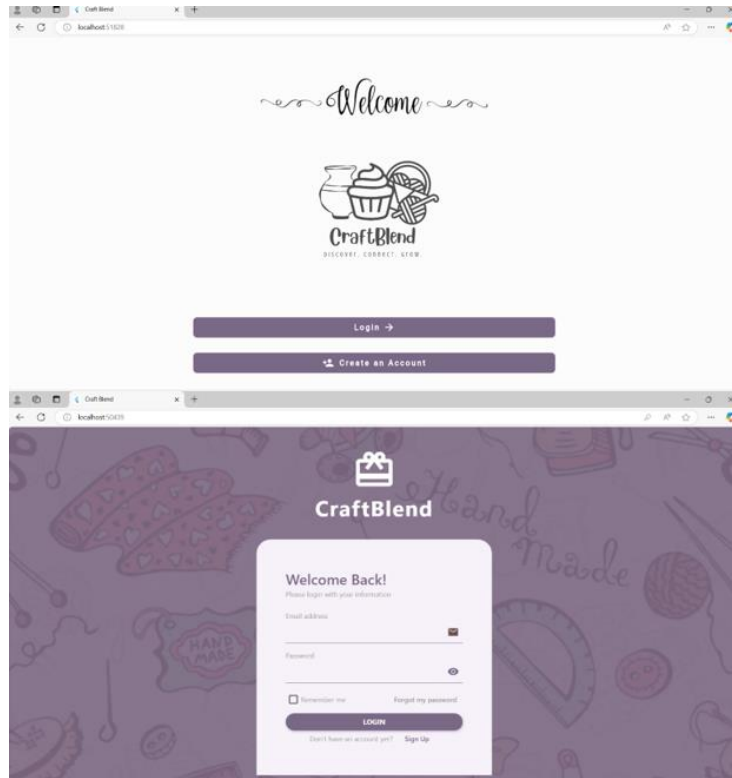


Figure 112: Web – Welcome, Login

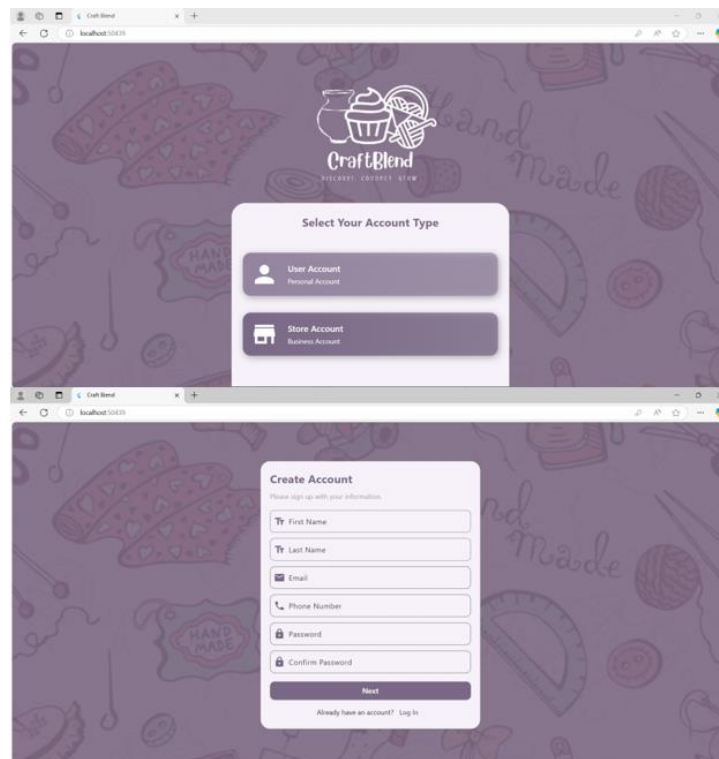


Figure 113: Web – Type Selection. User Signup

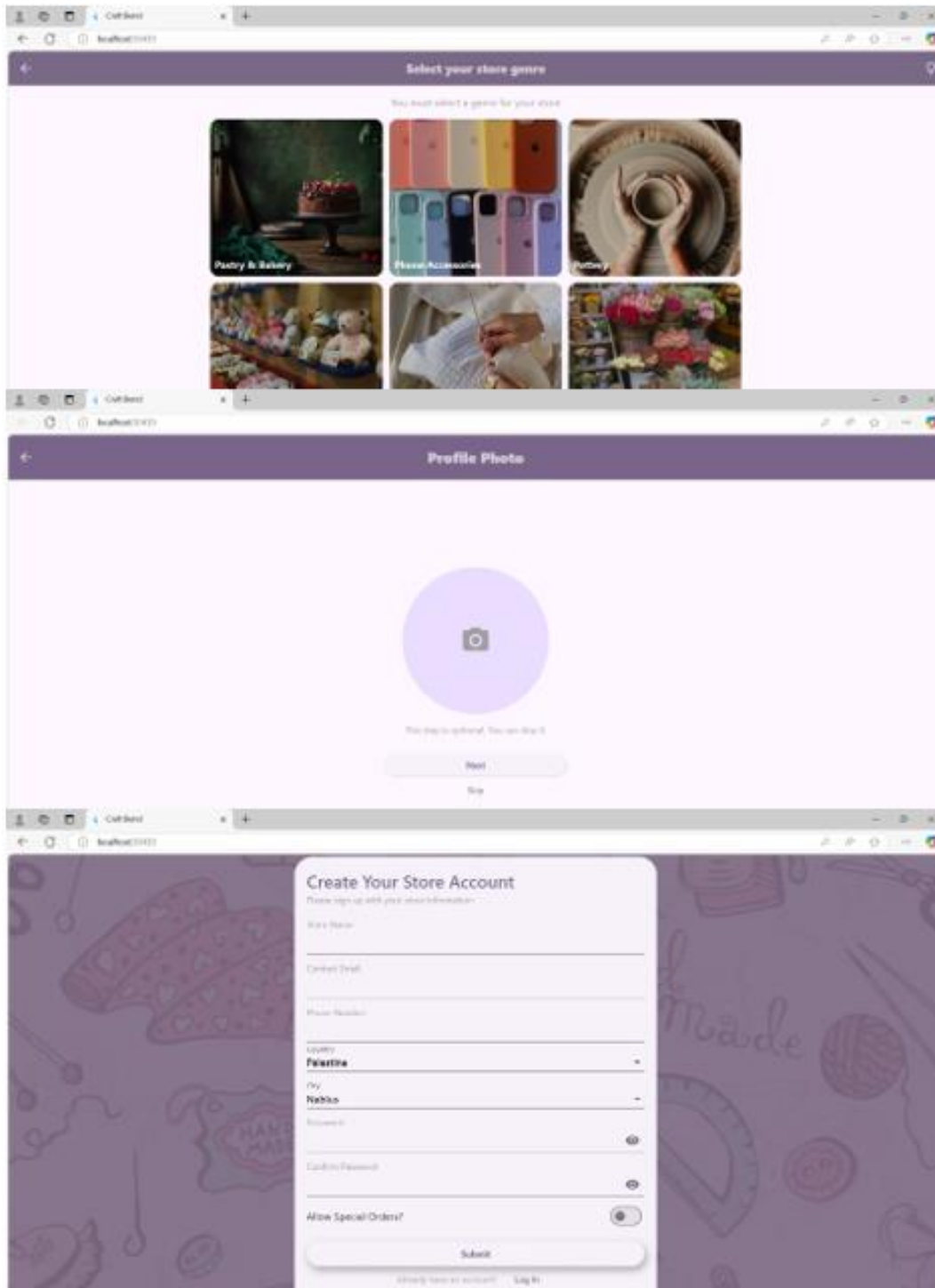


Figure 114: Web - Store Signup

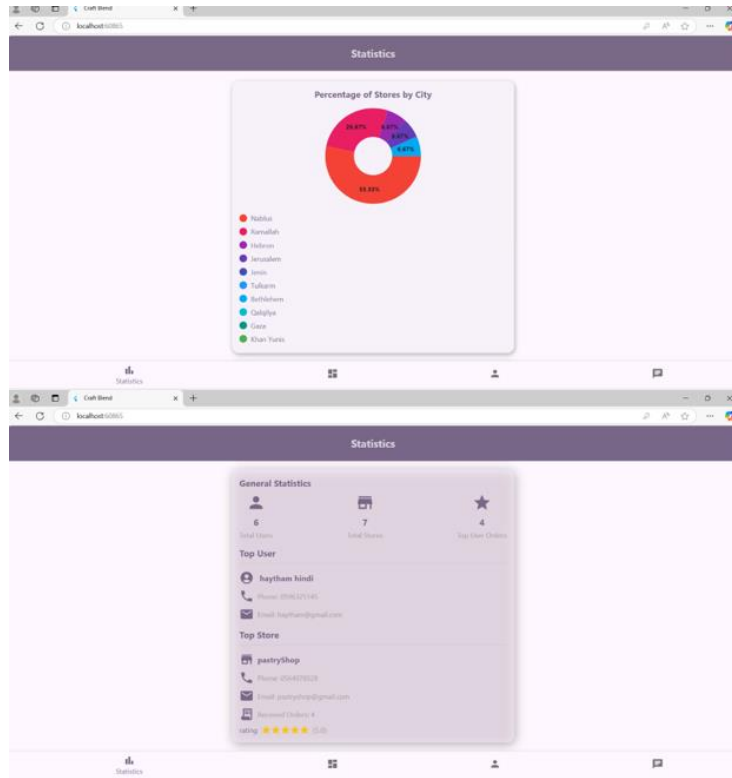


Figure 115: Web – Admin’s Statistics page

The top screenshot shows the "Add New Admin" form. It includes input fields for "First Name", "Last Name", "Email", "Phone Number", "Password", and "Confirm Password", followed by an "Add Admin" button. The background features a "Hand made" theme with various craft-related illustrations.

The bottom screenshot shows the "View Current Admins" page, which lists one admin: Adam Masri, with his email (adam@handmade.com) and phone number (056734596).

