



An-Najah National University
Faculty of Engineering & Information Technology
Computer Engineering Department

Graduation Project 1: StartUp Hub

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Bachelor degree in Computer Engineering**

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-Gharam

Disclaimer

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Chapter 1

Abstract

In today's fast-paced world, startup owners face significant challenges in developing their projects and achieving sustainable success. To address this need, we have developed a comprehensive platform aimed at helping project owners develop their ideas, providing the necessary resources for success, and introducing them to key success factors. In addition, the platform offers a space for showcasing their startup projects, enabling them to market their projects, access grants, enroll in specialized training courses, and attract investments.

The platform also includes a section dedicated to ideas, where users can submit their personal ideas to gather feedback from others and discover the most popular and trending ideas in the market. Investors also play a vital role, as they can search for successful projects to invest in, evaluate ideas and projects, and engage with project owners.

This platform aims to create an integrated support ecosystem, bringing together startup owners, investors, and individuals interested in starting their own businesses, contributing to the accelerated growth and mutual success of projects.

Chapter 2

Introduction

2.1 General Background

In today's fast-growing startup ecosystem, entrepreneurs face numerous challenges in developing their projects, finding resources, and attracting investments. Startup owners often struggle to gain visibility for their projects and may lack the right tools and information to ensure success. The rise of digital platforms has made it easier for entrepreneurs to connect, but there is still a need for a comprehensive space that combines development, marketing, and investment opportunities in one place.

2.2 Problem

With the increasing number of startups and entrepreneurs, there is a growing need for a platform that addresses the key pain points: lack of resources, limited access to potential investors, difficulty in promoting projects, and challenges in finding appropriate feedback for ideas. Current platforms tend to focus on isolated aspects, leaving users to navigate multiple services, which can be inefficient and time-consuming. There is a need for a unified platform that supports both project owners and investors in the startup ecosystem.

2.3 Objectives

Our project aims to create a platform that supports startup owners in two key areas: developing and promoting their projects. The platform will help users access resources, understand the factors that contribute to project success, and provide a space for showcasing projects to attract investments. Additionally, the platform will allow users to submit their ideas, receive feedback from others, and see the most popular and successful ideas and projects. For investors, the platform offers a place to discover viable projects, evaluate their potential, and invest in them.

The platform will be built with a user-friendly design and intuitive interface, ensuring that users, whether entrepreneurs or investors, can easily navigate through the platform's features. It will include tools for project management, marketing, feedback collection, and investment opportunities. The goal is to create an environment that fosters collaboration and growth for startups and investors alike.

2.4 Scope of the Project

The project targets three main user roles: project owners, investors, and admins. The primary audience includes entrepreneurs looking for a space to develop, promote, and gain visibility for their projects, as well as investors interested in discovering and supporting successful startup ventures. The platform will enable users to submit and share their ideas, showcase their projects, and interact with other users to gather feedback. Investors will have the ability to browse and invest in projects, as well as engage with project owners. The admin will manage the platform's operations, ensuring the proper functioning of the features, user interactions, and data management.

2.5 Importance

The startup ecosystem is rapidly evolving, with entrepreneurs and investors increasingly relying on digital platforms to connect, share ideas, and support successful projects. Our platform addresses this need by offering a comprehensive space that combines development tools, marketing opportunities, and investment avenues. This approach not only simplifies the process for project owners but also enhances the experience for investors. The platform's ability

to provide real-time feedback, facilitate collaboration, and offer a streamlined process for discovering and investing in projects makes it a valuable asset in the startup ecosystem.

2.6 Report Organization

This report will detail the development process of the platform, including the methodology followed, the technologies used, and the design choices made. It will also present an overview of the features and functionality of the platform, along with the outcomes and data collected throughout the project. A discussion of the challenges faced during development, the solutions implemented, and the limitations encountered will follow. Finally, the report will conclude with insights gained from the project, recommendations for future improvements, and references to the resources that guided the development process.

