

An-Najah National University



Faculty of Engineering and Computer Technology

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Software Graduation Project

Cookly



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Acknowledgement

We stand at the culmination of a significant chapter in our lives, our graduation, feeling a profound sense of gratitude. This project is not just a reflection of our efforts but a tapestry woven with the support, guidance, and encouragement of many.

We are immensely grateful to our families, whose love and support have been our constant source of strength. To our friends, thank you for the laughter and encouragement that carried us through. Our professors deserve special mention for their guidance and wisdom, which have been pivotal to our success.

This journey has been enriched by each one of you, and we carry forward the lessons and memories with heartfelt thanks.

Disclaimer Statement

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Abstract

During and after the Corona pandemic, we noticed that people switched for making their own businesses regarding food preparation. They used various social media platforms to sell their dishes, so it was confusing for the consumers to find a suitable option by searching through multiple platforms.

In our application, we want to empower women and men by making meal planning, ordering, and cooking easier. We also want to create a community-driven platform where convenience, quality, and user interaction are given top priority.

Our project's objective is to develop an effective mobile application that serves especially home cooking ladies and gentlemen, offering them a faster and more efficient way to plan, receive orders, and prepare meals daily, with the aid of the app's subscription services. Users can order from personalized menus with a variety of food categories, including lunch, desserts, party food, and specialty dishes like Yalanji. Users can place orders utilizing the daily menu options or according to their preferences.

Customers can rate the kitchens, and add notes to their orders, all through a smooth and convenient ordering experience offered by the app. Cash or credit cards can be used for payment, however, a report system is supported. Includes choices for pickup and delivery as well. Customers receive points for placing orders, and these points can be redeemed for future discounts.

The app's integrated chat system is an essential feature that facilitates direct connections between customers and chefs to meet specific requests or food preferences. By guaranteeing customer satisfaction and enabling suitable interactions, this improves the user experience.

There are multiple apps in the market that specialize in restaurants' orders, like Yummy, but not home cooking orders. So, our app supports people who have cooking skills to deliver their dishes to consumers to get profit and expand their small businesses.

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1. Introduction

1.1 Problem

A rise in home-based food enterprises following the Corona pandemic has created a fragmented market where businesses are spread out over multiple social media channels. Customers looking to locate and purchase home-cooked meals become confused as a result of this fragmentation, which results in a difficult and ineffective process without a centralized, easy, and quality-assured platform for meal planning and preparation.

1.2 Objectives

1. **Develop a user-friendly mobile application** specifically tailored for home chefs to streamline the meal planning and order receiving process.
2. **Create a centralized platform** that consolidates home-cooked meal options, eliminating the need for consumers to navigate through multiple social media sites.
3. **Empower home chefs**, both women and men, by providing them with a tool to manage orders, plan meals, and grow their small businesses efficiently.
4. **Enhance customer experience** by offering a variety of personalized menu options, including daily specials and a wide range of food categories.
5. **Implement a rating system** to ensure quality control and encourage user interaction.
6. **Integrate a secure payment system** that supports both cash and credit card transactions with a robust report feature.
7. **Offer loyalty points** to incentivize repeat customers, which can be redeemed for discounts on future orders.
8. **Facilitate direct communication** between customers and chefs through an in-app chat system to cater to specific requests and dietary preferences.
9. **Differentiate from existing market players** by focusing on home-cooked meals rather than restaurant orders, filling a niche gap in the market.

1.3 Scope of The Work

- Create Accounts: Users and chefs can create their accounts, fill up their personal information, while the admin is responsible for creating the delivery men accounts.
- Edit Profile: All user types can edit their personal information.
- Change Password: All user types can change their password.
- Kitchens Categories: The chefs can choose their kitchen category and the user can filter kitchens based on that.
- Kitchen Ordering System: We have 2 types; order in the same day or order in the previous day.
- Kitchen Special Orders: The chef can specify if they accept special orders or not.
- Add Menu Item: The chef adds their menu items with all required details, choose a category for each item, preparation time, price, etc.
- Manage Menu Item: The chef can edit or delete a specific menu item.
- Filter Feature: The users can filter kitchens based on their location and category.
- Search Feature: The chef can search for a specific item in their menu, and the user can search for a specific menu item in the kitchen's menu.
- Subscription Feature: The chefs can choose between 2 plans: monthly or annually, when their subscription expired, they can activate it and change the plan if they wish.
- Order Feature:
 - Adding Items to cart: the user browses a specific kitchen menu, adds items to cart with the required quantities and writes any notes on each item.
 - Placing the order: after adding all the desired items, the user navigates to the cart and places the order.
 - Checkout: In this page the user specifies the pick-up time, and if delivery is required, they will fill the receiving address, then choose the payment method, the user can either pay on receipt (cash) or by credit card.
- Order Status: We have 4 types; pending, in progress, done and delivered
 - Pending: When the user places the order, the chef will be notified.
 - In Progress: When the chef starts preparing the order.
 - Done: when the chef finished, if delivery required the chef will assign a delivery man otherwise, they will wait for customer pick-up.
 - Delivered: When delivery man delivered the order or when customer picked the order up.
- Notification Feature:
 - User: will get a notification if the order status becomes done, or when a chef sends a message
 - Chef: will get a notification when the delivery man accepts/decline the order, or when a user sends a message
 - Delivery Man: will get a notification when a chef assigns an order for delivery.
- Chat Feature: For special orders, a chat page is used between the user and the chef.
- Rating Feature: Users can rate the kitchens after receiving their orders.

- Points Feature: Each time a user places an order; they will receive points that will be used for discounts.
- Report Feature: The chef can report users when they don't deliver their order which results in losing their points. After 3 reports the user account will get suspended.
- Delivery Man:
 - Changes their status; Available, Busy (Automatically when accepting an order) and Out of Service.
 - Accepts or declines an order.
 - Changes order status to delivered
- Admin:
 - Dashboard: Percentages of kitchens in cities, top kitchen and delivery man of the month in each city, and the total numbers of kitchens, users and delivery men.
 - Adding delivery men: To ensure good reputation of our system.
 - Checking and filtering kitchens: to view their rate, subscription status and contact information.

1.4 Importance

The importance of our application, Cookly, lies in its ability to bridge the gap between home chefs and consumers in the post-pandemic world. As the landscape of food consumption shifts towards a preference for homemade, quality meals, Cookly emerges as a pivotal platform that not only simplifies the process of meal planning and ordering but also fosters a community-driven environment where culinary passion meets convenience. By empowering home chefs with the tools to expand their small businesses and providing consumers with a seamless experience to access diverse, home-cooked cuisine, Cookly stands as a testament to innovation and adaptability in the evolving food industry. It's not just an app; it's a movement towards sustainable, local, and personalized dining experiences that celebrate the unique flavors and stories of each kitchen.

1.5 Organization of The Report

- Chapter 1: Is the chapter that introduces It outlines the significance of the project, along with its goals, scope, and objectives.
- Chapter 2: We will look more into the literature review, projects, and publications from across the globe to find out more about how this project was carried out, what their recommendations were, and what features may be added for improvement.
- Chapter 3: The methodology chapter, which describes the steps used to develop the system and discusses the obstacles and limitations the project had to overcome.
- Chapter 4: Results and discussion, it looks into the project's ultimate result and what happened.
- Chapter 5: The project's conclusion and recommendations are highlighted, along with suggestions for any future study and projects.

2. Literature Review

The COVID-19 pandemic encouraged the growth of home-based food companies as people started selling homemade meals on social media. This pattern made it clear that a specialized application was required to make purchasing homemade meals easier. Cookly fills this void by offering a smartphone app that helps home cooks—especially women—manage businesses profitably and engage with customers.

Mobile Food Delivery Applications

Although food delivery services like DoorDash and UberEats have transformed the food ordering process, they mostly concentrate on restaurant orders, leaving an untapped market for home-cooked meal delivery (Gogia, 2019) [1]. User experience is given priority in effective apps, which greatly increase consumer satisfaction with simple payment methods and intuitive interfaces (Liu & Jang, 2020) [2]. These best practices are followed by Cookly's features, which include integrated chat, customizable menus, and rating systems.

Platforms Driven by the Community

By offering crucial business resources and cultivating a feeling of community, community-driven platforms enable local business owners (Chen & Hu, 2022) [3]. Higher satisfaction and repeat business are the results of direct contacts between chefs and customers using integrated chat systems (Andrews & Masuda, 2021) [4]. Cookly wants to establish a home cooks' ecology of support.

Competitive Landscape

Although applications such as Yummy and UberEats facilitate restaurant deliveries, they do not offer sufficient functionality to assist home-based food enterprises. Cookly sets itself apart from the competition by providing tools for home chefs to plan meals, manage orders, and communicate with customers. It stands out in the market thanks to its emphasis on prepared meals and community-driven strategy.

By incorporating best practices from other meal delivery apps and concentrating on the particular requirements of home cooks, Cookly tackles the expanding trend of home-based food enterprises. This creative strategy encourages community involvement, helps kitchen entrepreneurs, and builds economic resilience. It may also serve as a template for future advancements in the home-cooked meal delivery industry.

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 guarantee accuracy and effectiveness in all areas.

- VS Code: It served as the main IDE (Integrated Development Environment) for editing, debugging, and coding.
- Android Studio: It was used as an emulator in a variety of virtual settings to test and simulate the mobile application.
- Trello: The team can brainstorm, plan, manage, and celebrate the work in an efficient, coordinated, and cooperative manner with the help of this visual work management tool.
- My SQL Workbench: It served as a visual tool for simple and effective data management, inserting, and handling.
- Postman: It was used to make various HTTP requests and responses, test various APIs, and confirm the dependability of our program.
- Firebase: Firebase's real-time database was selected for features like real-time chat and notifications due to its scalability and resilience. The software uses Firebase storage in addition to validation methods to safely save images on the cloud. This guarantees effective platform-wide picture data management and accessibility.
- GitHub: GitHub made it easier to collaborate and manage version control, which helped us organize our work and effectively track changes to the code.

3.1.2 Programming Languages

Flutter was used as the frontend framework in the development of this project's website and mobile application. A cross-platform toolkit called Flutter is made to help developers create mobile apps with great performance. In contrast to conventional methods, Flutter renders view components using its own rendering engine rather than depending on web views or device OEM widgets. Google's Dart programming language, which is well-known for its capacity to create expansive online applications, is the one utilized in Flutter. In Flutter, widgets are essential components that fall into two primary categories: stateless widgets and stateful widgets, each of which has a different function.

We used MySQL Workbench for database management. A structured query language (SQL) interface offered by MySQL Workbench gives relational database management a standardized approach. Strong querying features in SQL make it easier to retrieve, manipulate, and analyze complicated data while maintaining data integrity and dependability. SQL Workbench was utilized to efficiently handle and manipulate structured data, guaranteeing the project's scalability and data integrity.

Node.js was used for the backend development; its non-blocking, event-driven architecture provides performance benefits, especially for I/O-bound applications. Node.js reduces the overhead of having to initialize programs for every request by keeping server-side apps in a constantly active state. This results in quicker response times and an enhanced user experience.

Furthermore, Node.js utilized Express.js as a third-party framework. Built on top of several middleware components and the central Node.js HTTP module, Express.js is a versatile web framework. It prevents repetitious code and improves maintainability by making activities like processing HTTP request bodies, managing sessions, and structuring routes simpler.

3.2 Database Implementation

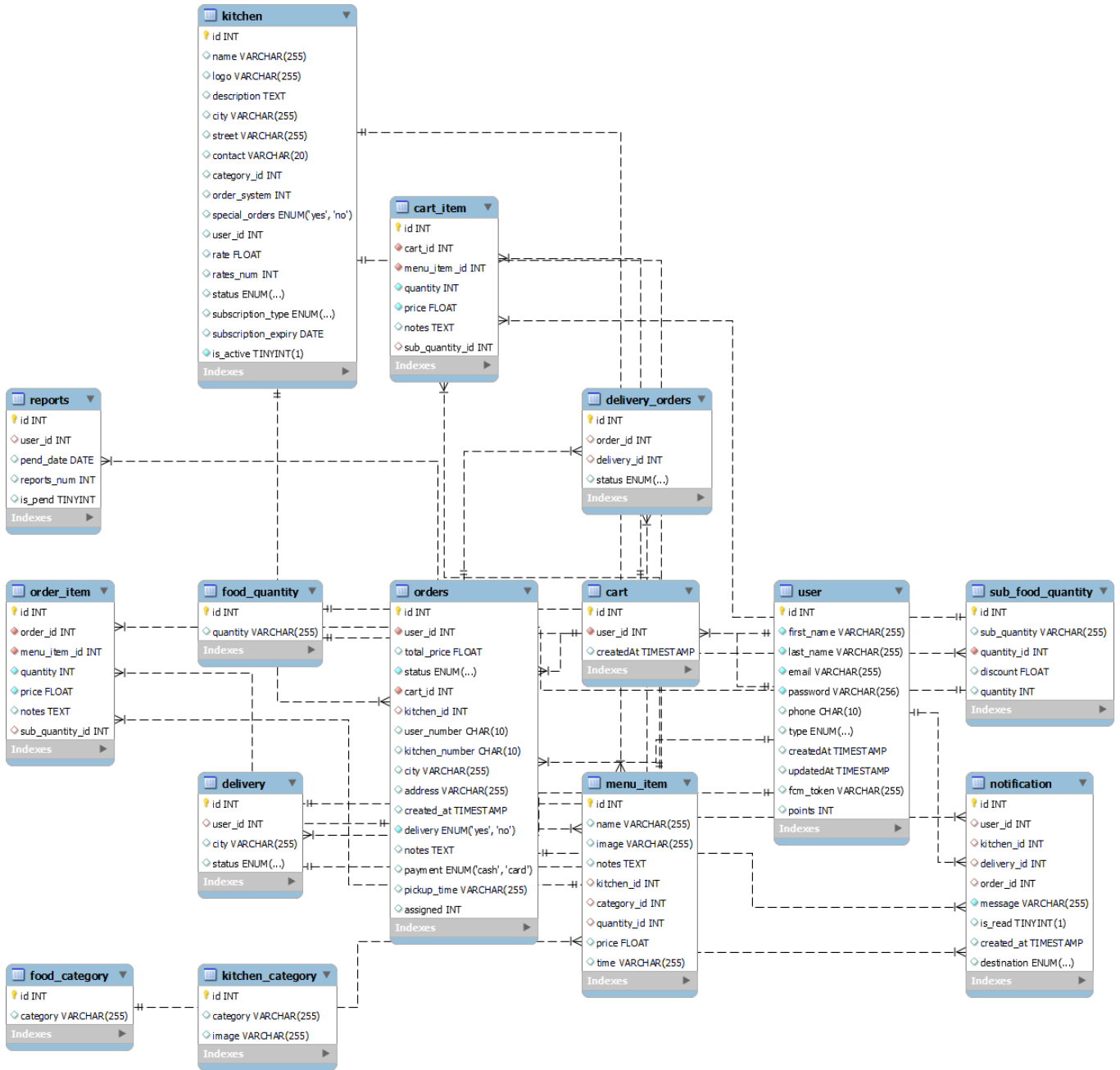


Figure 1 - EER Diagram

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 2 - Welcome

- Create Account

The client and the chef are the two user types that can create accounts from this page. First and last name, phone number, and user type are among the personal details that must be entered on the first page of the chef/user sign-up form. In order to finish their kitchen registration, the chef must proceed with two additional pages.

Let's create a normal user account!

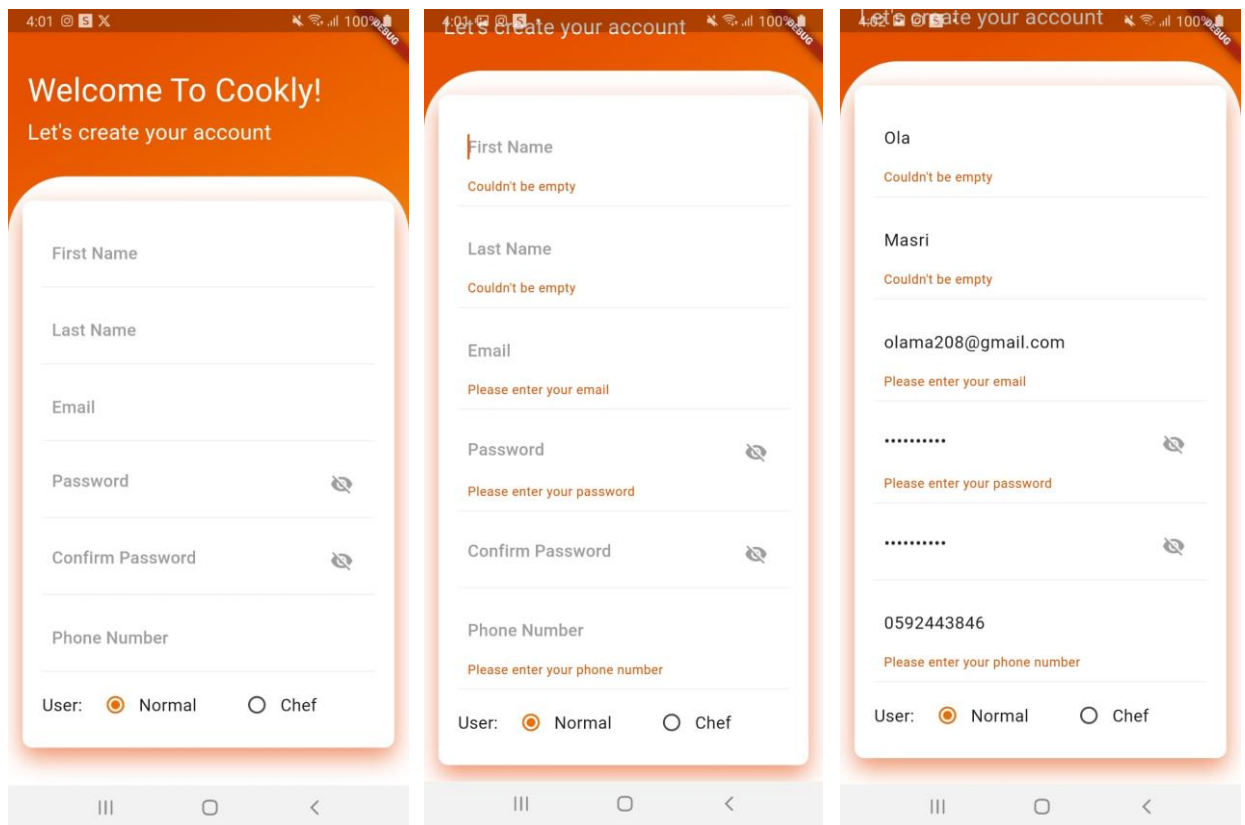
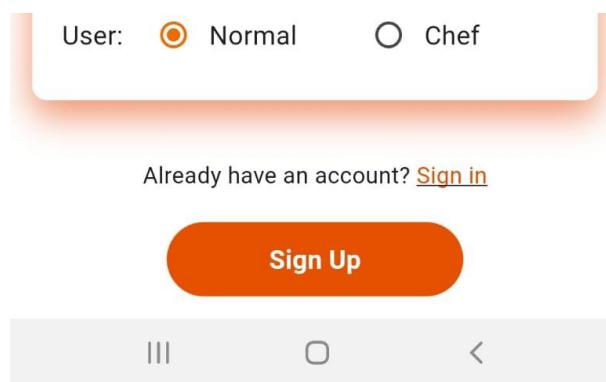


Figure 3 - Create Normal Account

As you can notice a validation for all fields was implemented to ensure reliability, once the user clicks on 'Sign Up' button the account will be created successfully.



Now, let's create a chef account.

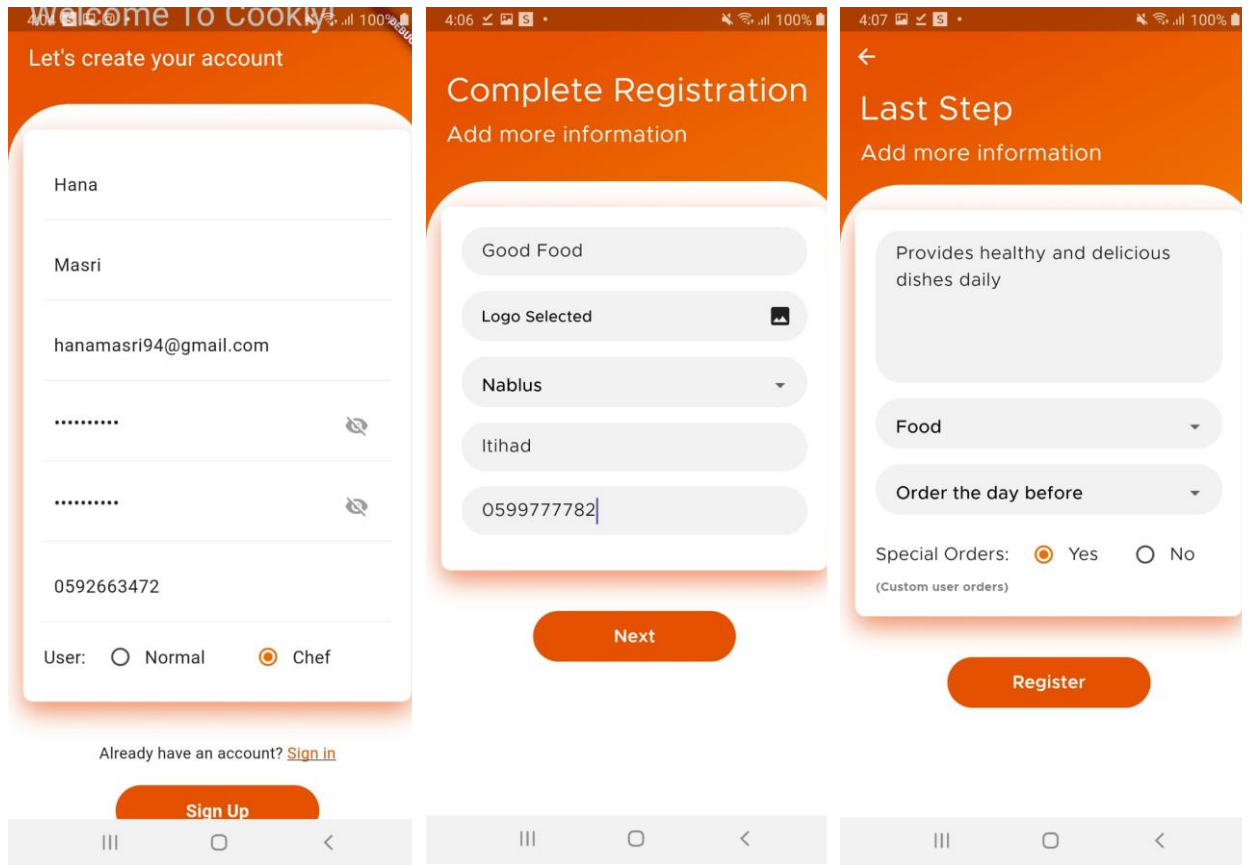


Figure 4 - Create Chef Account

All of the kitchen's details, including the name, logo, address, phone number, description, kitchen category, ordering system, and whether or not special orders are accepted, must be entered by the chef.

○ 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.

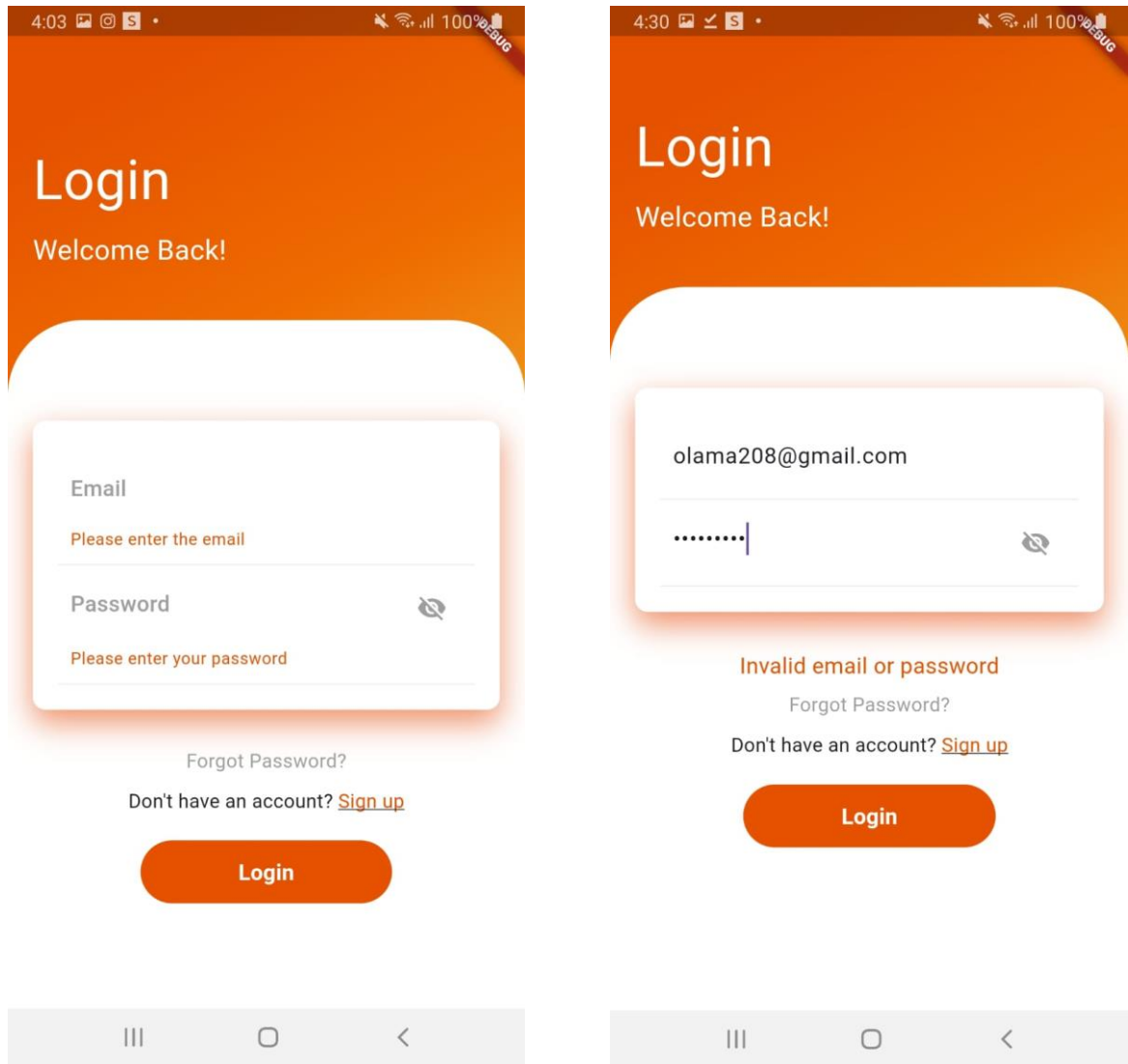


Figure 5 - Login

- User Home Page

After a successful login, the application takes the user to the home page where they can filter the kitchens by category, location, or both. The kitchens on this page will only be visible to those with valid subscriptions. Upon selecting a category, the user is directed to a page that includes every kitchen within that category according to the location they have chosen. We included the filter function to that page as well because all of the kitchens in that category will show up if the user doesn't select a location.

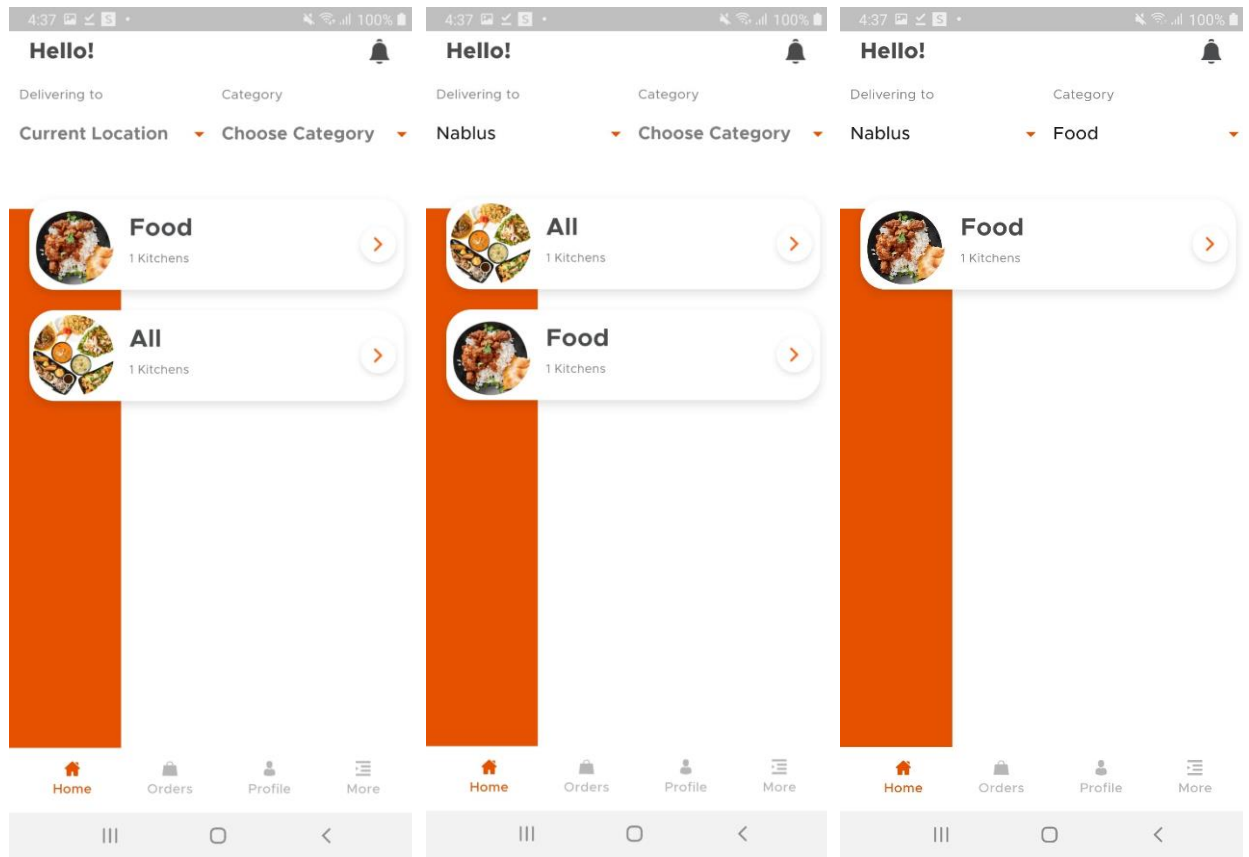


Figure 6 - User Home Page

○ User Kitchens View

The user can search for a specific kitchen by name or filter the list of kitchens in a given category using the filters found on this page, the status, rate, ordering system of each kitchen will appear on its card. An alert will show up for the user if the kitchen they are looking for is not there.

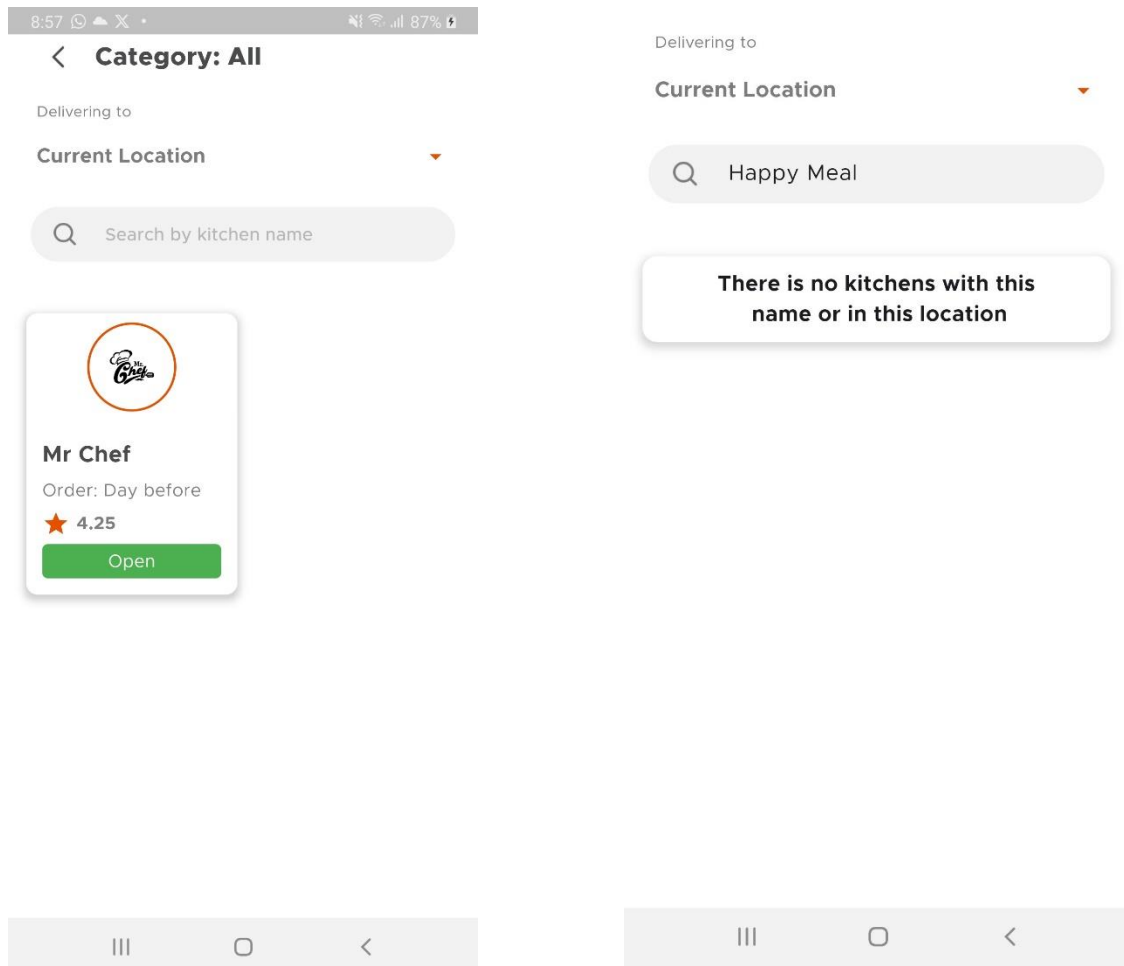


Figure 7 - User Kitchens View

- User Kitchen's Menu View

The user can browse the chosen kitchen menu on this page. The user will see a picture of the menu item along with its name, category, cost, and quantity.

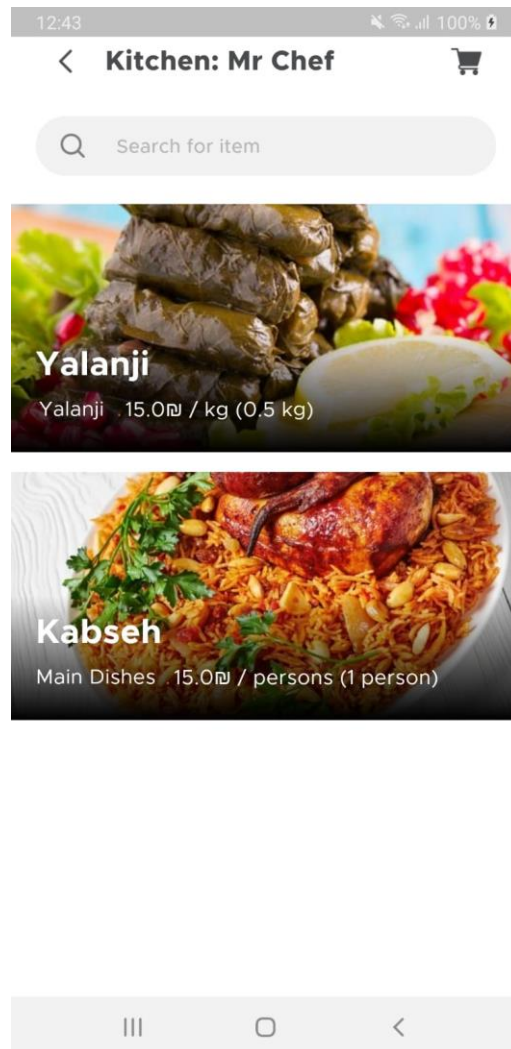


Figure 8 - User Kitchen's Menu View

- Menu Item Details

The user can view all the information on a particular menu item on this page, including the category, price, quantity, and description, as well as the necessary preparation time. By choosing the number of portions, adding a note, and indicating the quantity, the user can customize their order. Once the entire cost has been determined and shown, customers can proceed to add the item to their cart.

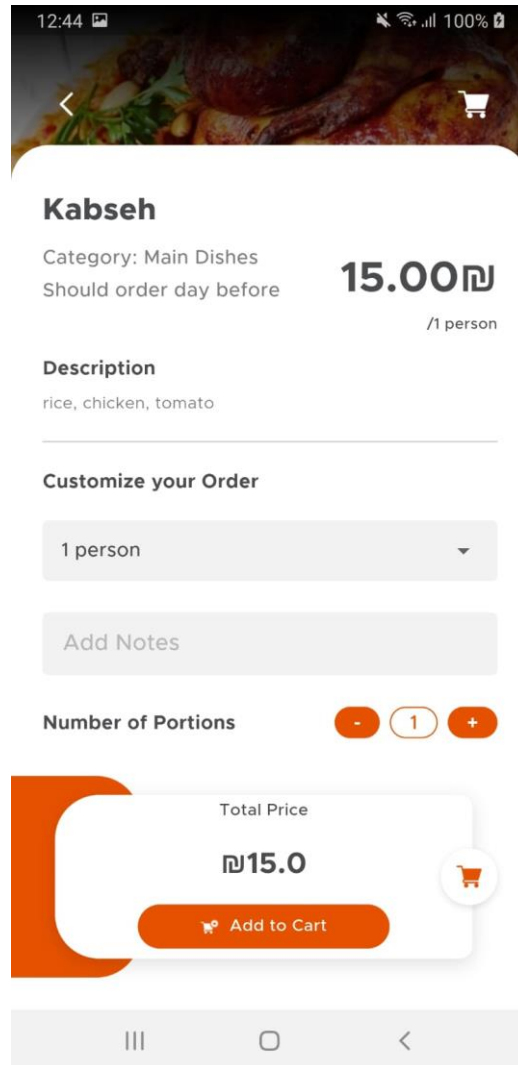
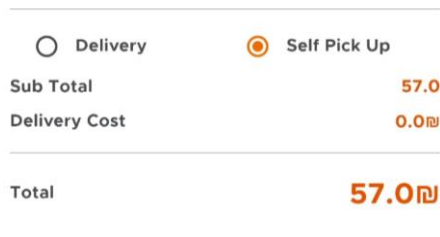
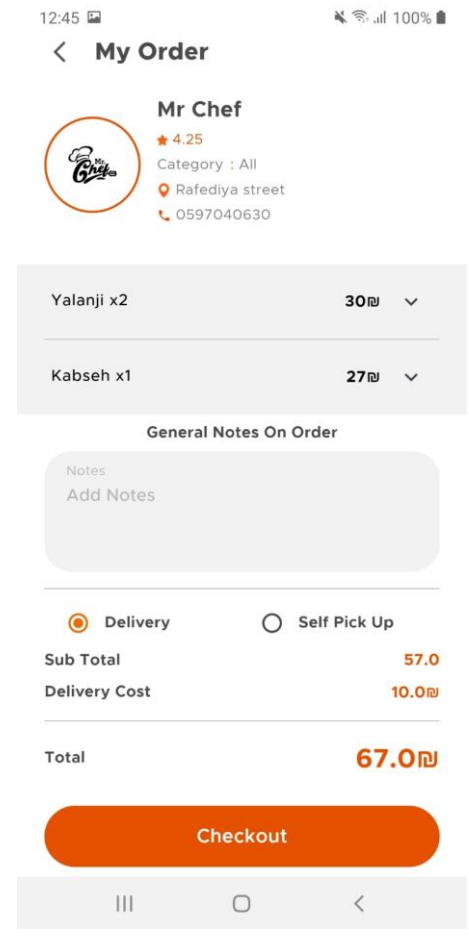
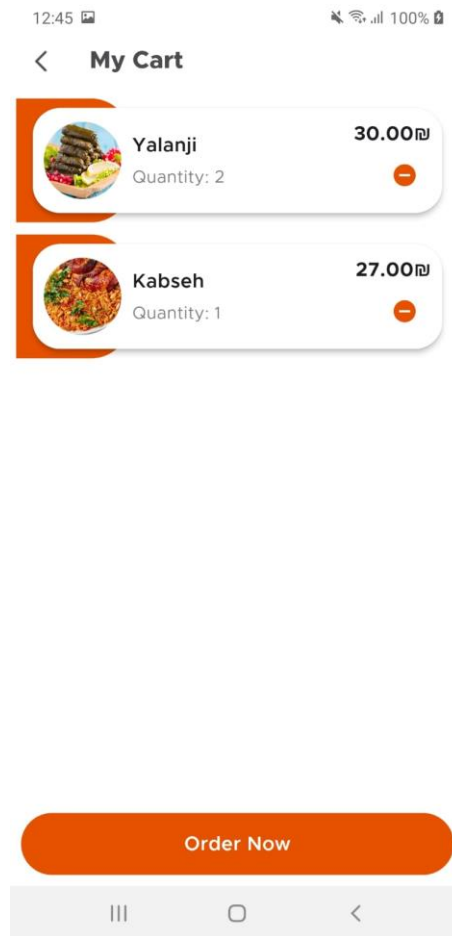
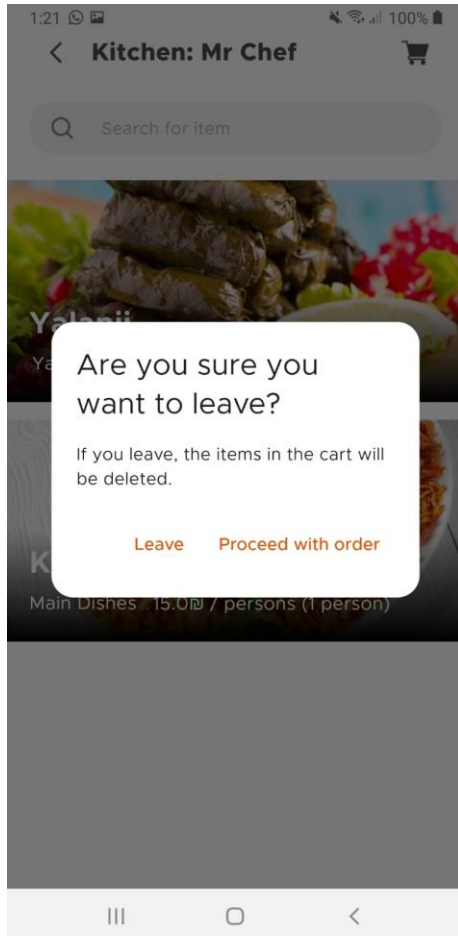


Figure 9 - Menu Item Details

○ Place An Order

If the user tries to exit the kitchen's menu page without placing the order after adding all necessary goods to the cart, an alert will show and they will be given the option to either leave or continue with the order. Assuming the second scenario, the user can explore the cart and select Place Order. A page summarizing the order will display, including the kitchen details, ordered items, a general notes section, and a delivery or self-pick-up option. This page will compute the total cost based on the delivery option you select.