Figure 116: WEB – Adding new admin, viewing all admins

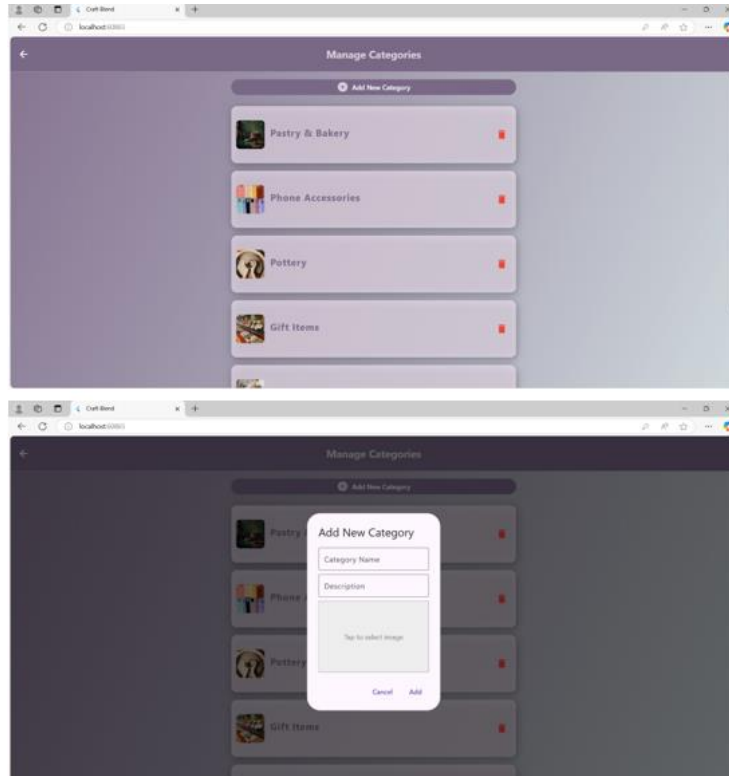


Figure 117: Web – Admin Manages Categories

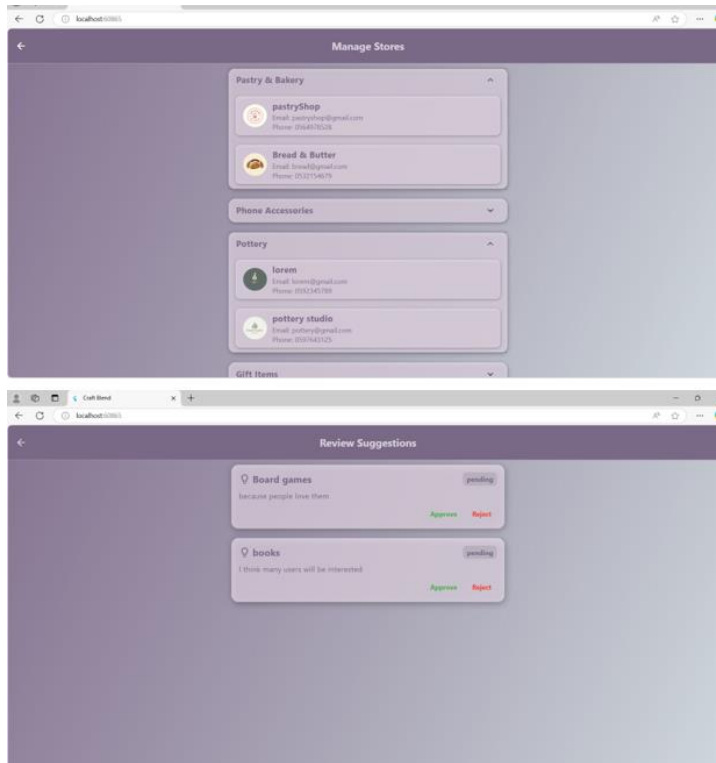


Figure 118: WEB – Admin manages stores, Admin manages Category reviews

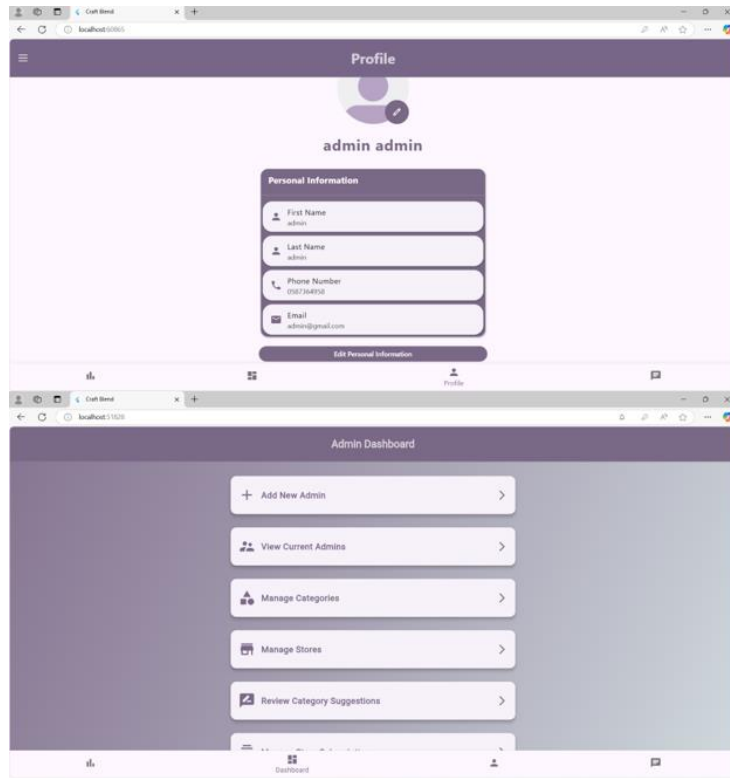


Figure 119: Web – Admin’s profile, Admin’s dashboard

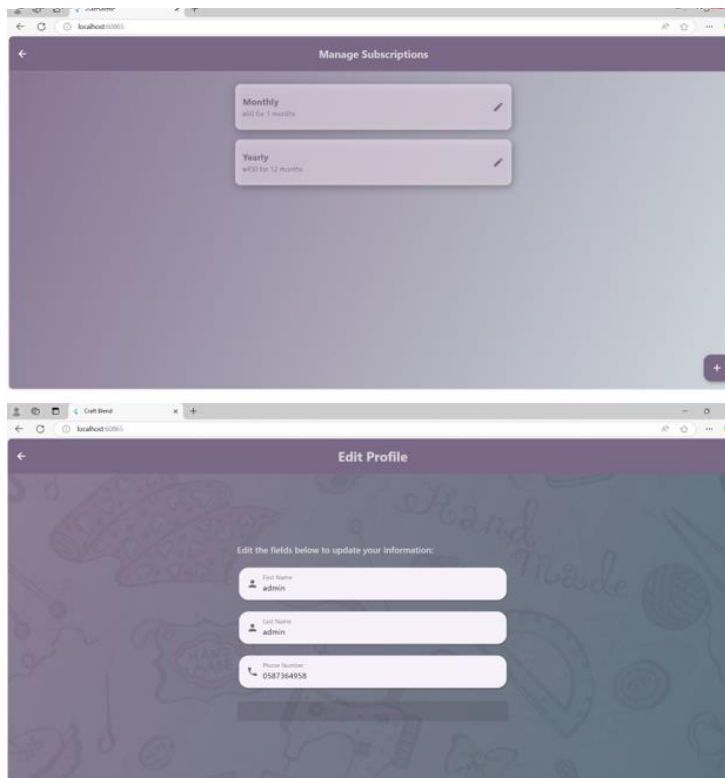