Chapter 3

Constraints, Standards, and Earlier Course Work

3.1 Constraints

3.1.1 Data Complexity Constraint

Given the variety of projects and ideas presented on the platform by users, dealing with complex data is a significant challenge. The system requires the ability to process large amounts of data related to each project, its idea, budget, and communication data between different parties. To handle this data efficiently, high-performance database systems have been adopted to ensure fast processing and secure storage.

3.1.2 Information Gathering Constraint

The platform gathers large amounts of information about projects, ideas, and user data in order to provide effective services. However, the platform faces challenges in how to collect data accurately and securely. This requires finding efficient ways to organize data so that it can be easily accessed by users and investors, while also ensuring compliance with legal regulations related to data protection.

3.1.3 Security Constraint

Ensuring data security, particularly for investor and project data, is essential. Strong authentication are implemented to safeguard confidentiality and prevent unauthorized access.

3.2 Standards

3.2.1 Model View Controller (MVC) Pattern

The Model-View-Controller (MVC) pattern separates data management (Model), user interface (View), and coordination (Controller), enhancing efficiency and ease of maintenance.

3.2.2 The Agile Model

An Agile approach divides development into short cycles (Sprints), ensuring continuous feature delivery and interaction with users and investors. The project followed five iterations:

1. Requirement Gathering: In this phase, we researched and determined all the requirements and features that we wanted to implement in this project, and estimated the time and effort we needed to finish the project.
2. Design: After gathering the requirements, we started to design the application based on the functionality of each requirement and how they are going to interact with the system.
3. Development: We started writing the code for the project, we divided the work between us for front end and back end, and in the code you find the implementation of each of the requirements.
4. Testing: For the backend we used Postman, which we will delve into more ahead, and then we connected the frontend and the backend and made sure every functionality works as intended.
5. Feedback: We had continuous feedback from our supervisor to make sure that the application satisfies the requirement, and made a few friends

and family do some test runs to get feedback from them on how to improve the application.

3.3 Earlier Course Work

Our prior studies equipped us with essential skills, such as modern programming techniques (JavaScript, Node.js), mobile app development with Flutter, user interface design, database management, and security, which were crucial in building the platform.

Chapter 4

Literature Review

In general, after conducting our market study and research, we found that platforms for startup projects and investments have evolved significantly over the years. Initially, entrepreneurs and investors relied on direct communication, in-person meetings, or simple advertisement listings to share and market startup ideas. However, with the rise of the internet and digital platforms in the early 2000s, dedicated platforms began to emerge, offering more structured methods for showcasing startup projects and connecting them with potential investors. These platforms allowed users to browse projects, submit ideas, and even manage investments online.

One prominent platform in the region is Alef StartUp, which provides entrepreneurs with resources to develop their projects. Globally, various platforms have also emerged, each focusing on a specific aspect of the startup ecosystem. Some platforms specialize in project development and management, offering mentorship, courses, and structured plans for scaling up. Others focus solely on investment opportunities, providing a marketplace where investors can discover and invest in promising startups.

However, many of these platforms come with limitations. A common challenge is that many of these services are subscription-based or paywalled, making it difficult for new entrepreneurs with limited budgets to access their full range of features. Additionally, most platforms focus on a single aspect of the startup ecosystem—either project development or financial investments—rather than providing a comprehensive, all-in-one experience.

In light of these challenges, we developed a unified platform that integrates the best features of both types of platforms. Our platform allows users to gain insights into how to build and develop successful startup projects, while also offering investors the ability to search for and invest in promising businesses. One unique feature of our platform is a dedicated section for entrepreneurial ideas, where users can submit ideas for public feedback and gauge market interest. By collecting public and user feedback, entrepreneurs can better assess the viability of their ideas and develop successful business plans.

Our platform also facilitates direct communication between project owners and investors, enabling investors to rate and provide feedback on projects and ideas. Users can create and develop their projects directly on the platform, market them to potential customers or investors, and explore other users' ideas and projects for inspiration. Additionally, the platform's project and idea display pages include advanced search and classification features based on location, stage, or industry, making it easier for users to find relevant projects and ideas.