In this picture, the user selected self-pick up, so the delivery cost becomes zero, and the total price is updated.

If the customer chooses delivery, a delivery field will show up on the checkout page; if the cook orders the day before, a time picker will show up. The user must decide whether to pay with cash or a credit or debit card. A bottom sheet to fill in the card details will appear when the card method is chosen. The user will not be allowed to check out if they close the bottom sheet without entering all of the information or without filling the address field. The user can receive a discount by using their points.

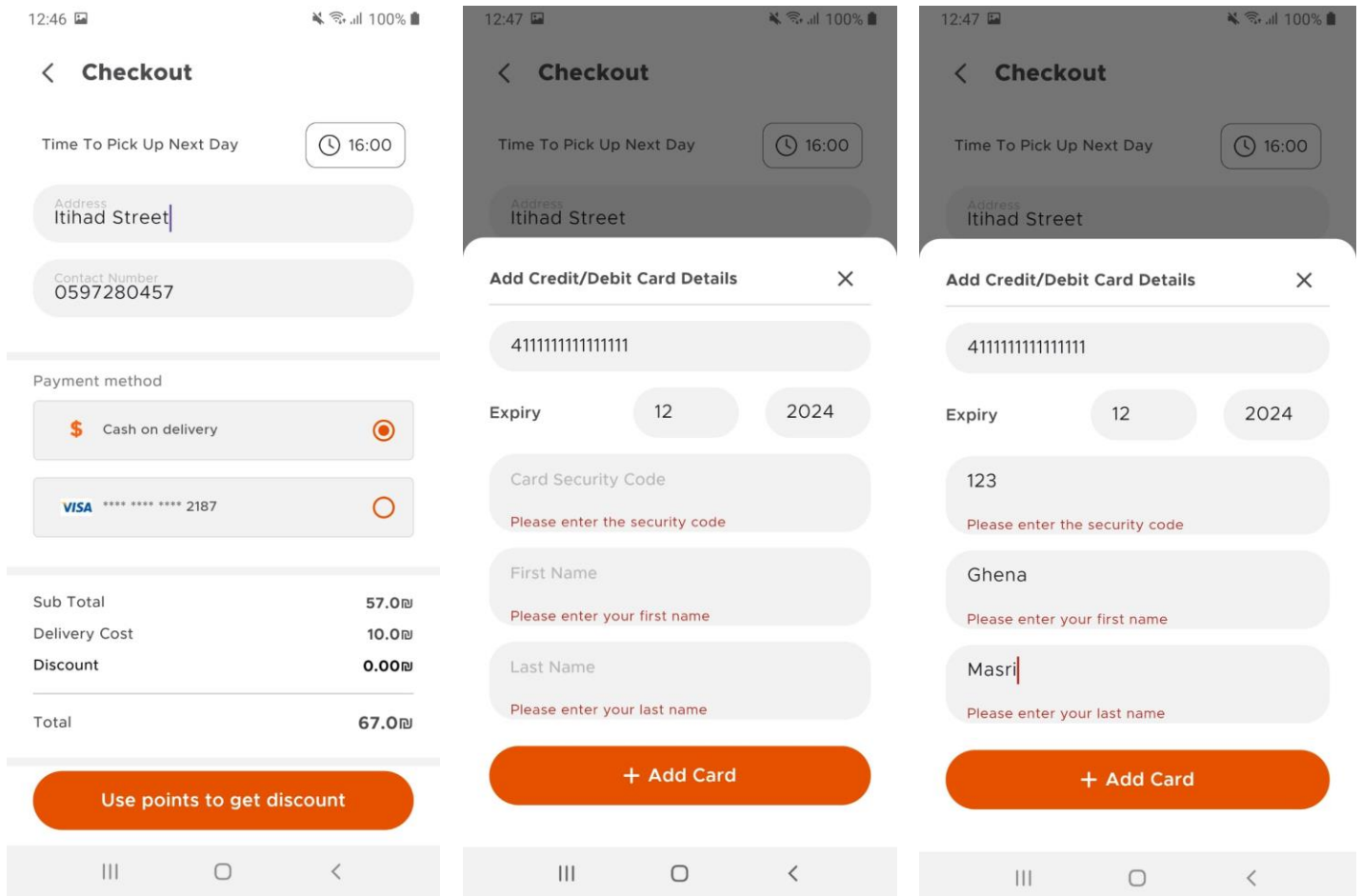
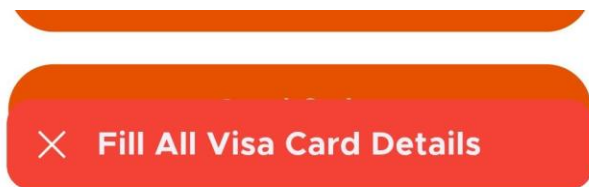


Figure 11 - User Checkout 1



This is the notification that will show up if the user selects the card method at checkout but does not fill out all the necessary information.

We have a use points button on this page, which when clicked will give the user a discount on their order. They can also cancel it by clicking un-use points. Our application offers a unique point system that can be utilized as discounts if the customer so desires. The user will receive more points after placing an order successfully.

12:50 📶 100%

< Checkout

Time To Pick Up Next Day 🕒 16:00

Address
Itihad Street

Contact Number
0597280457

Payment method

🇸🇦 Cash on delivery

VISA **** * 2187

Sub Total	57.0₪
Delivery Cost	10.0₪
Discount	2.05₪
Total	64.95₪

Unuse points

☰ ○ <

12:51 📶 100%

Time To Pick Up Next Day 🕒 16:00

Address
Itihad Street

Contact Number
0597280457

Thank You!

Track Your Order In Orders Page

Your Order is now being processed. Thank you for using Cookly!

Back To Home

☰ ○ <

Figure 12 - User Checkout 2

- User Orders

The user can monitor the status of their order on this page and will receive notifications when there are changes to the status and when their order is ready. This page displays an order details page with all the information when the user clicks on one of the orders. A rate button allowing the user to assess the kitchen will show up on the order card once the status of the order has been provided.

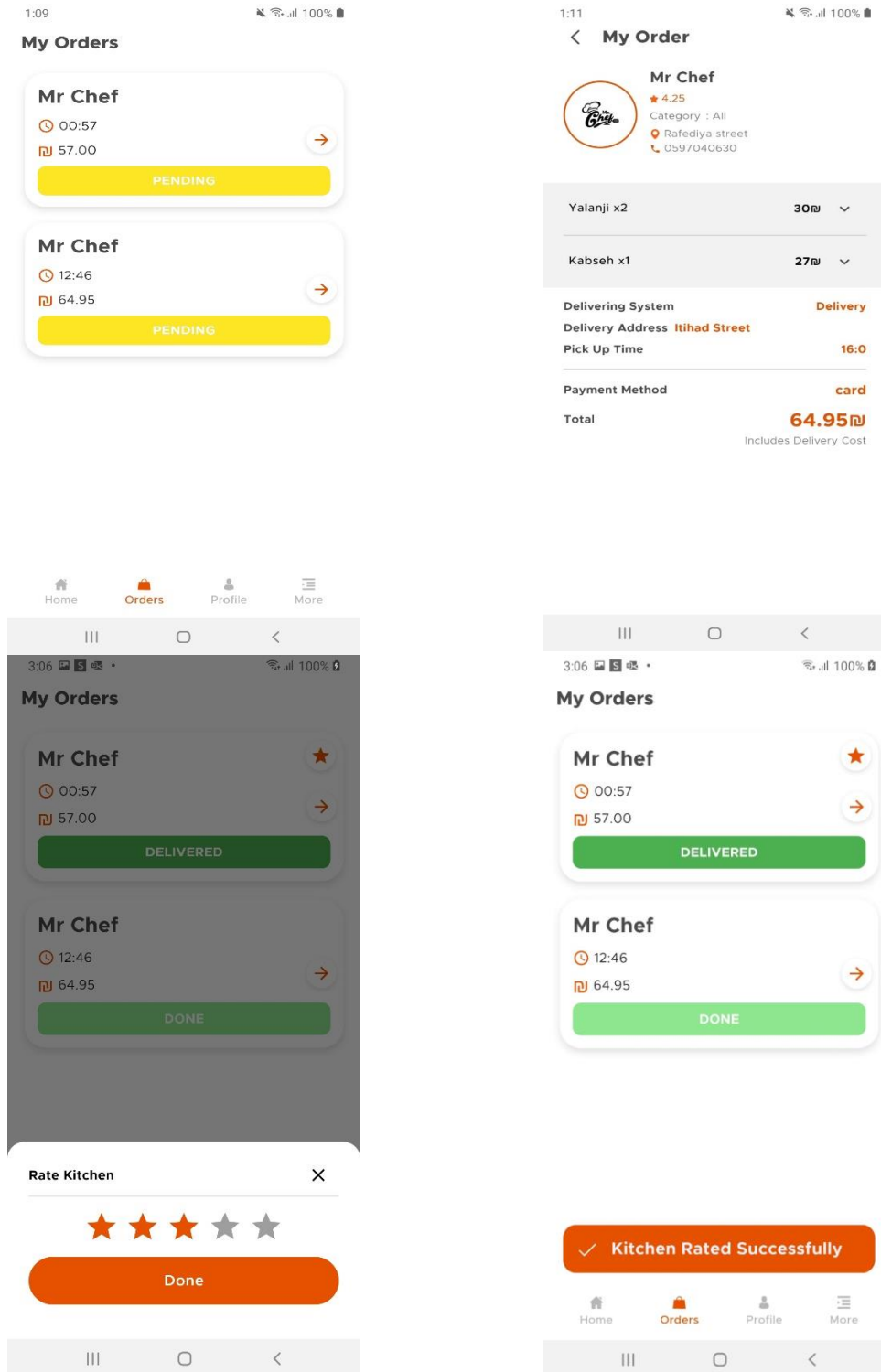


Figure 13 - User Orders

- User Order Status Changes

When the chef or delivery person makes changes to an order, the customer will be informed. or while the delivery guy is on way. A sample for all of it can be seen in the screenshot down below.

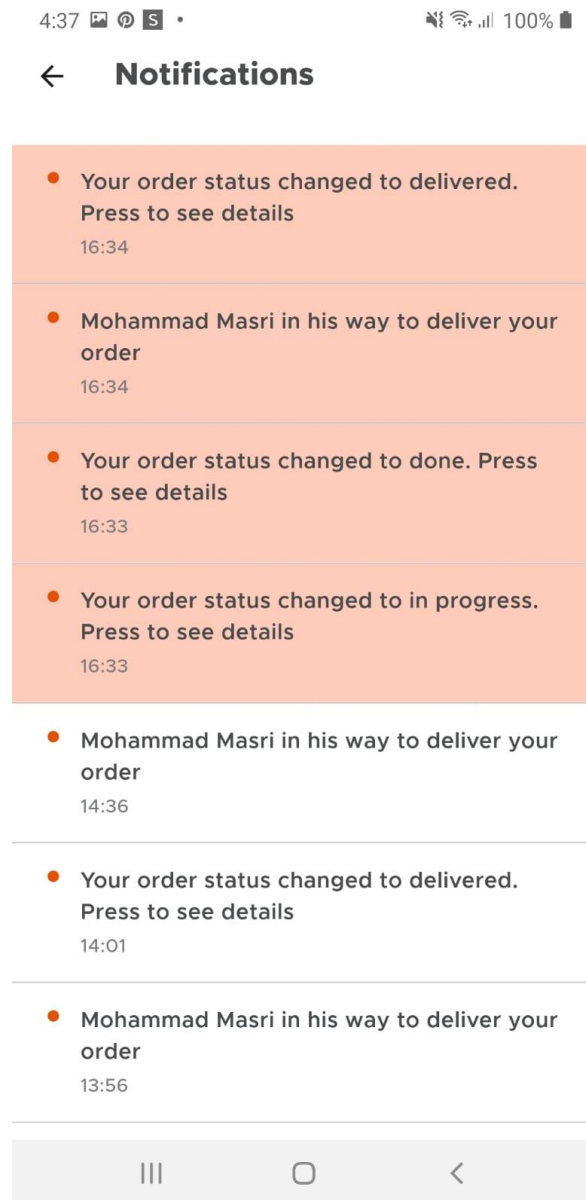


Figure 14 - User Order Status Changes Notifications

- User Profile

The user can review their points, modify their name and phone number, and click on "Change Password" to go to the page where they can do so, which we will see shortly.

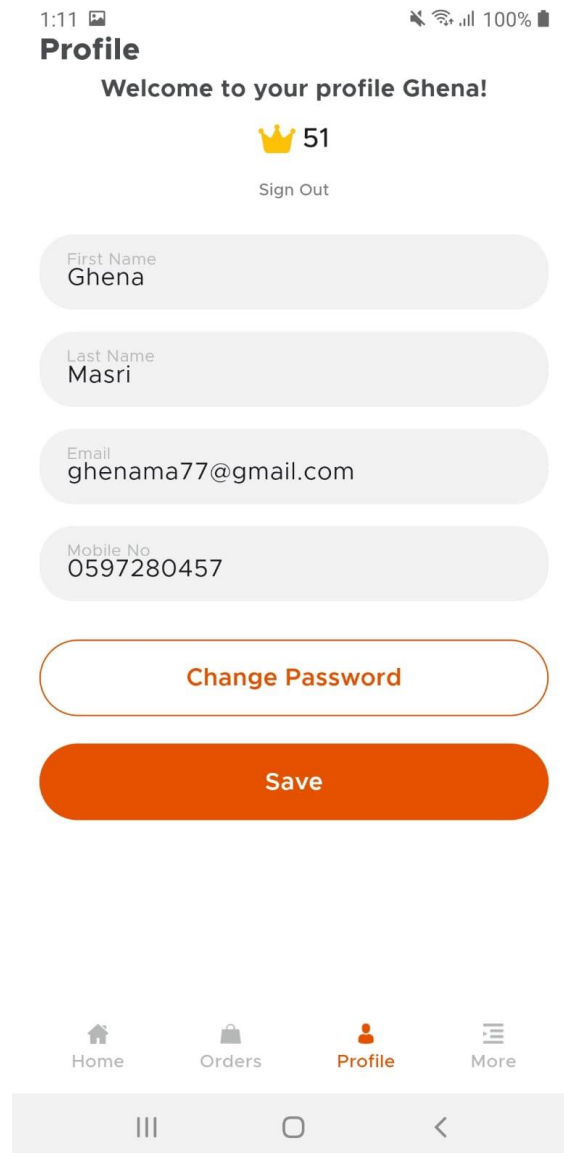


Figure 15 - User Profile

- Chef Home View

Assuming the chef has already activated their subscription, a message titled "Start Adding Your Menu" will show up on the home page when the chef logs in for the first time. Additionally, this page has a status toggle button that allows the chef to open or close the order taking door, as seen by the consumers. The chef can access the 'Add Menu Item' page by using the floating button on this page. The chef can handle each item by modifying or deleting it once they have been added. The items will then display on this page.



Figure 16 - Chef Home View

- Adding Menu Item

The chef will be able to add menu items on this page. They will be required to include an image, a description of the ingredients, the amount of time needed for preparation, the category, the quantity type, and the price with the item.

Let's add some items together!

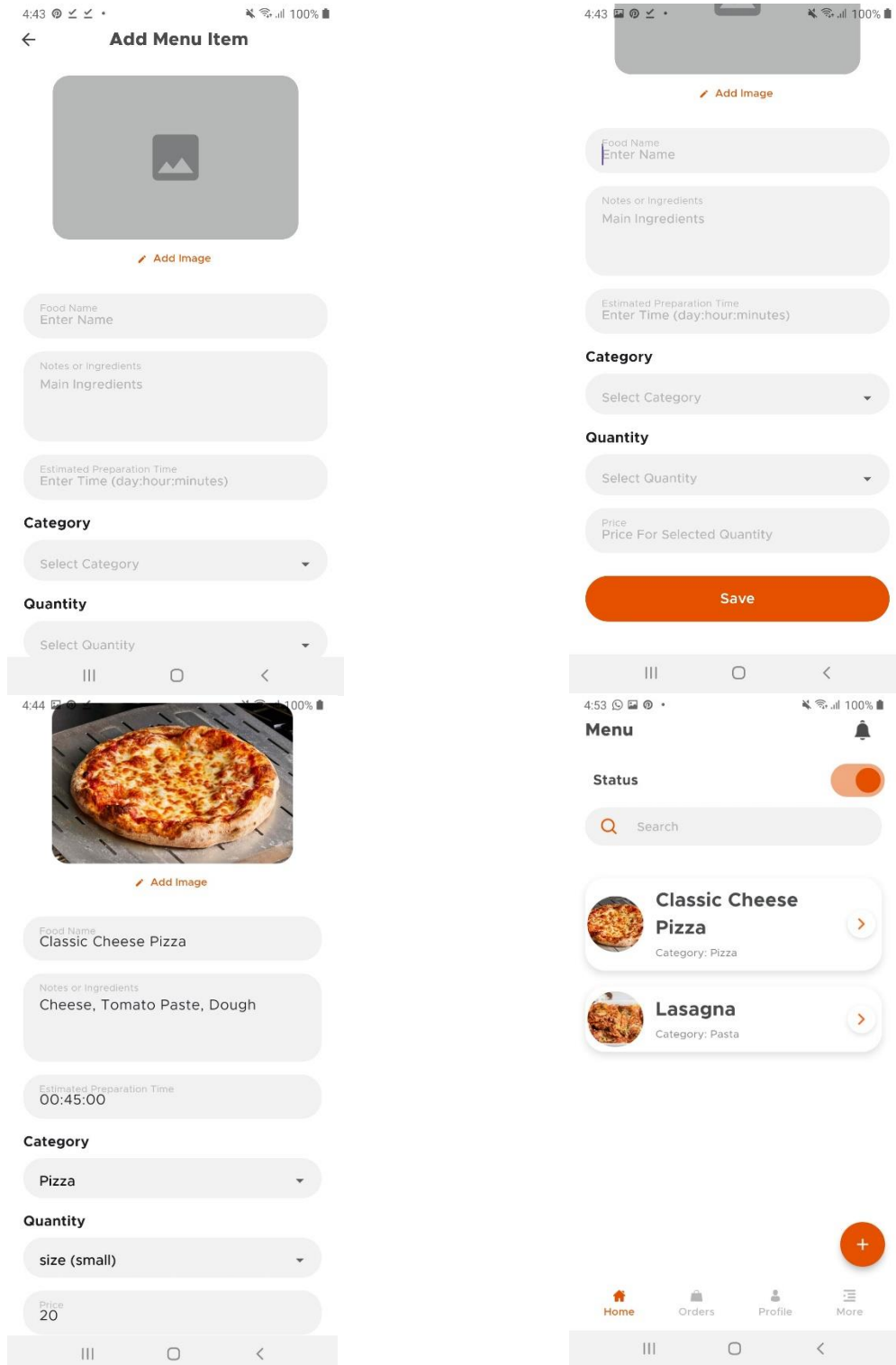


Figure 17 - Adding Menu Item

- Manage Menu Item

If the chef makes changes to any of the fields on this page, they can click the edit button and successfully alter the menu item. The chef can also remove the item; when they do so, a confirmation alert will show.

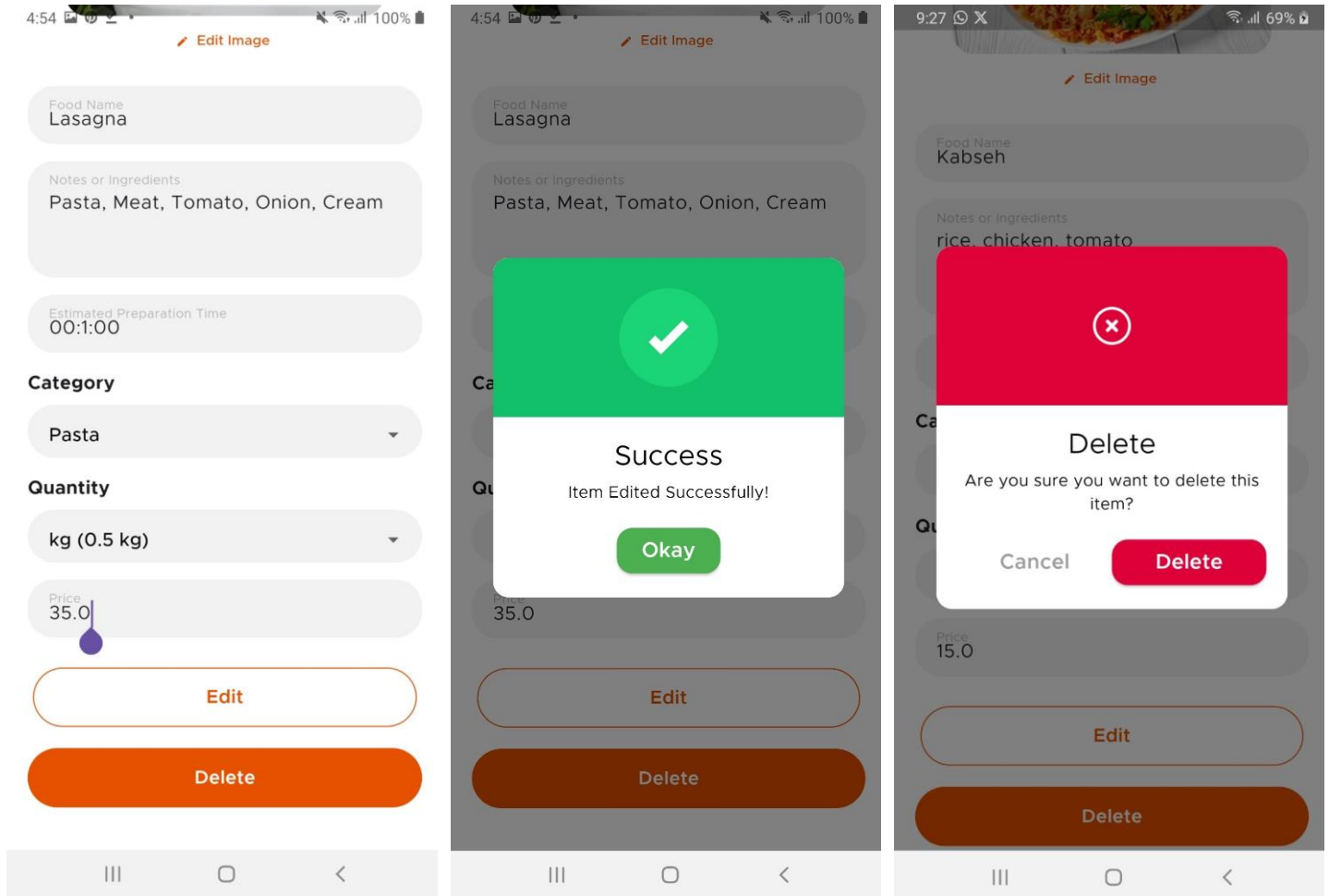


Figure 18 - Manage Menu Item

- Chef Subscription

The chef will be able to select between two types of plans—monthly or annual—and proceed by entering their card details as they land on the home page for the first time, or when their subscription is about to expire, an alert will let them know. Customers won't be able to see the kitchen if the subscription hasn't been activated.

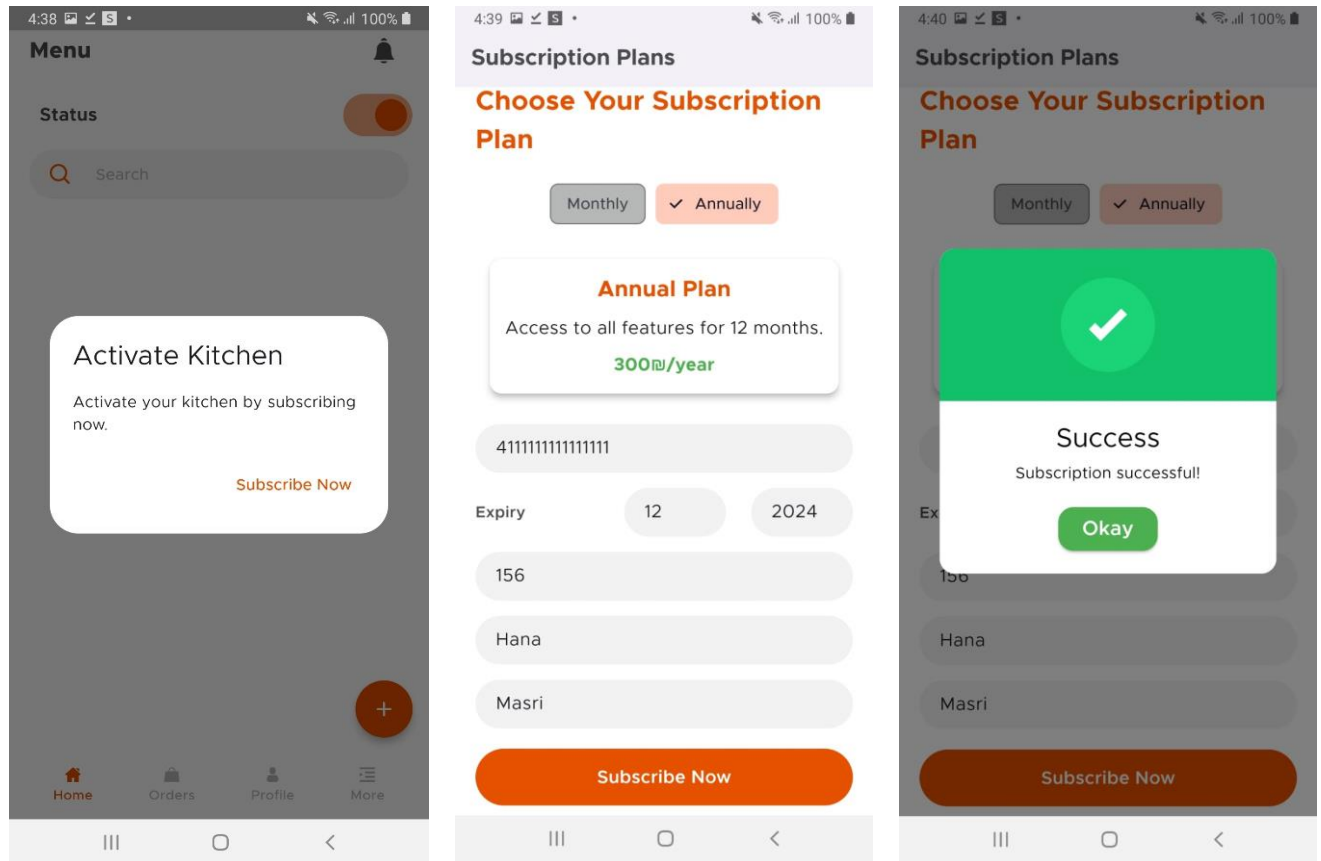


Figure 19 - Chef Activating Subscription

- Subscription Management

The chef can check the type, expiration date, and status of their subscription on this page. They will also be able to activate the subscription and modify the type of plan they have. A card field validation was put into place.

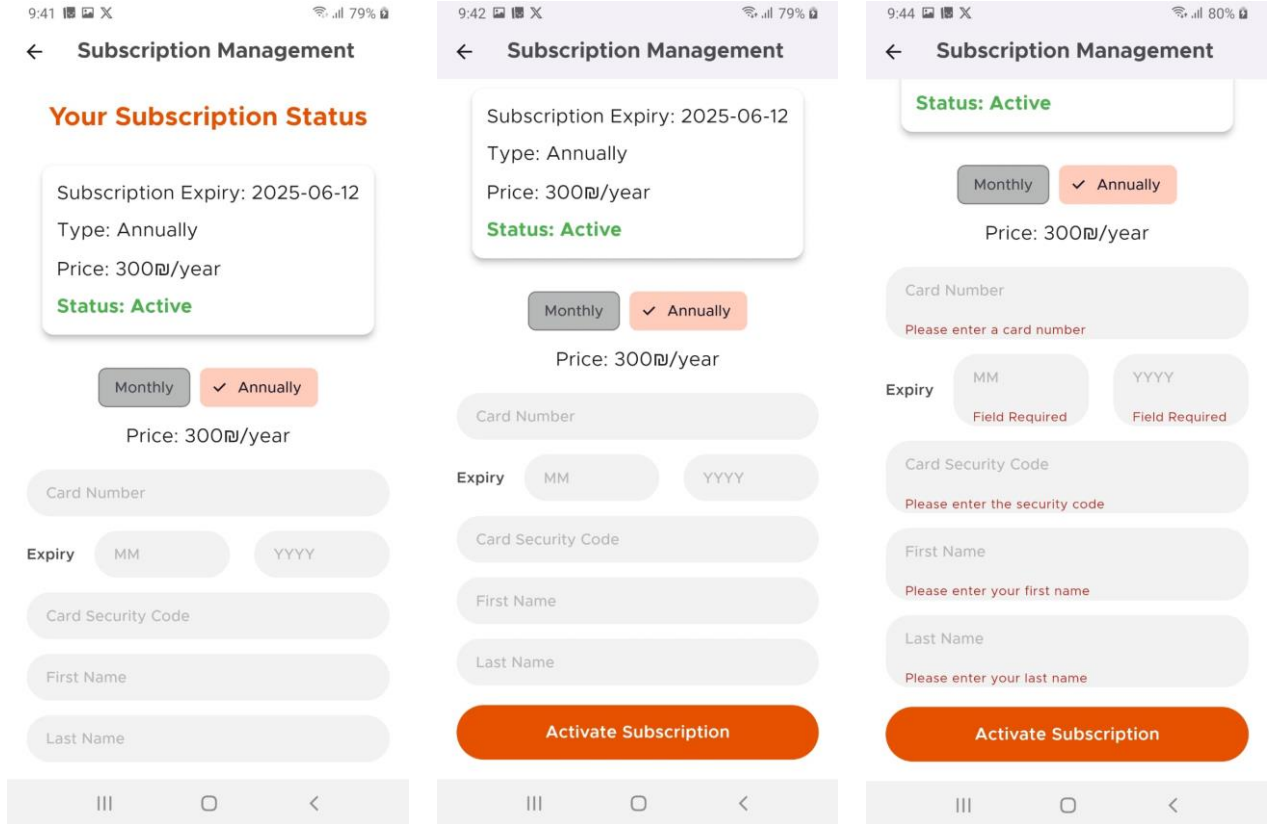


Figure 20 - Chef Manage Subscription

o Chef Receiving Order

Once the chef received an order, they will be notified. Four types of statuses exist, pending, in progress, done and delivered. The chef can change the status for the self-pick-up orders between these 4 statuses, but if delivery required the 'delivered' status will be set by the delivery man.

The order is described on the order details page, which has all the details shown in the third screenshot.

Let's start step by step!

The chef received order notification, can navigate to the order details page from the notification page directly.

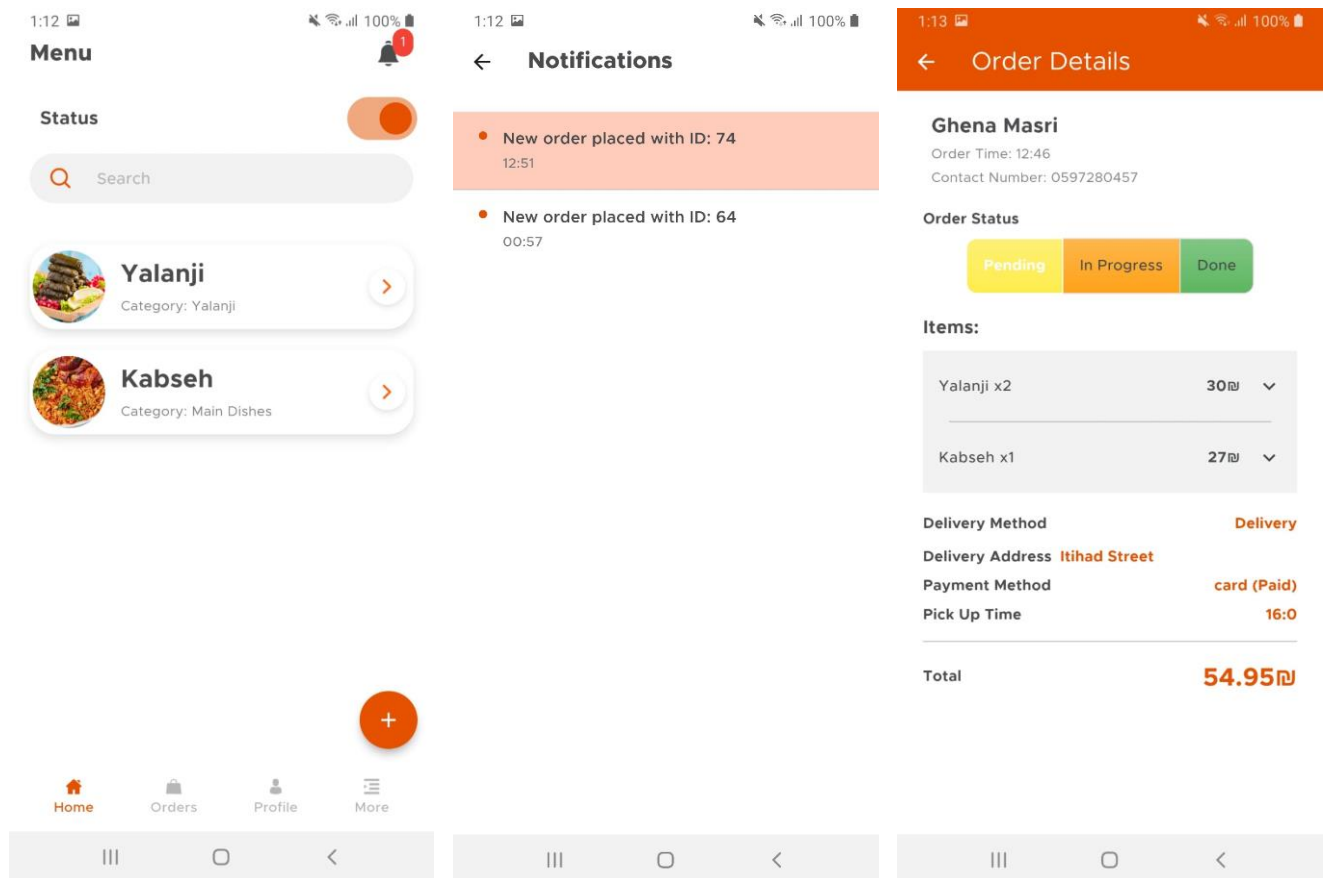


Figure 21 - Chef Orders 1

The orders tab allows the chef to monitor orders; if an order was in pending state, they may only be changed to in progress directly by the chef.

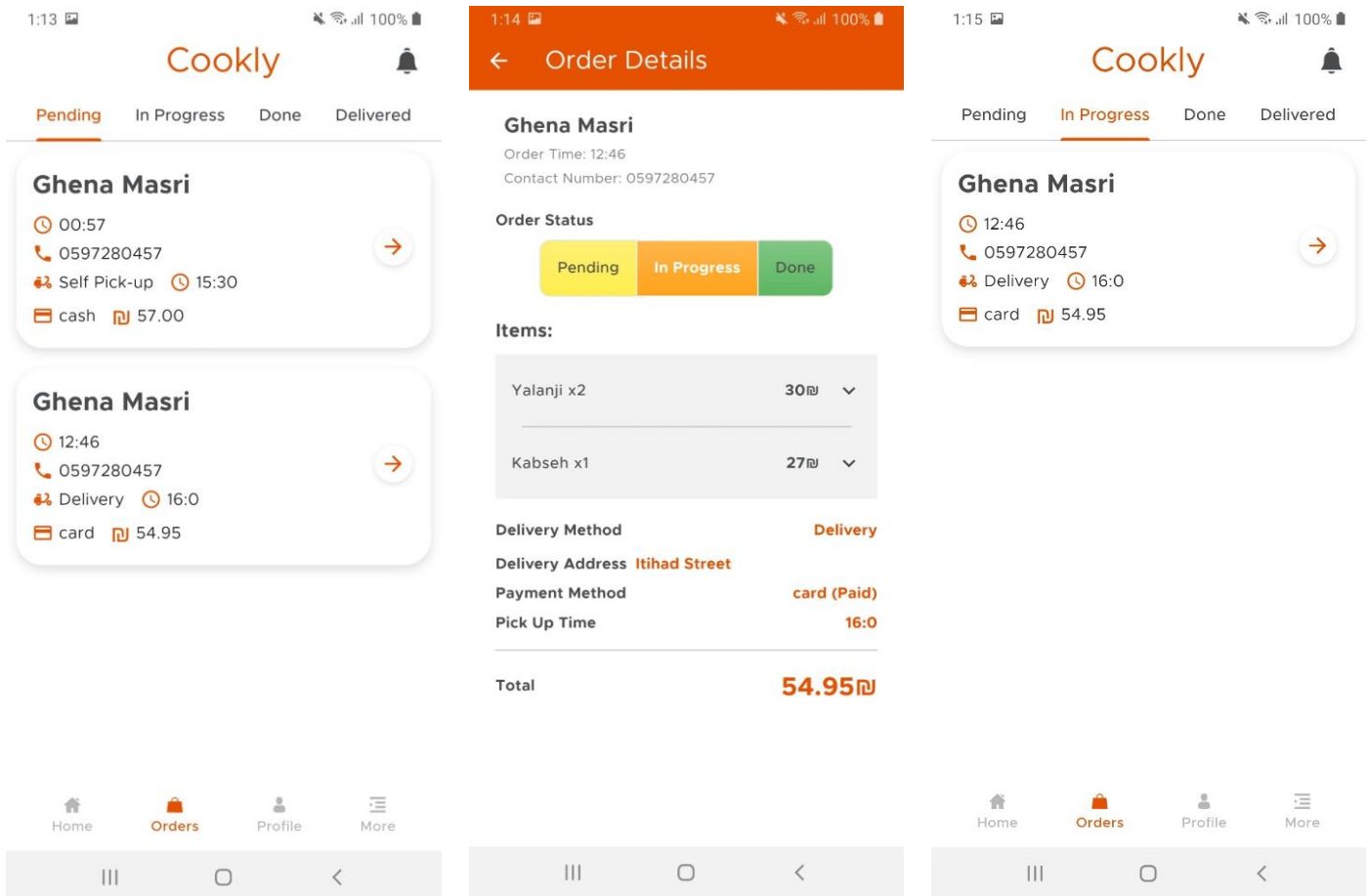


Figure 22 - Chef Orders 2

There are two ways the chef can change an order's status from in progress to done: if the customer requests delivery, a "Assign to delivery" button will appear, and the delivery person will be in charge of making the change; if the customer prefers self-pick-up, a "Picked up" button will appear, and the chef will be in charge of making the change from done to delivered in this scenario.