Figure 120: WEB – Admin manages subscription plans, edit admin profile

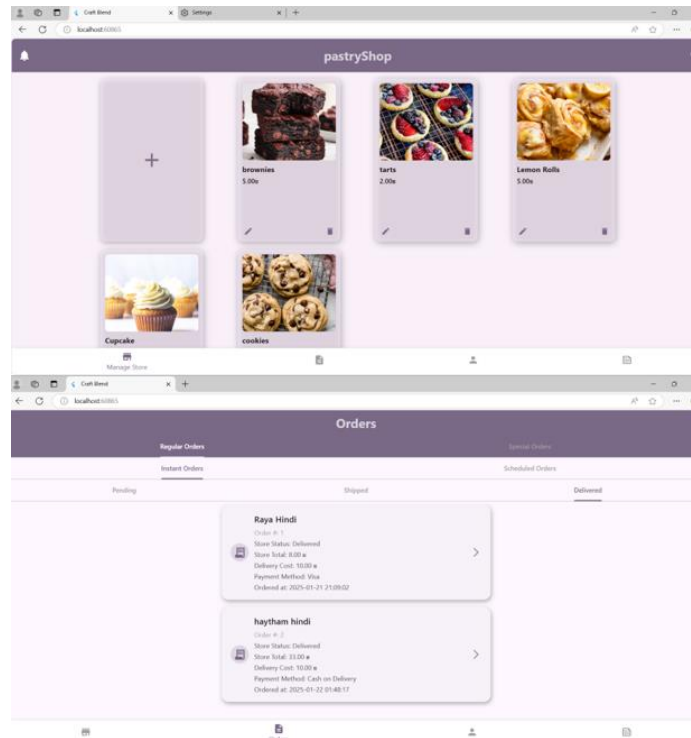


Figure 121: Web – Store home page, orders

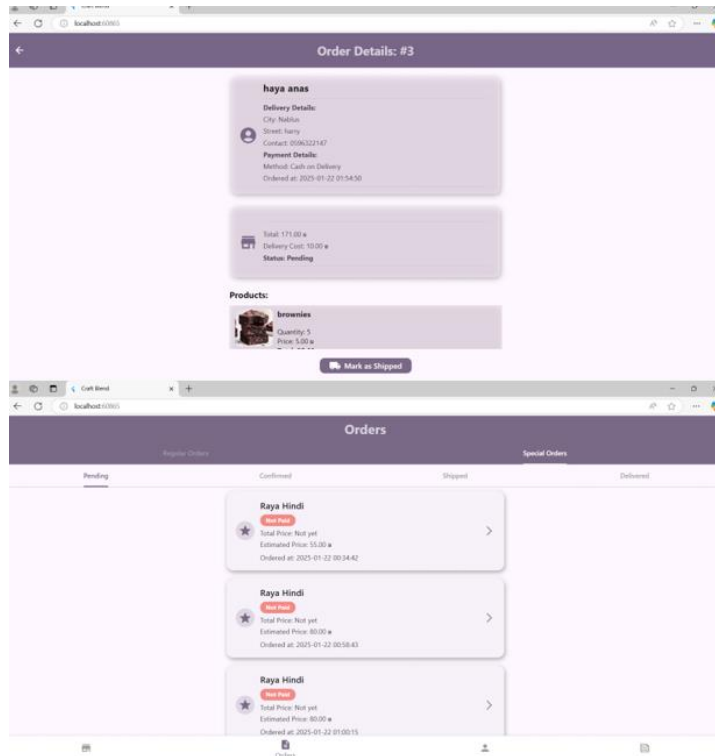


Figure 122: WEB – Store order details page, special orders

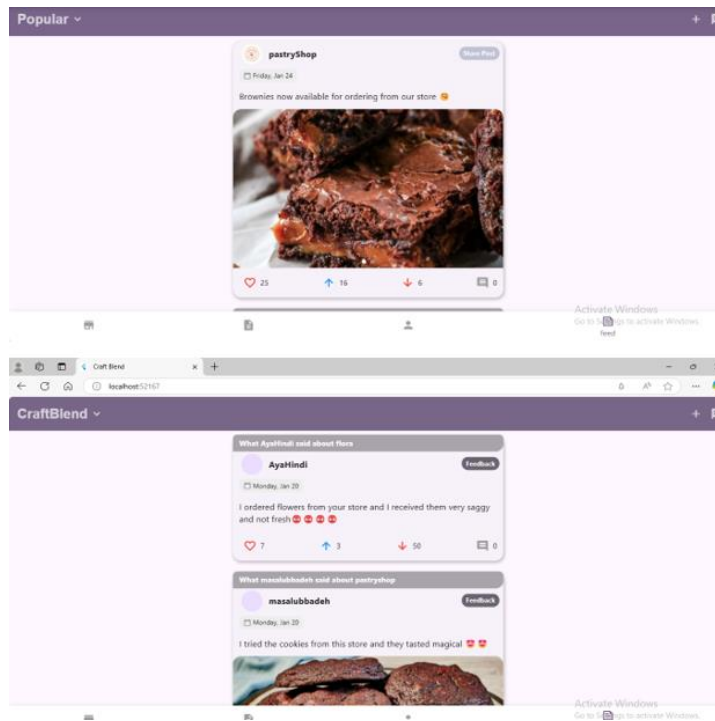


Figure 123: WEB – Store feed page with filters

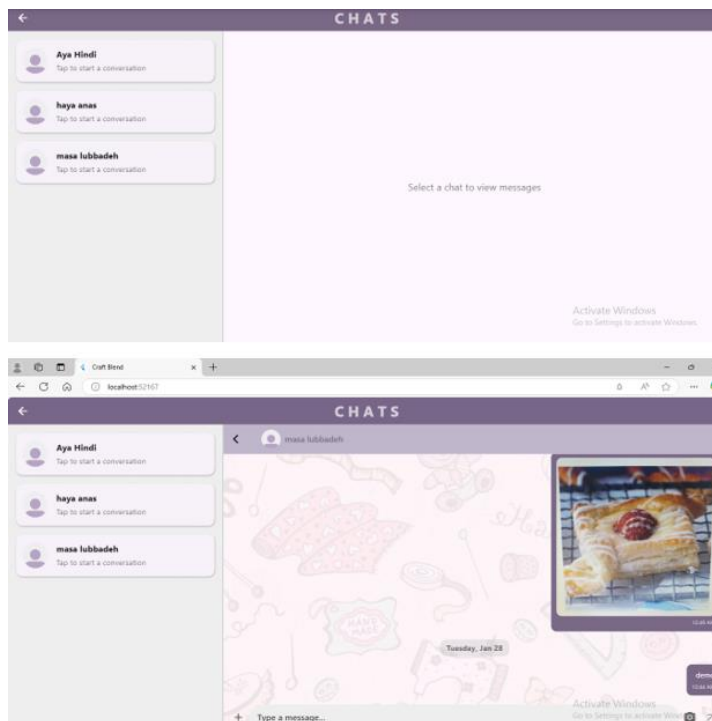


Figure 124: WEB – Chatting

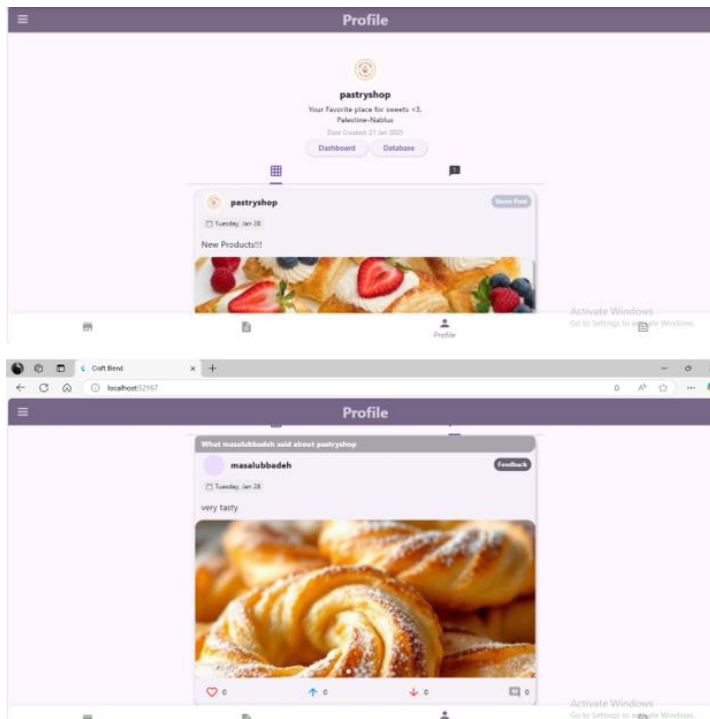