The global startup ecosystem has seen remarkable growth over the past decade. According to industry data, the global venture capital market has grown exponentially, driven by an increasing number of startups and the democratization of funding opportunities through online platforms. Reports indicate that digital platforms supporting startups and entrepreneurship generate billions of dollars annually, with the number of users and investors steadily increasing.

Given the rapid adoption of digital tools in entrepreneurship and the growing number of users seeking accessible, comprehensive platforms, our platform stands out as a unique opportunity. By integrating project development, marketing, idea sharing, and investment features into one platform, we offer a full suite of services that meets the needs of both project owners and investors. With its user-centric design and comprehensive feature set, our platform aims to provide an accessible, inclusive space for nurturing innovative ideas and promoting successful startup ventures.

In terms of the commercial aspect of this type of application, the electronic startup project platform industry has achieved significant profits over recent years, as shown in the figure 4.1, and the actual figures continue to grow steadily.

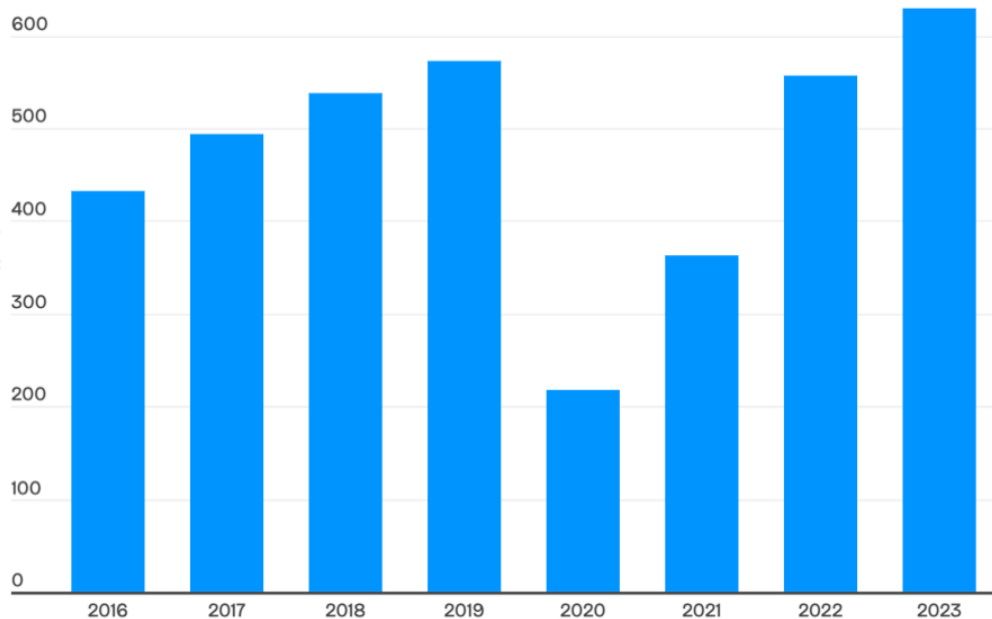


Figure 4.1:

Chapter 5

Methodology

Upon reviewing the studies, market research, and questionnaires in the literature review, it became evident that the project idea is not only creditable but also highly appropriate. Given the rapid development of the startup sector, especially here in Palestine, and the clear lack of such applications in the region, the project demonstrates strong relevance to current trends. Moreover, it offers a less complicated way to discover successful ideas and projects in the region.

This chapter will cover our data collection methods, the analysis of the gathered data, data processing, the tools and techniques employed, the models adopted during the development phase, and the comprehensive procedures followed throughout the overall project process.

5.1 Data Collection

In this section, we will discuss how the required data was collected and used in this application. The project aims to provide a platform for startup projects, where project owners can showcase their ideas and projects to receive feedback and investment from investors. To make this platform effective, data was collected from various sources, including specialized books and articles that discuss how to start a startup. Notable sources include the book *Rework*, along with articles such as *The 7 Steps to Create Startups* and *How to Start Your Own Business*.