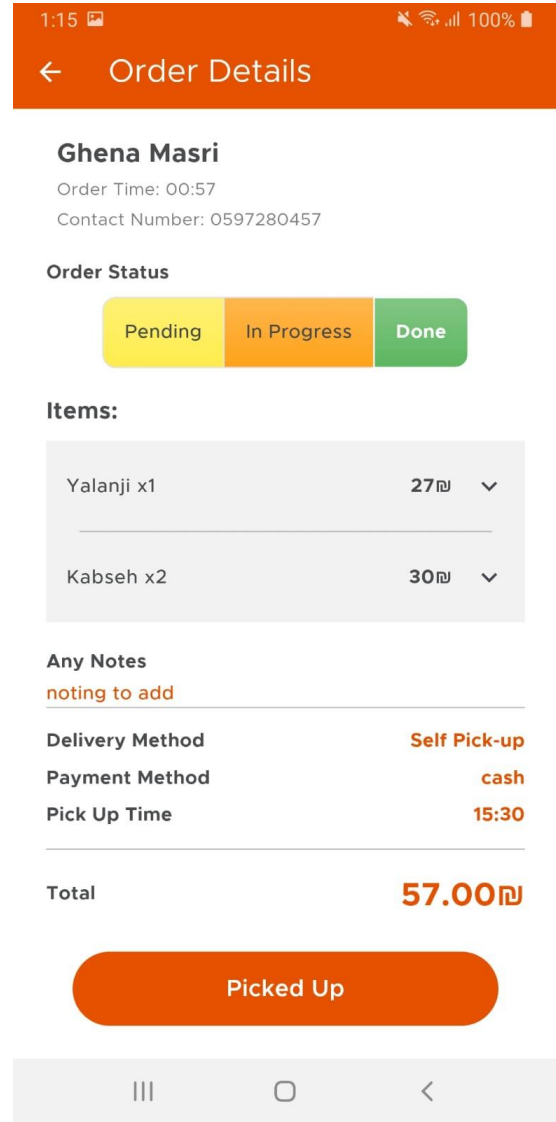
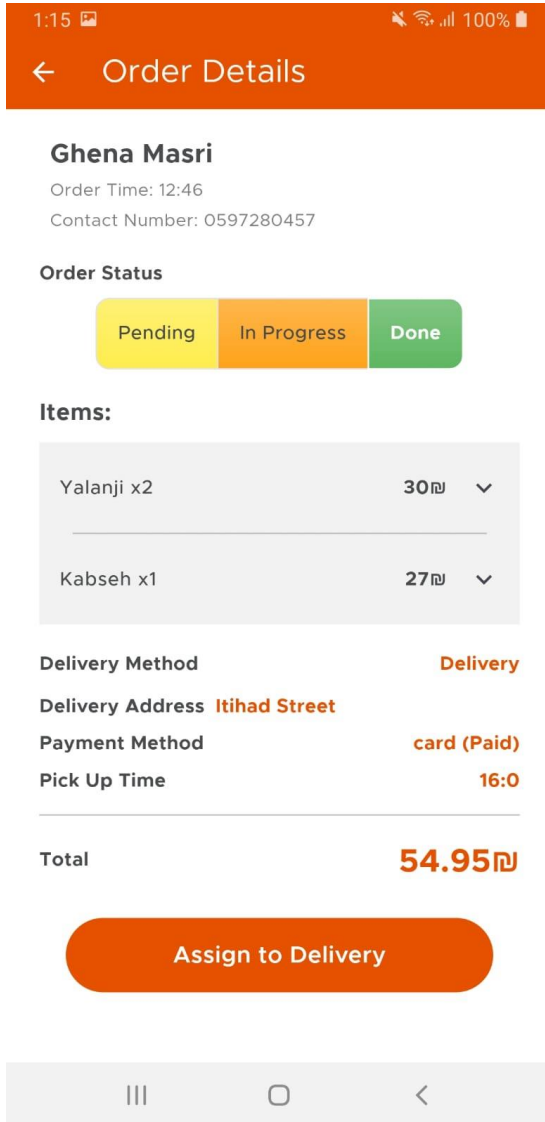


Figure 23 - Chef Orders 3

In the first case, the order will remain in the done tab visible to the chef until the delivery man modifies it to delivered from their end.

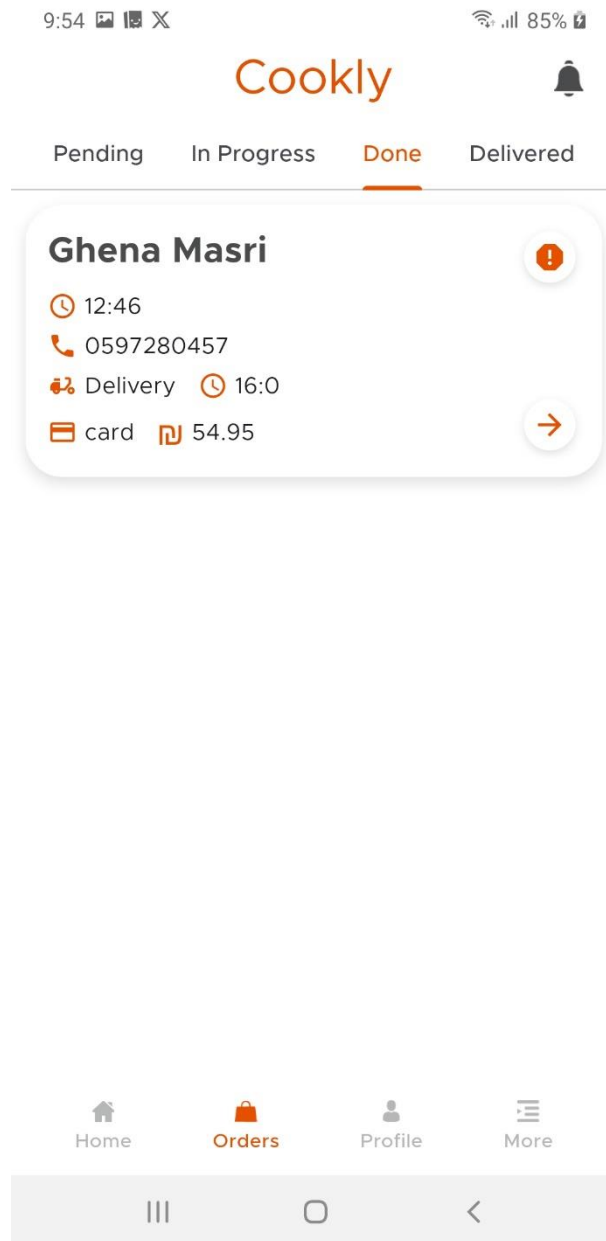


Figure 24 - Chef Orders 4

The order will become delivered as soon as the chef selects "Picked Up" in the second scenario to modify the status. The order status will remain done until it is picked up by the customer if they haven't done so yet. If they never picked up the order the chef can report them, we will take about the report feature later on.

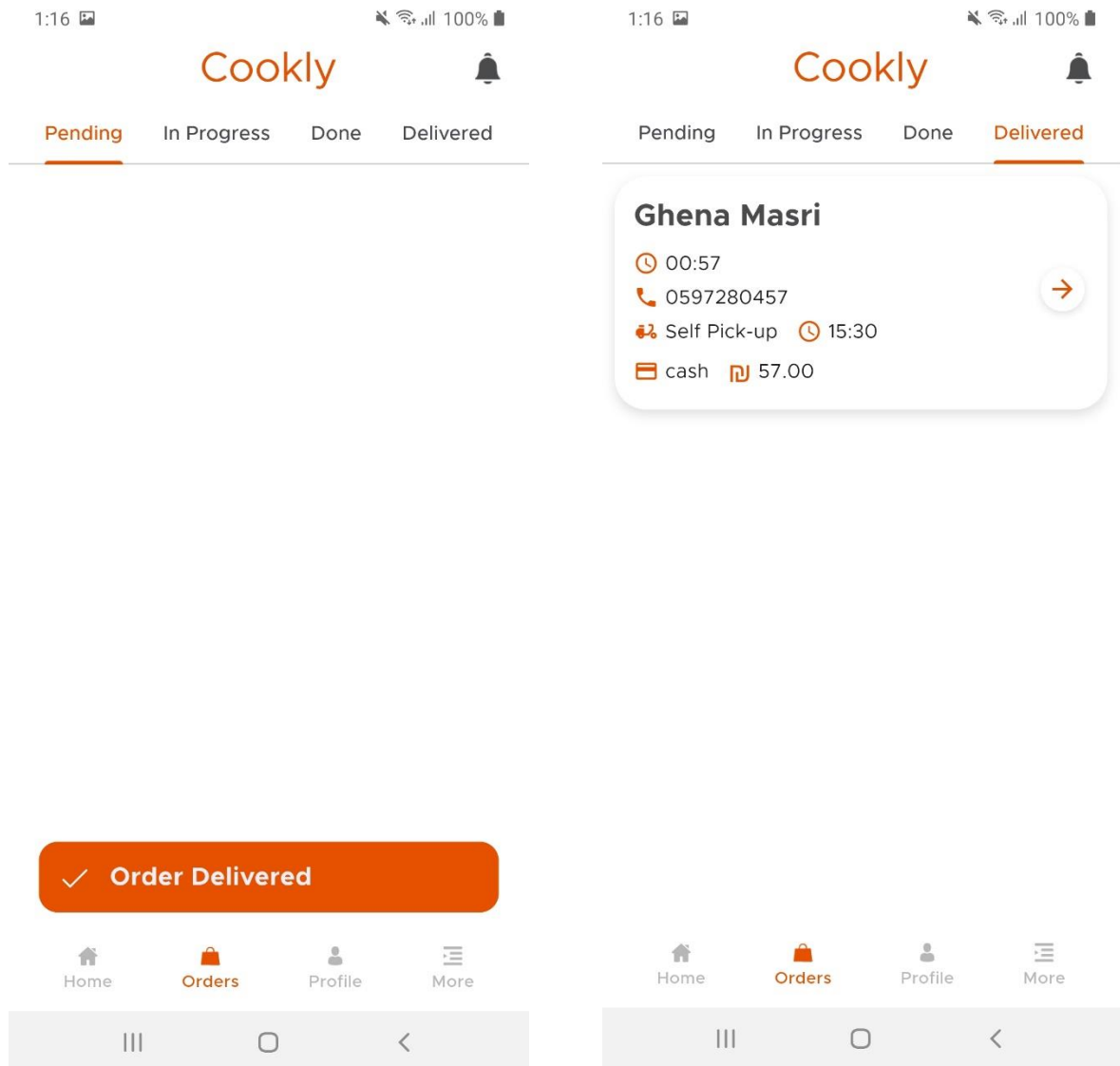


Figure 25 - Chef Orders 5

○ Chef Assigns Order to Delivery

Let's assign a delivery guy for this order. The chef will see a bottom sheet listing the deliverymen who are now available after clicking Assign Order. The chef may assign one of them with the command and watch for their response. The chef will be notified after the delivery man accepts or declines.

Let's start with the scenario where the delivery man accepted the order.

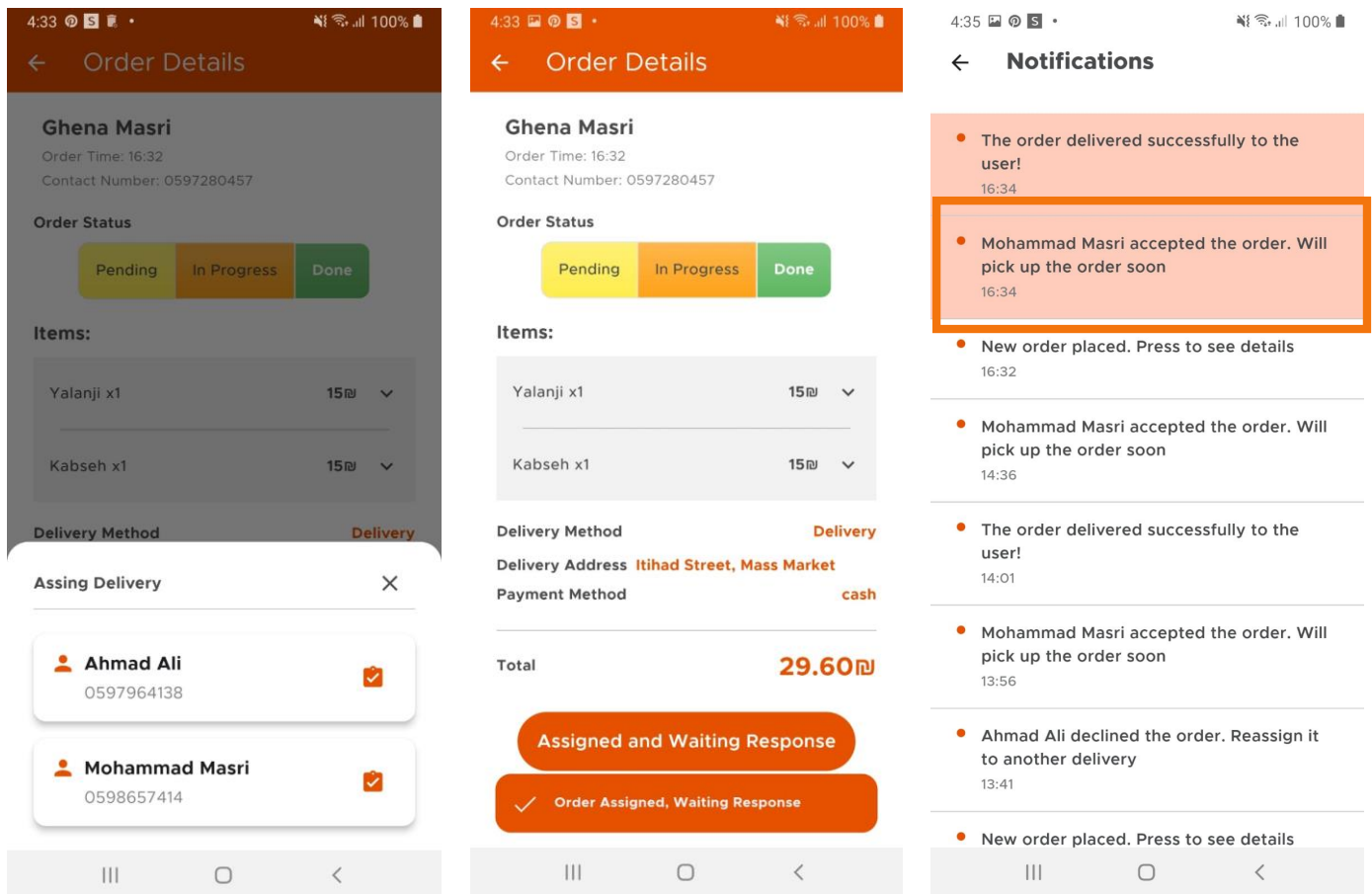


Figure 26 - Assigning Order to Delivery 1

After the deliveryman changed the status of the order from his side to delivered the chef will also get notified and can see the order in the delivered page.

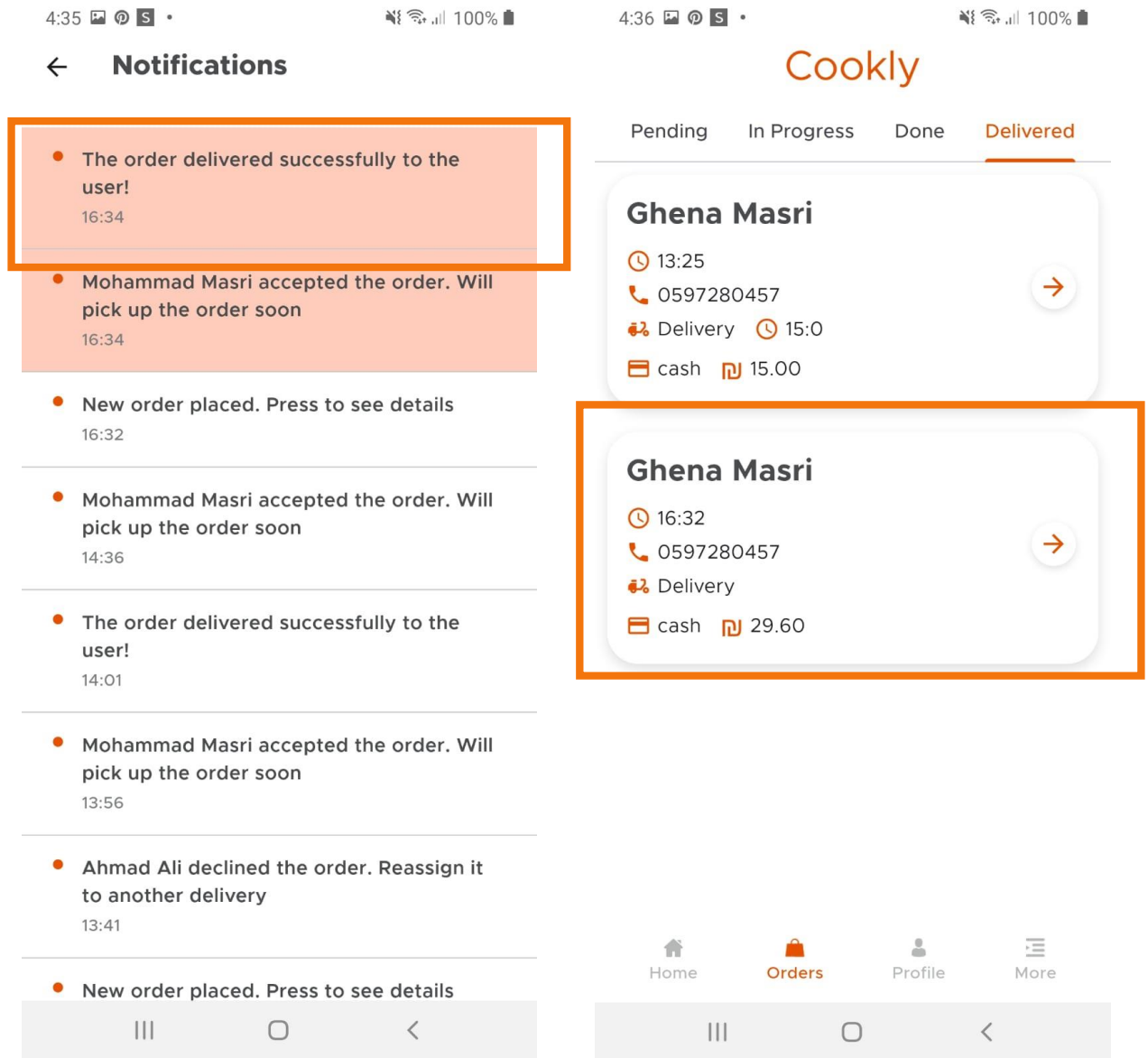


Figure 27 - Assigning Order to Delivery 2

Let's go with the scenario, where the delivery man declined the order, the chef will get notified and will have to assign the order to another deliveryman.

PS: the first screenshot is a deliveryman page which we will discuss later.

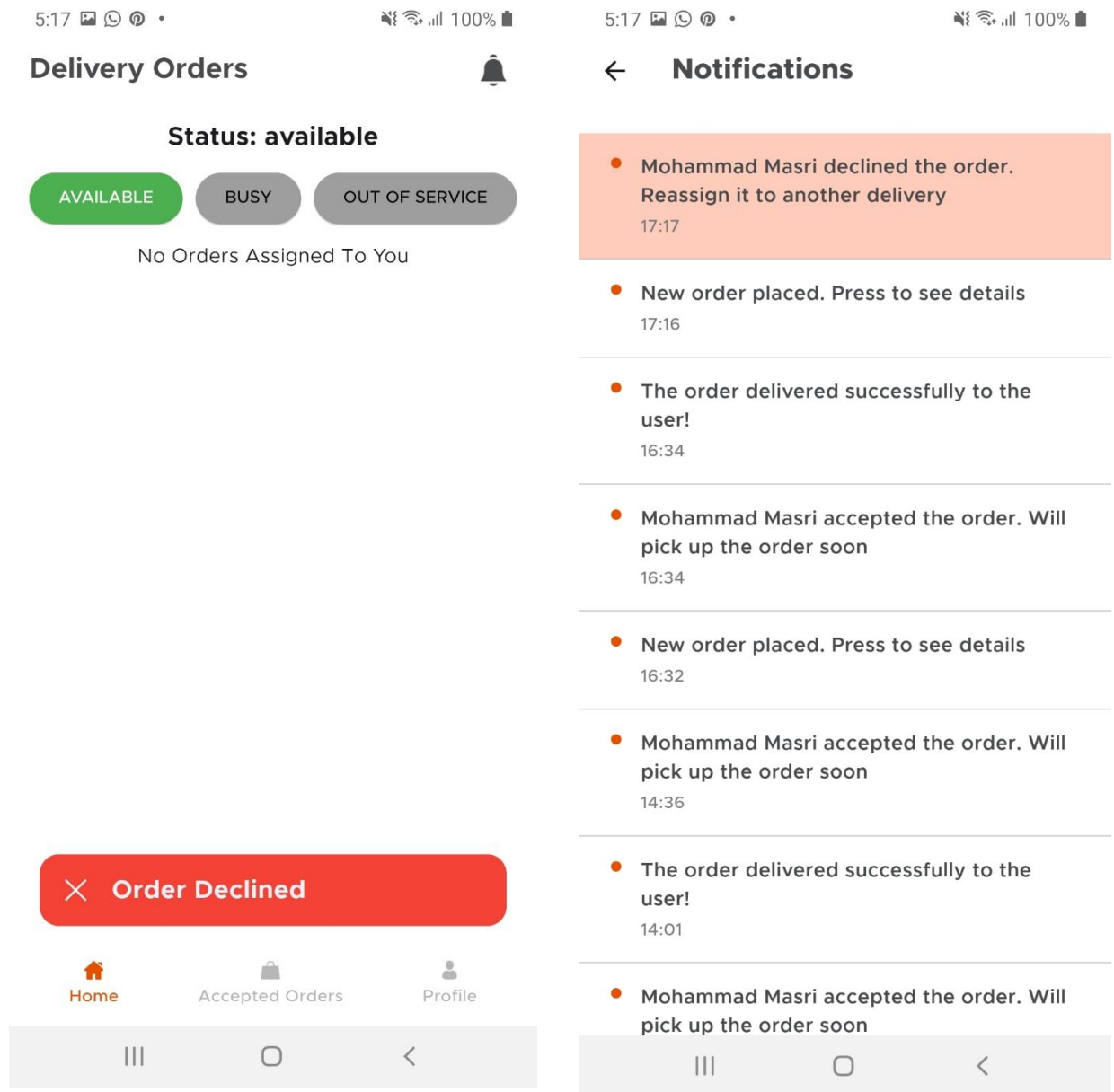


Figure 28 - Assigning Order to Delivery 3

- Chef Profile

The standard profile and the kitchen profile are the two pages that make up this section. The chef can change their password, phone number, and name on their standard profile page. The chef has the ability to modify several aspects of the kitchen profile, including the name, logo, address, phone number, category, description, ordering system, and ability to accept special orders. The chef can view the kitchen rate in this page.

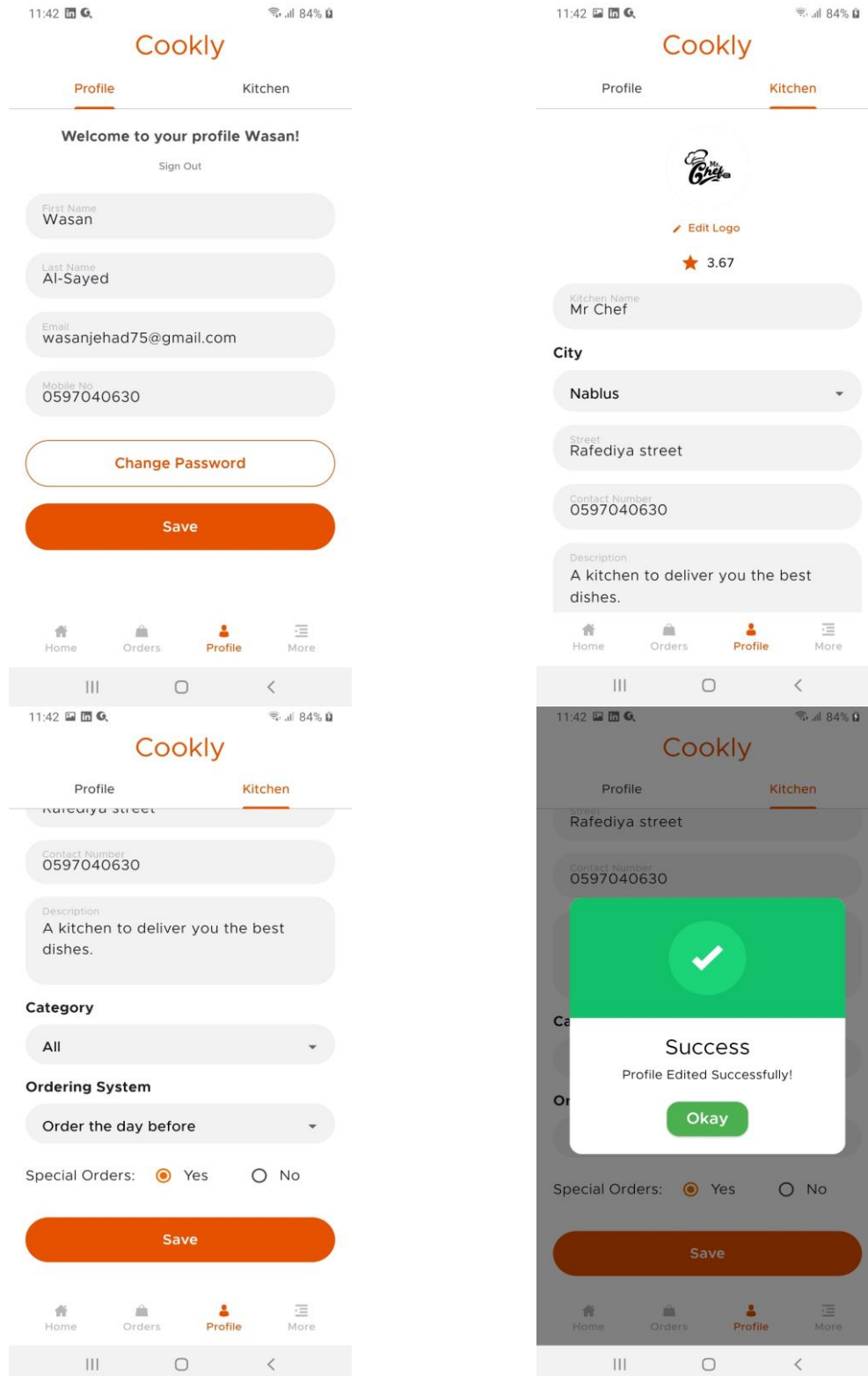


Figure 29 - Chef Profile

o Kitchen Status

The chef has the ability to modify the kitchen's state to closed. Once this is done, the customers will be able to see it. If they attempt to add anything from the kitchen to their cart, they will be informed that it is closed and cannot take any further orders; the cart will remain empty.

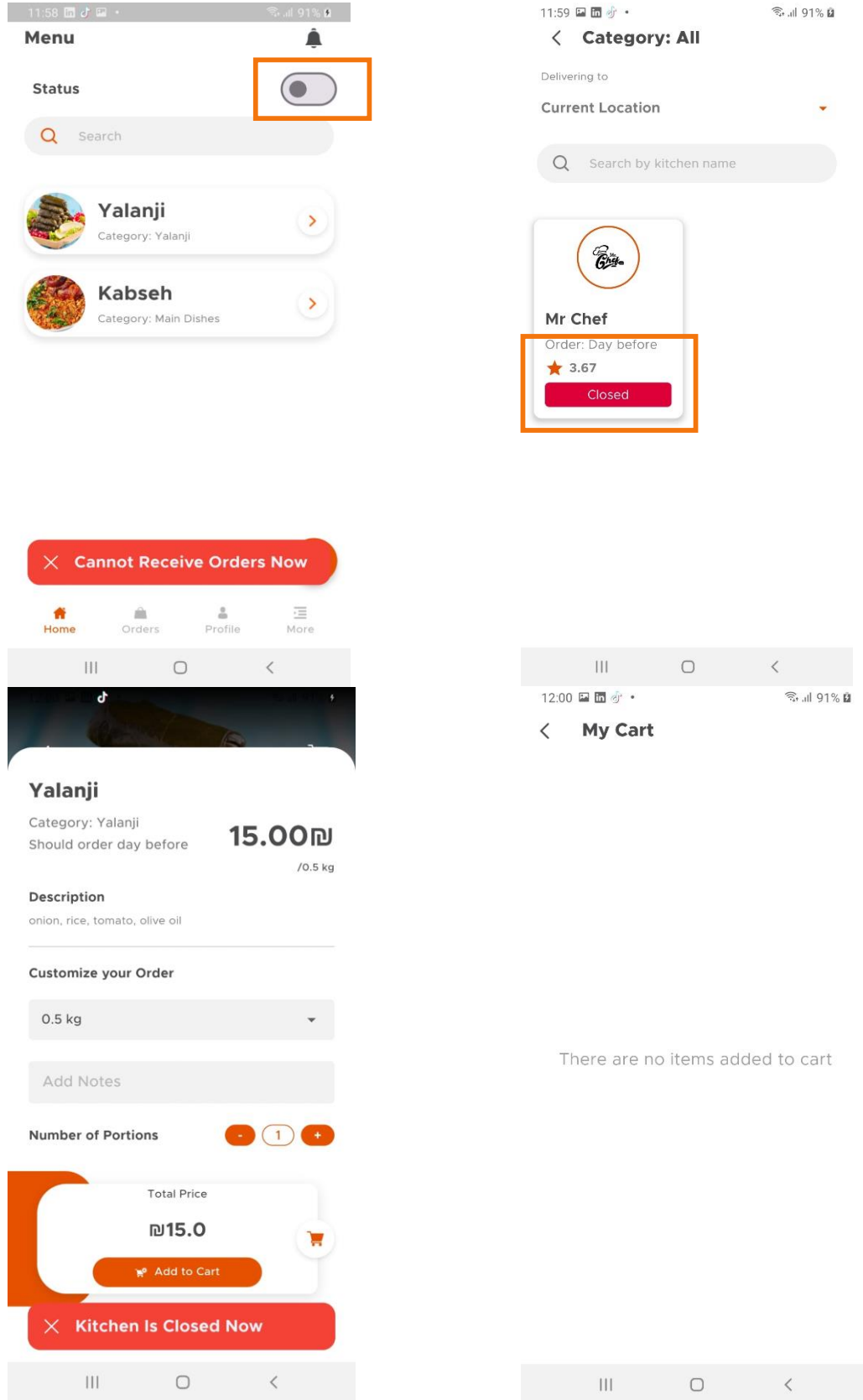


Figure 30 - Kitchen Status

o Admin Home Page (Statistics)

The administrator can view the percentage of kitchens in each city on this page. He can also use the filter to find the best kitchens in each city, which is accomplished by limiting the maximum kitchen rate in each city. The overall number of kitchens in the system includes the number of kitchens, users, and delivery men.

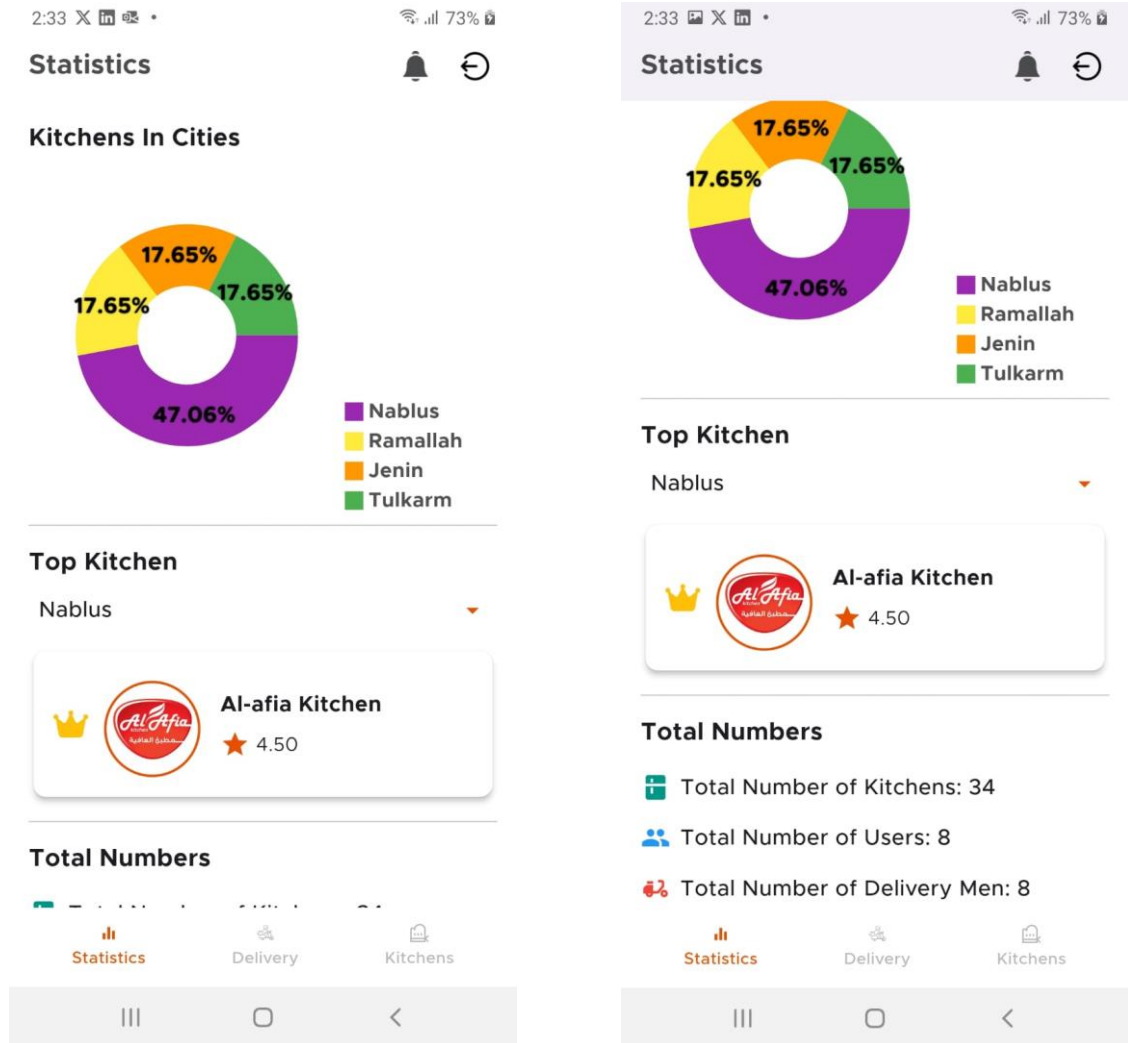


Figure 31 - Admin Home Page

o Admin Manage Delivery Pages.

The administrator can add deliverymen to the system, filter them according to their locations, view their status (available, busy, out of service), and remove them from the system using these two pages.

Let's add a deliveryman.

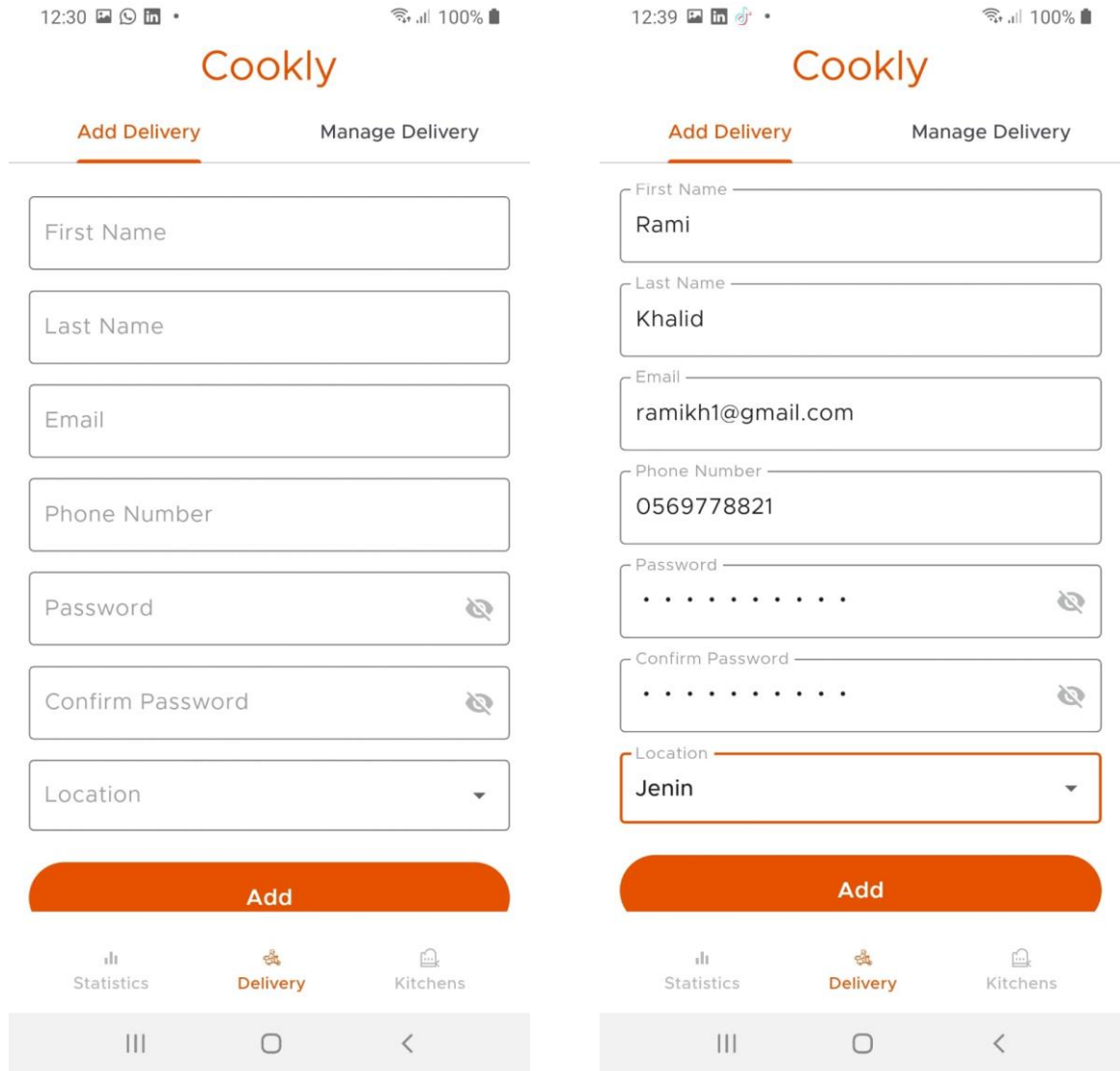


Figure 32 - Admin Adds Delivery Man

Now, let's find this deliveryman based on the location and delete him.

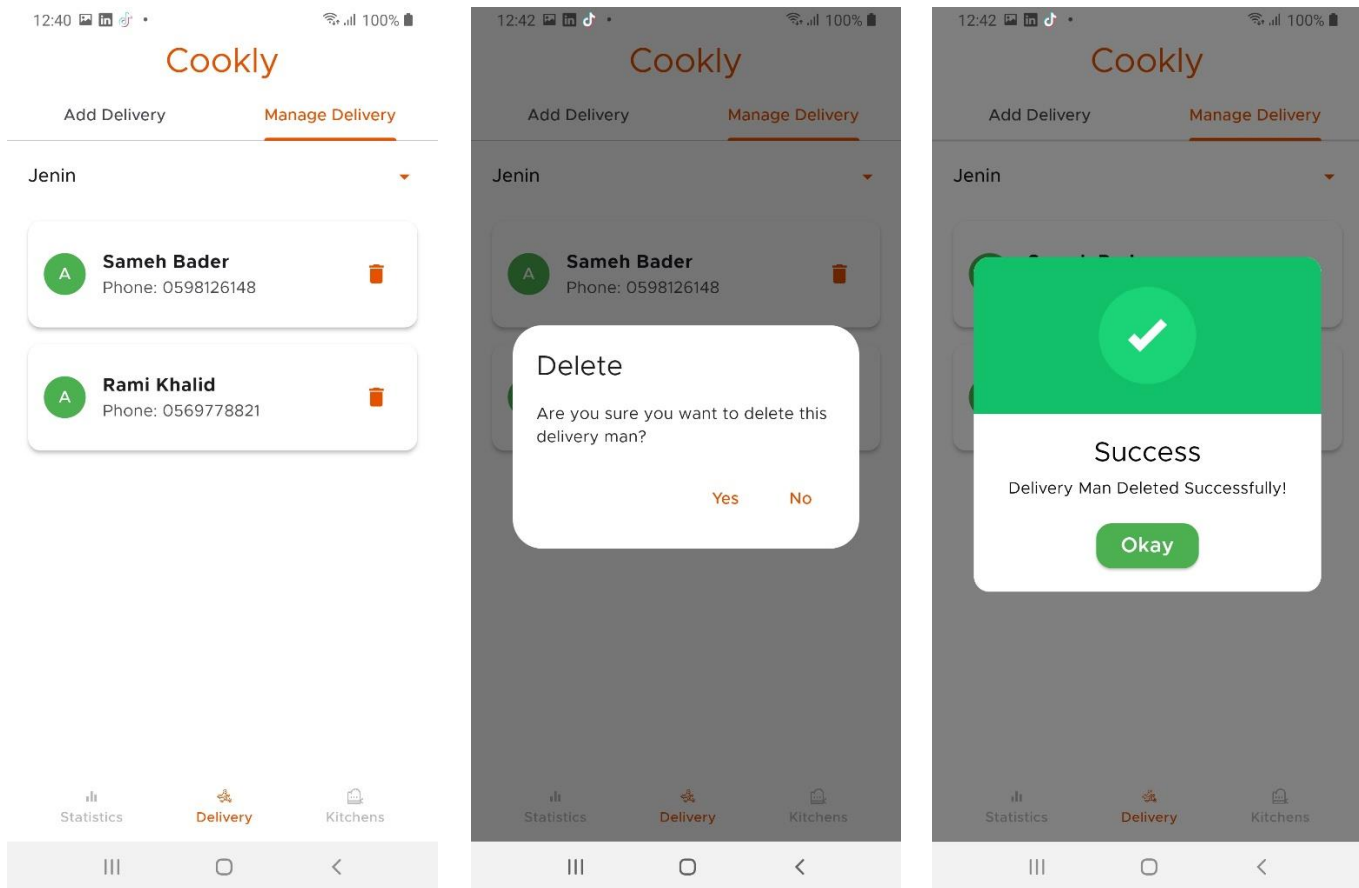


Figure 33 - Admin Manages Delivery Men

o Admin Views Kitchens Pages.