Figure 125: WEB – Store Profile

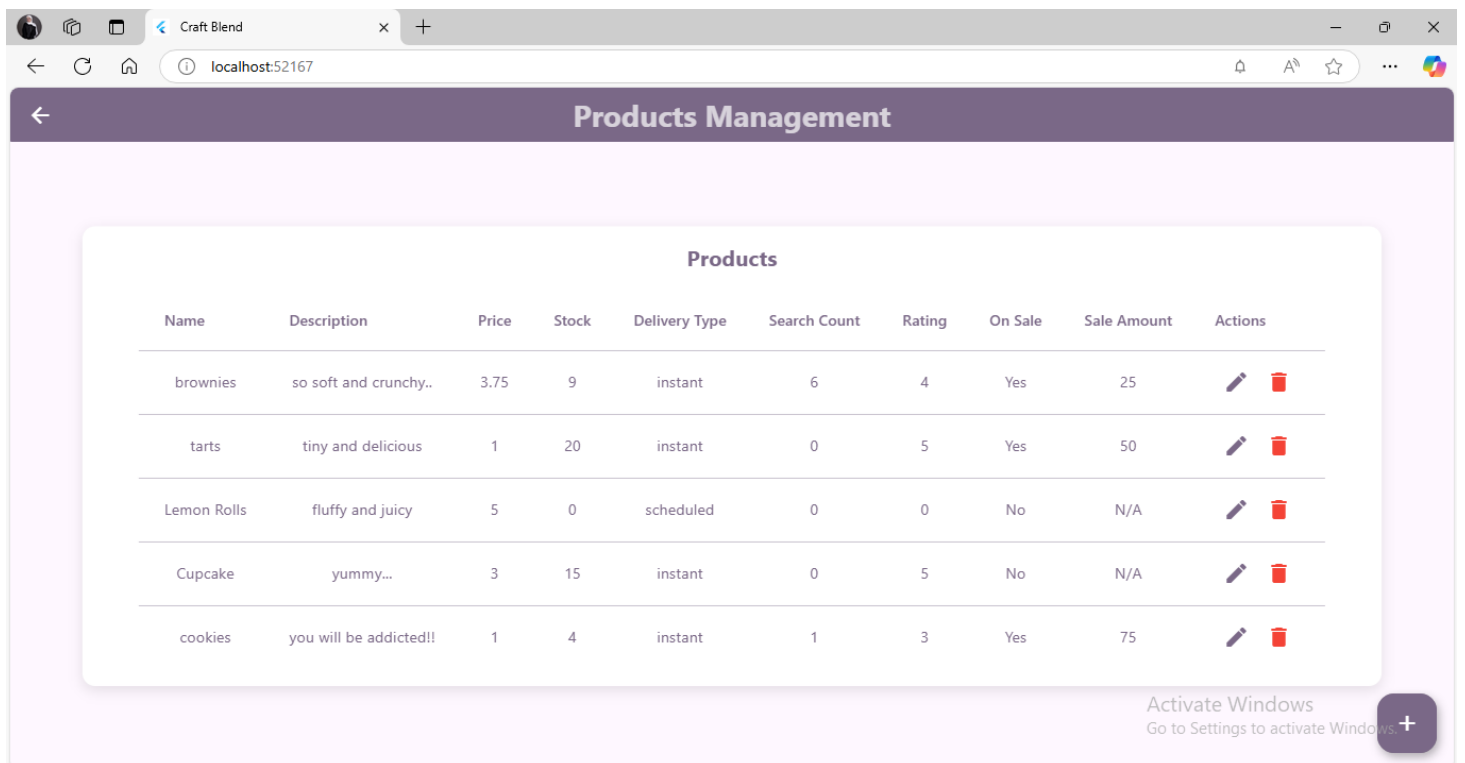


Figure 126: WEB – Database interface

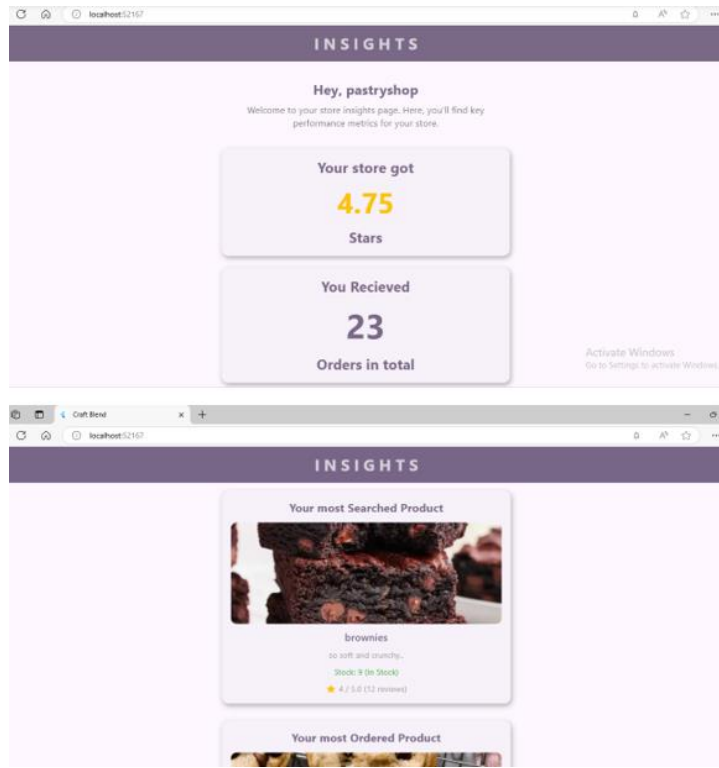


Figure 127: WEB – Insights Page

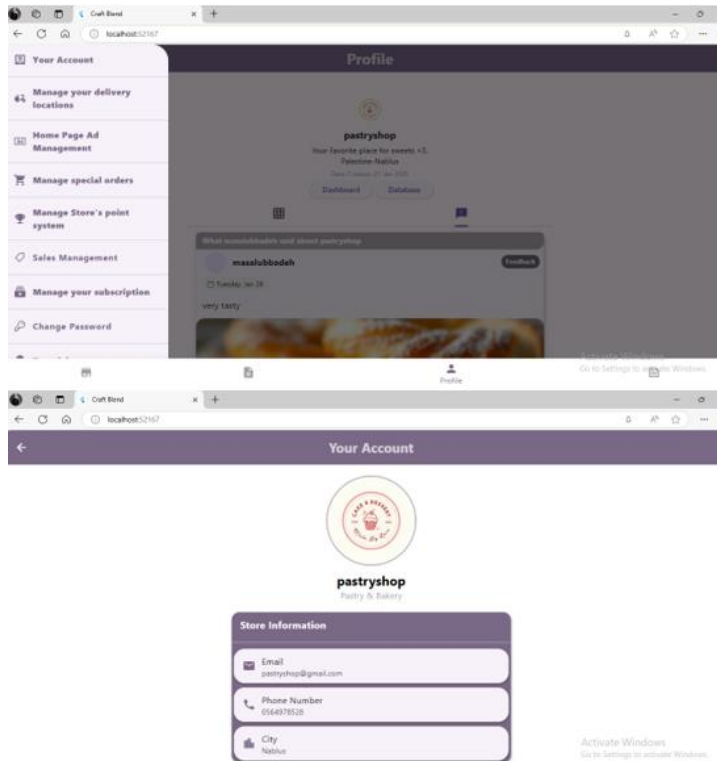


Figure 128: WEB – Chatting Side Menu + Your Account

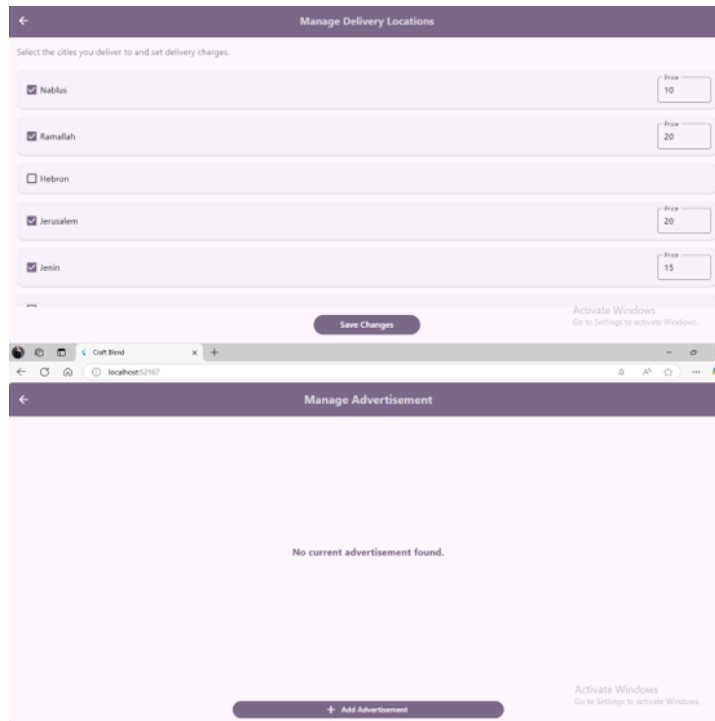


Figure 129: WEB – [Insights Page](#) Manage Delivery locations + Manage Advertisements