The administrator can filter the kitchens on the first page according to their category and/or location. The admin will then get an overview page with all the kitchen's information and menu items if they click on any of the kitchens.

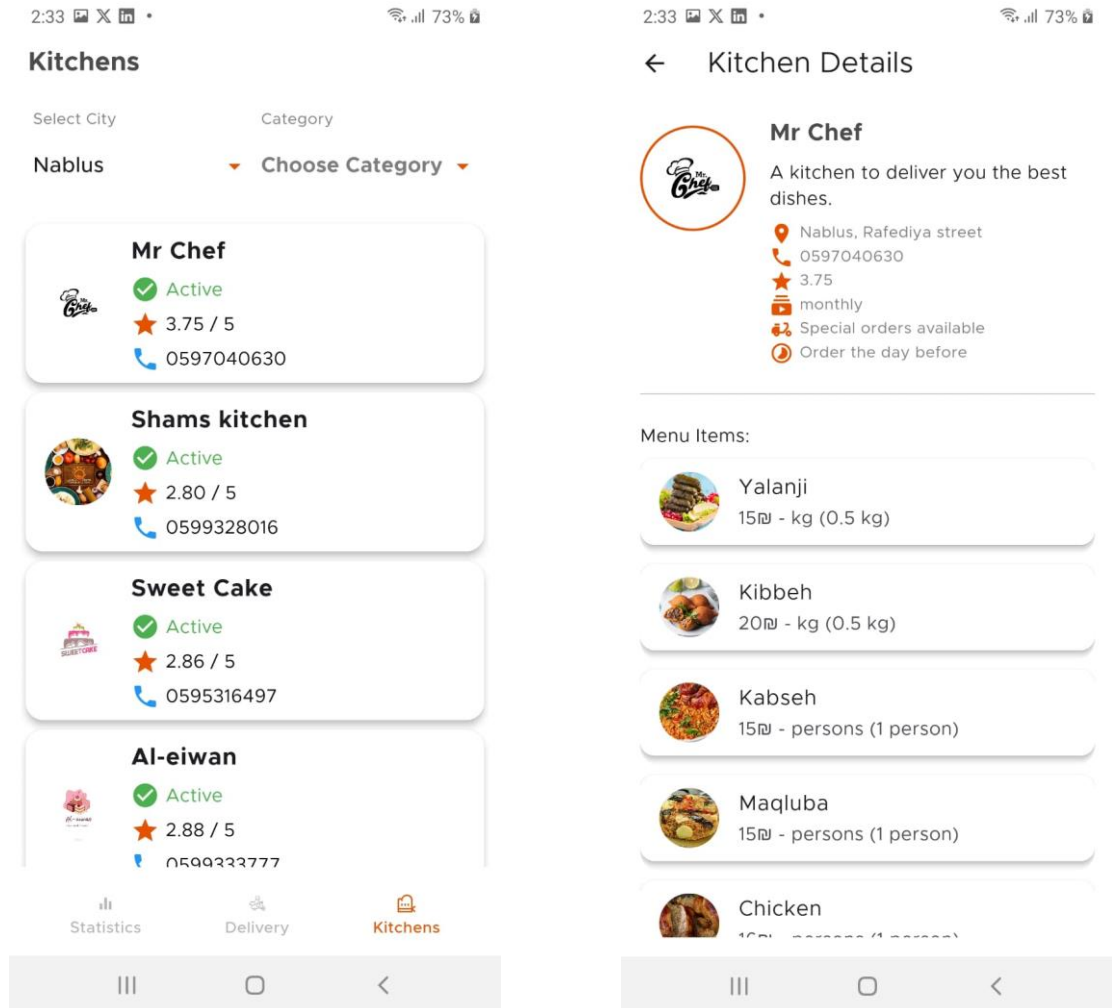


Figure 34 - Admin Views Kitchens Pages

- o Delivery Man Home

In this page, the delivery man will be able to change their status, accept or decline orders that will be shown in this page. The status will be changed explicitly to 'Busy' once the delivery man accepts an order. And the status will return explicitly to 'Available' once the order delivered successfully.

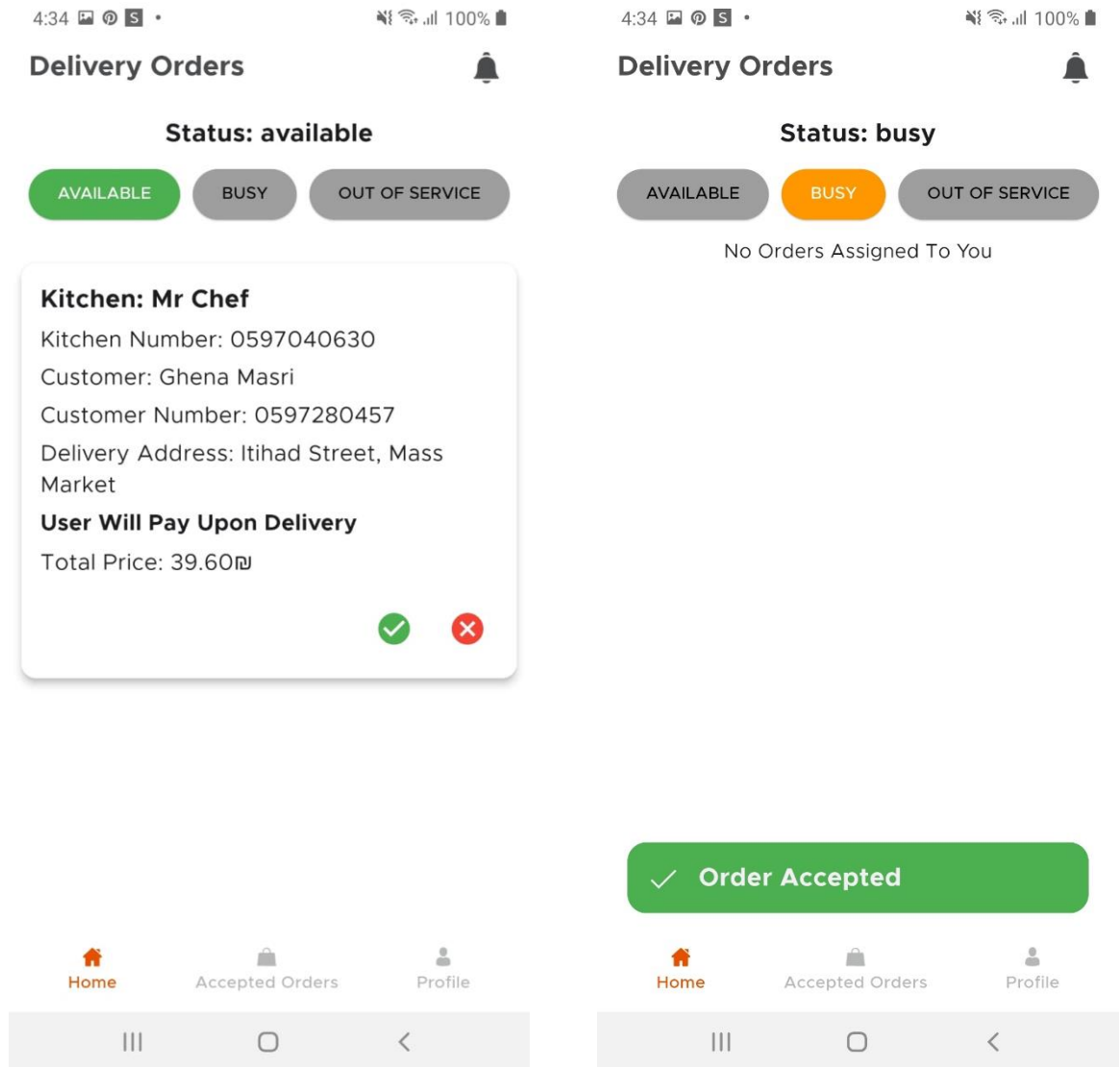


Figure 35 - Delivery Man Home

- o Delivery Accepted Orders

This page will display all accepted orders, with a button to mark each one as delivered. The button vanishes and the words "Delivered Successfully" displays as soon as the delivery man marks the order as delivered. Following the delivery of the order, the delivery man's status changes back to available.

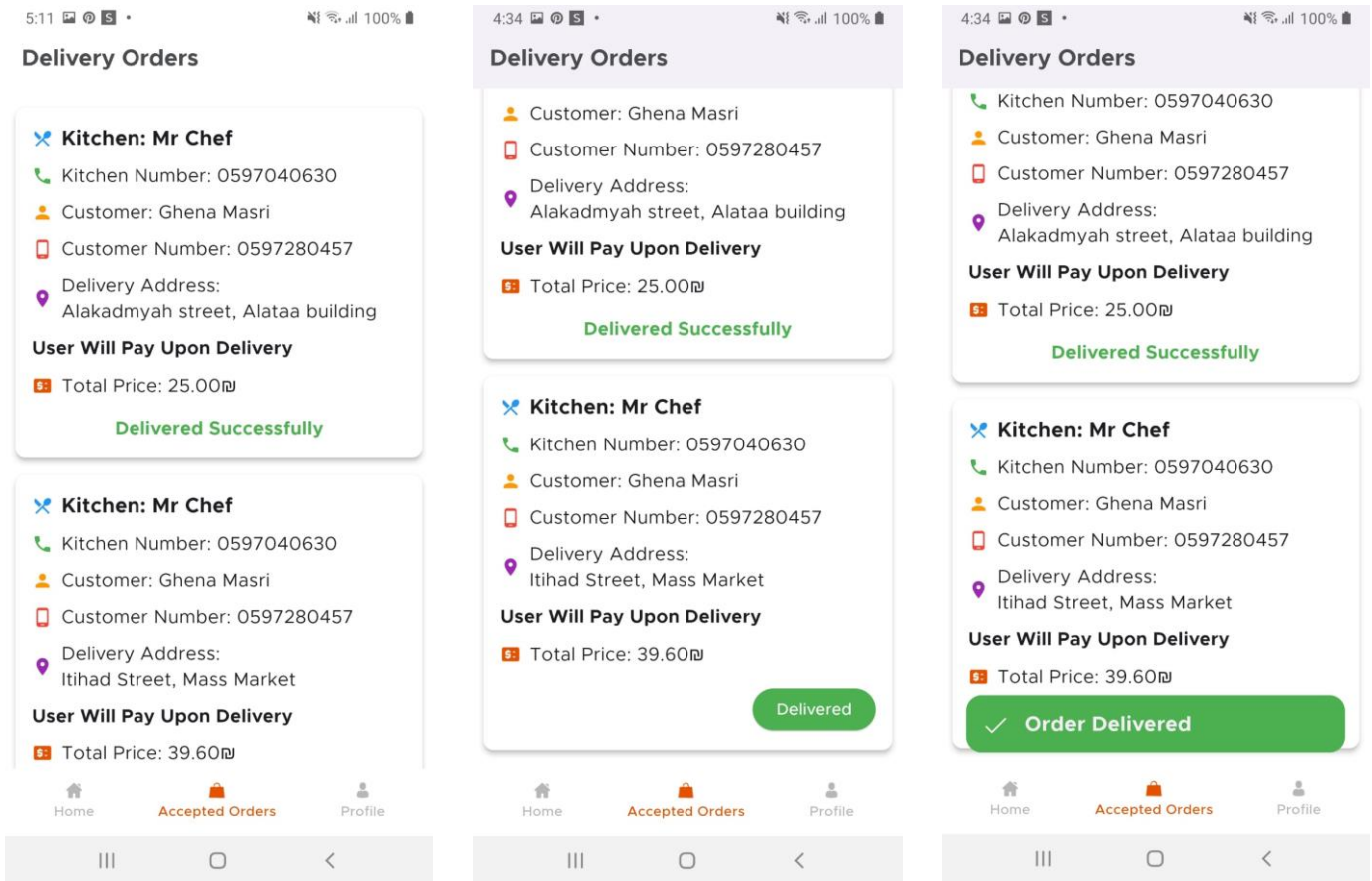


Figure 36 - Delivery Accepted Orders

- Delivery Man Profile

The delivery man can modify their name and phone number, and click on "Change Password" to go to the page where they can do so, which we will see shortly.

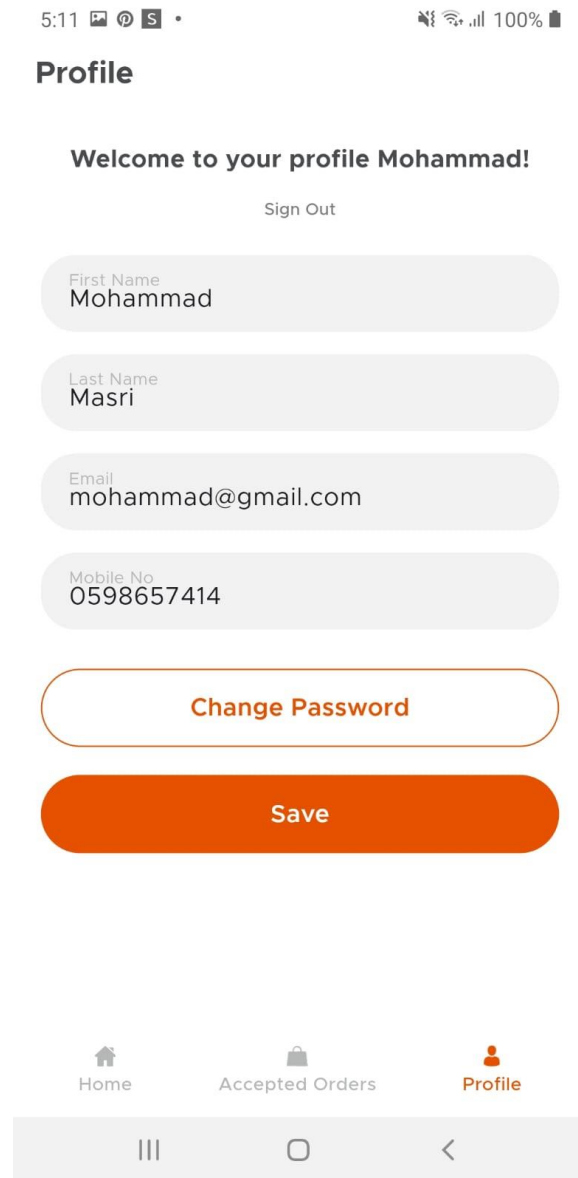


Figure 37 - Delivery Man Profile

○ Delivery Man Receiving Orders

Once the delivery man receives an order, they will get a notification.

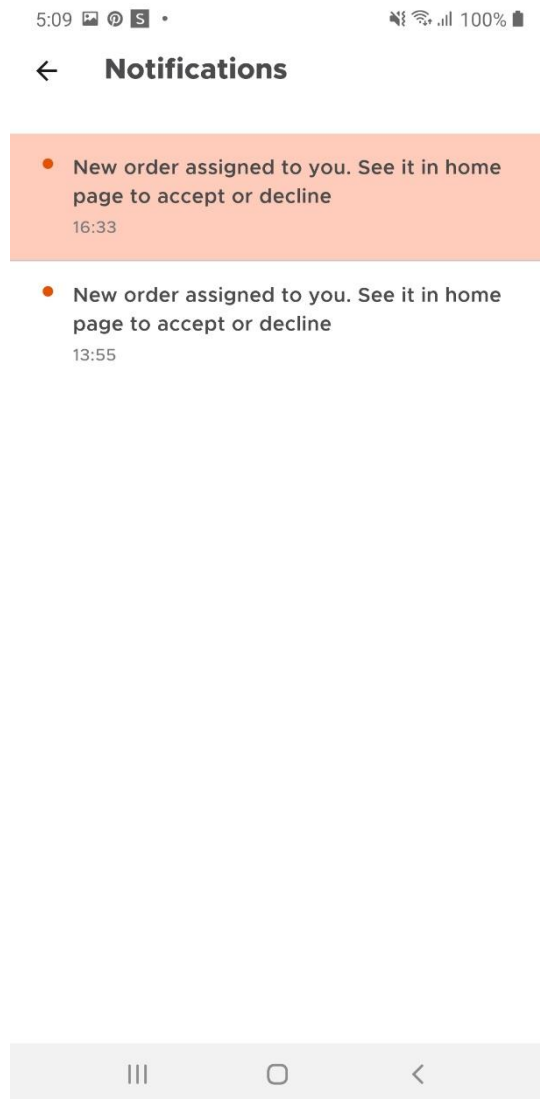


Figure 38 - Delivery Man Receiving Orders

- Change Password

Any kind of user will be able to modify their password by providing their old password, their new password, and a confirmation. It was decided to create validation for these three fields. For instance, an alert will show up if the previous password was wrong or if the new password and confirmation do not match.

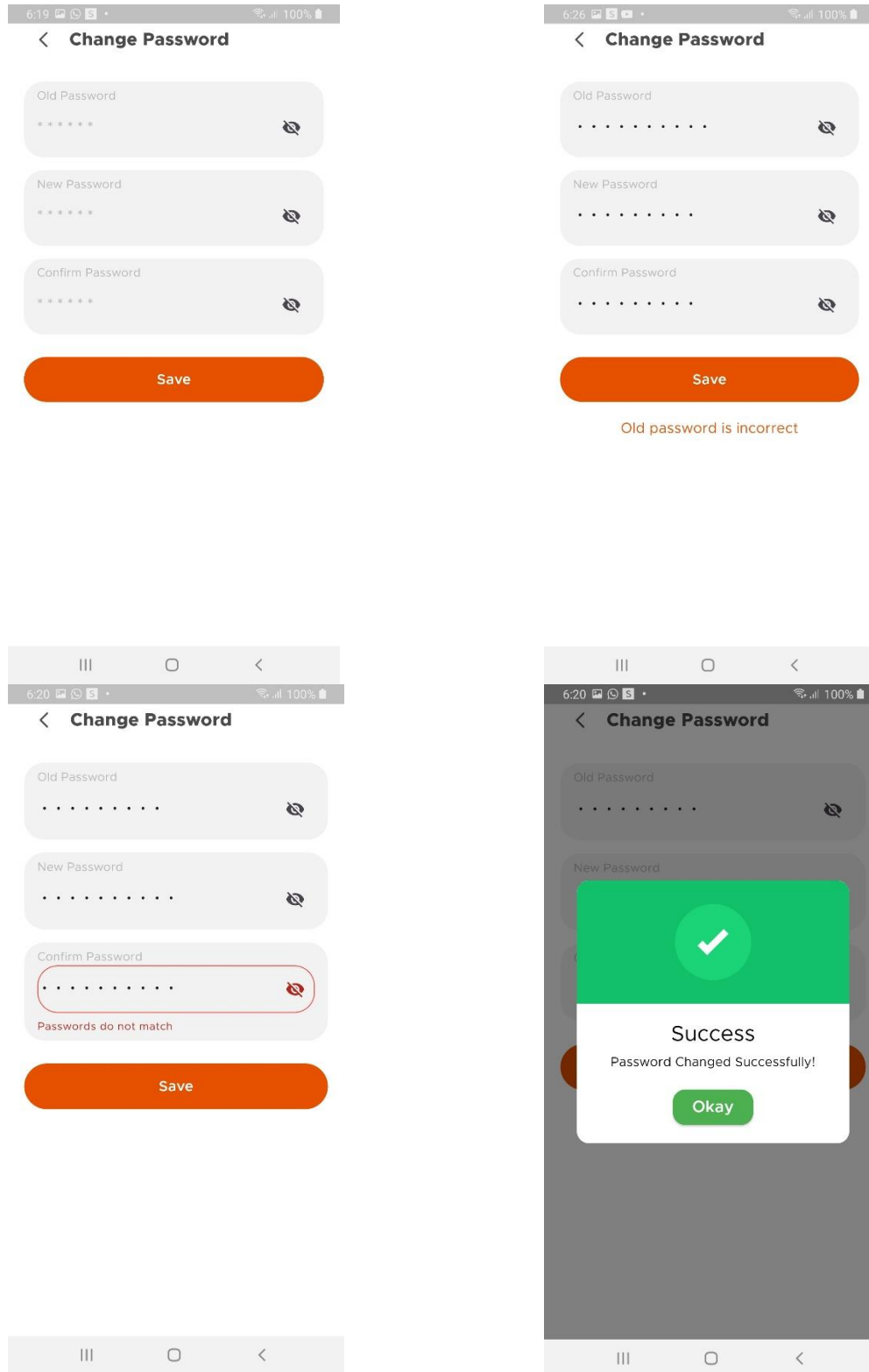


Figure 39 - Change Password

- Report User

The chef will have the ability to report a customer who doesn't receive their order, which would lower their customer points. The user's account will be suspended for three days if they receive three reports.

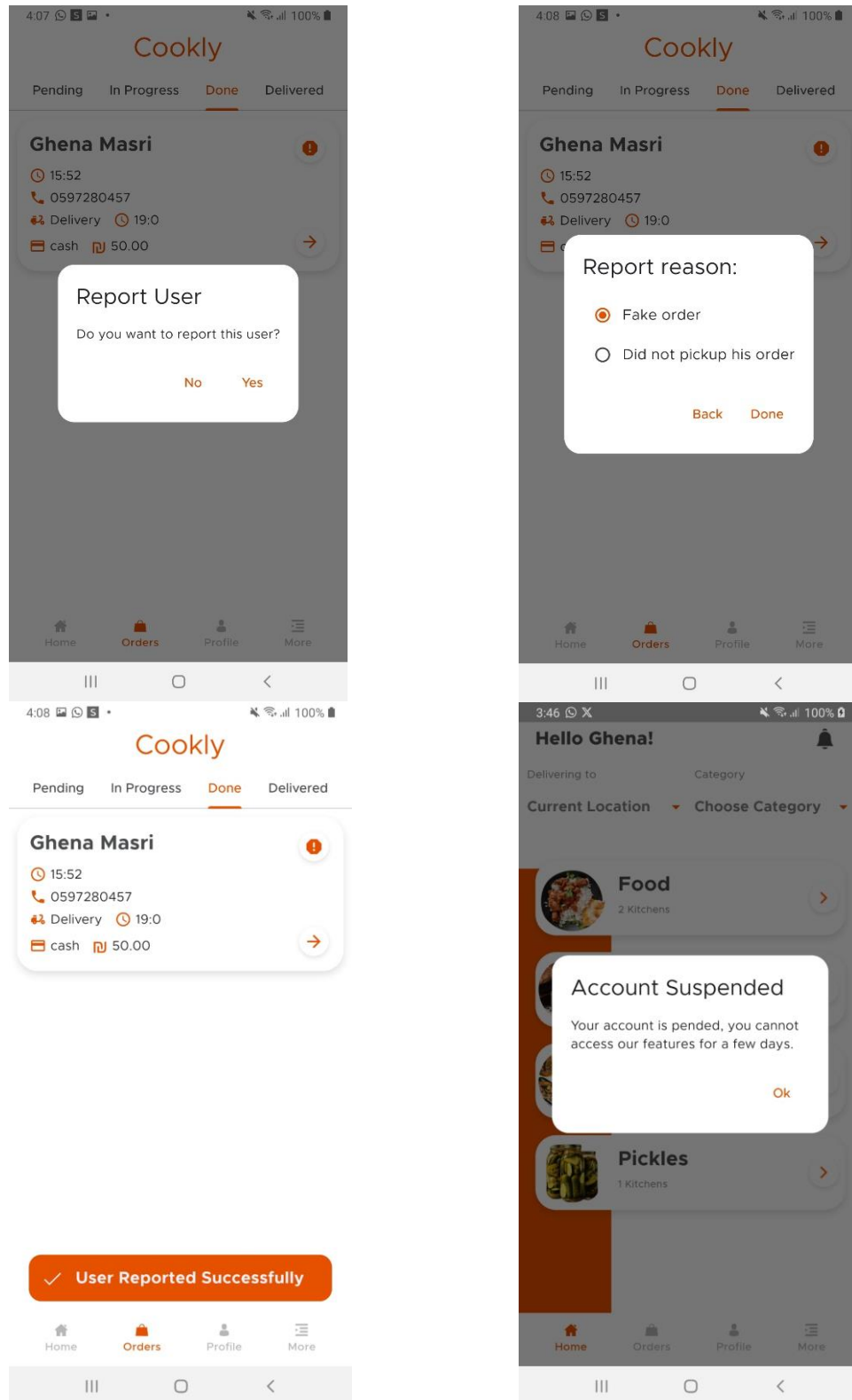


Figure 40 - Chef Reports a Customer

- Live Notifications

This section will cover the various types of notifications and their purposes.

The first kind occurs when an order is given to the chef. As you can see, the notification icon's number of notifications is displayed at the top. When the chef clicks on the notification, this number will drop and the notification's color will turn white.

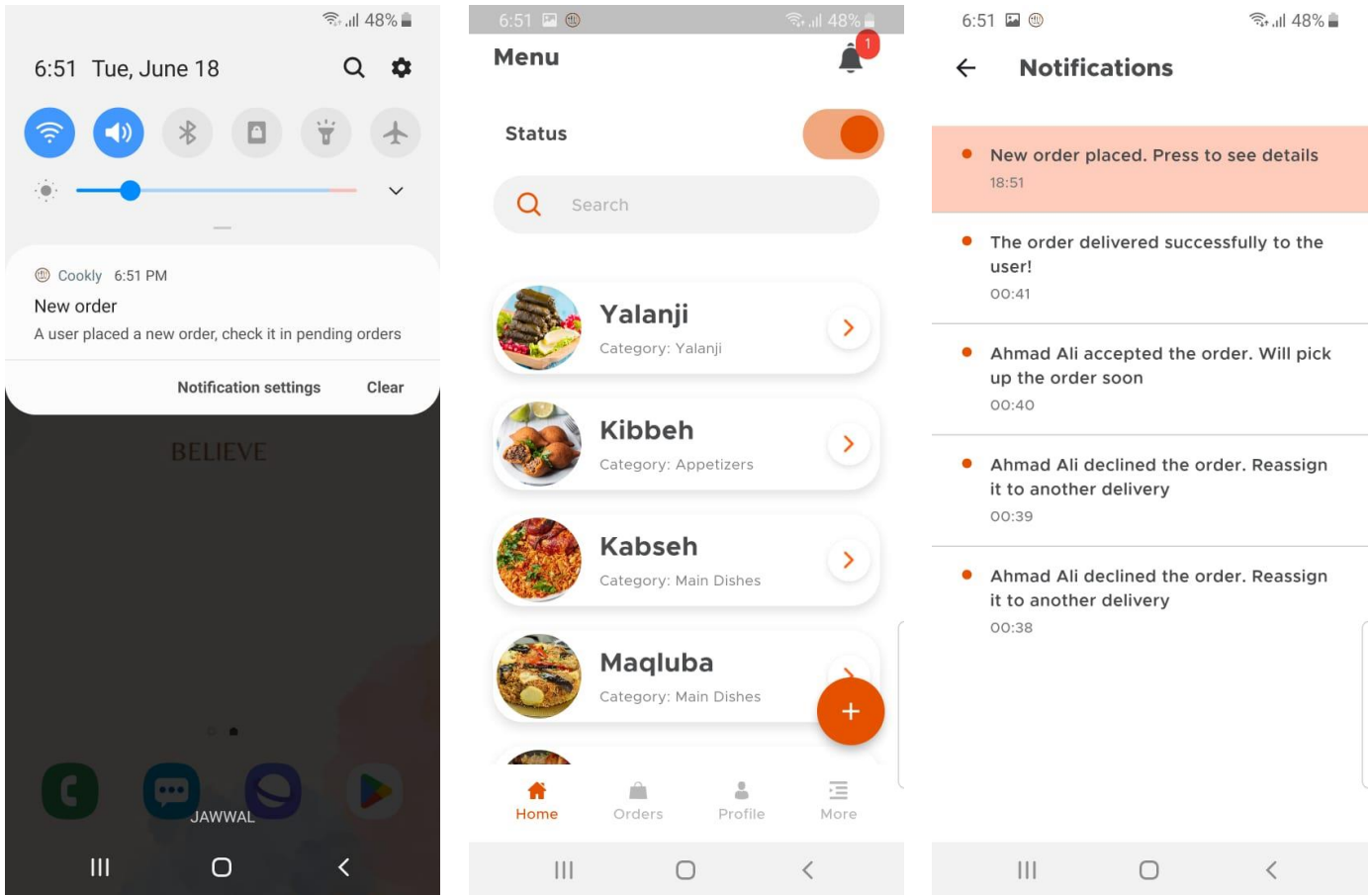


Figure 41 - Notifications 1

The second type of notifications, is the notification that will be sent to the user when their order status changes. The consumer will be informed right away if the chef or the delivery person modifies the order's status.

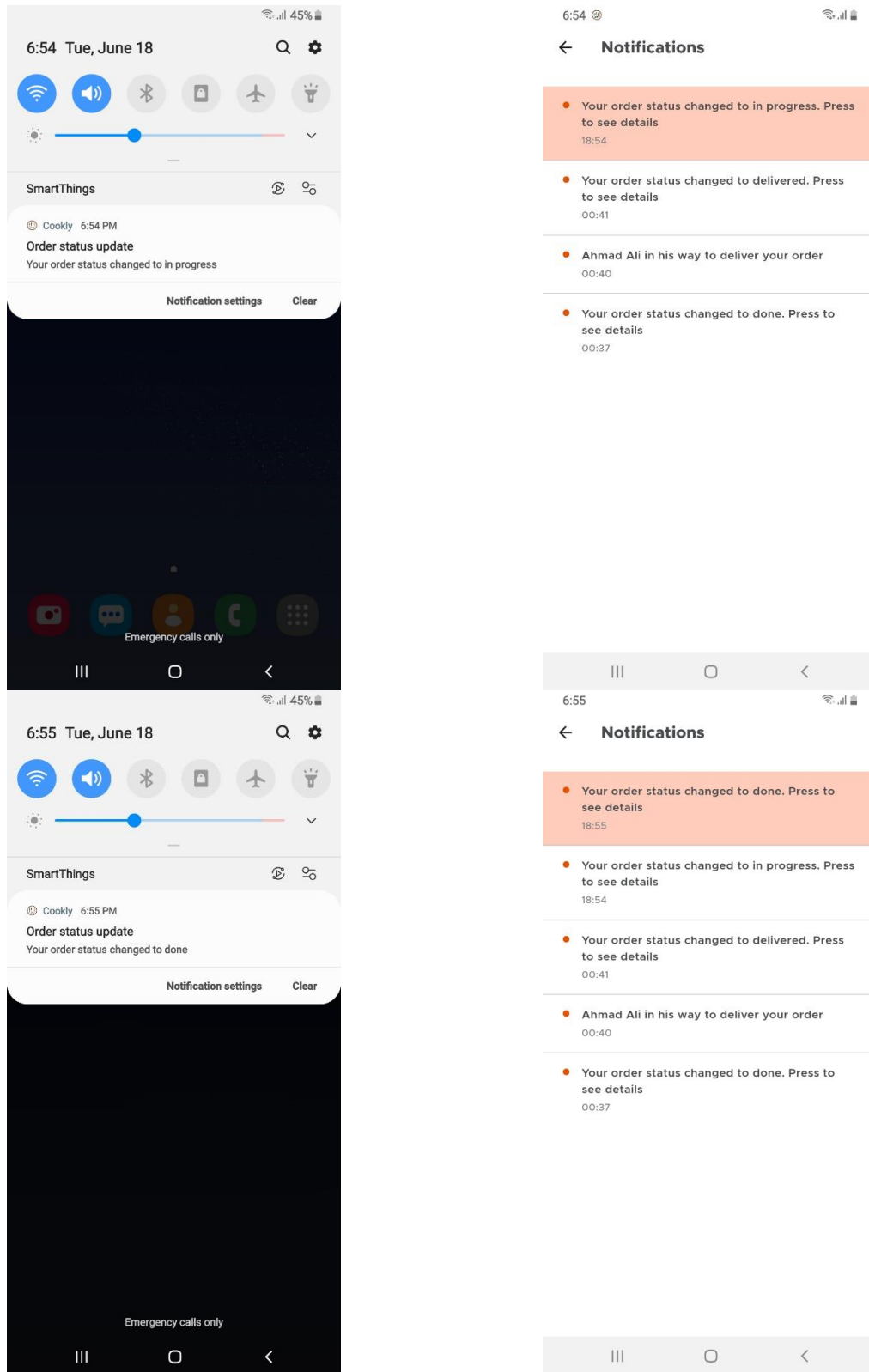


Figure 42 - Notifications 2

The third type is the one that a delivery man receives when the chef assigns them a new order.

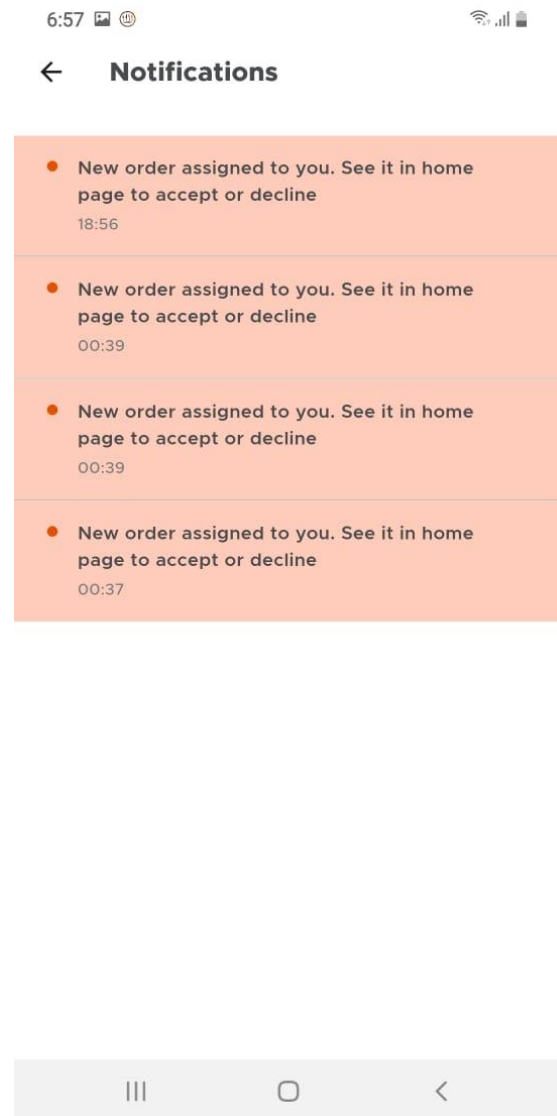
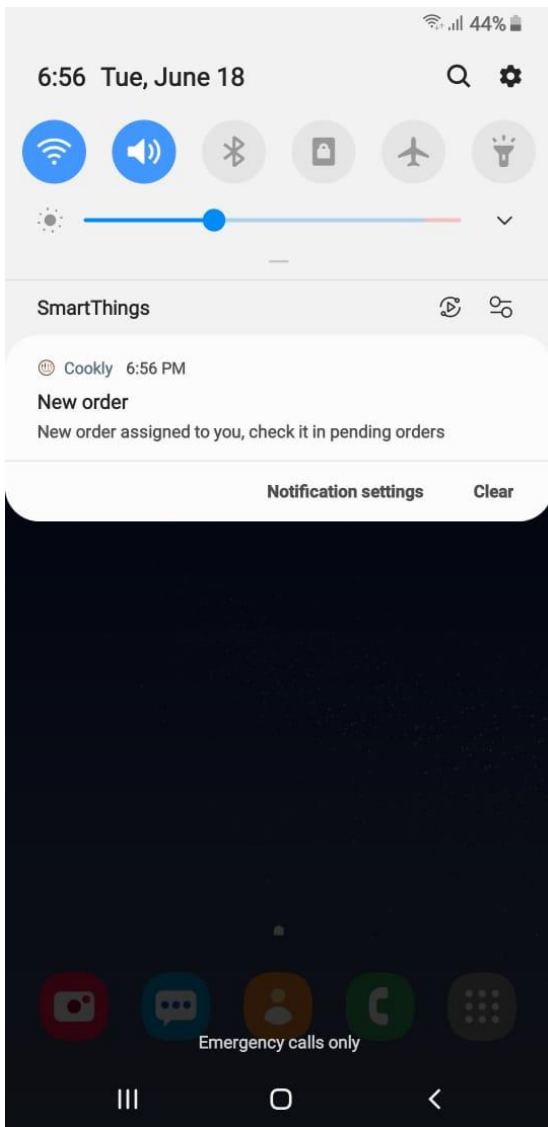


Figure 43 - Notifications 3

In order to reassign the order to a different deliveryman, the chef gets the fourth type when the deliveryman declines it.

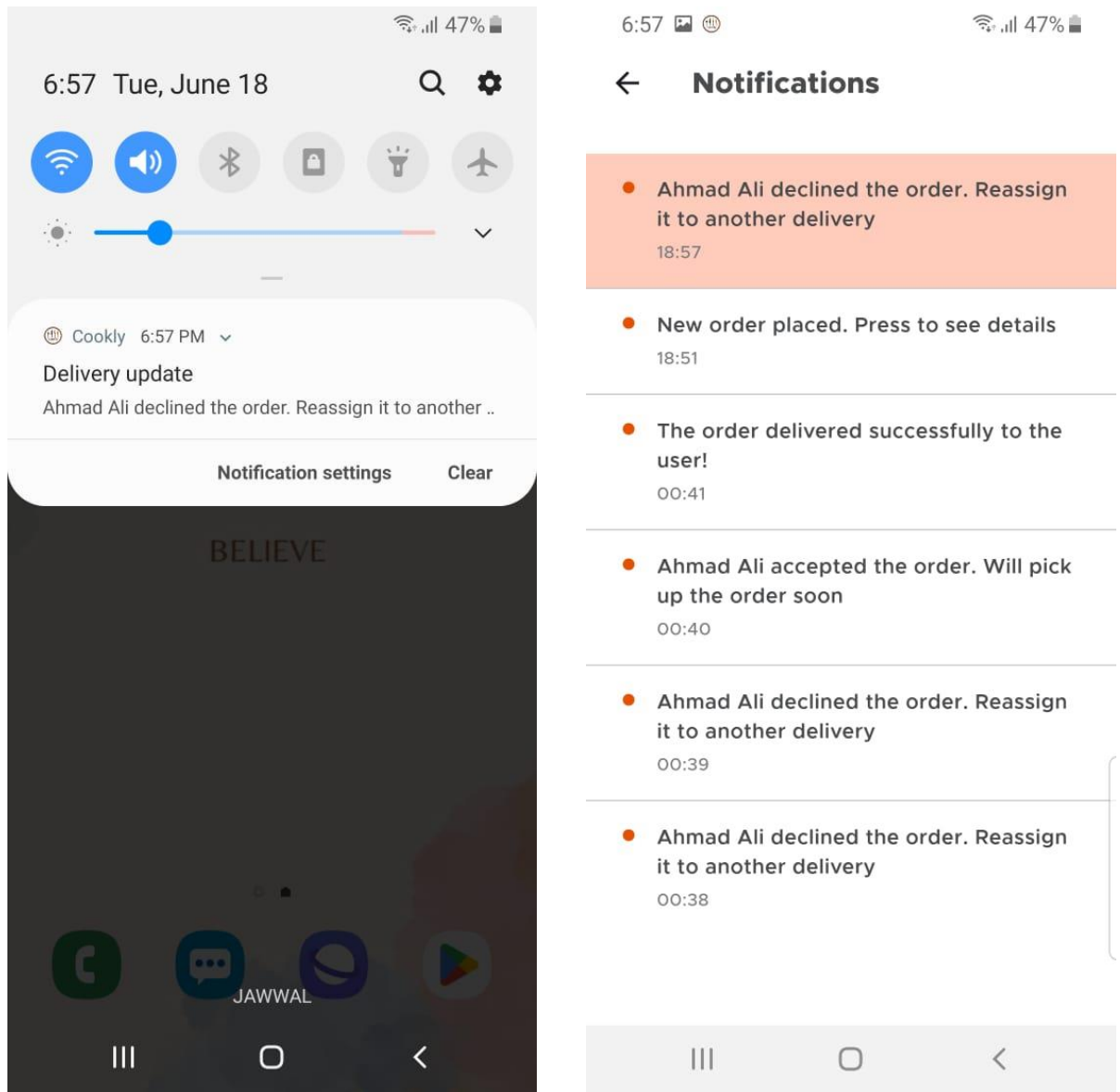


Figure 44 - Notifications 4

The section where the delivery person accepts the order will be highlighted by this type. When the deliveryman accepts the order and is on his way to pick it up, the chef will be notified. Additionally, the customer will be notified that their order is on its way.

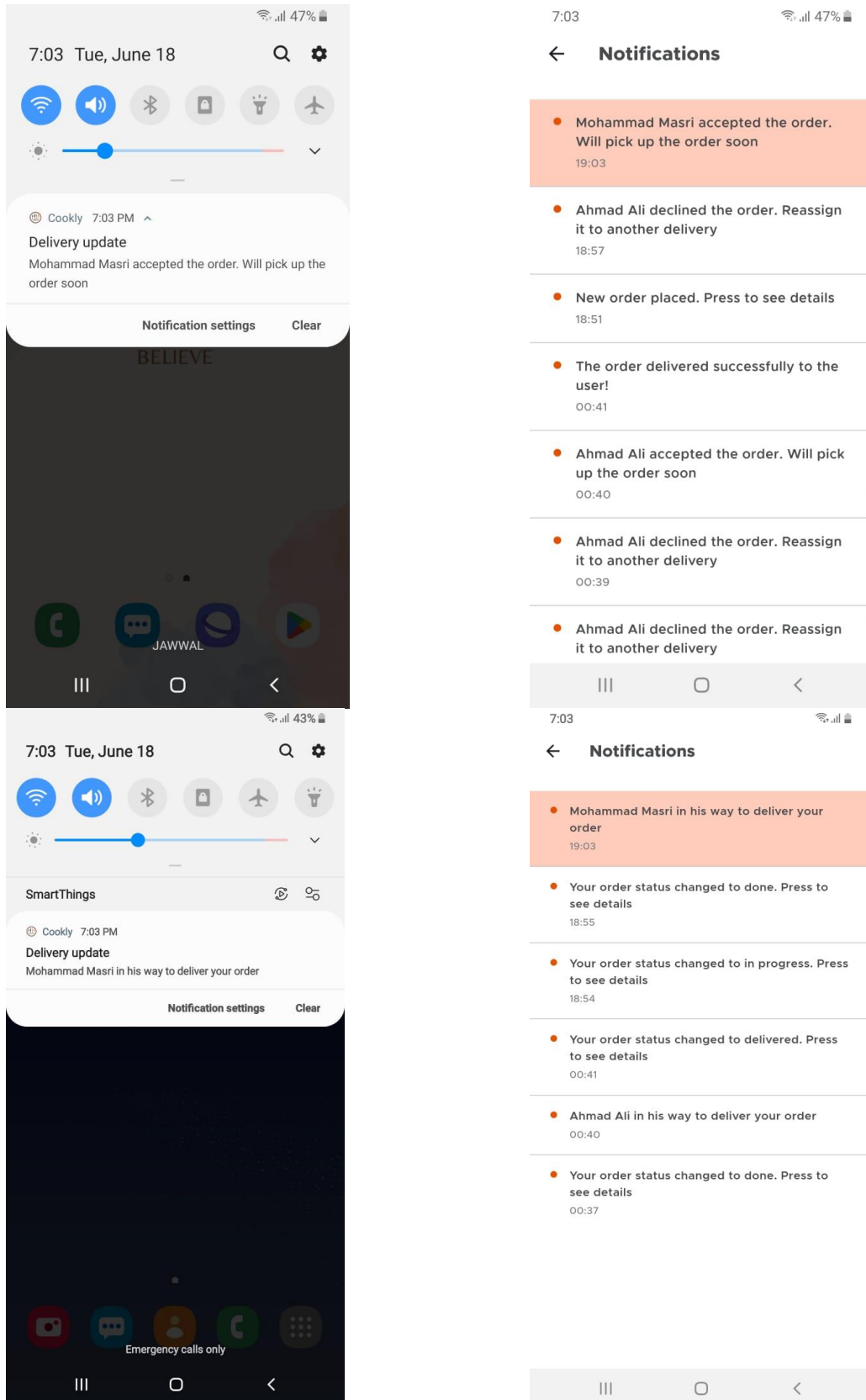


Figure 45 - Notifications 5

When the deliveryman delivered the order successfully both the customer and the chef will be notified.

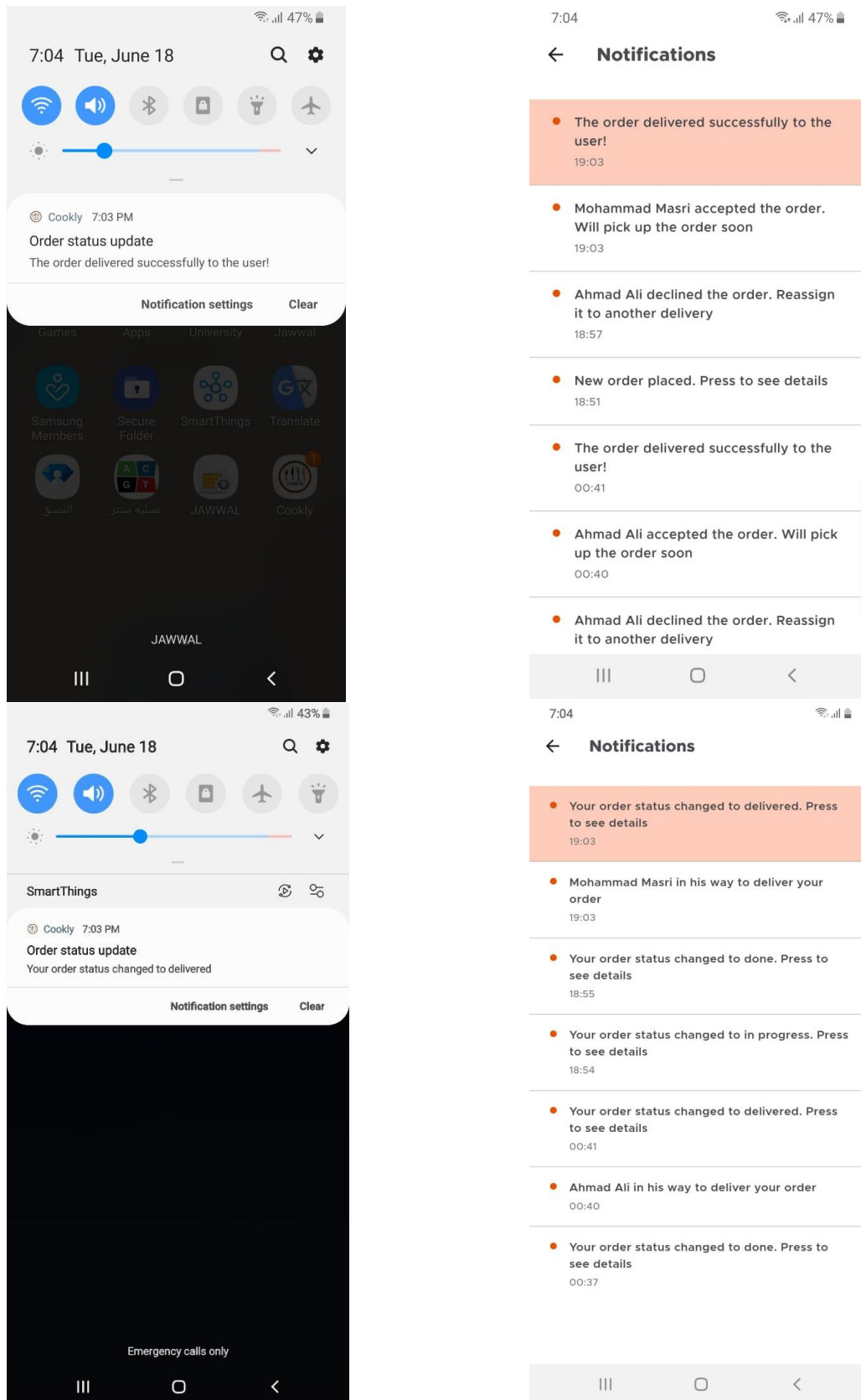


Figure 46 - Notifications 6

The last type is the one that the admin receives when a chef activates their subscription.

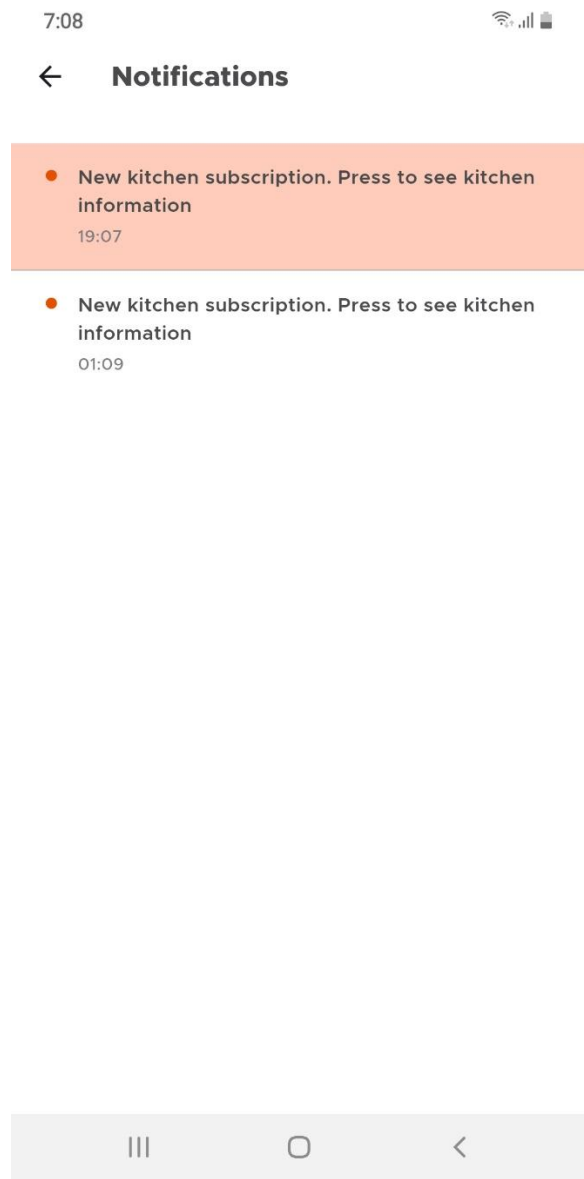
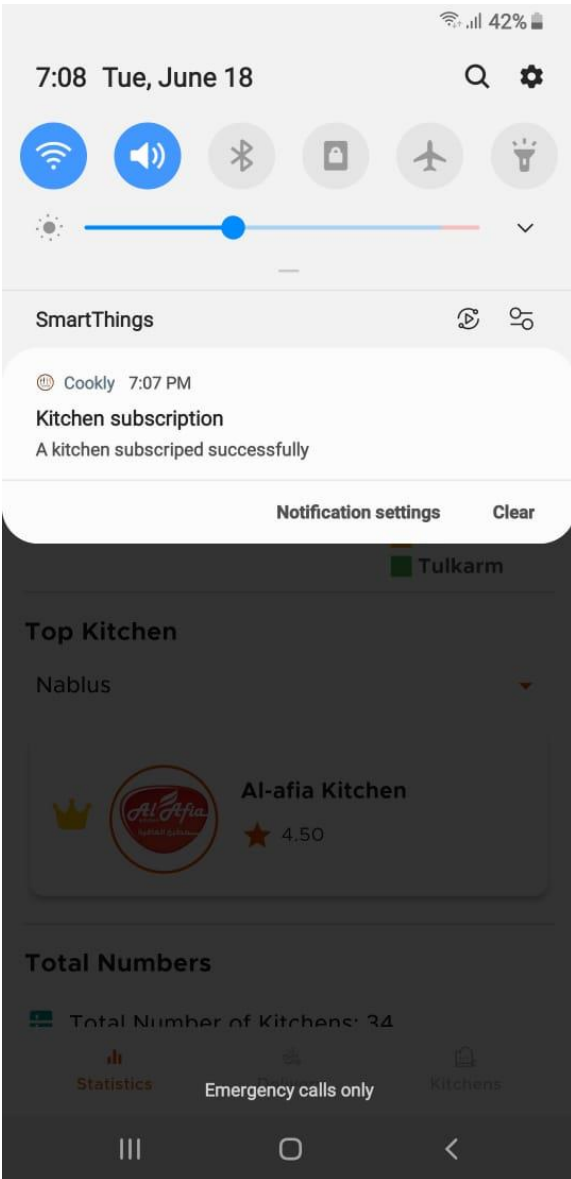


Figure 47 - Notifications 7

- Special Orders

Customers will see an inbox floating button if the kitchen accepts special orders. After speaking with the chef, the consumer may adjust their order using the chat window that appears.

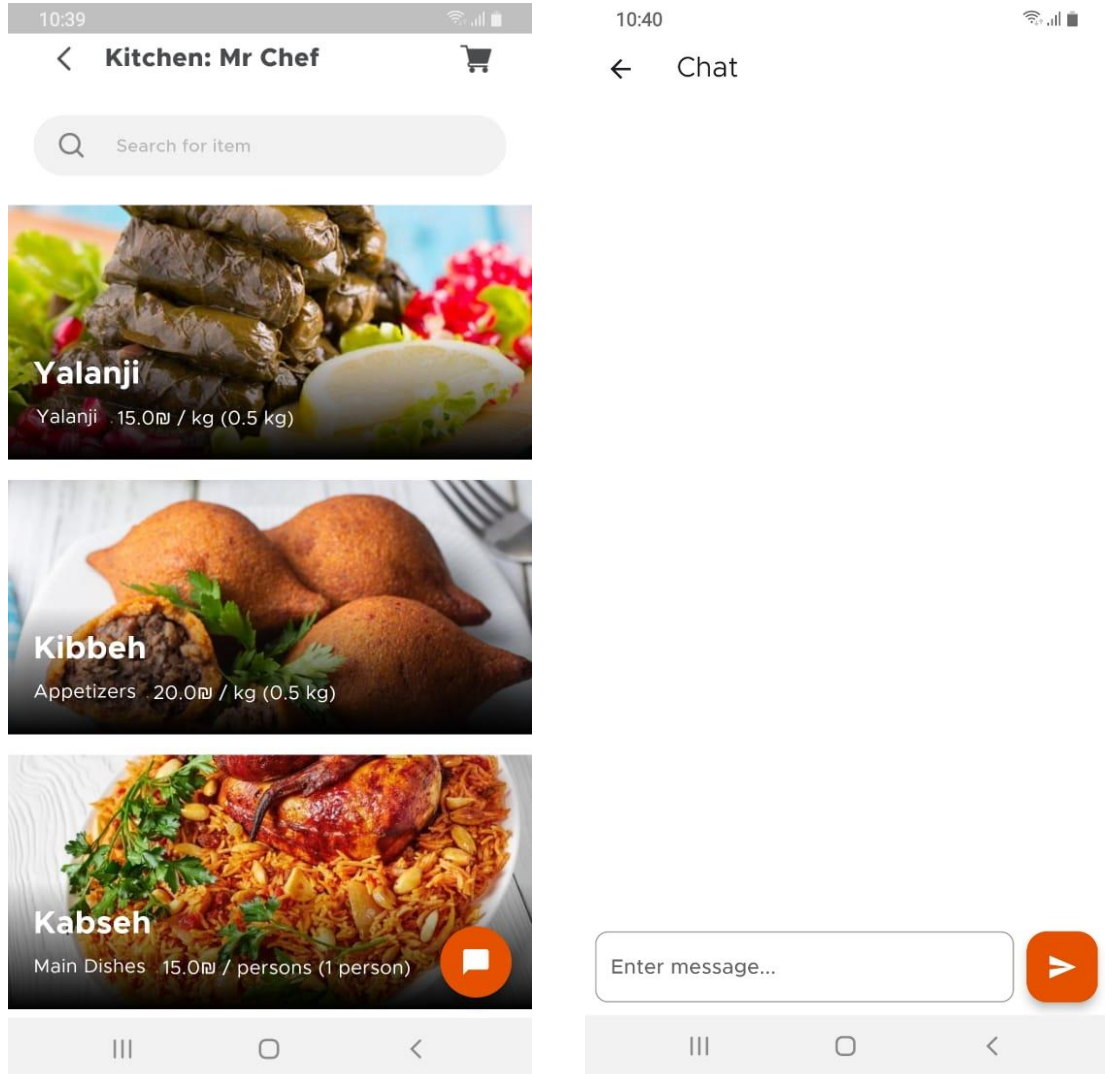


Figure 48 - Special Order 1

The chef will get notified once the customer reaches out to place their special order. It's a real time 2-way communication method.

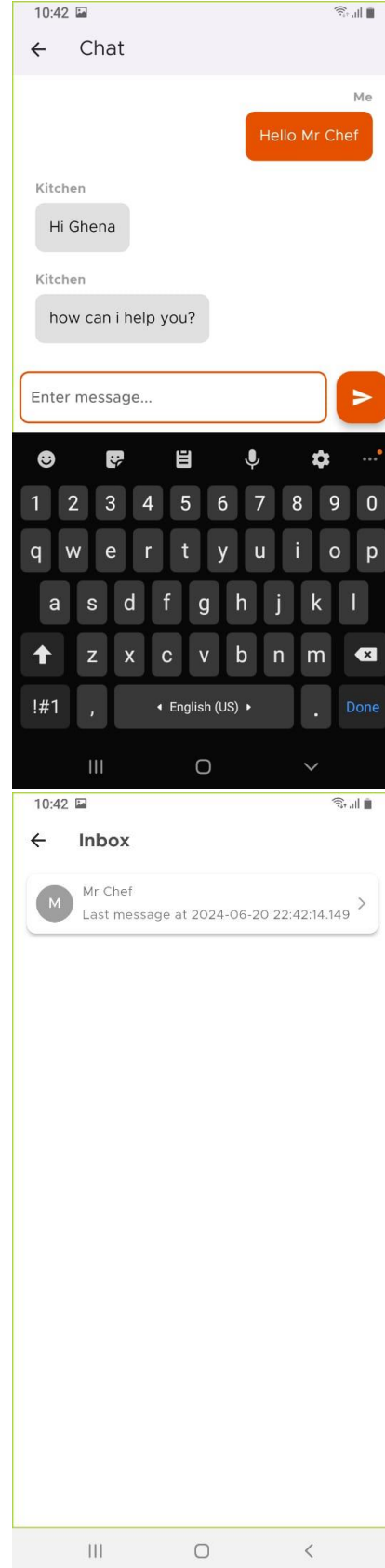
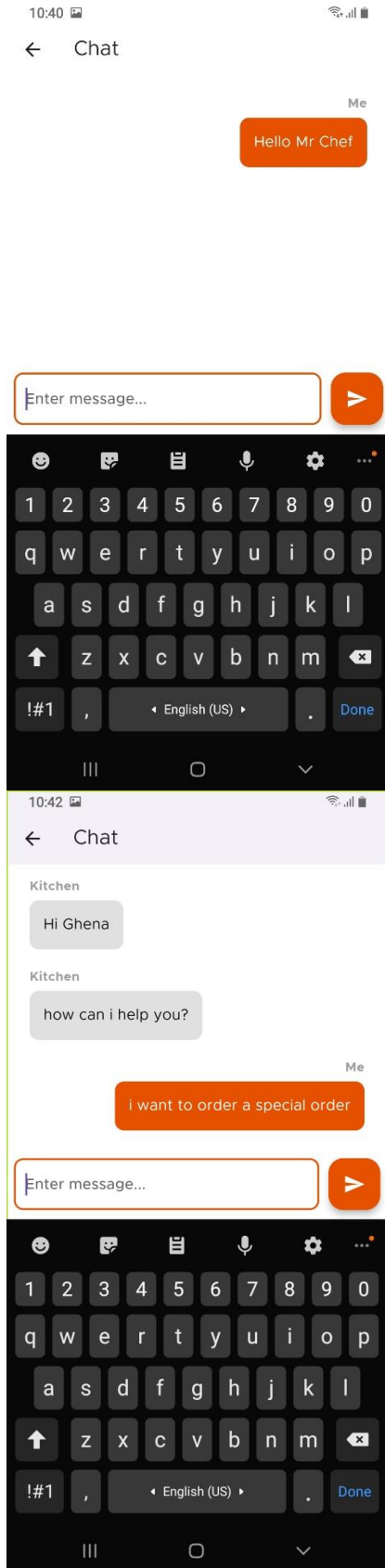


Figure 49 - Special Order 2

Here is the real time notification that the chef will receive when a customers want to place a special order and how the inbox list appears.

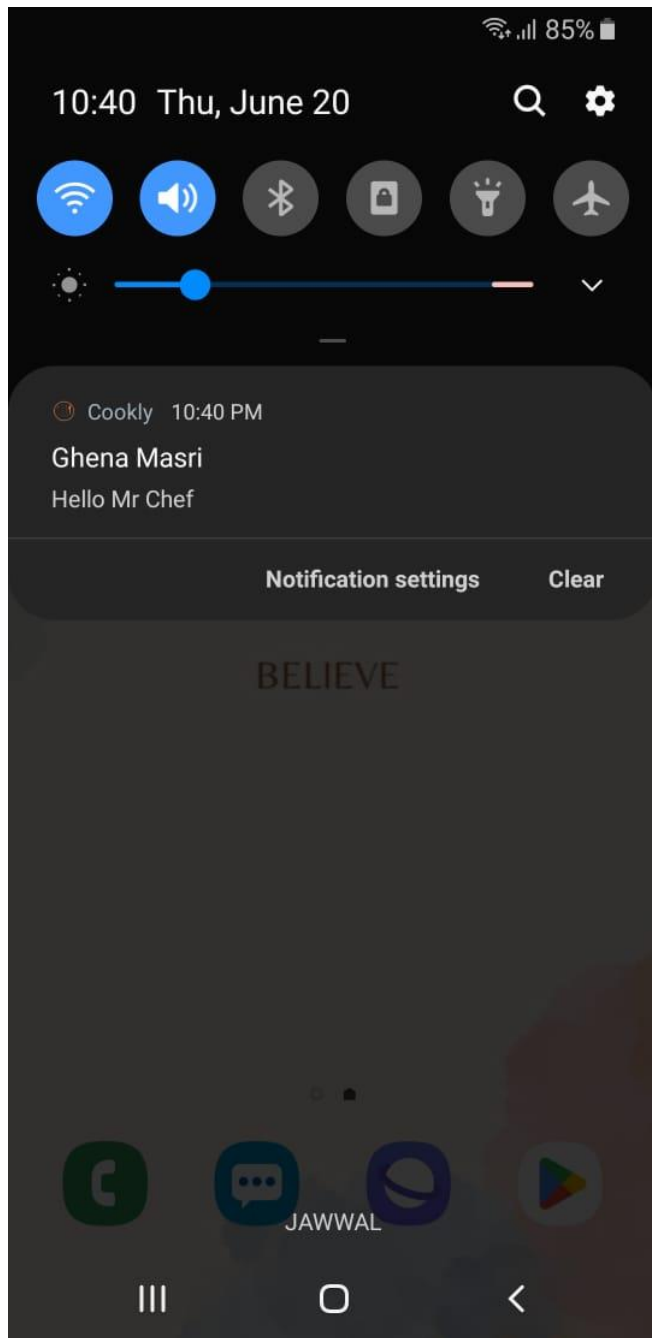


Figure 50 - Special Order 3

And this is the chat from the chef side.

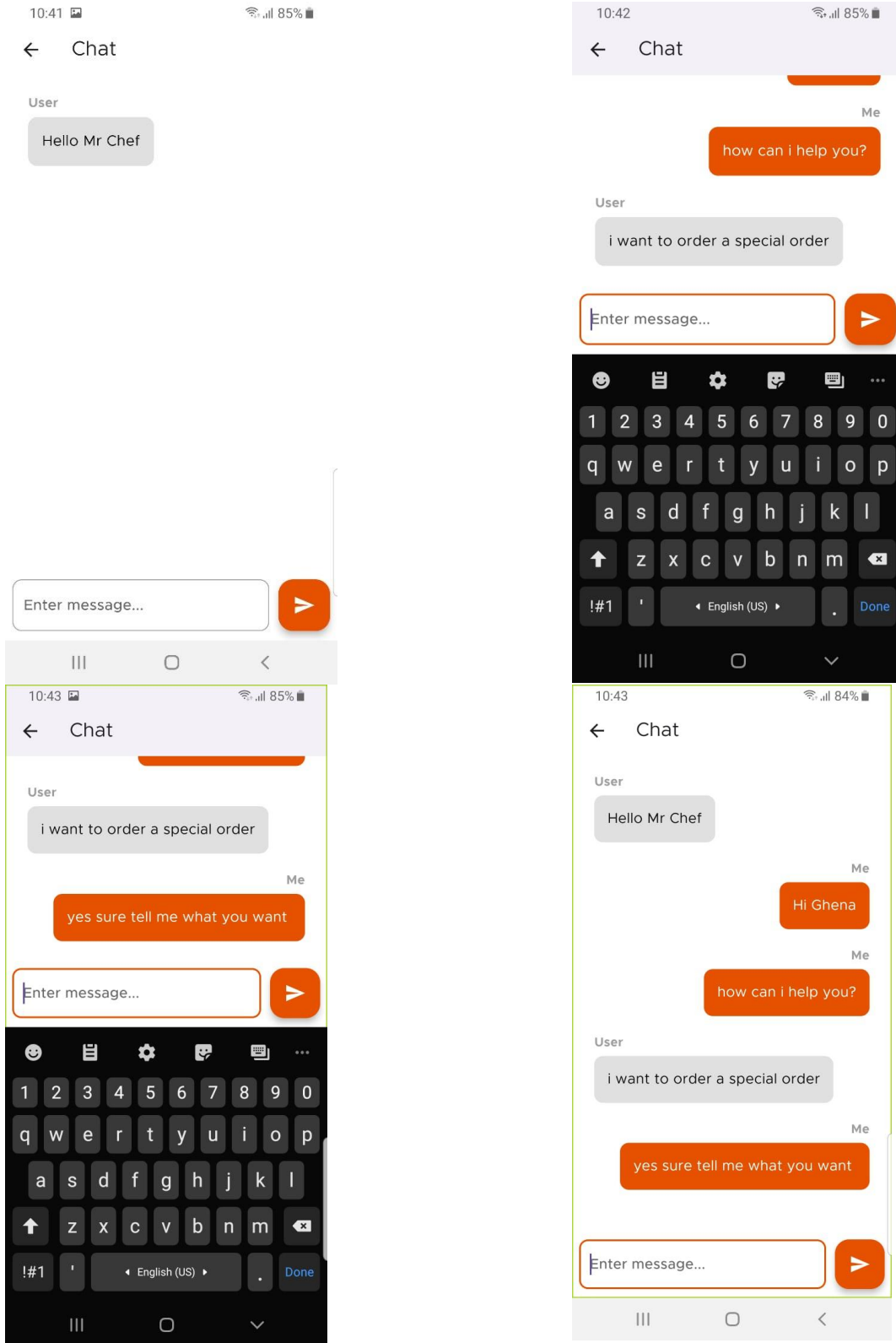


Figure 51 - Special Order 4

○ Reset Password

If any of the users forgot their password, they can reset the password by using the forget password feature.

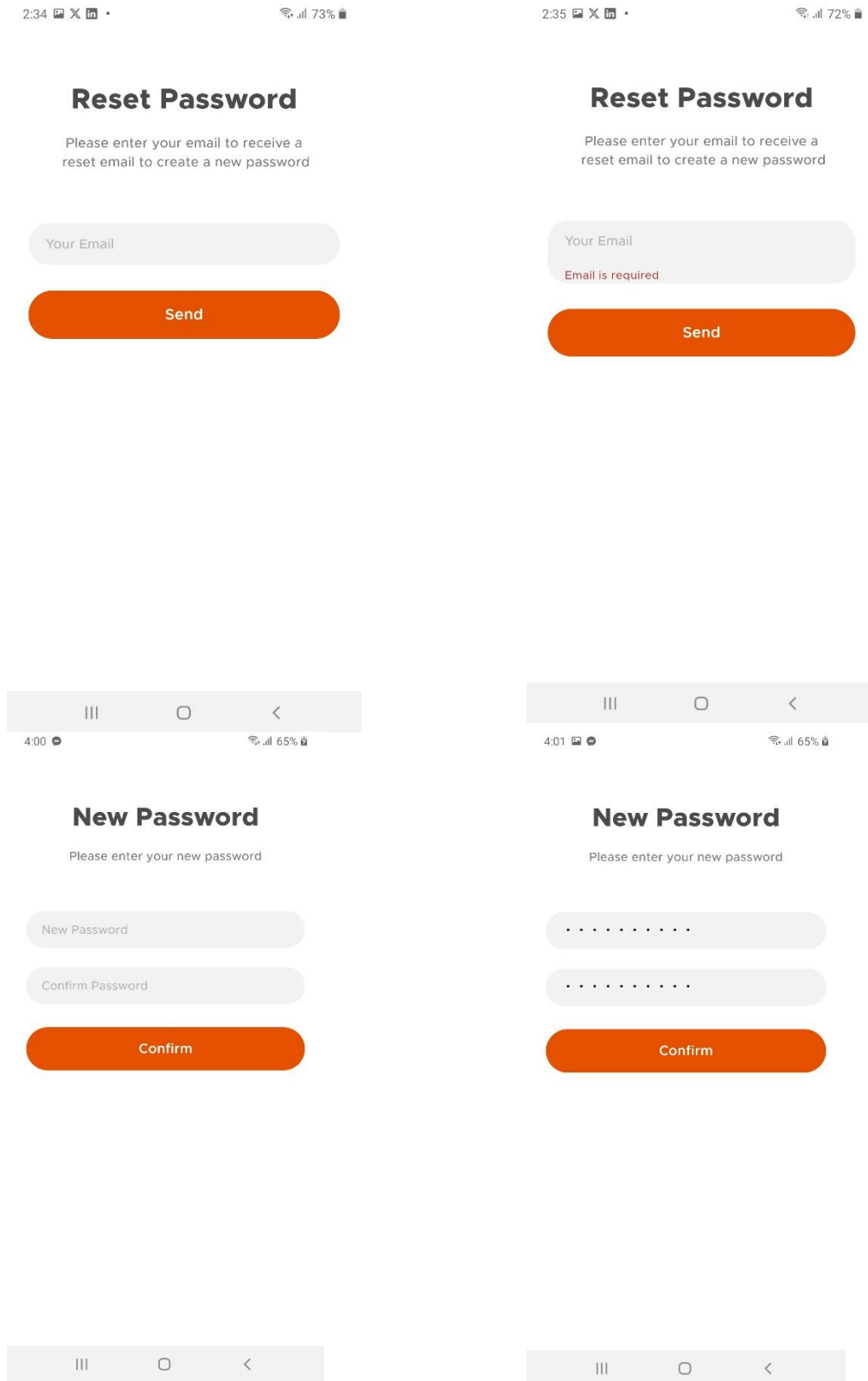


Figure 52 - Reset Password
65

- More Page

There are more pages for the customer and the cook. The chef can use this page to access the about us, inbox, and subscription page. They can log out as well. The customer's sole navigation options are the about us and inbox pages, and they can log out.

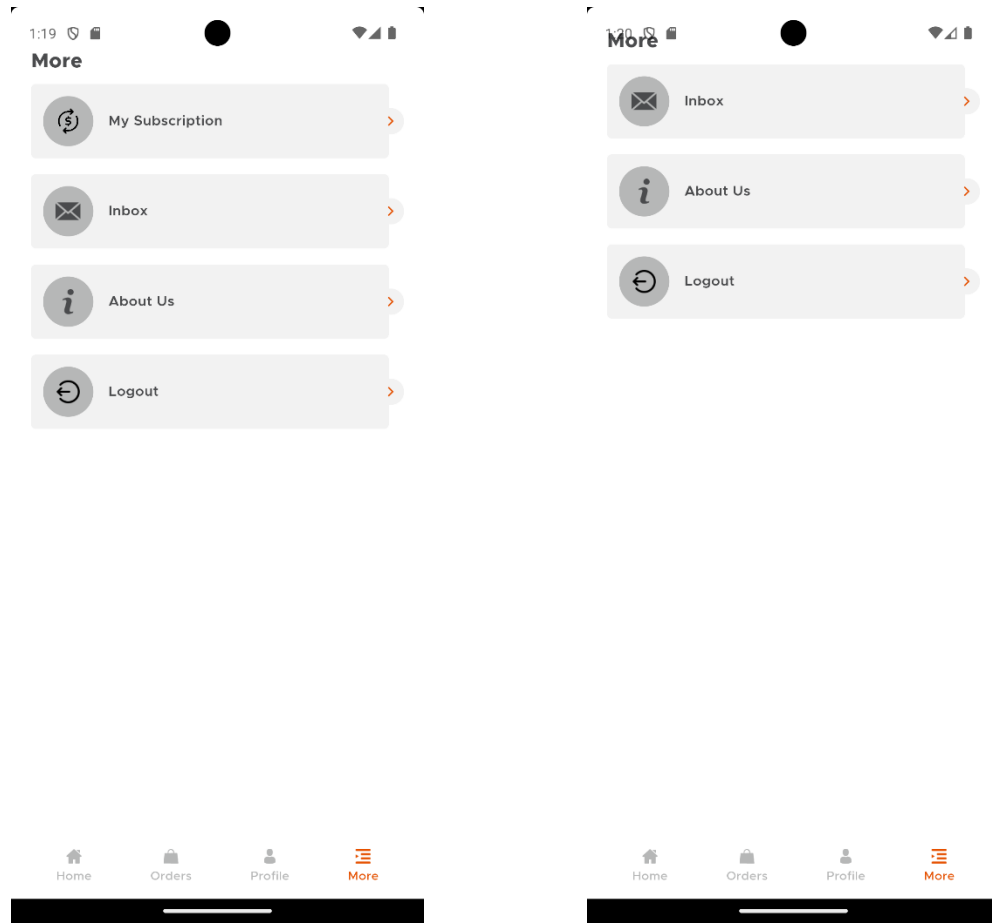


Figure 53 - More Page

- About Us

This page contains the contact details and a brief description of our app.

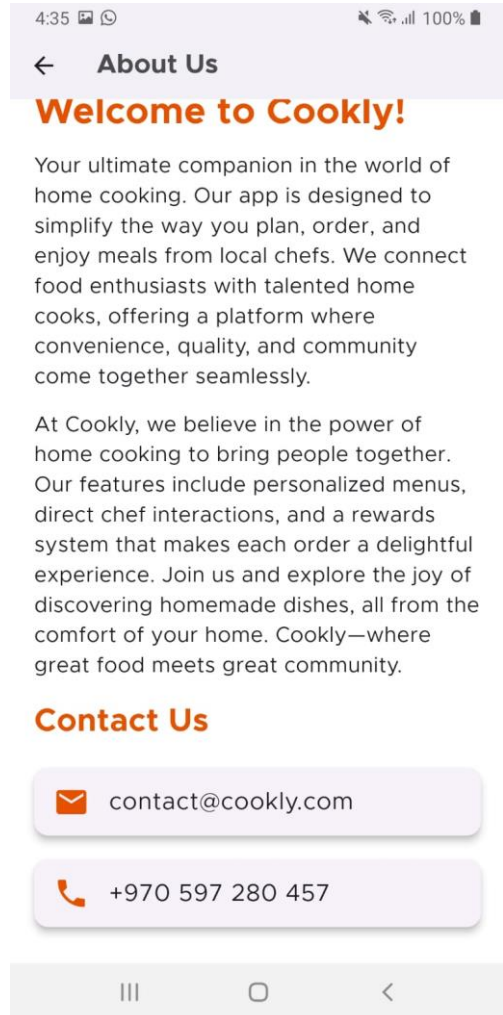


Figure 54 - About Us

3.3.2 Website

Our website uses the same APIs to build all of its pages, and it includes all of the features and user interfaces of the mobile application.

- Welcome and Login Pages:



Figure 55 - Website Welcome Page

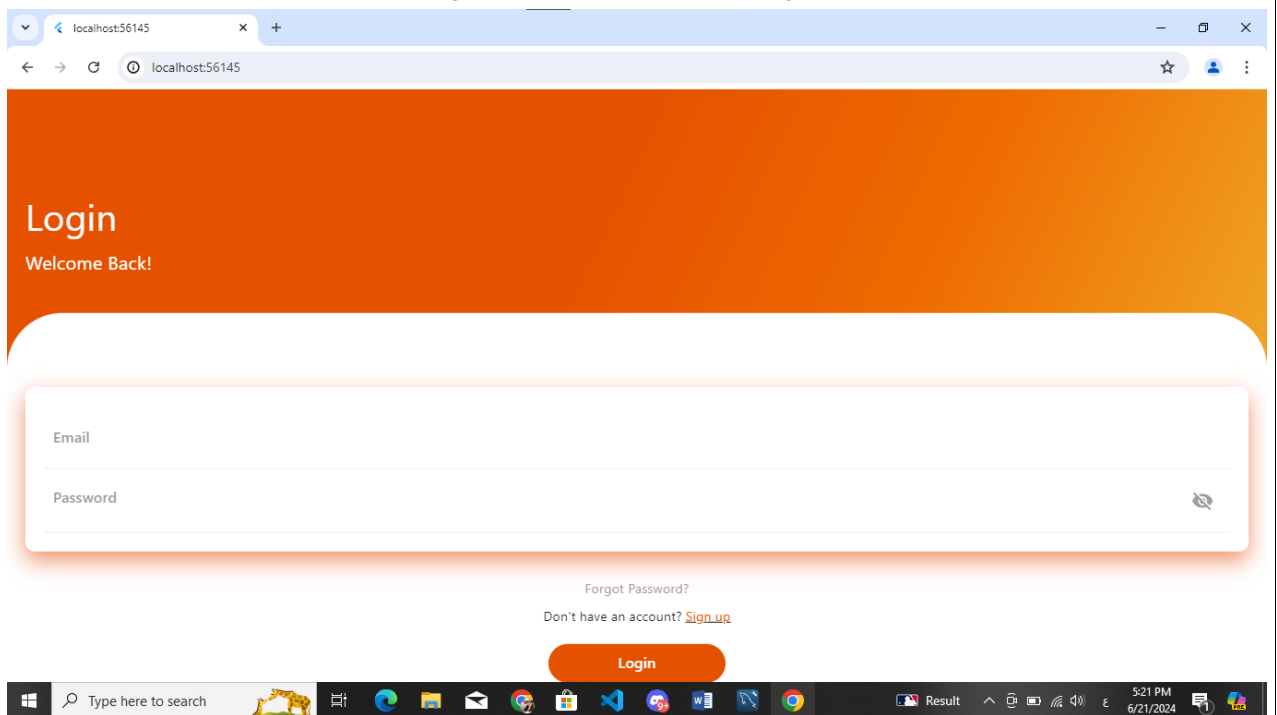


Figure 56 - Website Login Page

○ Sign Up Pages:

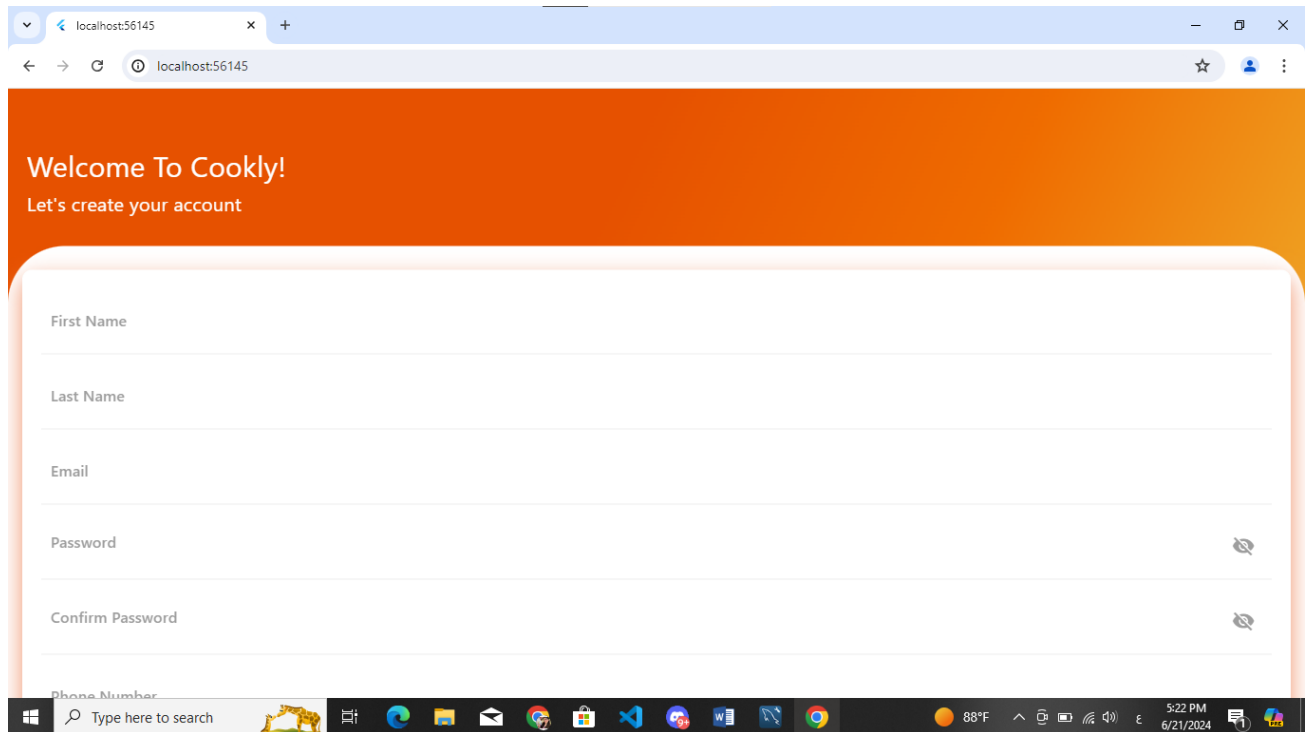
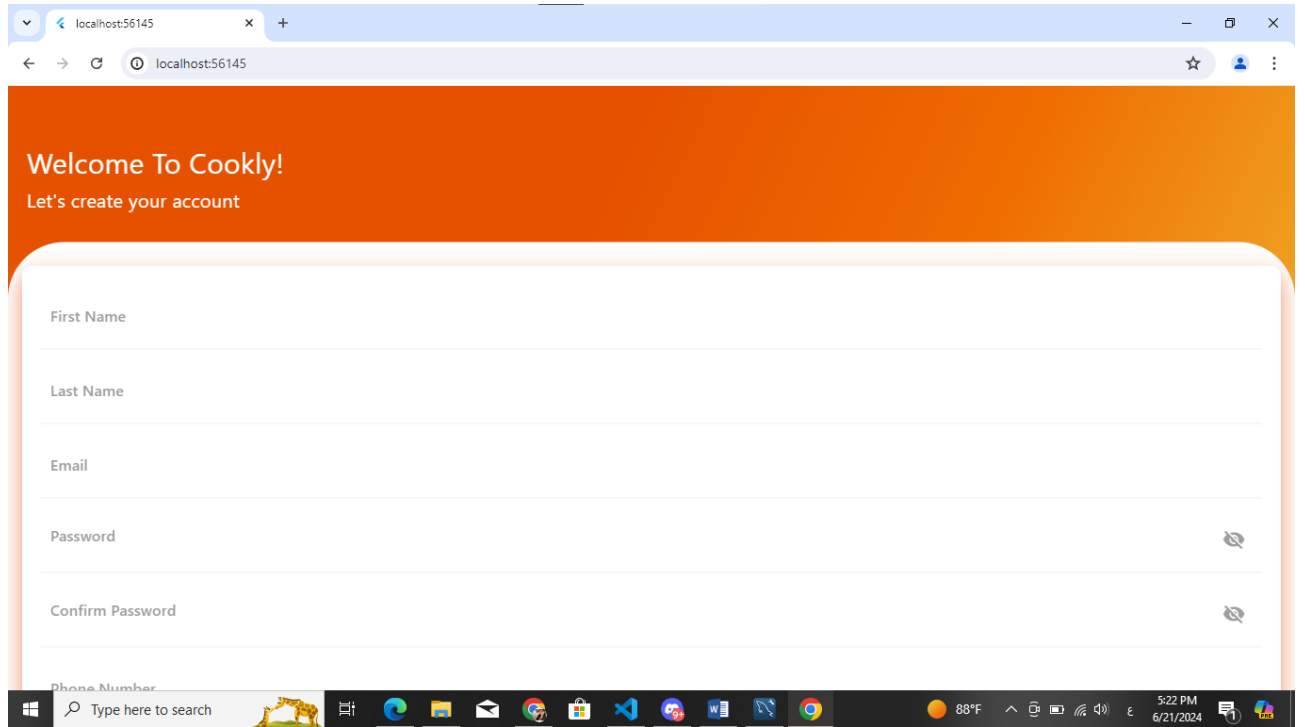