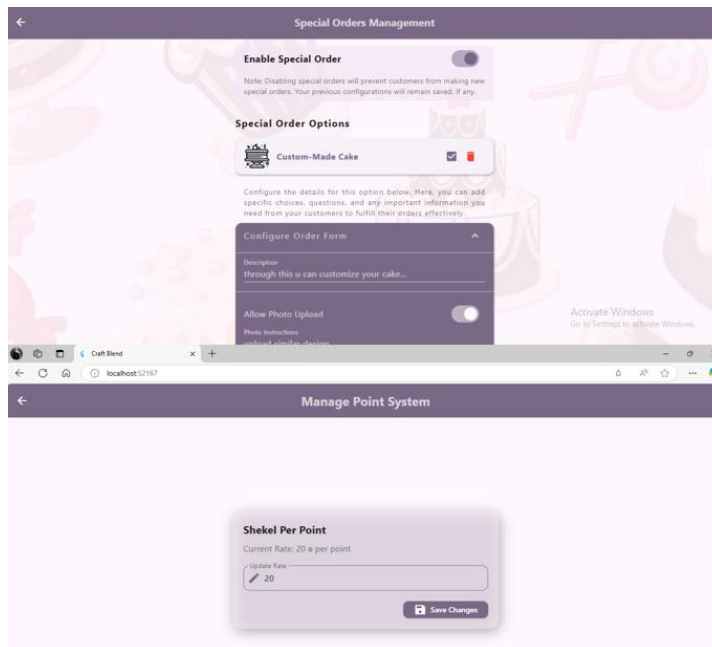


Figure 130: [WEB – Chatting](#) Manage special orders + Manage point system

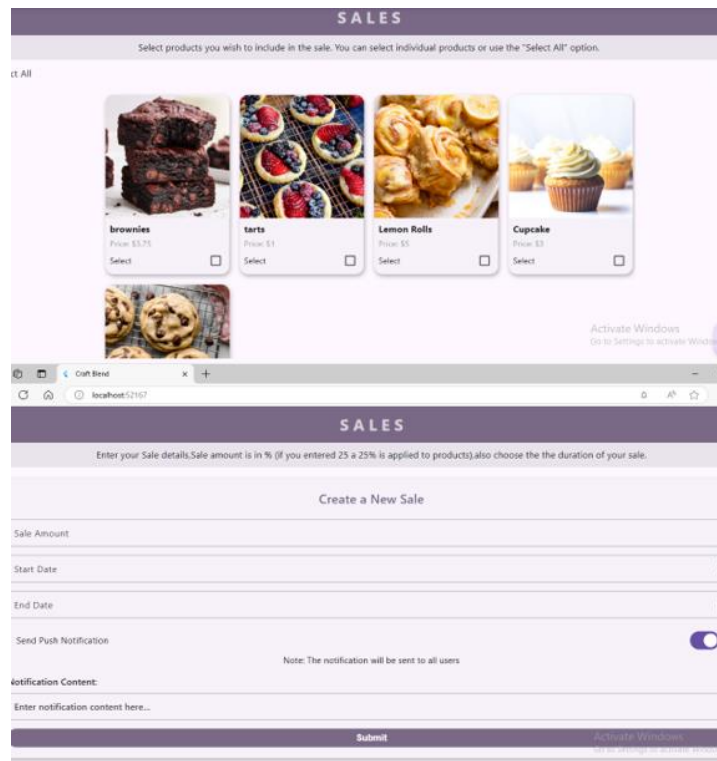


Figure 131: WEB – [Insights Page](#) Sales Management

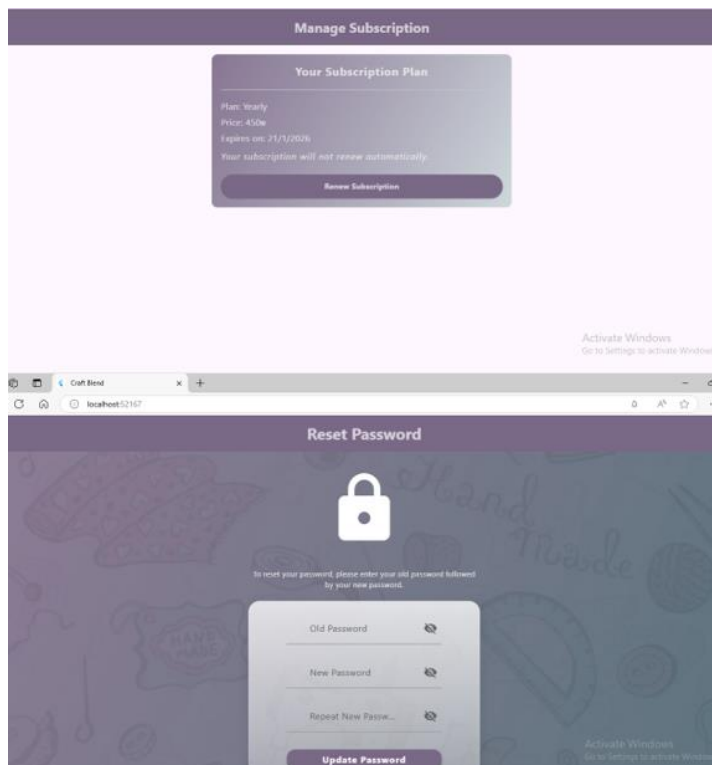


Figure 132: [WEB – Chatting](#) Manage Subscriptions + Reset Password

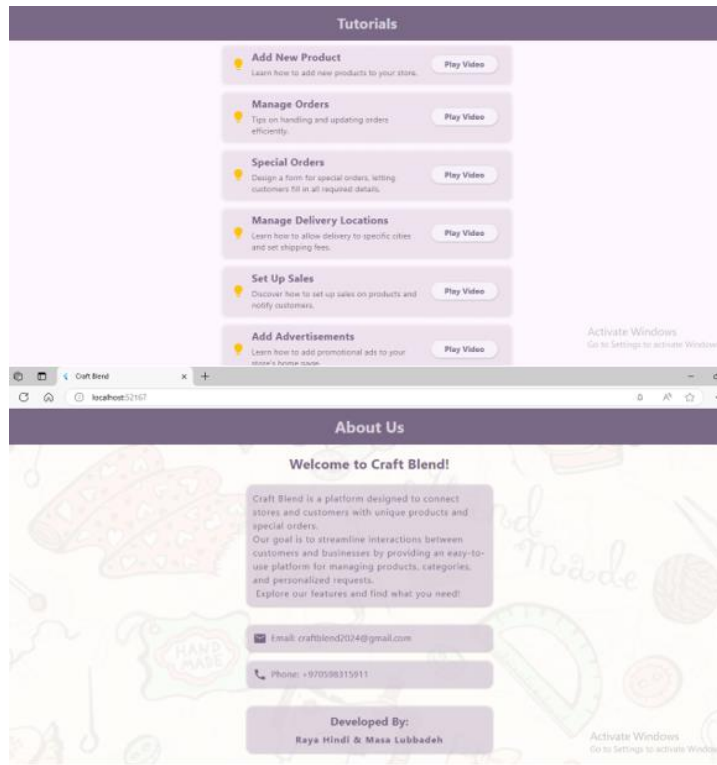


Figure 133: WEB – [Insights Page](#) Tutorials + About us

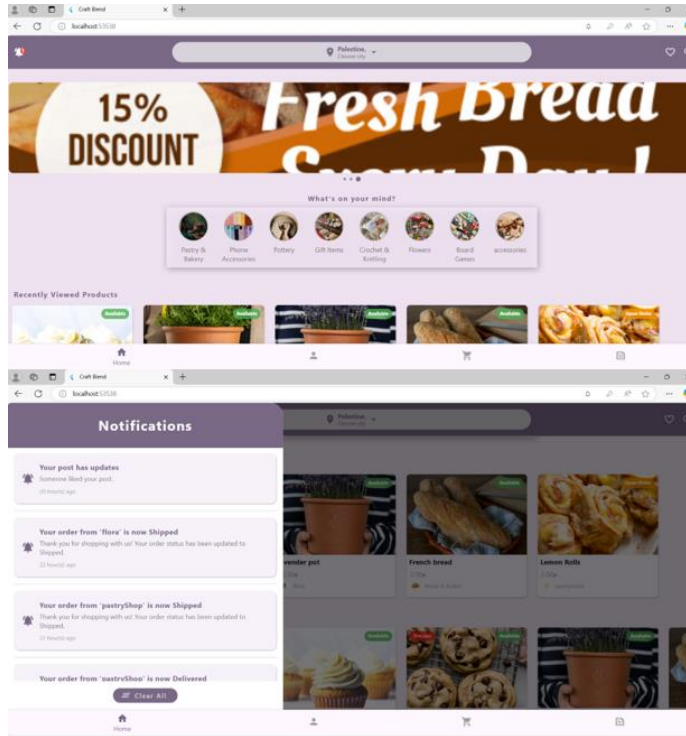


Figure 134: Web – User home page, Notification

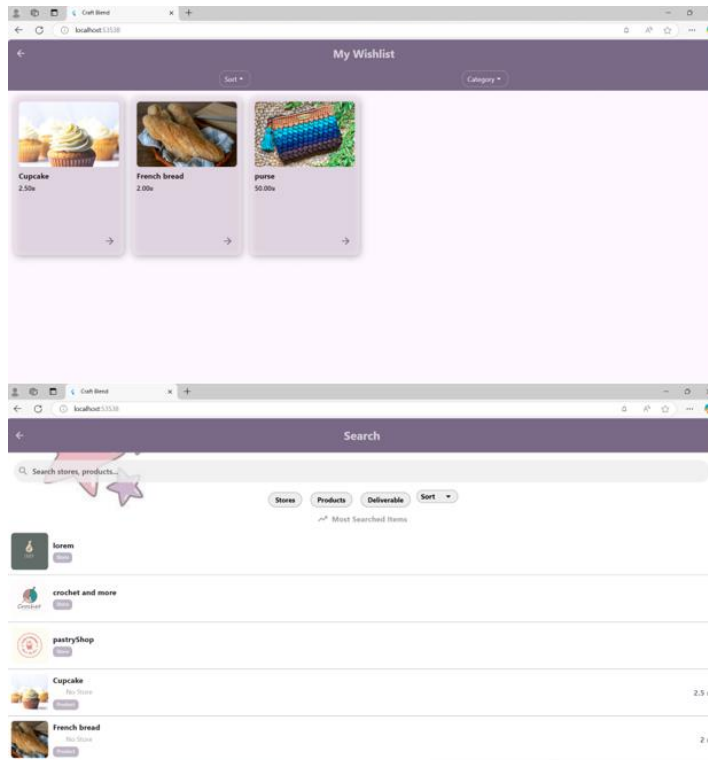


Figure 135: WEB – Wishlist, Search

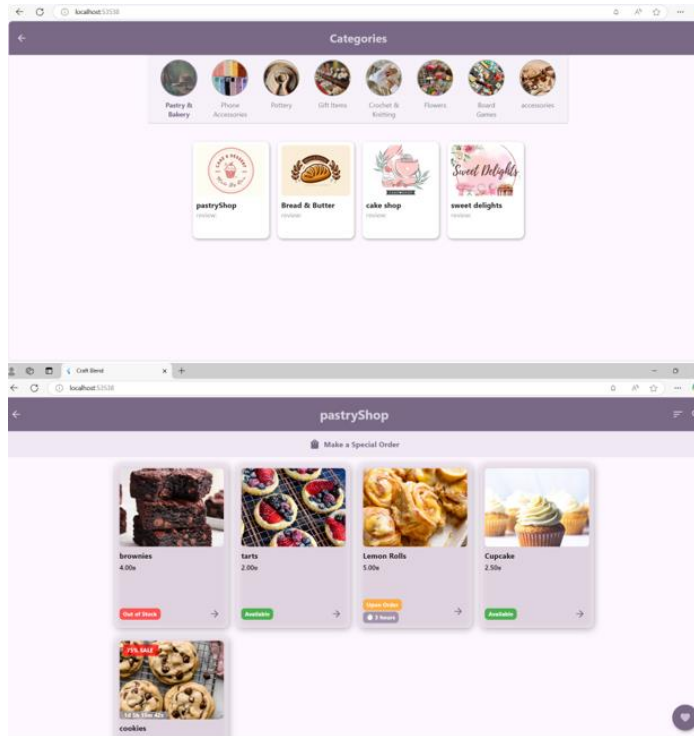


Figure 136: Web – User browse categories and stores

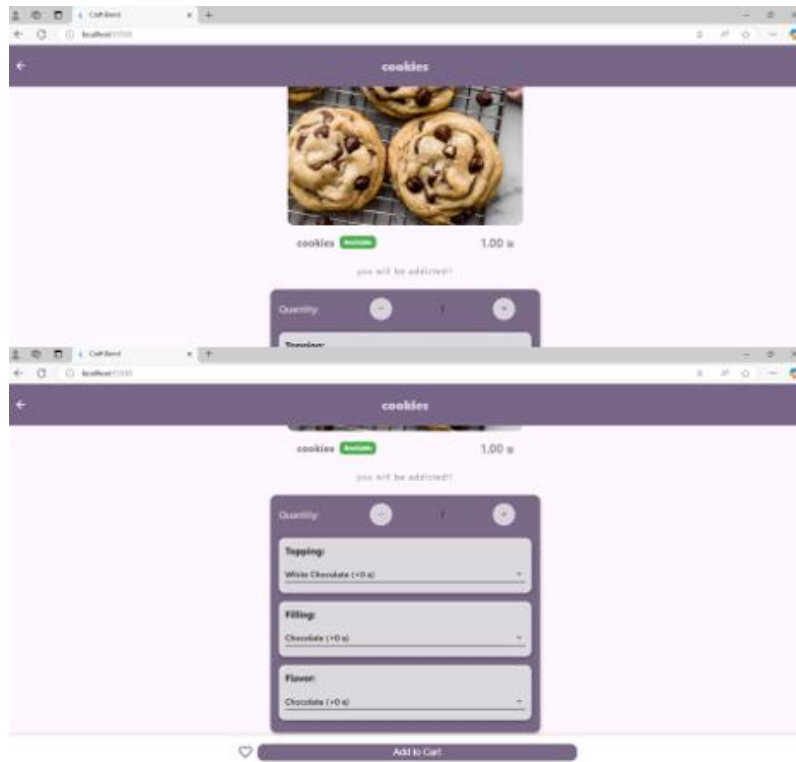


Figure 137: WEB – Product details page, add to Wishlist, add to cart

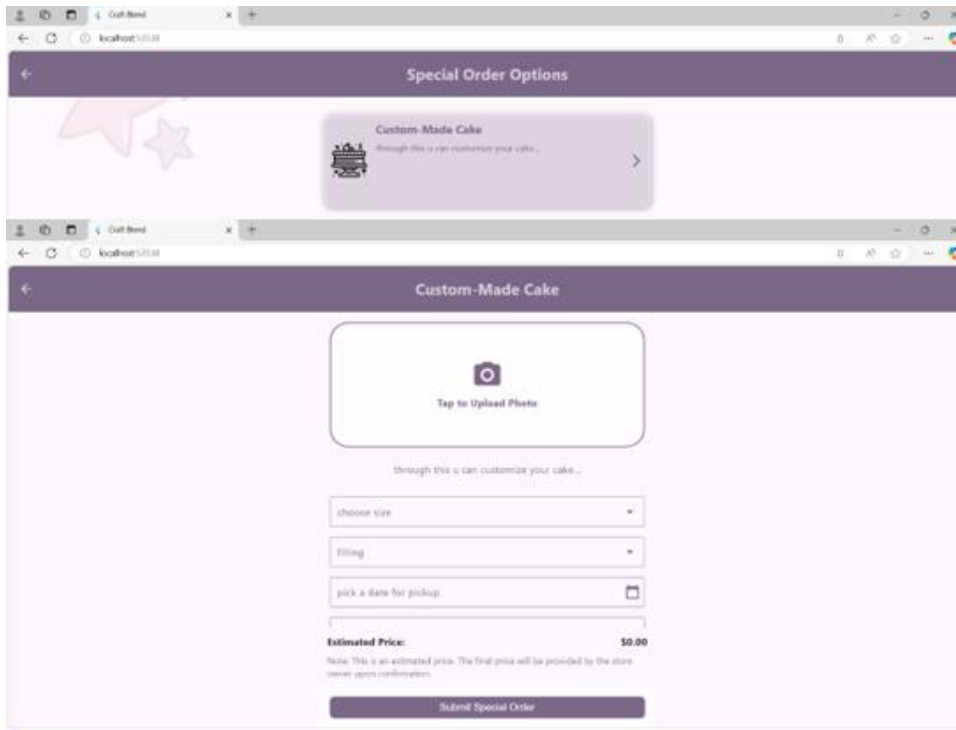


Figure 138: Web – user view special-order options and form

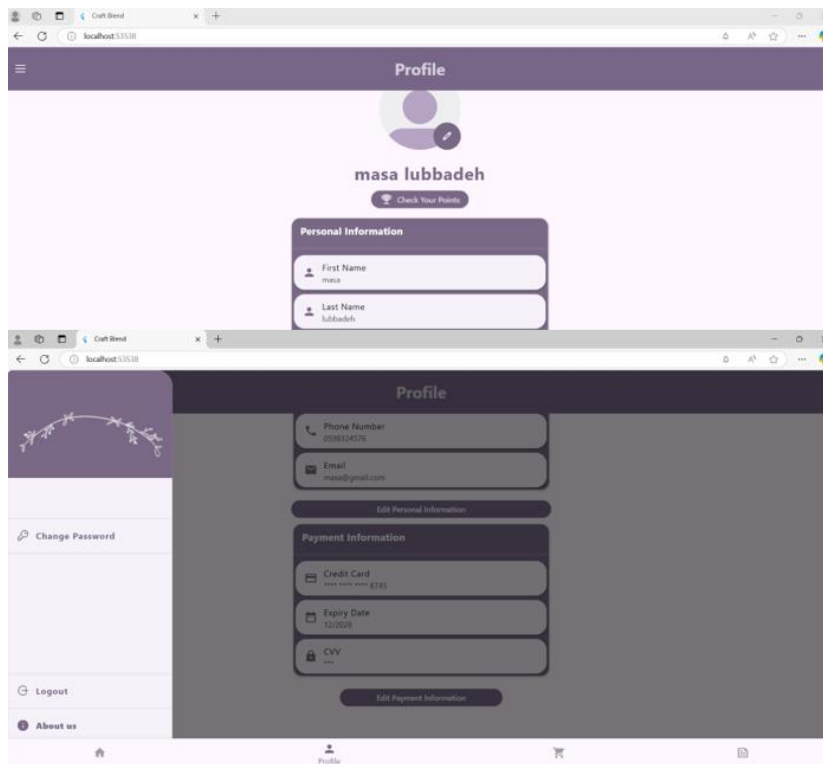


Figure 139: WEB – User's profile

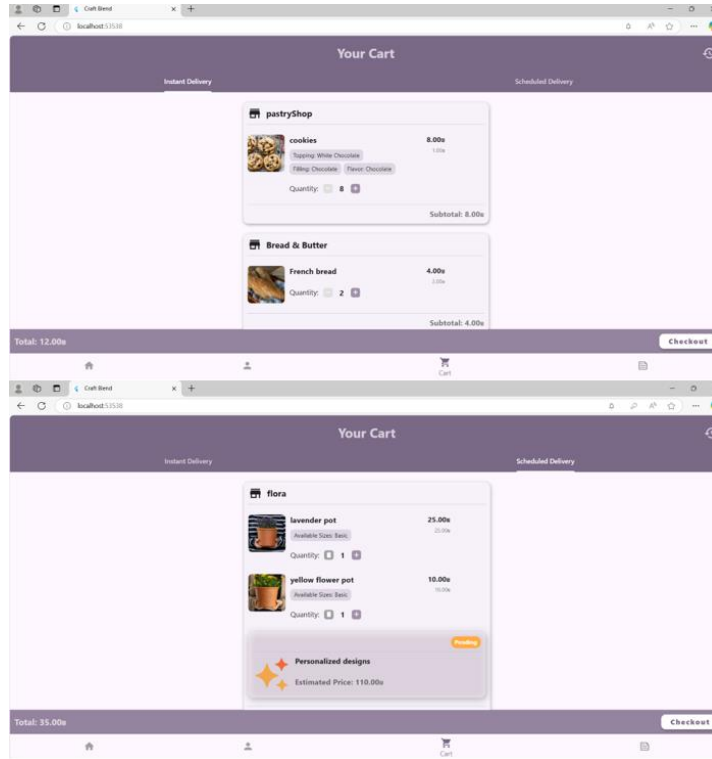


Figure 140: Web – user’s cart

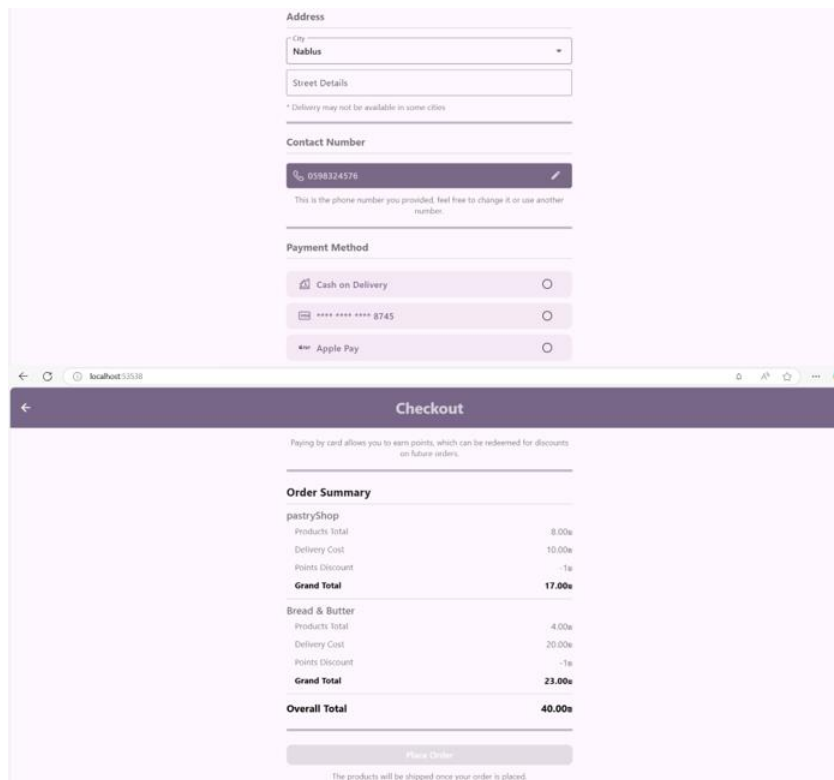


Figure 141: WEB – checkout

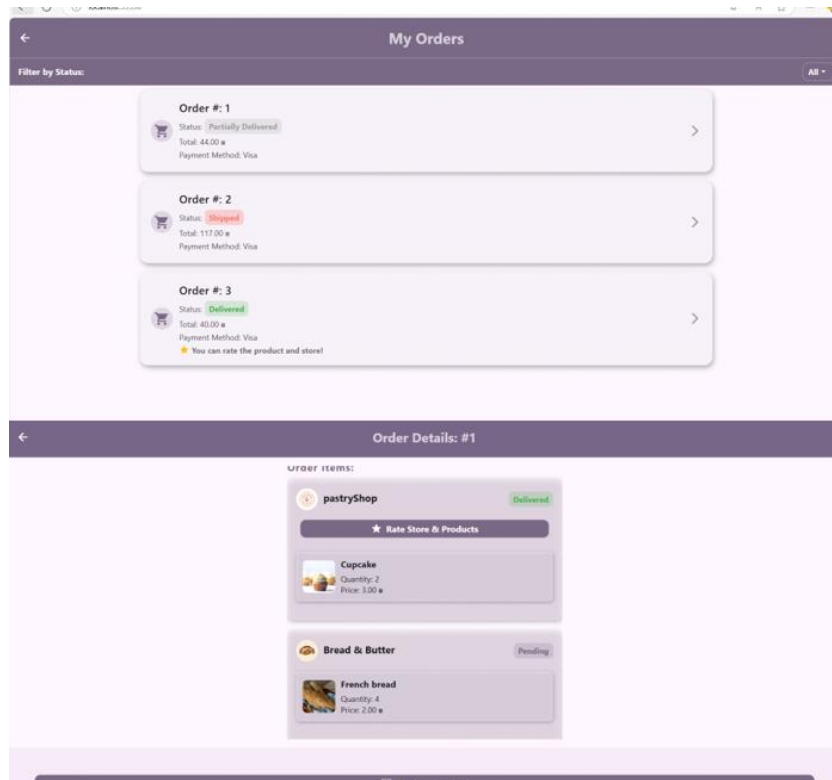


Figure 142: WEB – user views previous orders, orders details page

4. CHAPTER 4

Result and Discussion

By the end of our project, we successfully developed CraftBlend, a platform designed to streamline the process for both small business owners and customers. The platform provides an organized marketplace where businesses can manage their stores, products, and orders with ease, while customers can browse, interact, and make purchases seamlessly.

With CraftBlend, store owners can expand their reach, improve customer engagement, and manage their sales efficiently. Customers, on the other hand, benefit from a structured shopping experience, where they can browse through categorized businesses, explore products, place regular or special orders, and engage with businesses through chat and social features.

CraftBlend saves time by offering a personalized and structured shopping experience, ensuring that users can quickly find what they need without navigating multiple platforms. With features like real-time notifications, a point-based loyalty system, and a smooth checkout process, CraftBlend enhances the experience for both store owners and customers.

4.1 Constraints

- **Managing Real-Time Features:** Implementing real-time chat and notifications required integrating Firebase, which involved handling multiple configuration files and synchronization challenges across both web and mobile platforms.
- **Database Structure Optimization:** Unlike relational databases, **MongoDB** follows a flexible schema, which required **careful structuring** to ensure efficient data retrieval and management, especially when handling complex relationships like stores, orders, and special orders.
- **Dependency Conflicts:** Integrating Google Maps into the application introduced compatibility issues with other dependencies, causing unexpected crashes. This required adjustments in Flutter's Gradle files and updating dependencies to ensure stability and proper functionality across different devices.

Despite these challenges, we successfully implemented a platform that balances social engagement and e-commerce, offering small businesses the tools they need to grow and succeed in the digital marketplace.

5. CHAPTER 5

Conclusion and Future Work

5.1 Summary

CraftBlend provides a dedicated platform for small businesses to showcase their products, manage orders, and connect with customers. It combines e-commerce and social engagement, offering store categories, a streamlined ordering system, special orders, and interactive features like chat and reviews.

The platform enhances customer experience with reward systems, notifications, and secure transactions, while the admin panel ensures smooth platform management. By addressing the challenges small businesses face on social media, CraftBlend offers a structured yet flexible solution to help them grow and engage effectively.

5.2 What We Have Learned

- How to use Flutter framework using Dart.
- How to integrate Firebase into Flutter.
- How to use Firebase features as storage and live messaging.

5.3 Future Work

- **AI-Powered Recommendations:** Implement an AI-based recommendation system to suggest products and stores based on user preferences, browsing history, and previous purchases.
- **Arabic Language Support:** Currently, the platform operates in English, but adding Arabic support will enhance accessibility for local users in Palestine and improve user experience.
- **Regional Expansion:** At present, CraftBlend is only available in Palestine. Expanding to other regions requires adapting the platform to support different currencies, address formats, and country-specific business regulations.

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- [2] C. Dennis, "--Gerardino Metallo, Professor of Management--University of Salerno, Italy".
- [3] L.-Y. Leong, T. S. Hew, K.-B. Ooi, N. Hajli, and G. W.-H. Tan, "Revisiting the social commerce paradigm: The social commerce (SC) framework and a research agenda," *Internet Res.*, vol. 34, no. 4, pp. 1346–1393, 2024.