Figure 57 - Sign Up Pages

Admin Website Pages

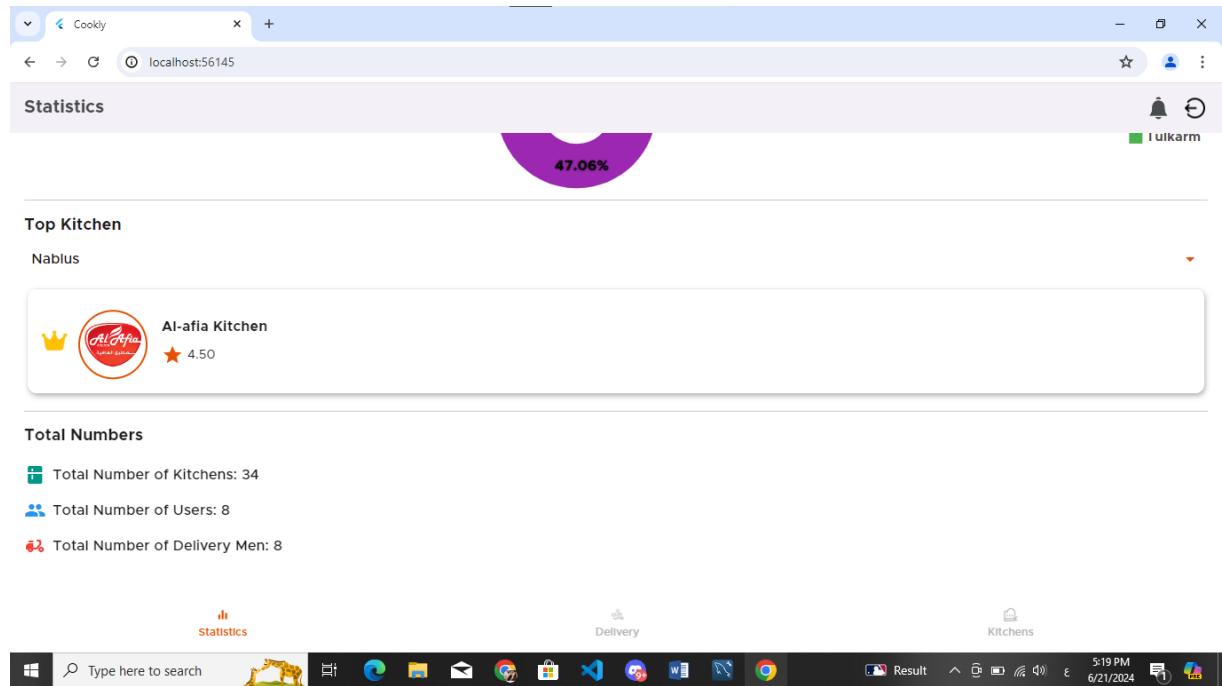
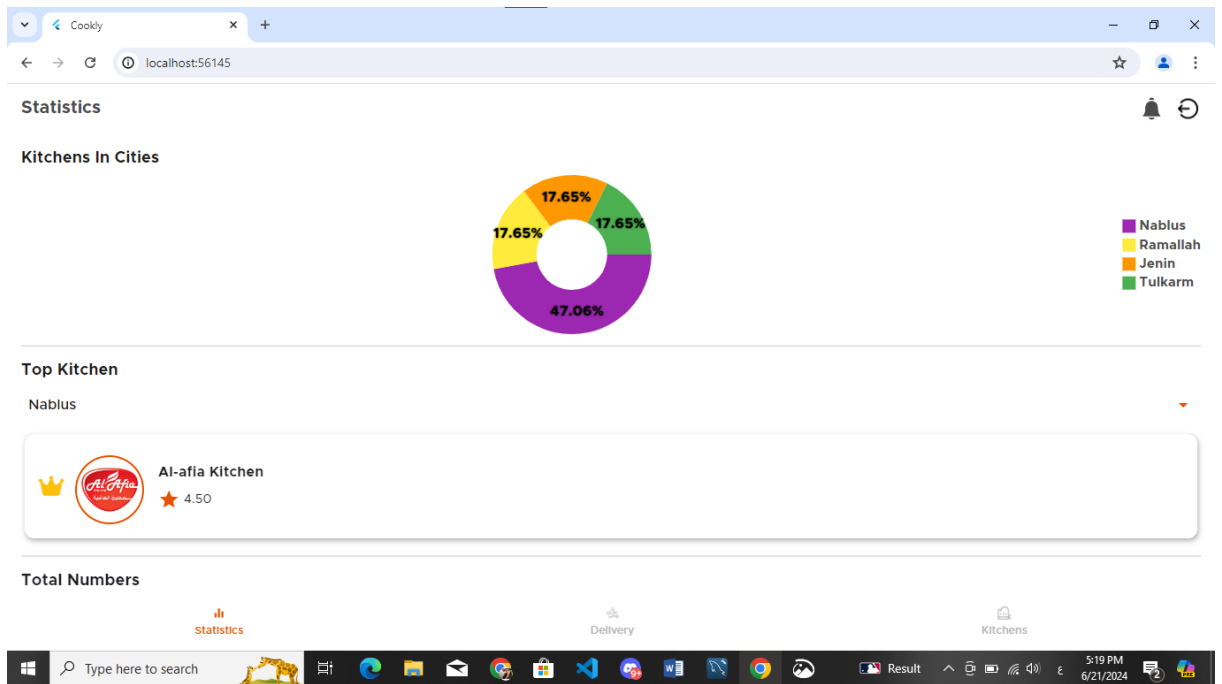


Figure 58 - Admin Pages 1

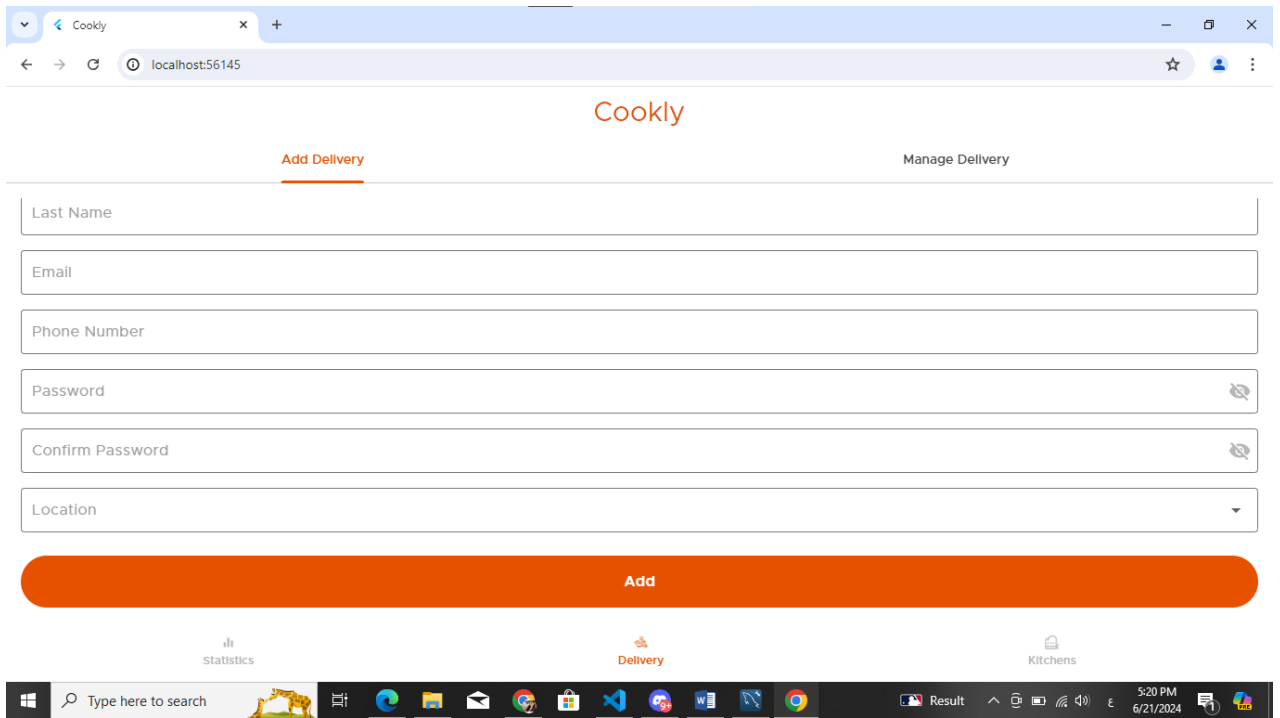
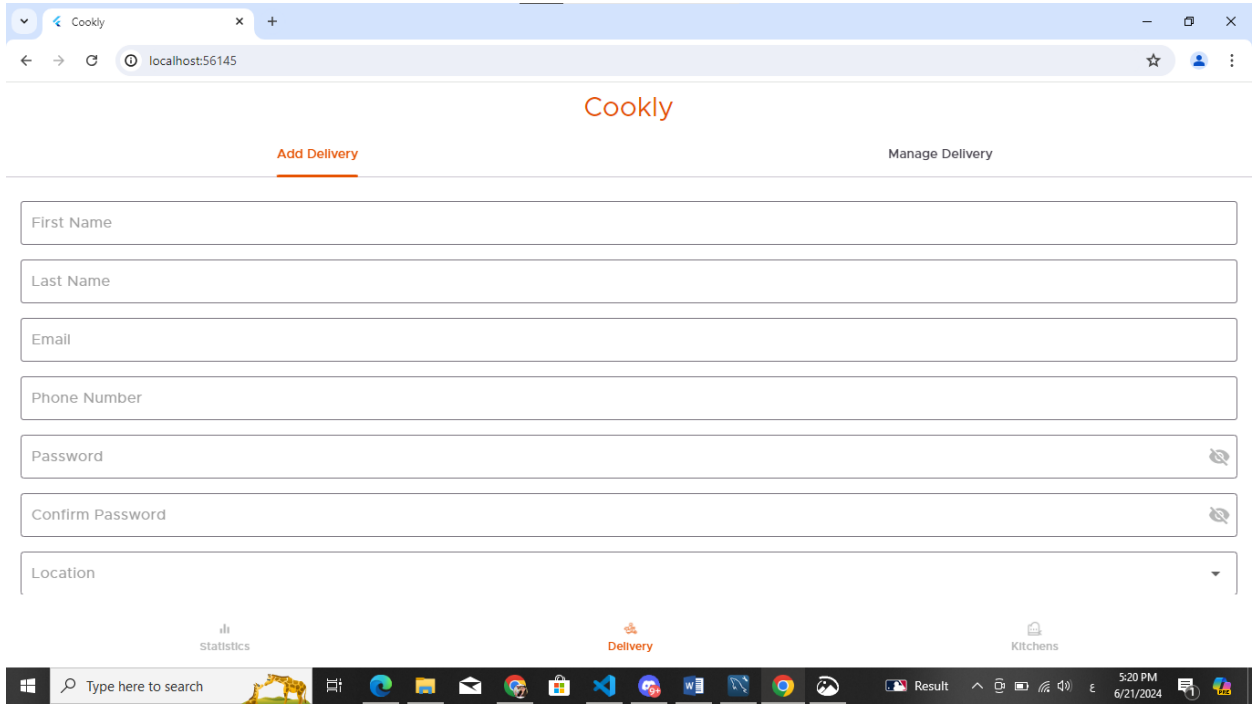


Figure 59 - Admin Pages 2

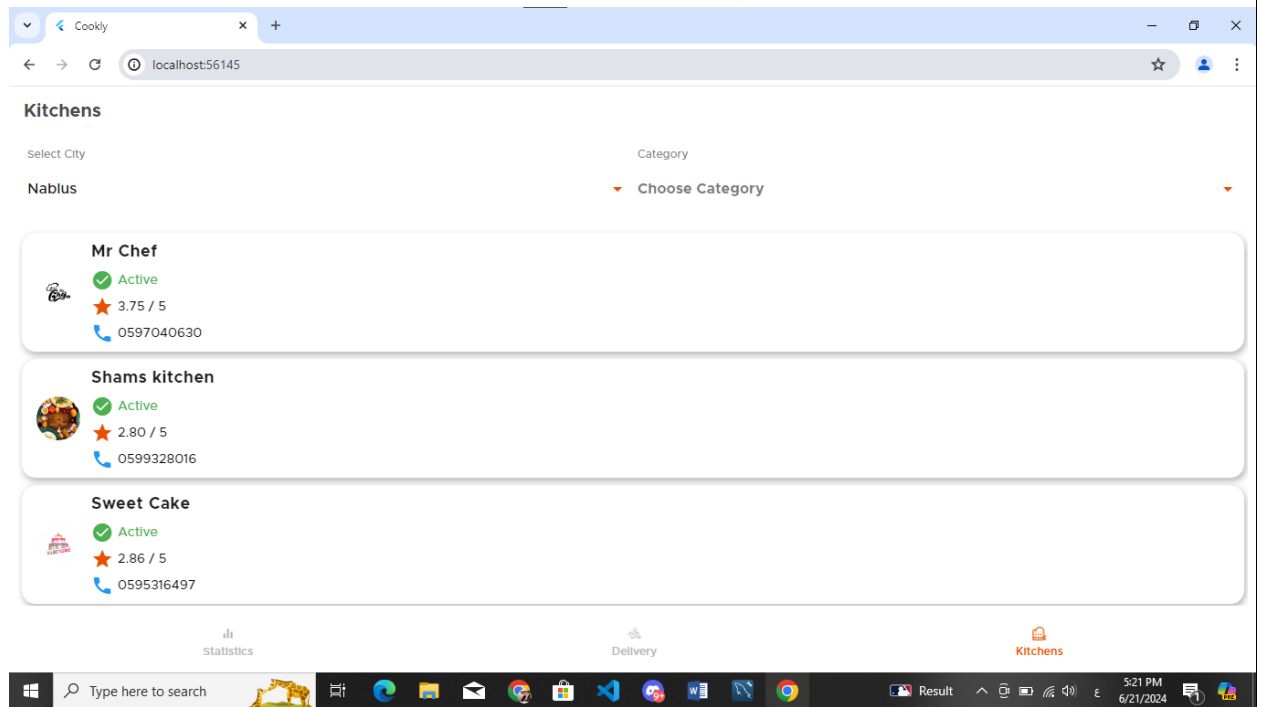
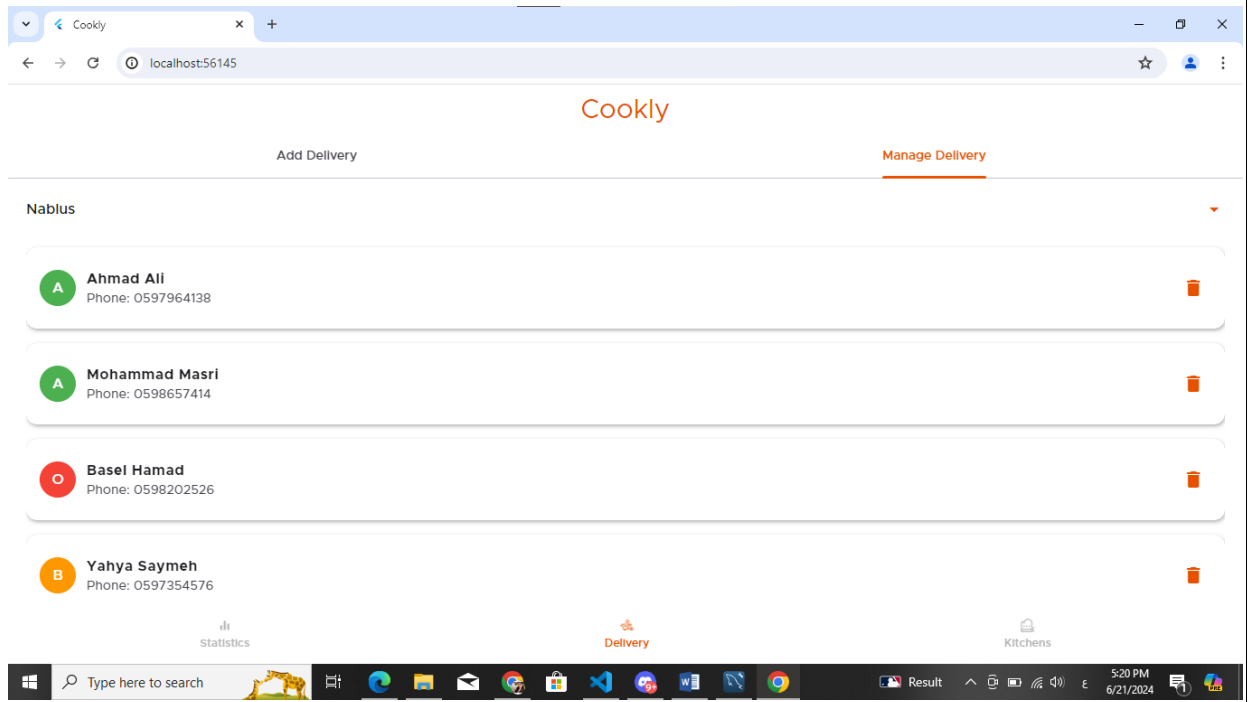


Figure 60 - Admin Pages 3

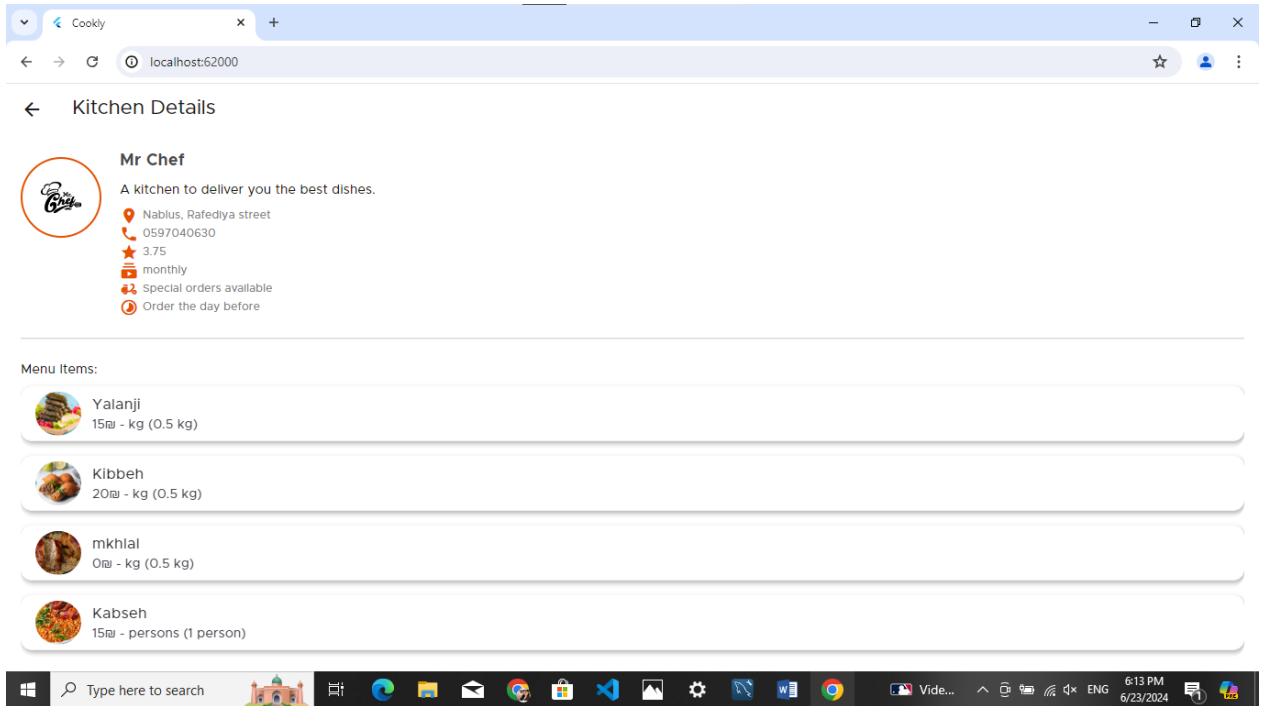


Figure 61 - Admin Pages 4

o Customer (Normal User) Pages

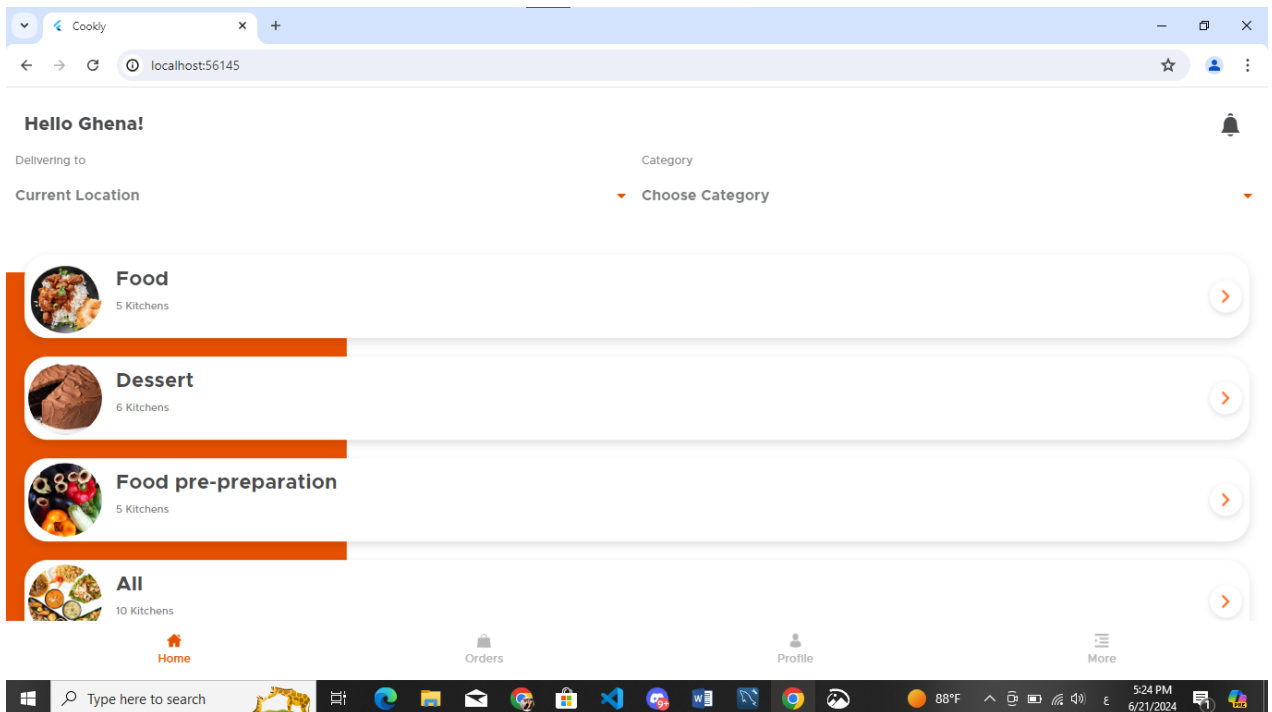


Figure 62 - User Pages 1

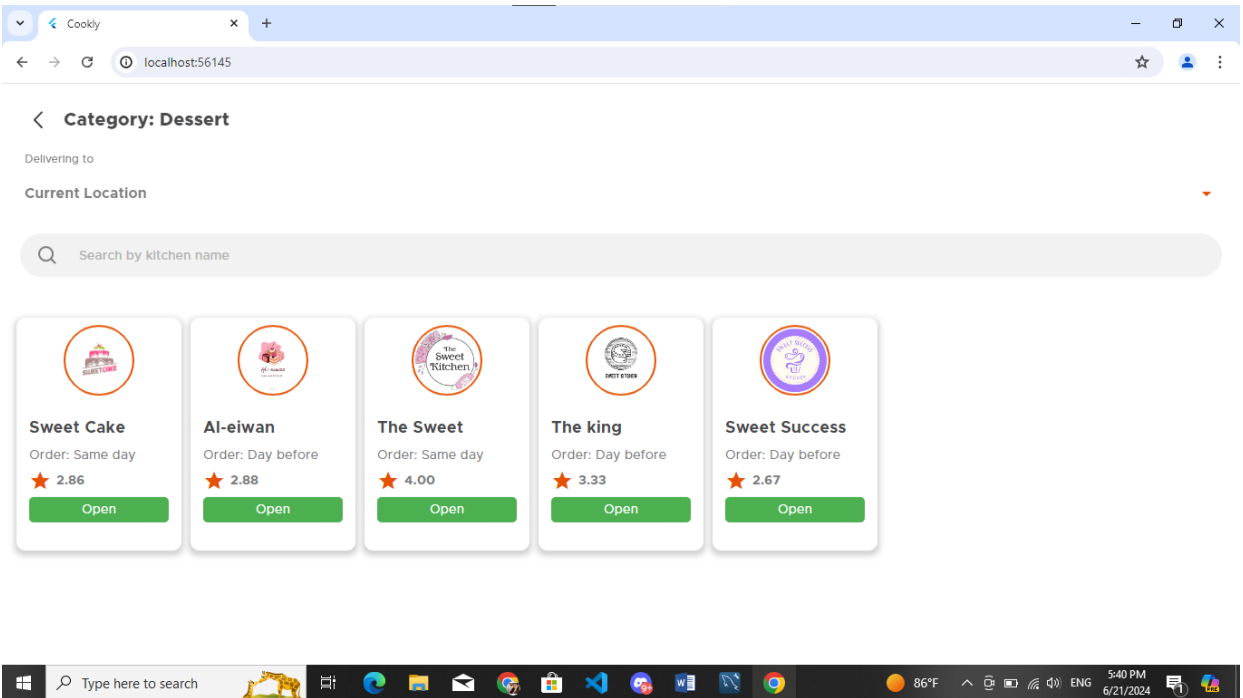
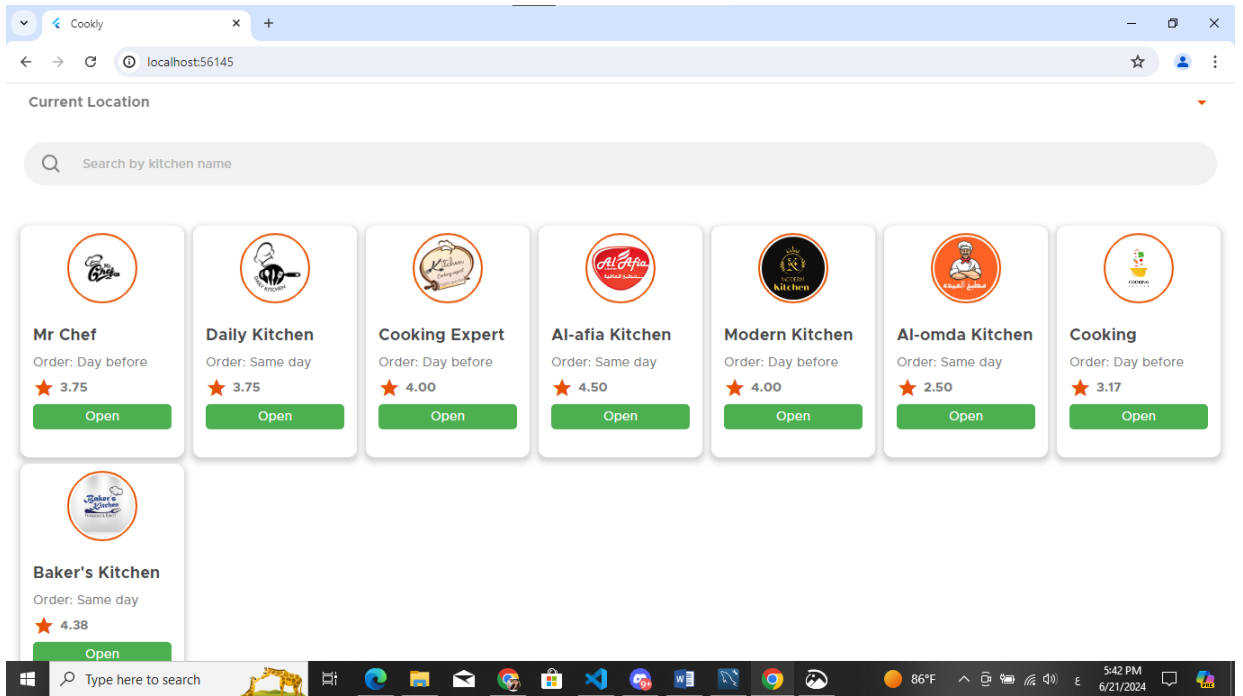


Figure 63 - User Pages 2

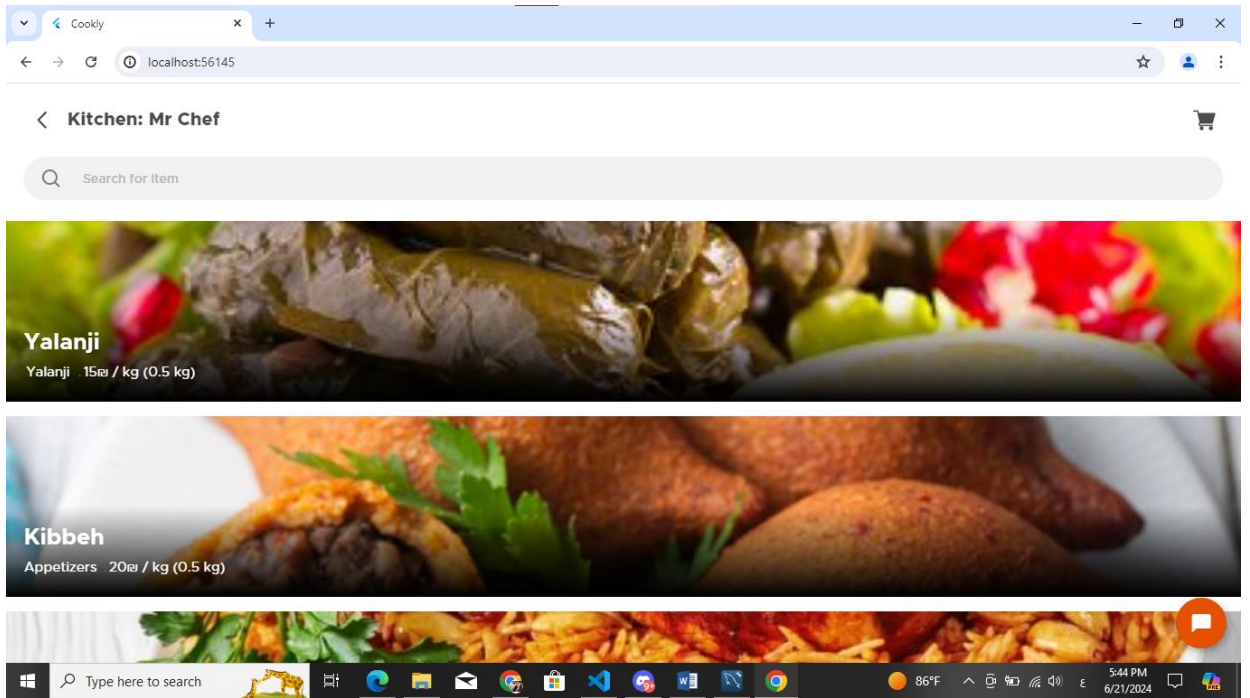
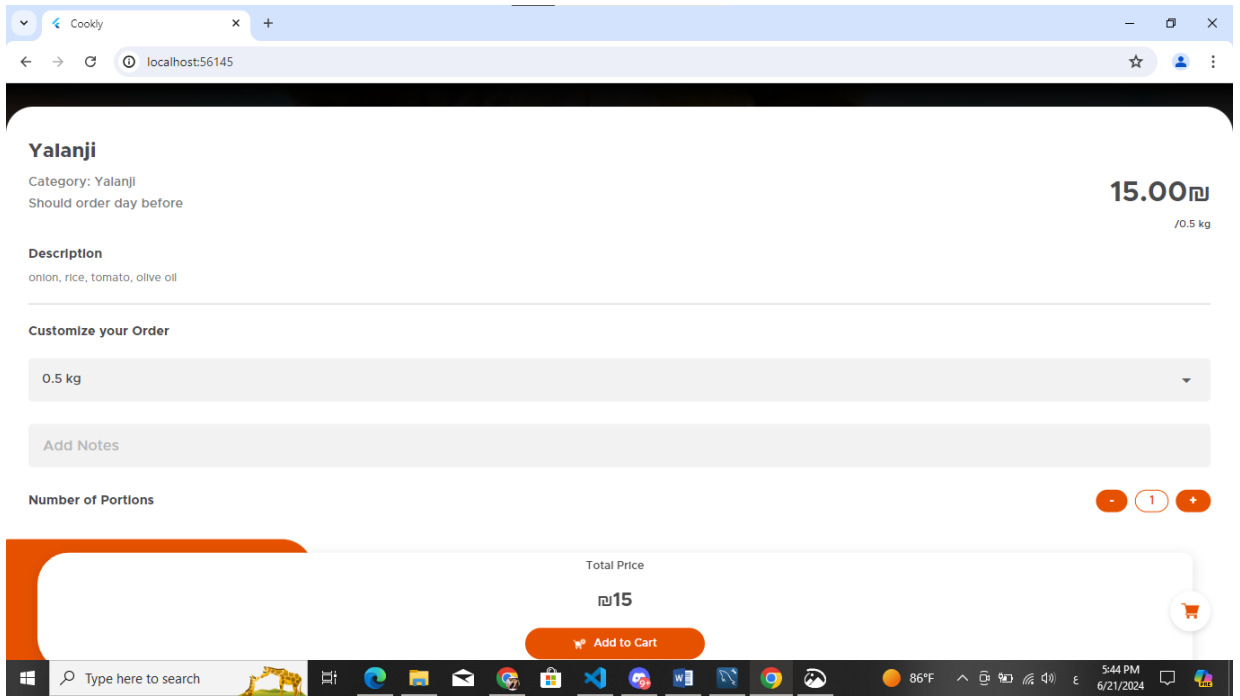


Figure 64 - User Pages 3

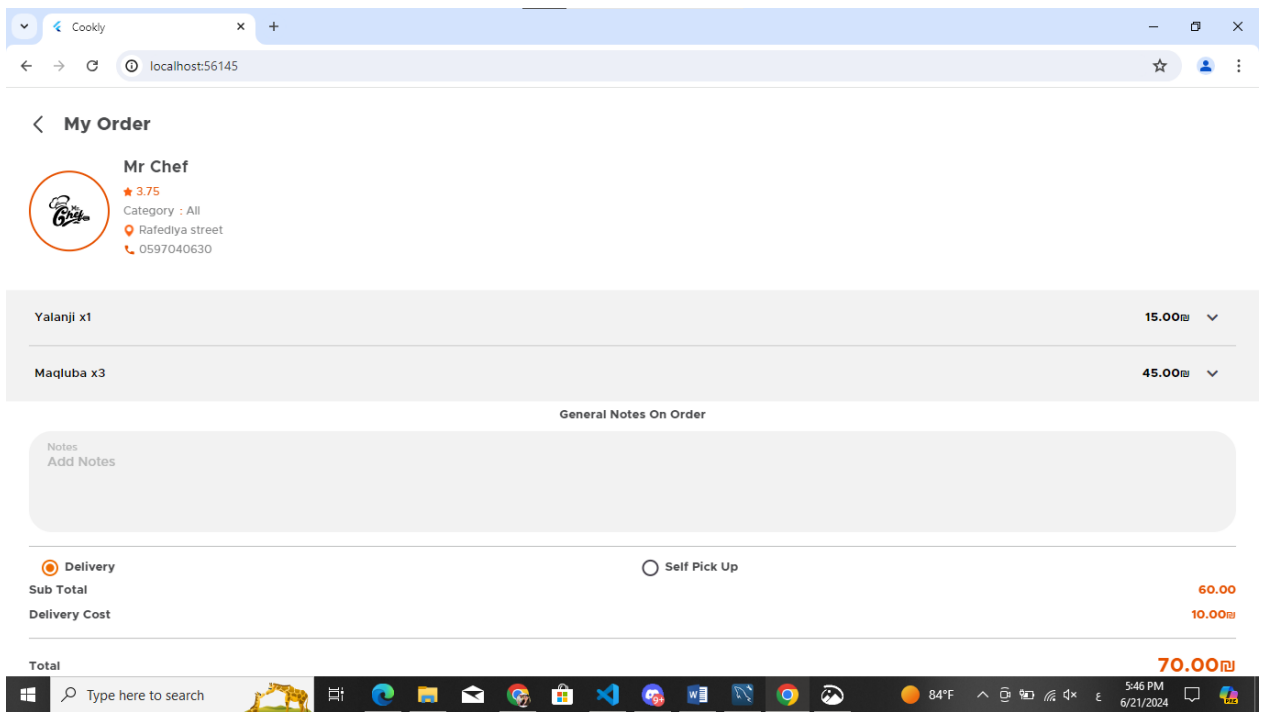
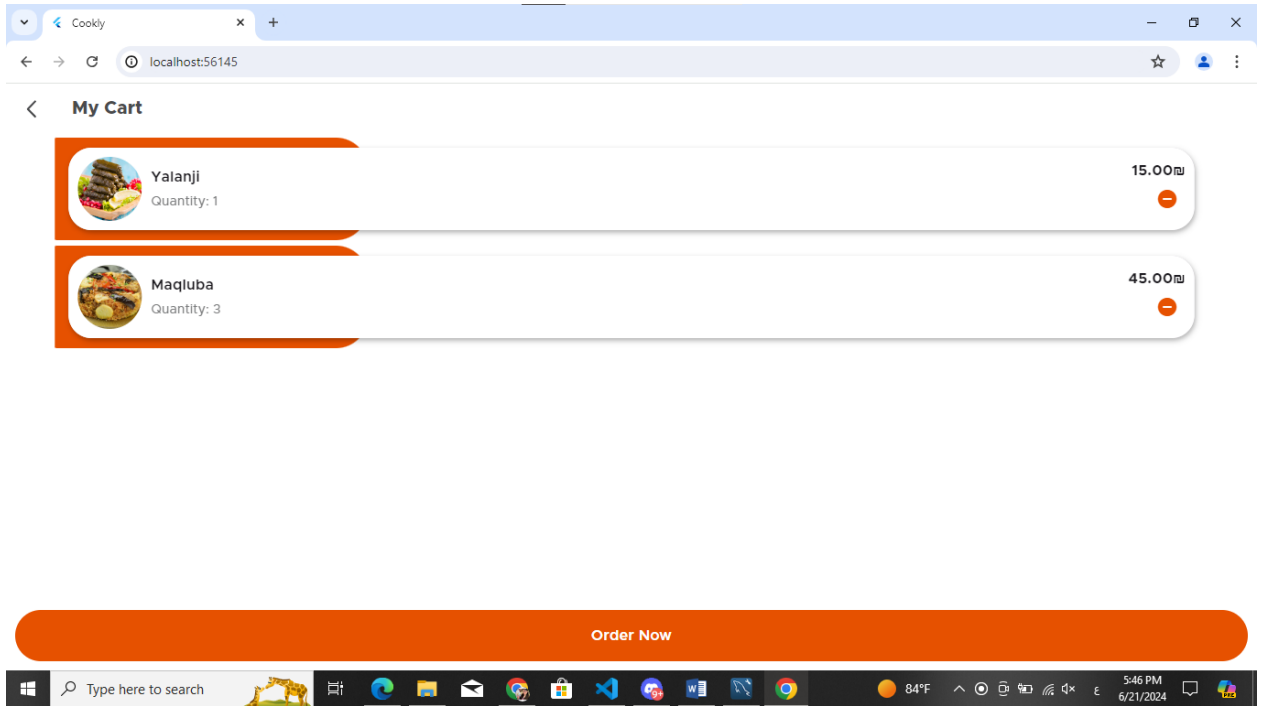


Figure 65 - User Pages 4

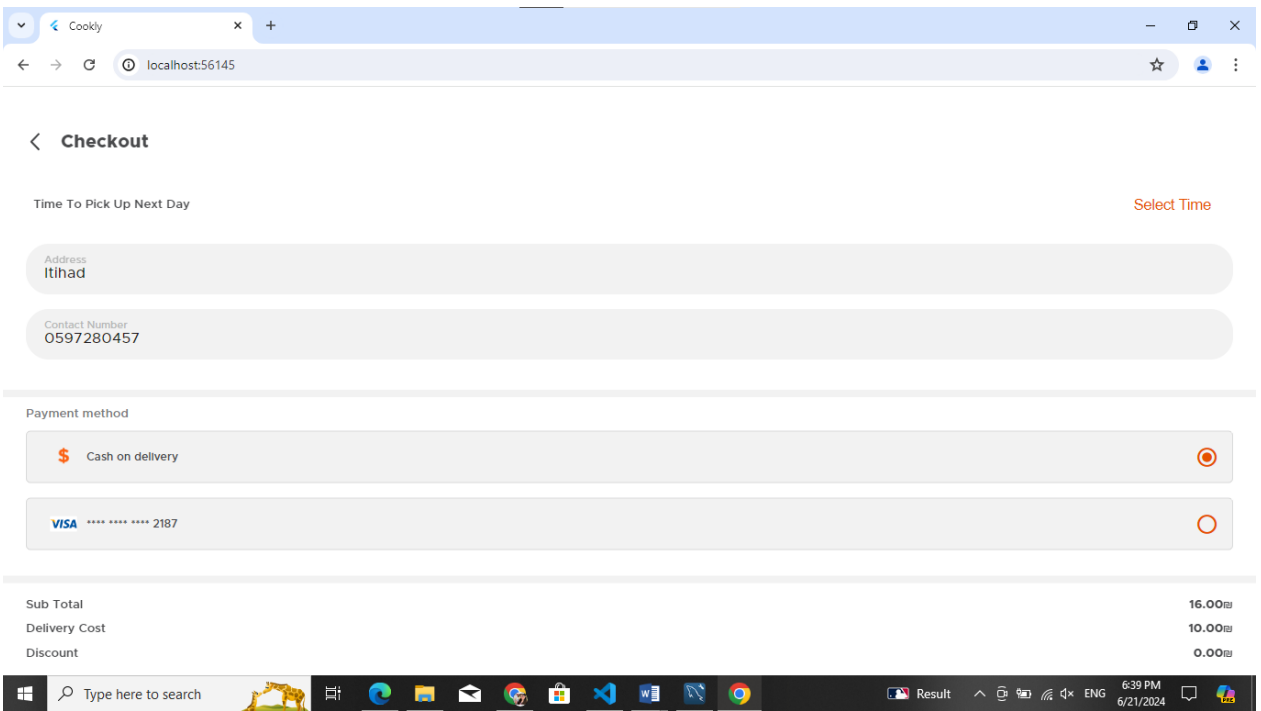
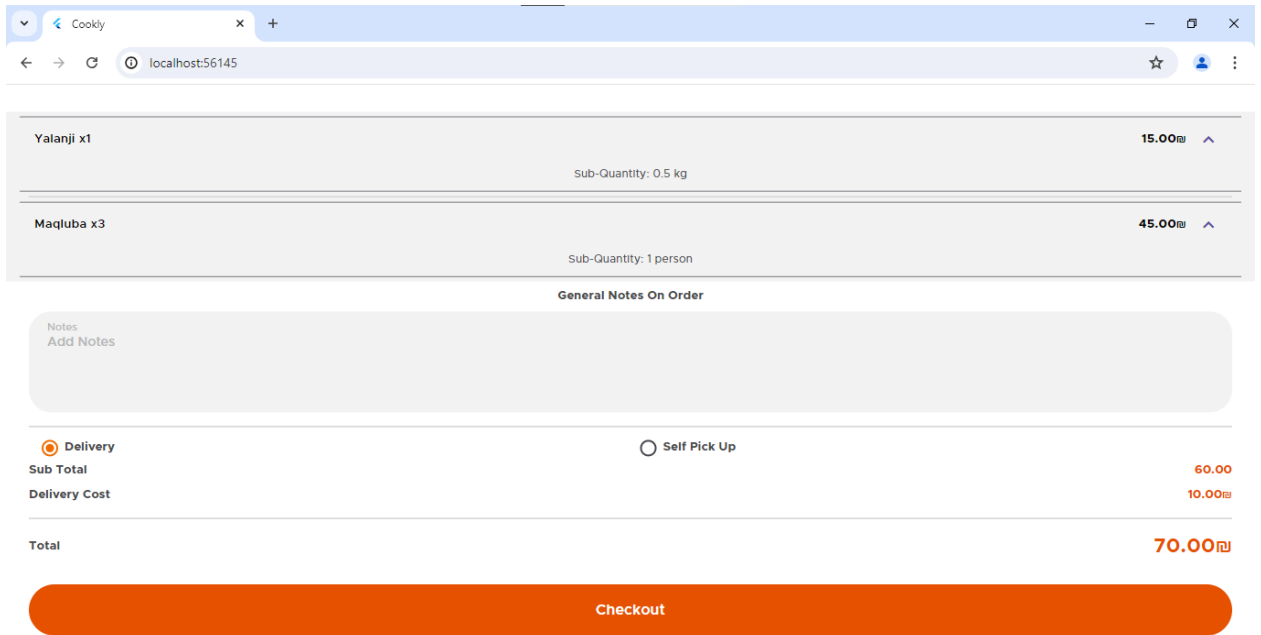


Figure 66 - User Pages 5

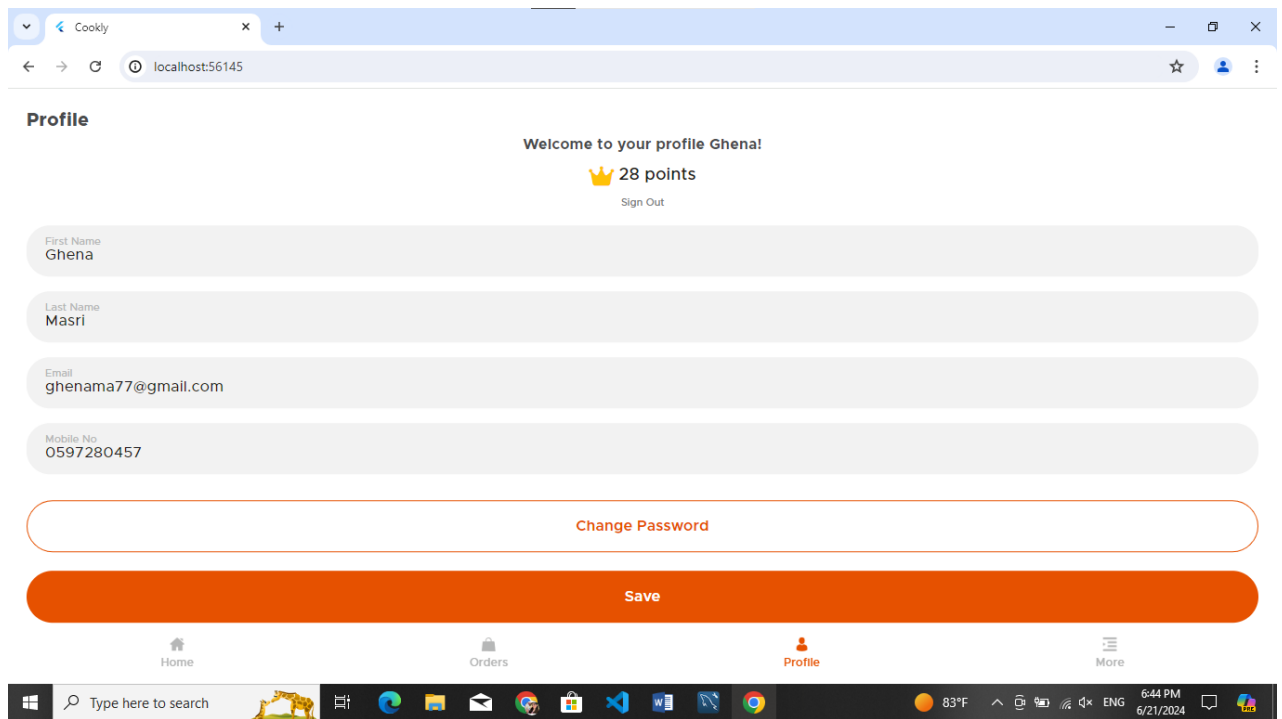
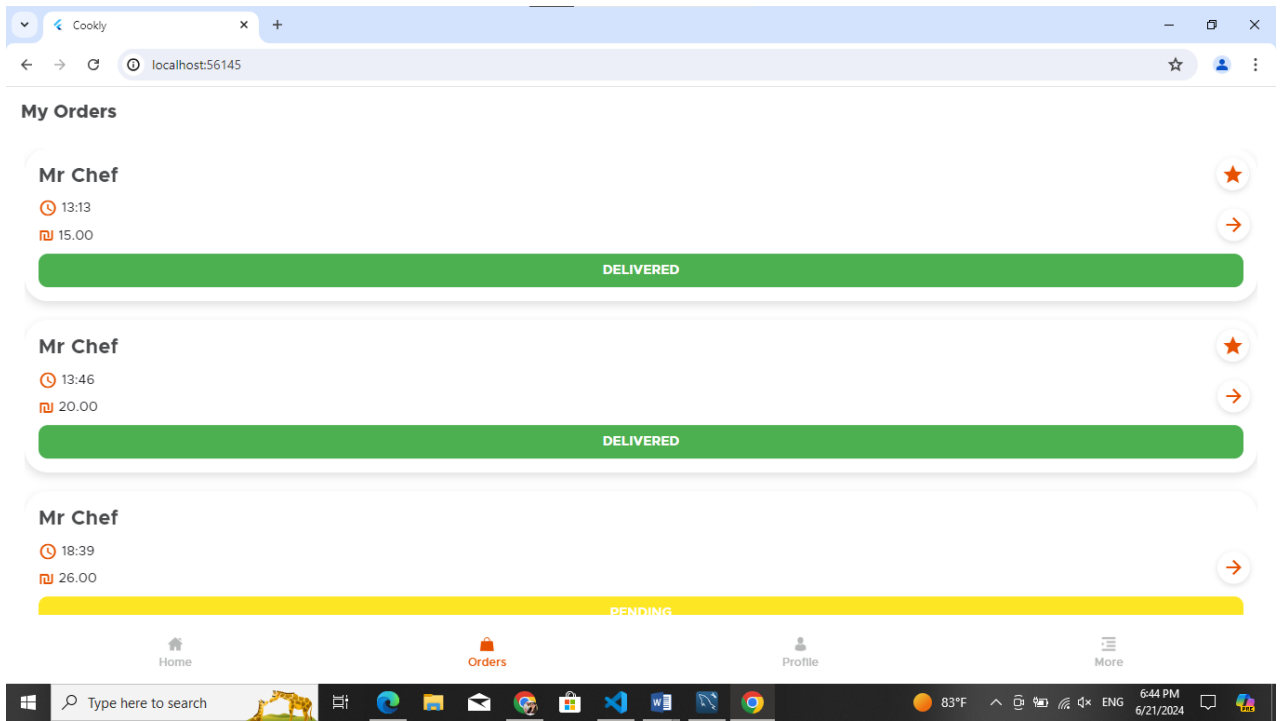


Figure 67 - User Pages 6

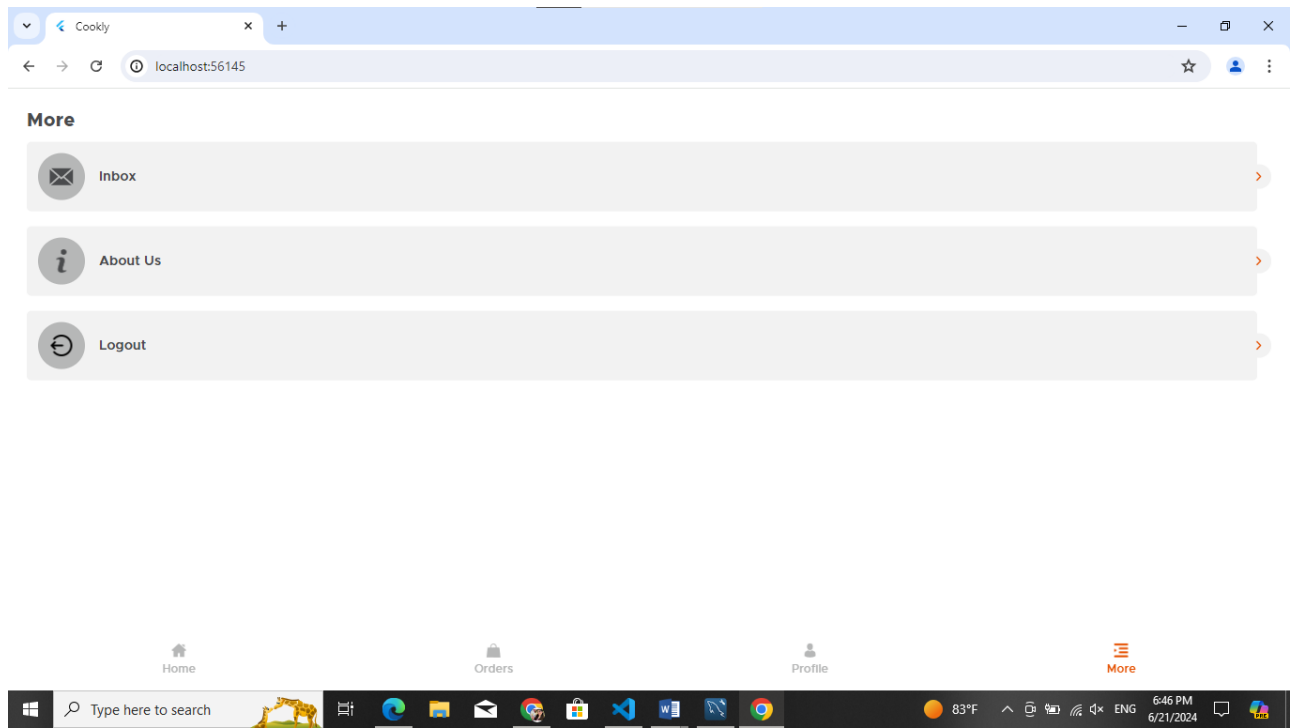
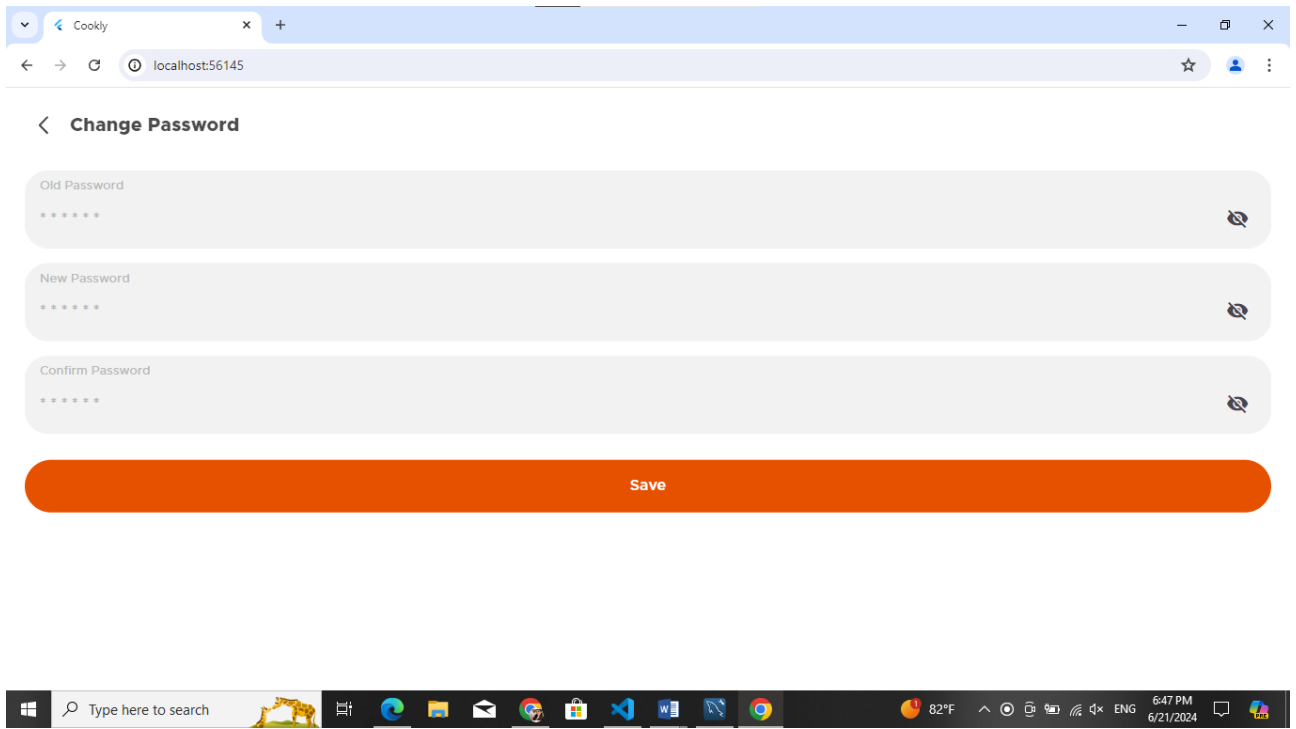


Figure 68 - User Pages 7

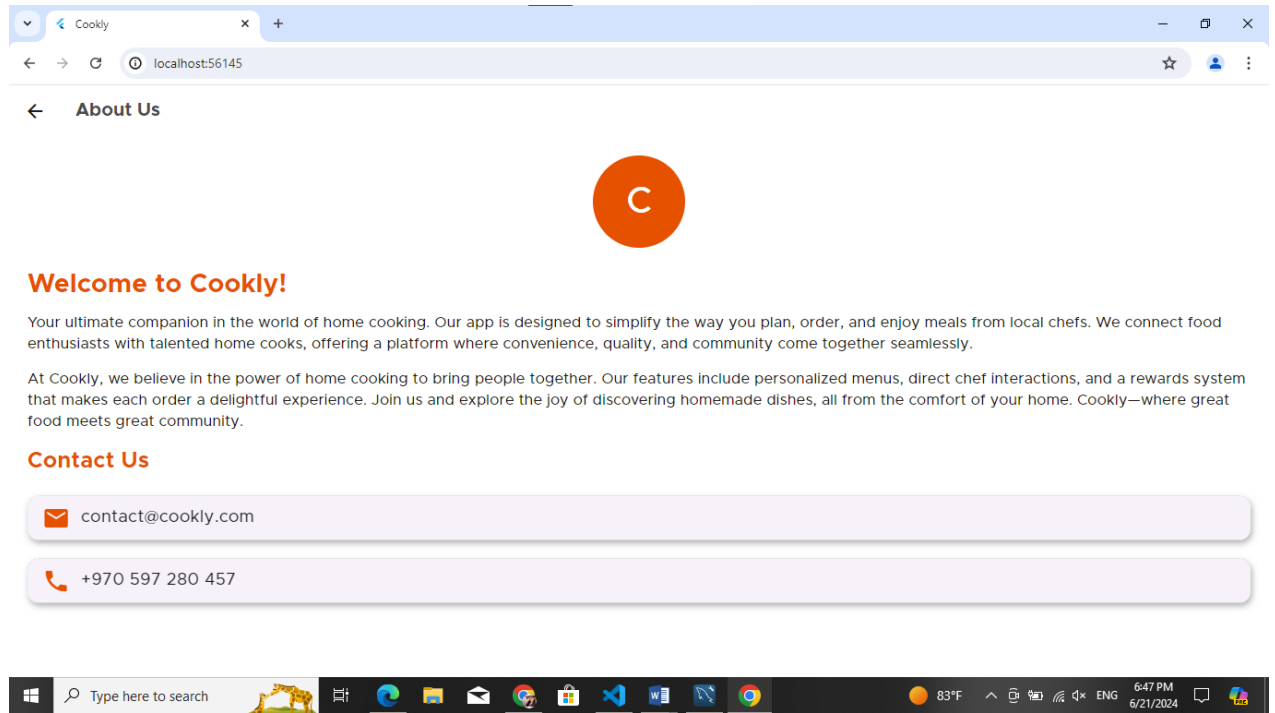


Figure 69 - User Pages 8

○ Chef Pages

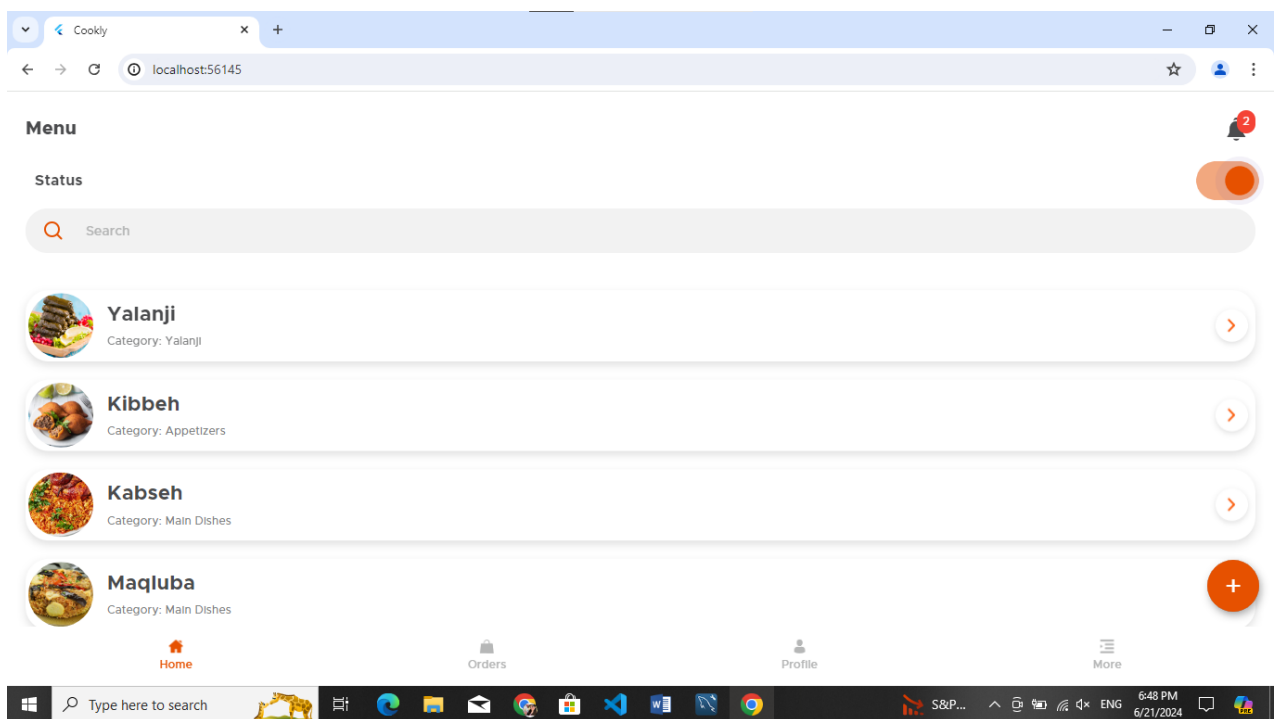


Figure 70 - Chef Pages 1

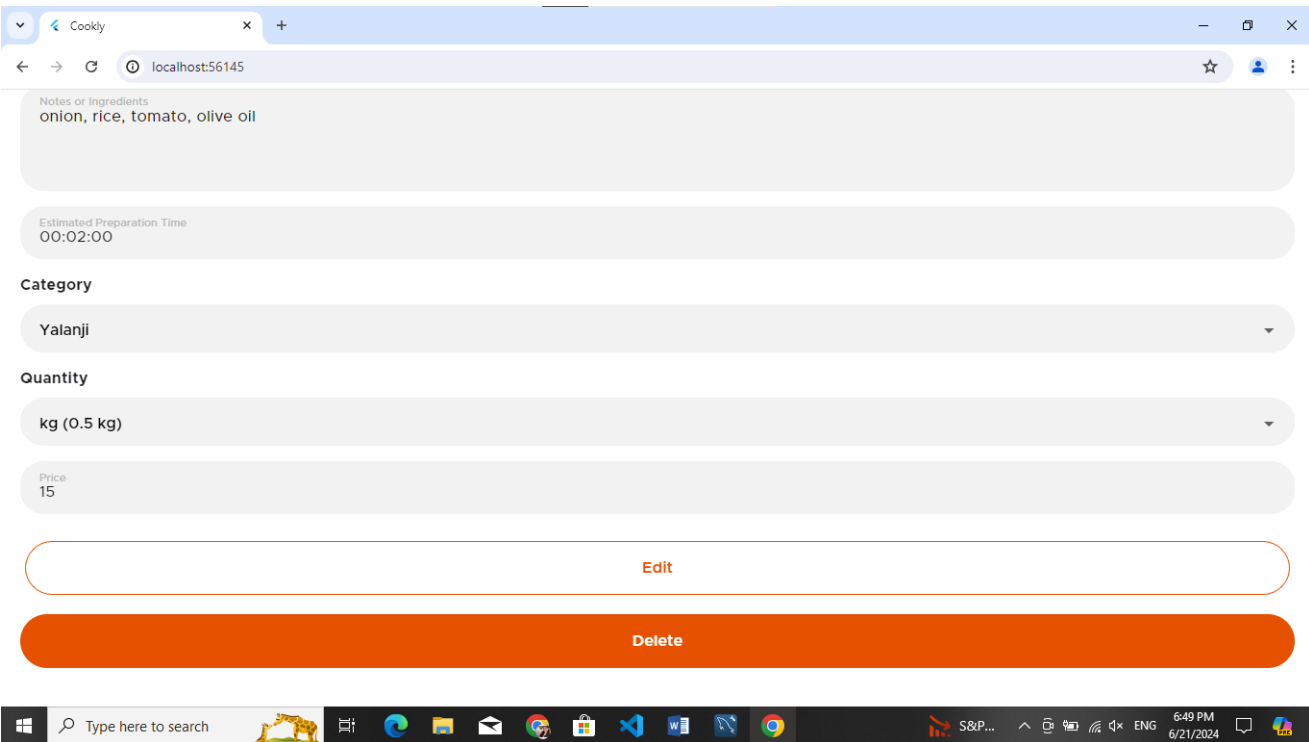
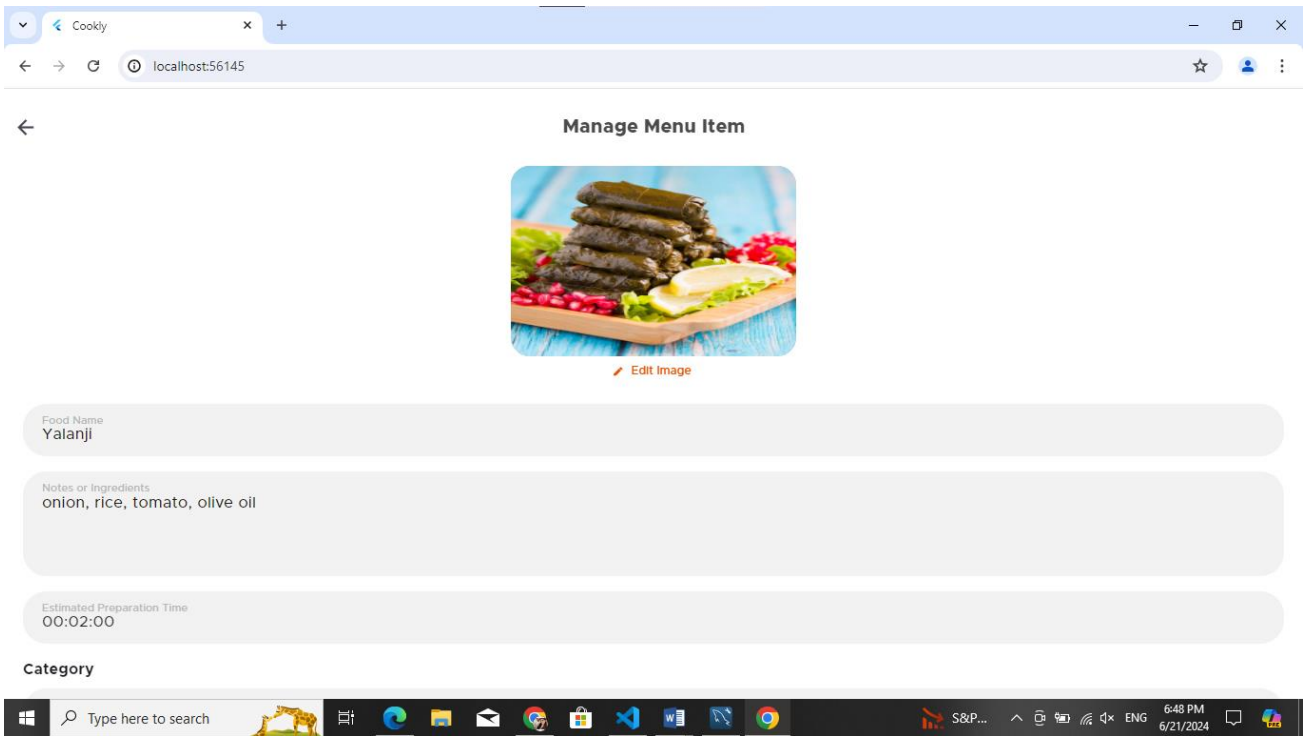


Figure 71 - Chef Pages 2

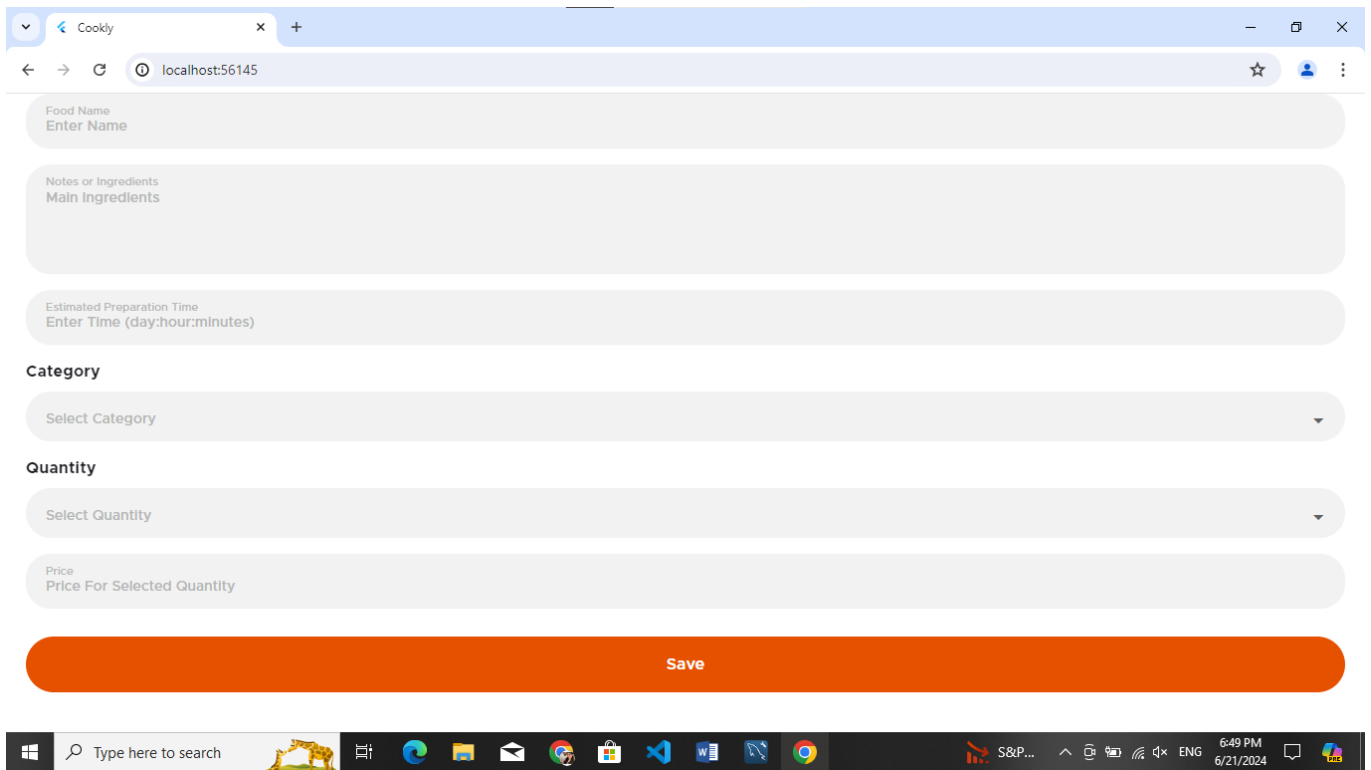
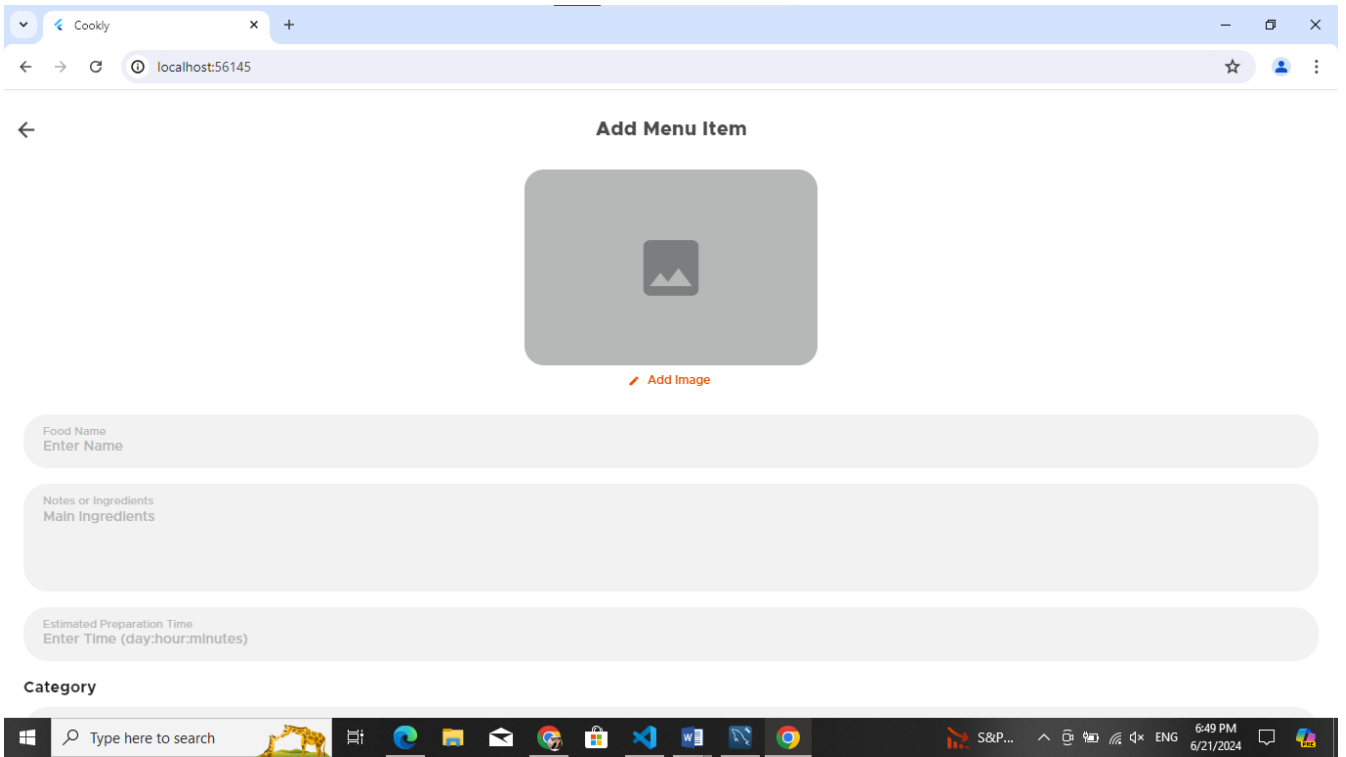


Figure 72 - Chef Pages 3

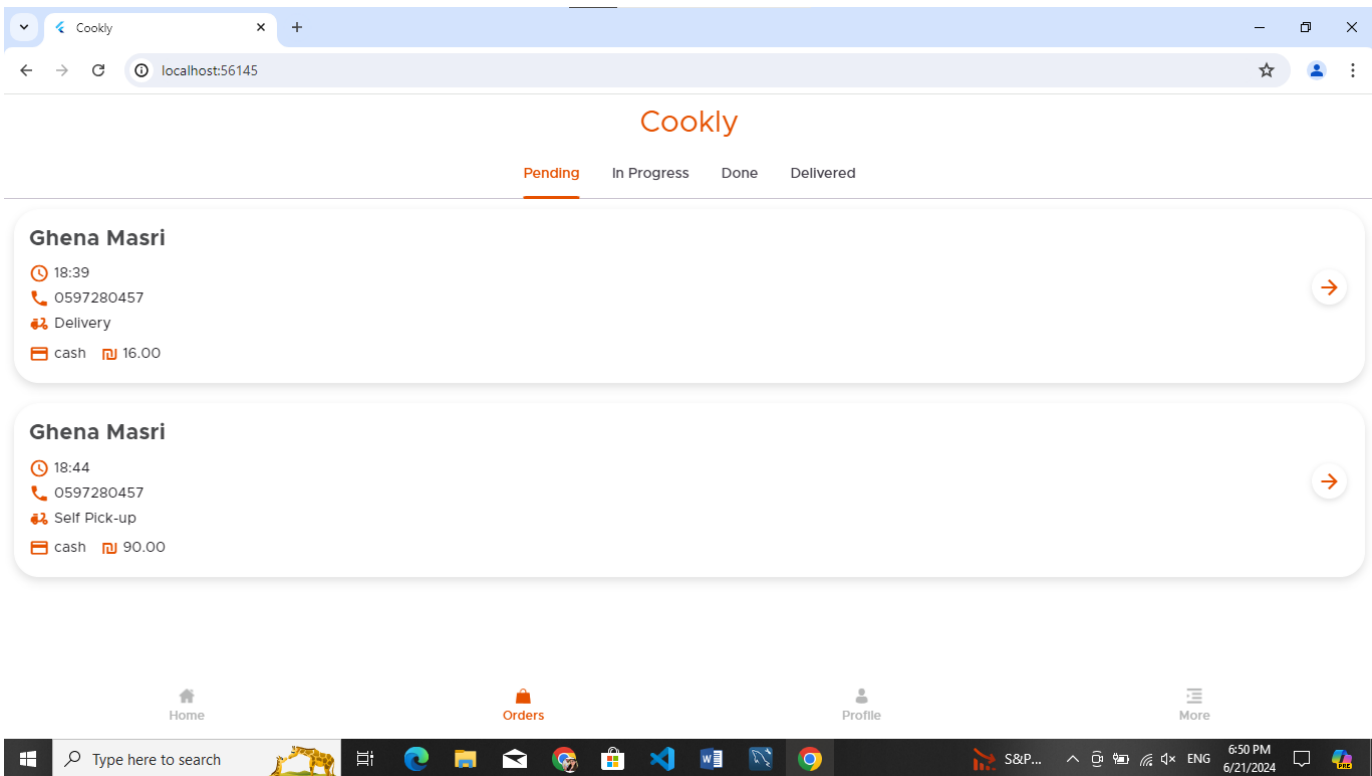
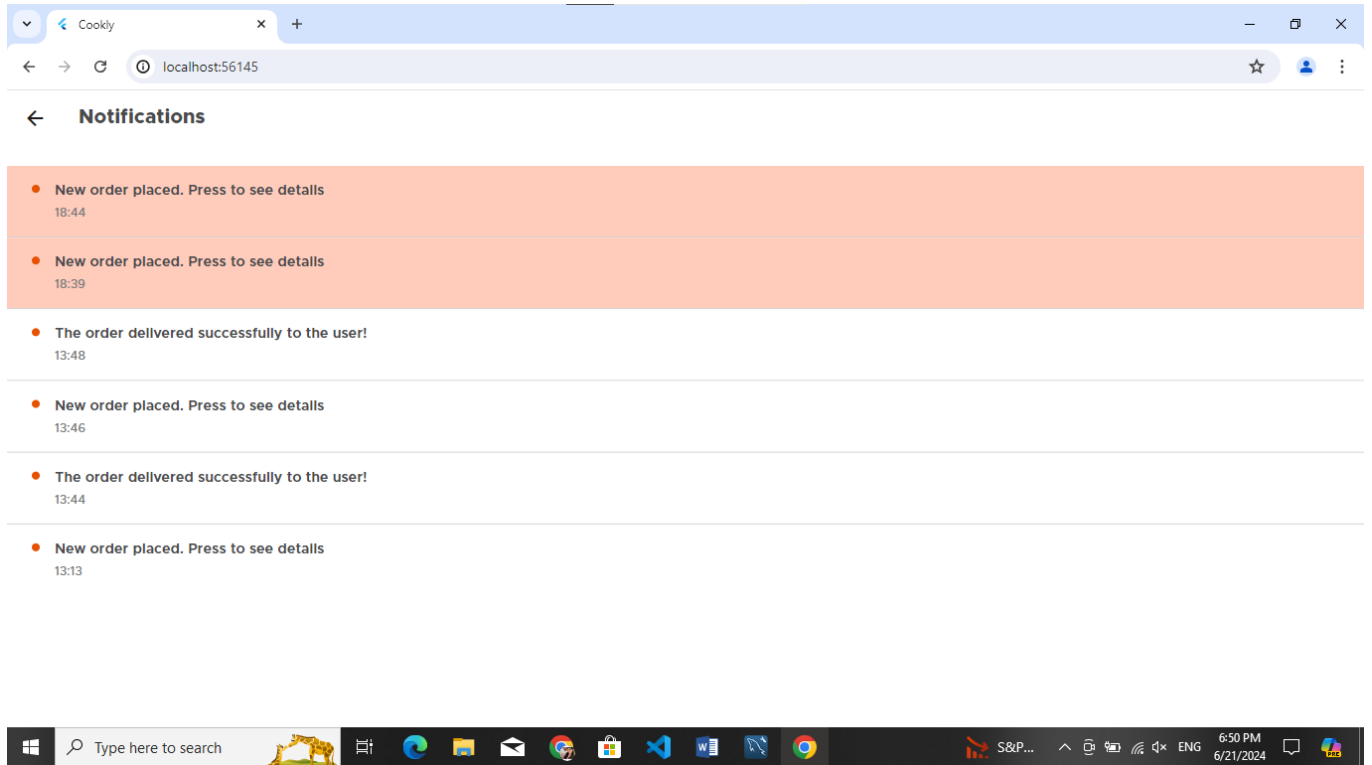


Figure 73 - Chef Pages 4

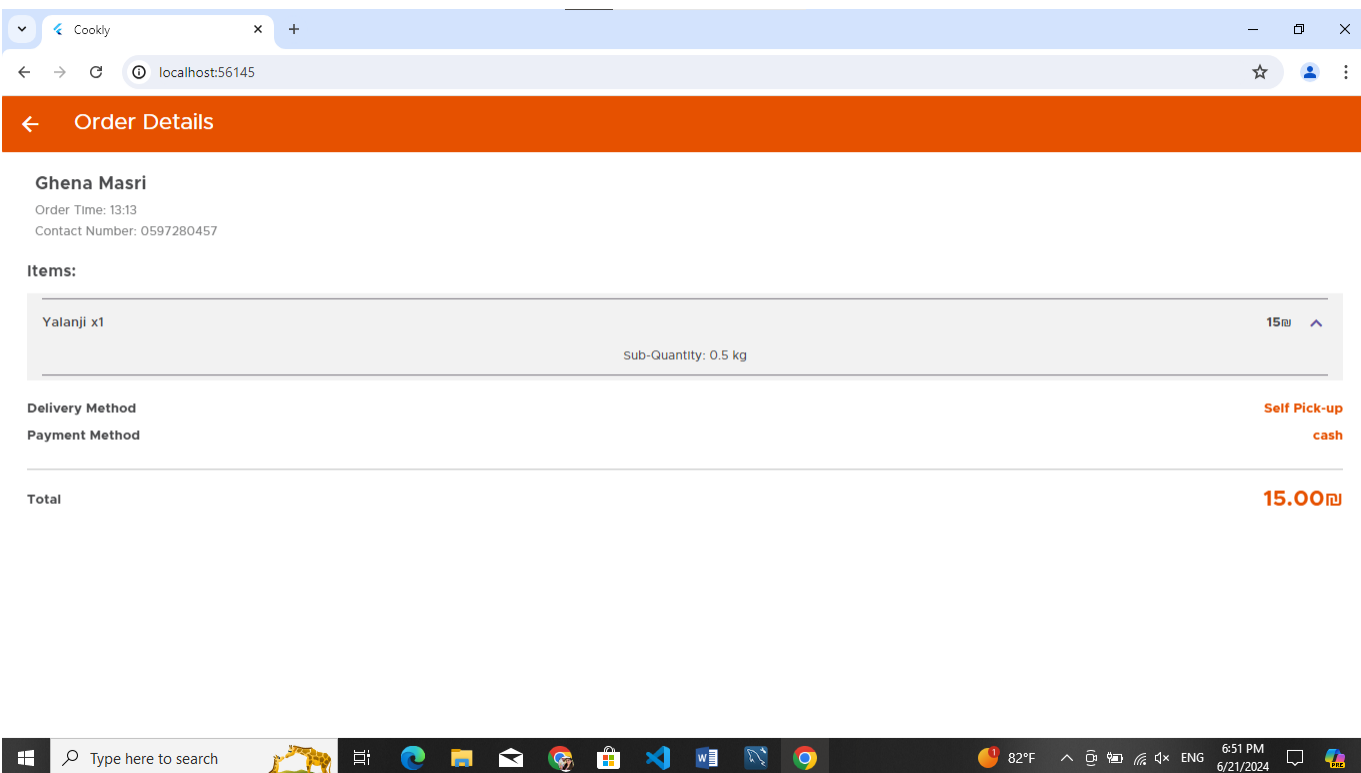
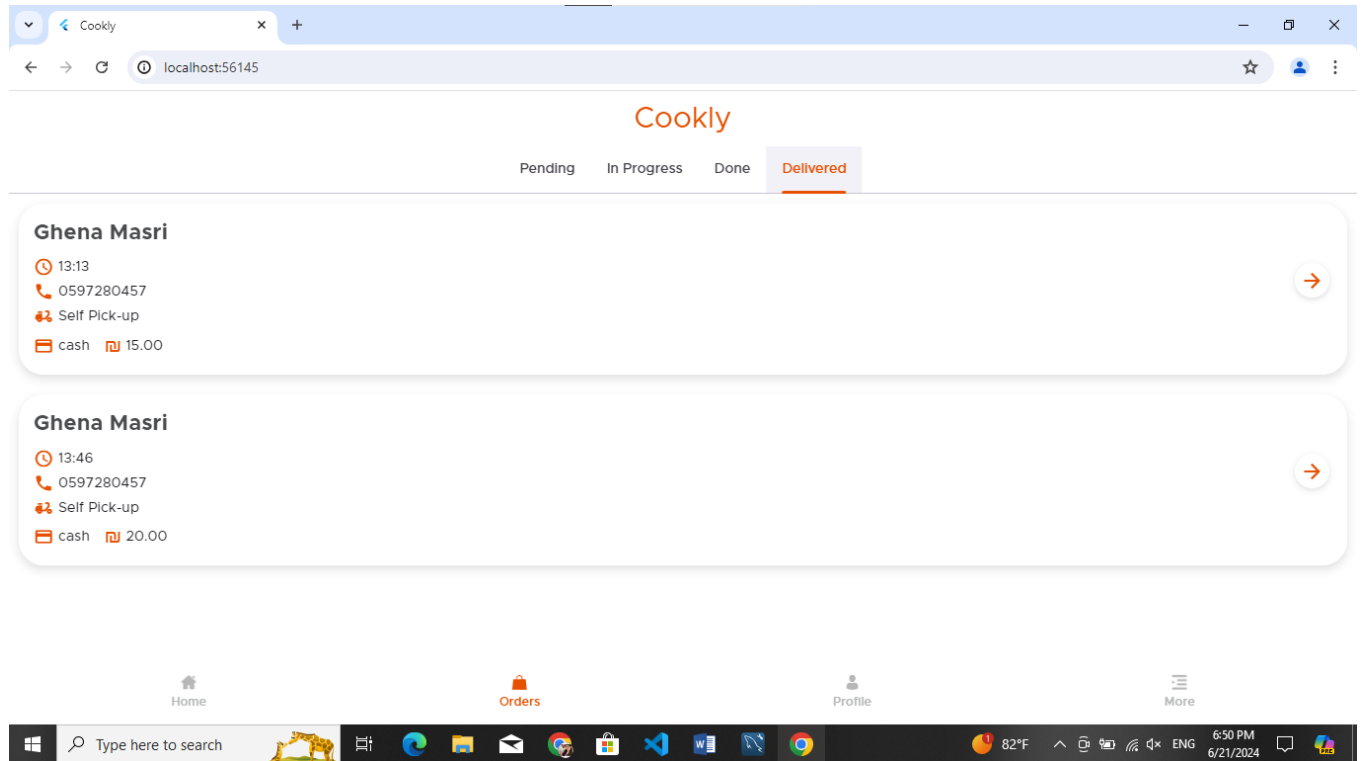


Figure 74 - Chef Pages 5

Cookly

Profile Kitchen

Welcome to your profile Wasan!

Sign Out

First Name
Wasan

Last Name
Al-Sayed

Email
wasanjehad75@gmail.com

Mobile No
0597040630

Change Password

Home Orders Profile More

Type here to search 82°F 6:51 PM 6/21/2024

Cookly

Profile Kitchen

Mr Chef

3.75

Mr Chef

City

Nablus

Street
Rafediya street

Contact Number
0597040630

Home Orders Profile More

Type here to search Result 6:51 PM 6/21/2024

Figure 75 - Chef Pages 6

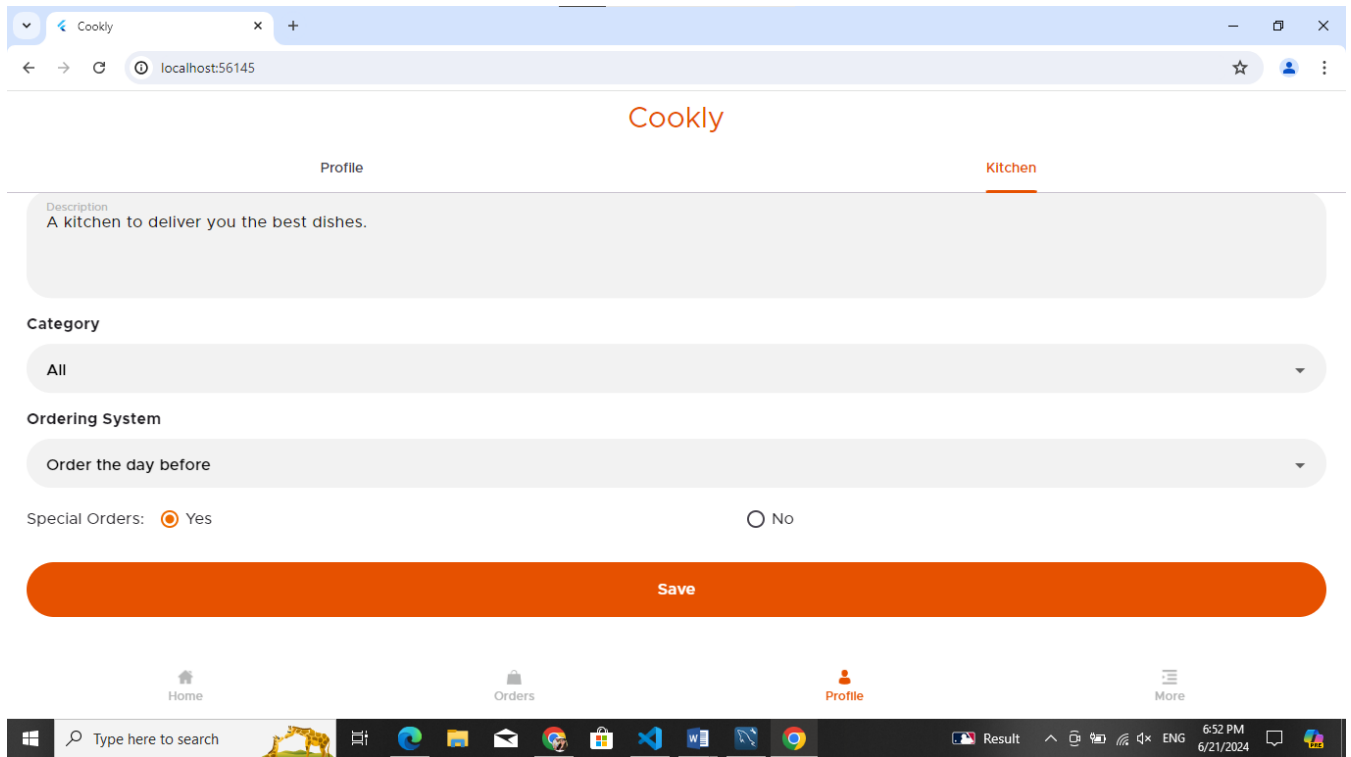
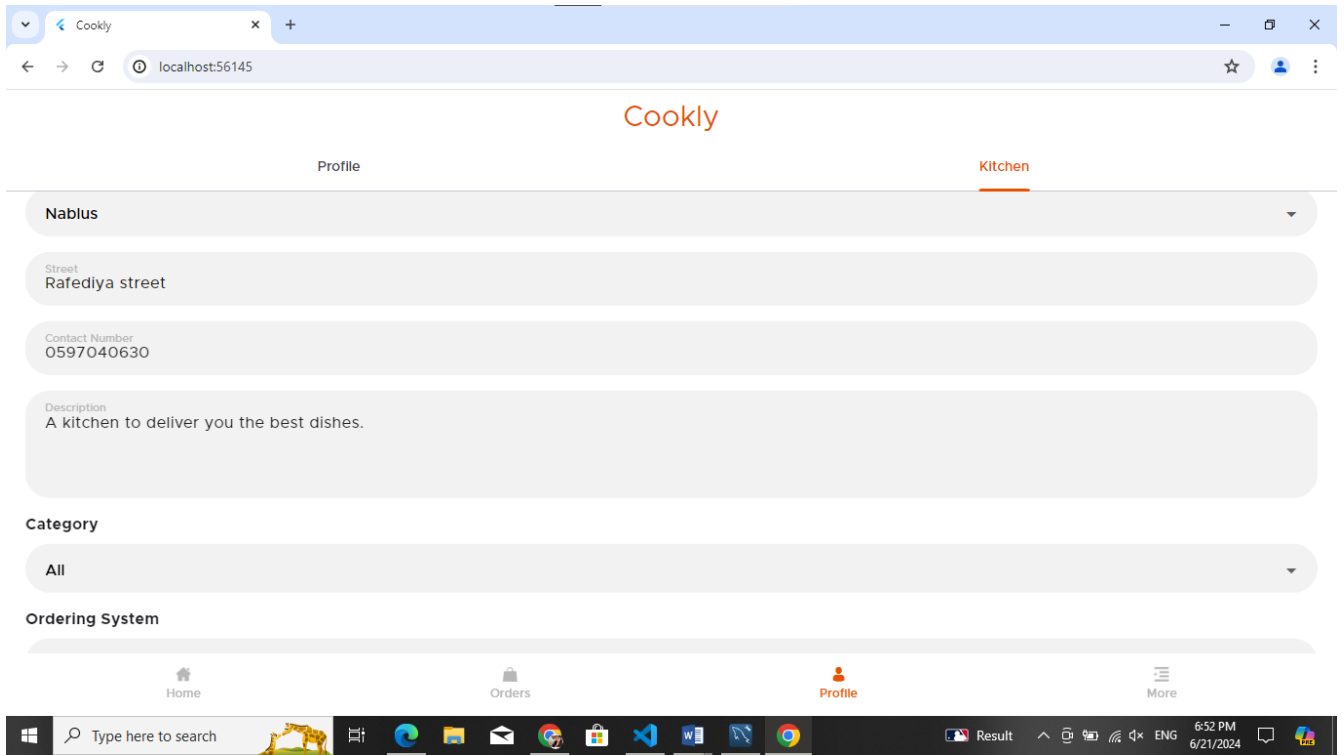


Figure 76 - Chef Pages 7

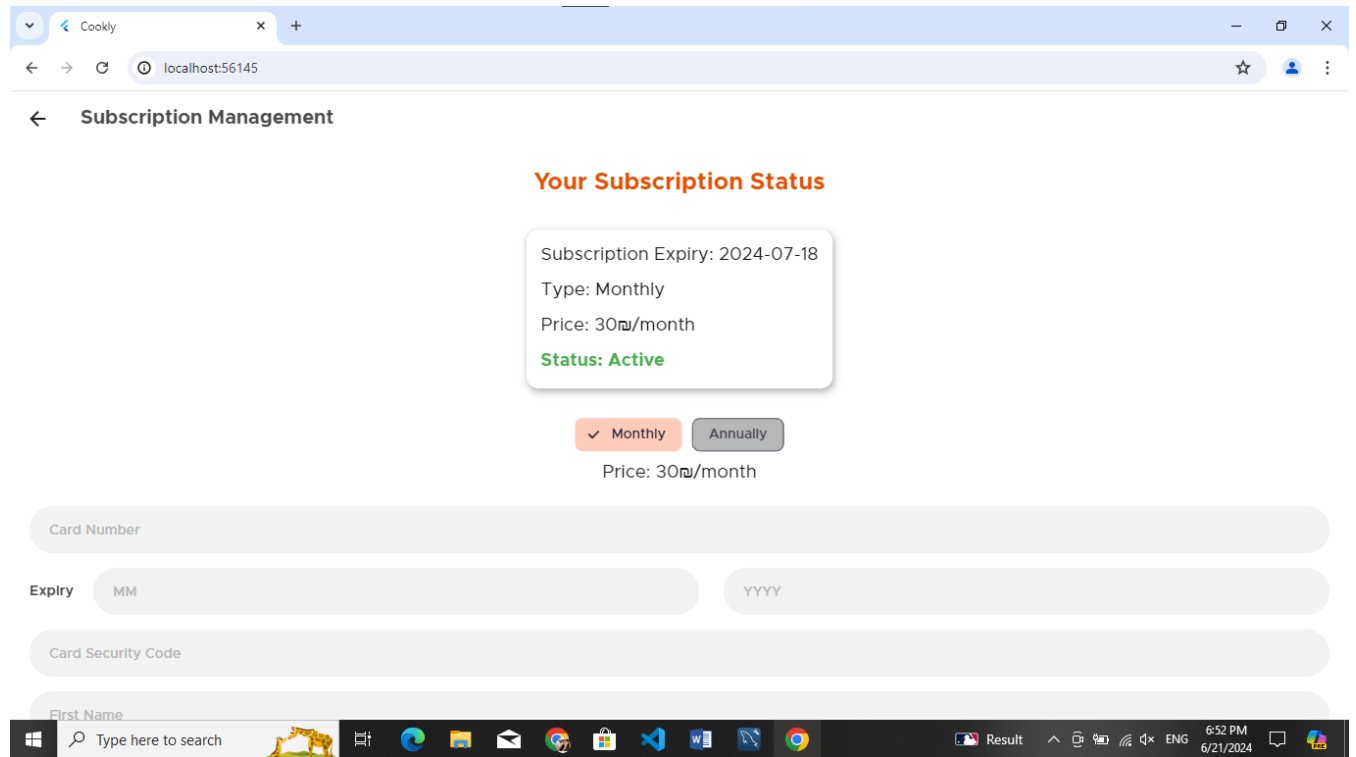
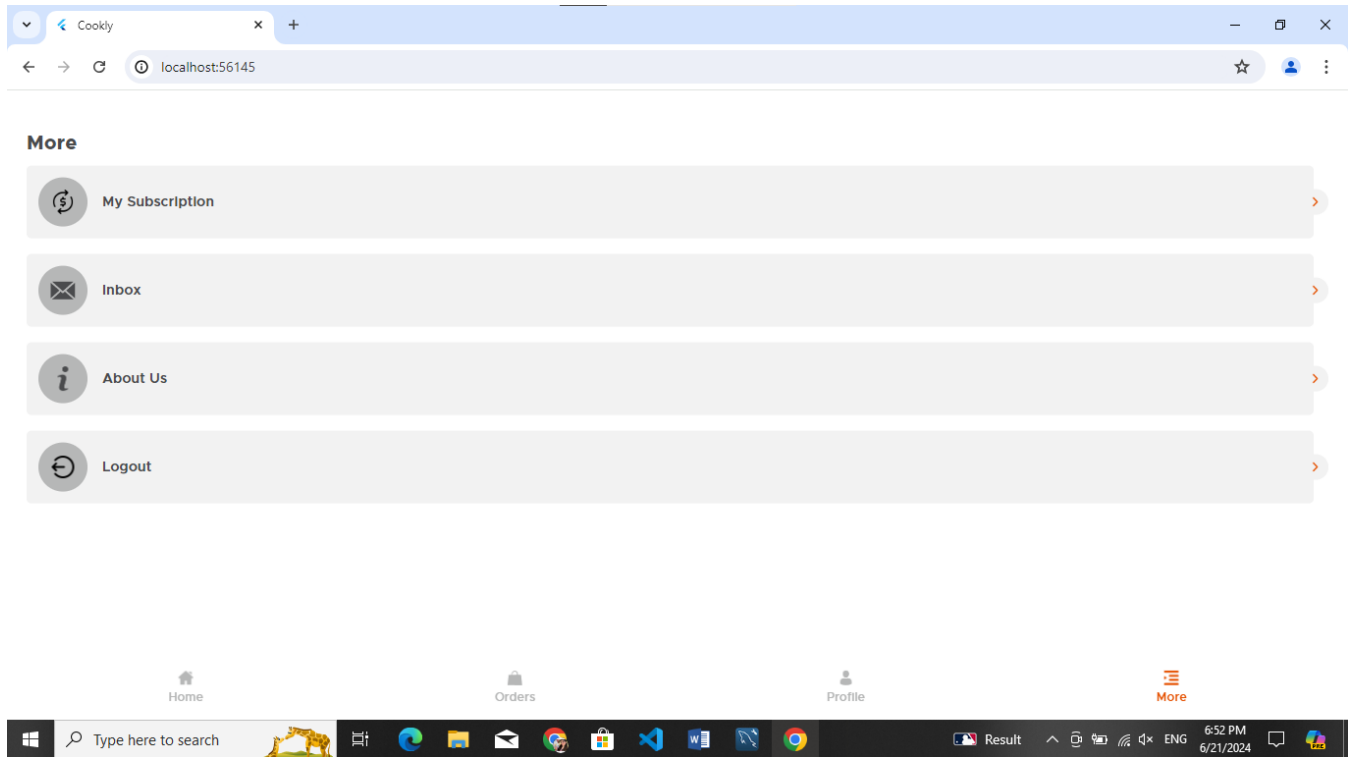


Figure 77 - Chef Pages 8

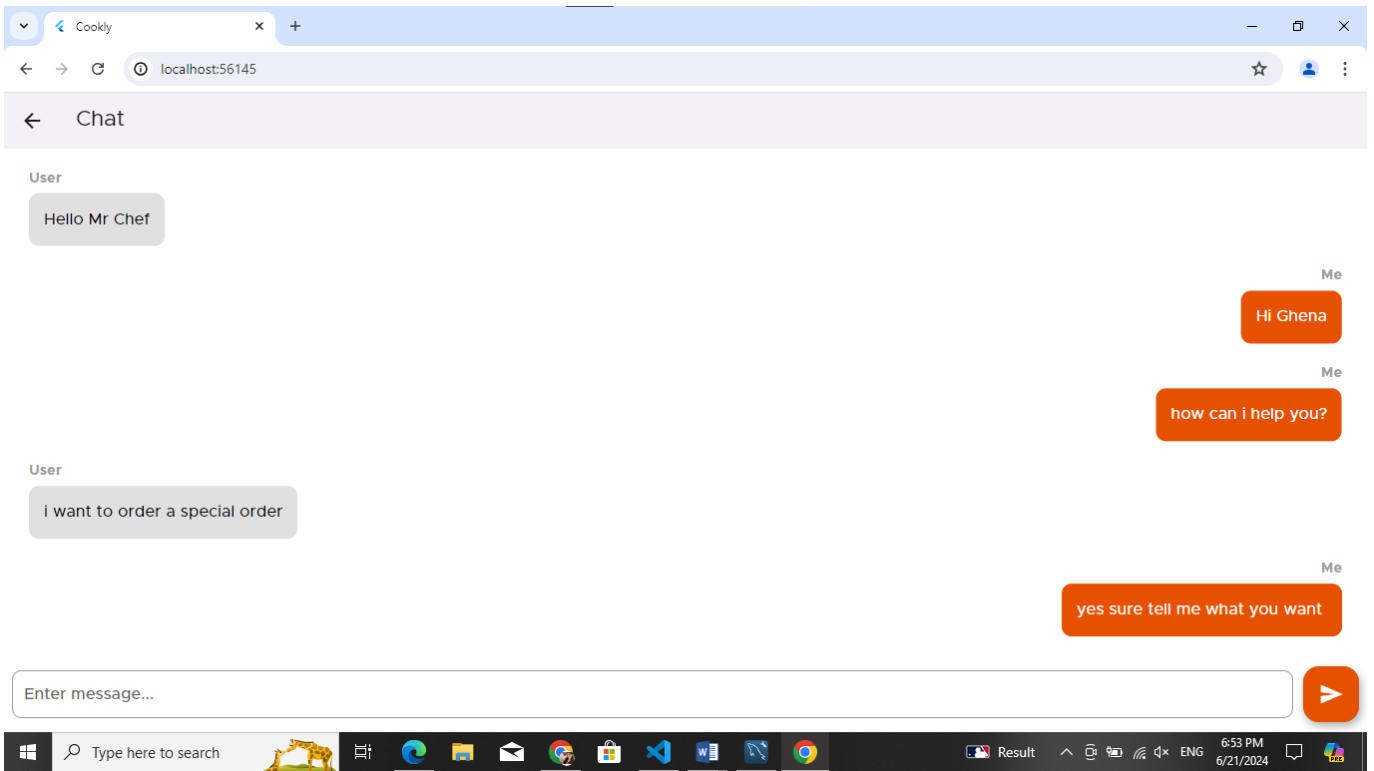
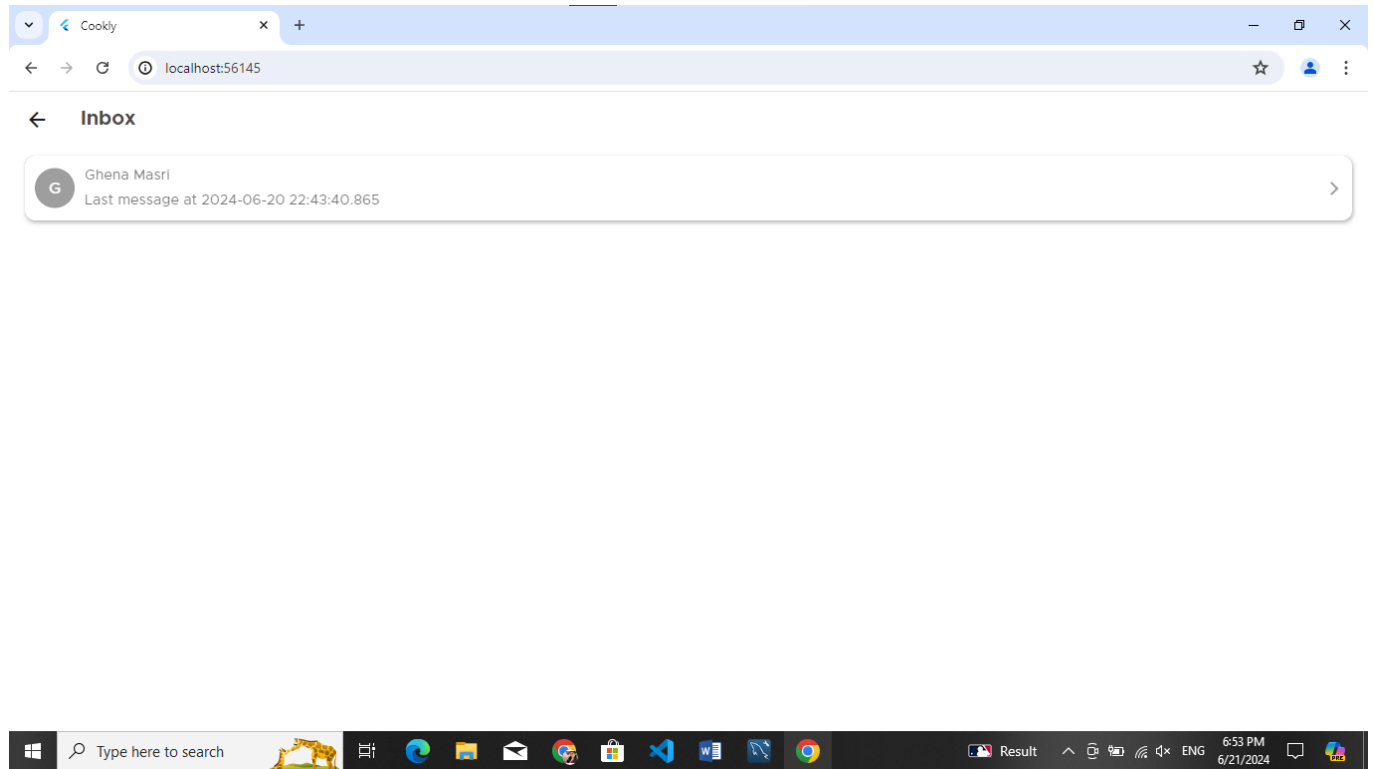


Figure 78 - Chef Pages 9

o Delivery Man Pages

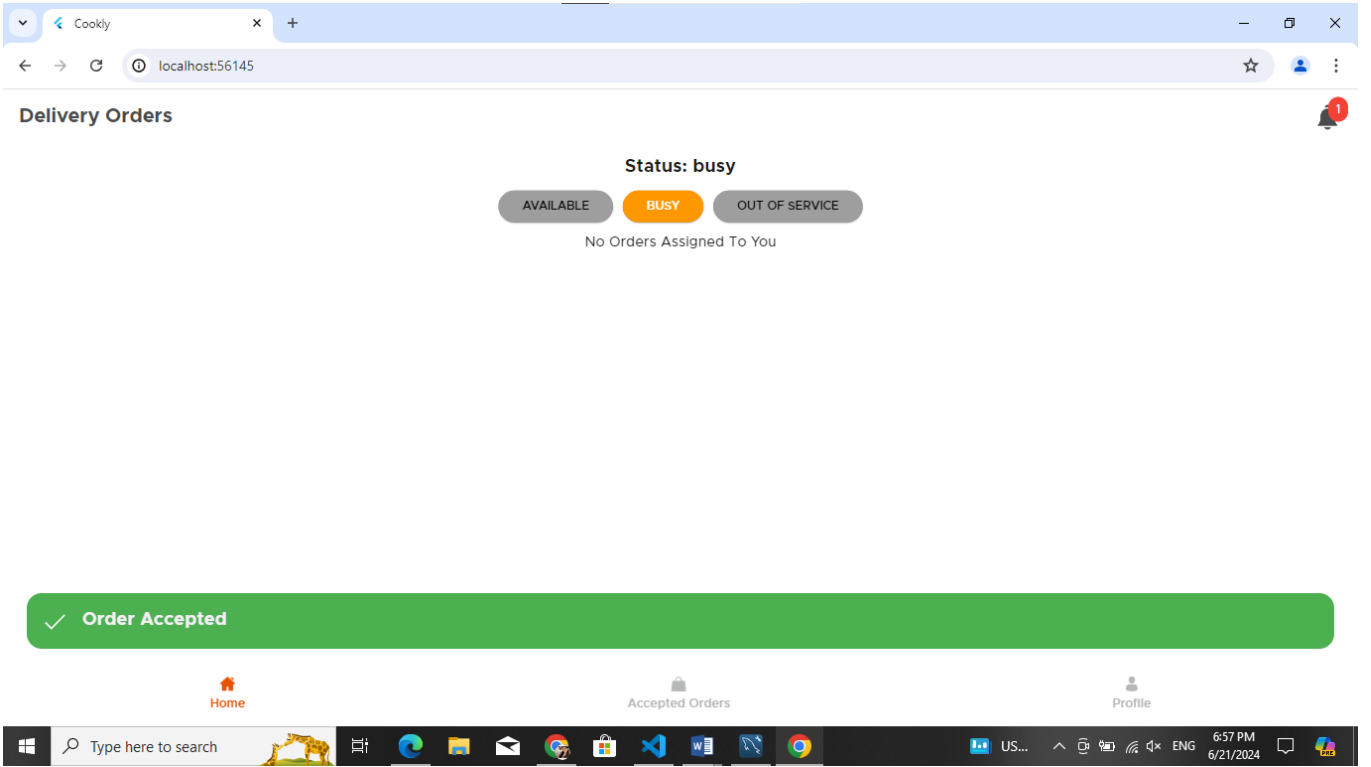
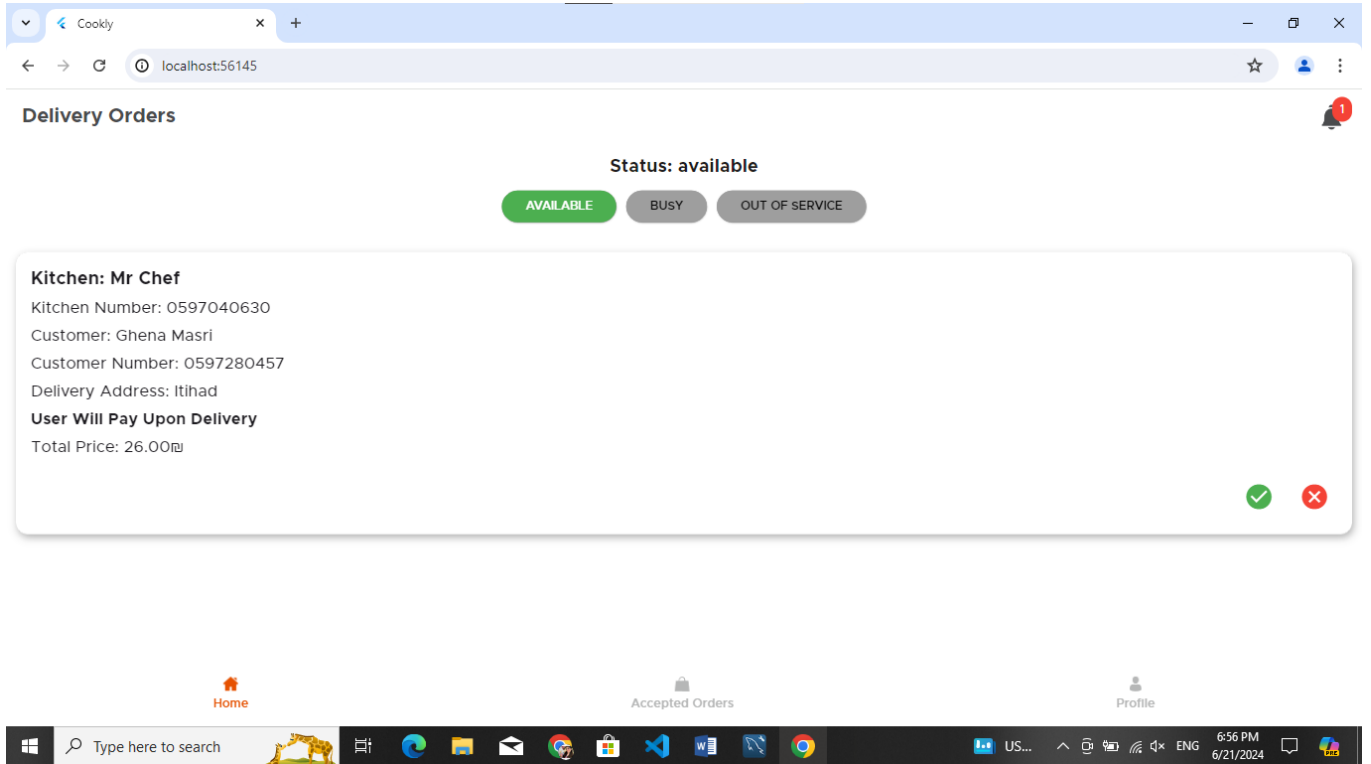


Figure 79 - Delivery Man Pages 1

Browser: localhost:56145

Delivery Orders

Kitchen: Mr Chef

Kitchen Number: 0597040630

Customer: Ghena Masri

Customer Number: 0597280457

Delivery Address: Itihad

User Will Pay Upon Delivery

Total Price: 26.00

Delivered

Navigation: Home, Accepted Orders, Profile

System Tray: 82°F, 6:57 PM, 6/21/2024

Browser: localhost:56145

Delivery Orders

Kitchen: Mr Chef

Kitchen Number: 0597040630

Customer: Ghena Masri

Customer Number: 0597280457

Delivery Address: Itihad

User Will Pay Upon Delivery

Total Price: 26.00

Delivered Successfully

Order Delivered

Navigation: Home, Accepted Orders, Profile

System Tray: 82°F, 6:57 PM, 6/21/2024

Figure 80 - Delivery Man Pages 2

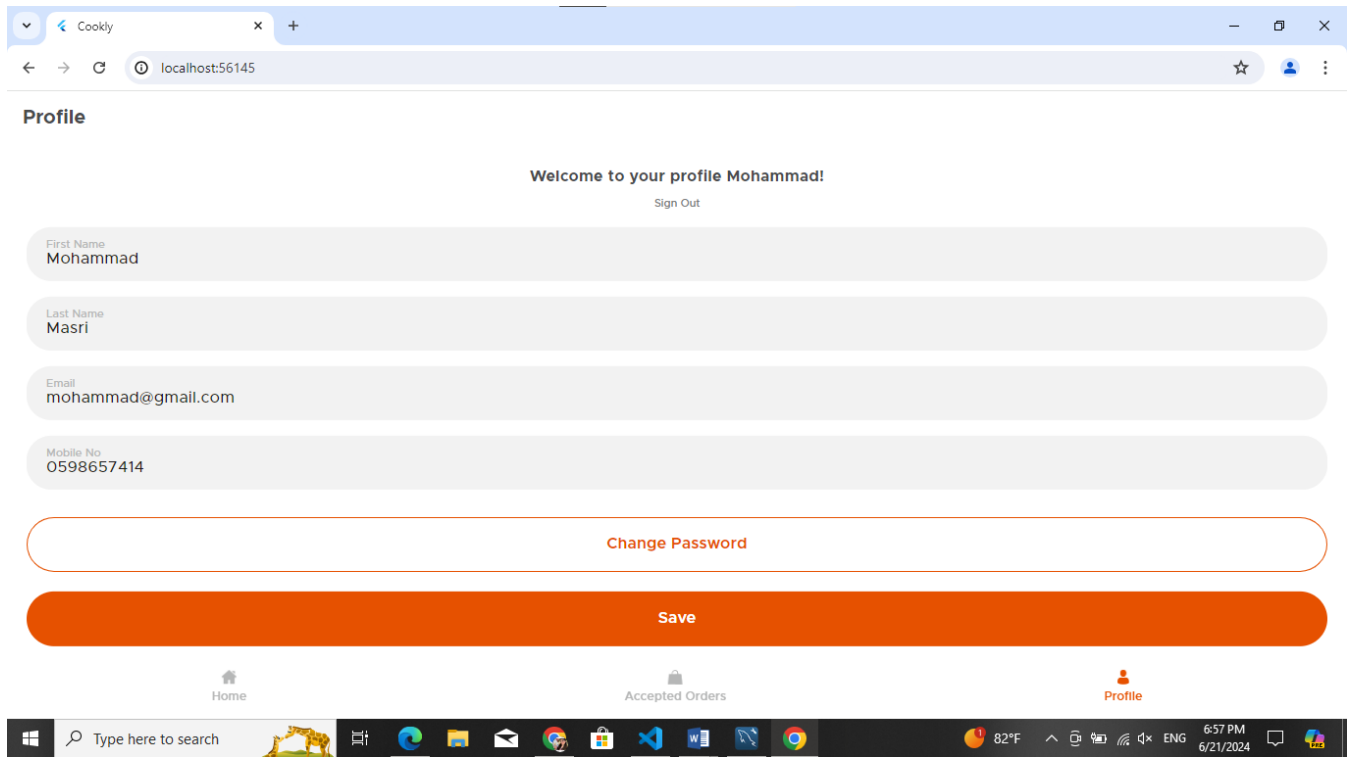


Figure 81 - Delivery Man Pages 3

4 Results and Discussion

By the project's conclusion, we had effectively achieved the intended outcomes. We have implemented a platform that facilitate the process for both customer and home cooking ladies and gentlemen with user friendly interfaces and smooth ordering process and delivering system.

The chefs will have the opportunity to expand their small businesses, and the customers will be satisfied since our application provides all the essential features in any food ordering and delivery application.

Cookly saves users time by offering a variety of kitchen categories. This allows users to select what they want without having to waste time browsing across multiple platforms.

4.1 Constraints

- Integrating Firebase with the project proved to be difficult; in order for the project to function properly on mobile and the web, we had to install many configuration files and scripts.
- To enable communication between our client web application and the Node JS resources, we required CORS, or Cross Origin Resource Sharing.
- A few dependencies caused a system crash; to fix this, we modified the Android Gradle files.
- A significant amount of work was required to construct a logical and comprehensive database.

5 Conclusion and Recommendation

a. Summary

Cookly was created to help home-based cooking talents grow their businesses and make it simple for customers to browse and order from these kitchens. The advantages of Cookly grew to include opportunities for deliverymen as well. The admin's ability to supervise these deliverymen protects Cookly's reputation.

Cookly is an easy-to-use platform that accepts cash and credit cards as payment methods. Customers can personalize their orders by entering into the chat feature. If the customer fails to deliver their order, the chef has the ability to report them, which can lead to account suspension and loss of points.

To put it briefly, Cookly was discovered to be the solution to the issue of having to look for what you need across several platforms. It effectively addressed the issue and offered a workable fix.

b. Recommendations

- Keep an eye on the latest updates of the software that you use.
- Read the documentation of the plugins and dependencies before adding them to your project.
- Be careful and choose the technology that you will use wisely and based on your needs.

c. 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.
- What is CORS.

d. Future Work

- Adding recommendation system.
- Track special orders by chef and customer.
- Adding delivery man tracking system.

References

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