1. Projects: Data was collected regarding the startup projects displayed

on the platform. This includes information such as the project title, description, current stage, location, category, website, email, ratings, and notes. Each project also contains data on its stages, ratings, and average ratings. This diversity of data enables investors and users to easily browse projects based on criteria that suit them.

2. Investors: Data about the investors participating in the platform was collected, including details such as the investment amount, investment duration, ownership percentage, investment date, and current investment status. Investments were categorized based on the associated project to ensure investors can easily find projects that align with their interests.

```
_id: ObjectId('67aa577cdda0573c582328db')
investorId : ObjectId('67913f992e260b04bcbdb661b')
investorName : "Gharam Mohammad Hussein"
investorEmail : "s1@stu.najah.edu"
projectId : ObjectId('67a8794056ac2e1f0b12086d')
projectName : "مُنْع بحب"
investmentAmount : 1000
investmentDuration : 7
ownershipPercentage : 2
dueDate : 2025-10-01T23:59:59.000+00:00
investmentStatus : "نشط"
investmentDate : 2025-02-10T19:46:04.509+00:00
createdAt : 2025-02-10T19:46:04.513+00:00
```

Figure 5.1: Investment

3. Users: User data includes personal information such as name, email, phone number, role, image, and last login date. This data helps personalize the user experience on the platform, whether the user is interested in presenting their ideas or reviewing other projects.

4. Reviews and Ratings: Reviews and ratings submitted by users about projects were collected. This data includes user opinions about the displayed projects, contributing to improving the project experience and attracting attention to deserving projects.

5. Business Model Canvas (BMC): Business model canvas data was collected

for the startup projects, including information about key partners, key activities, key resources, value propositions, customer relationships, channels, customer segments, cost structure, and revenue streams. This data helps define how startup projects operate by breaking down key activities, making it easier to manage and guide investors.

```

    _id: ObjectId('67b2d5f4c62a169496597dca')
    projectId: ObjectId('67a8794056ac2e1f0b12086d')
    ▼ keyPartners : Array (4)
      0: "الموردين"
      1: "شركات الشحن والتوصيل"
      2: "المنصات الإلكترونية"
      3: "الطهاة المتخصصين"
    ▼ keyActivities : Array (4)
      0: "إعداد وتحضير الأطعمة والحلويات"
      1: "خدمة التوصيل"
      2: "تسويق المنتجات"
      3: "خدمة العملاء"
    ▼ keyResources : Array (3)
      0: "الطهاة والموظفين"
      1: "أسطول التوصيل"
      2: "المواد الخام"
    ▼ valuePropositions : Array (3)
      0: "حلويات وأطعمة منزلية مبتكرة"
      1: "خدمة توصيل سريعة"
      2: "تجربة طعام منزلية دافئة"
    ▼ customerRelationships : Array (2)
      0: "دعم العملاء عبر الإنترنت"
      1: "خدمة مخصصة"

```

Figure 5.2: BMC

- ▼ **channels** : Array (4)
 - 0: "الموقع الإلكتروني"
 - 1: "تطبيق الهاتف المحمول"
 - 2: "وسائل التواصل الاجتماعي"
 - 3: "الشراكات مع المحلات التجارية"
- ▼ **customerSegments** : Array (2)
 - 0: "محبّي الحلويات"
 - 1: "الأشخاص الباحثين عن خيارات صحية"
- ▼ **costStructure** : Array (3)
 - 0: "تكاليف الإنتاج"
 - 1: "التسويق والإعلانات"
 - 2: "تكاليف التوصيل"
- ▼ **revenueStreams** : Array (2)
 - 0: "بيع الأطعمة والحلويات"
 - 1: "خدمة التوصيل"

Figure 5.3: BMC

How the Data is Used: The collected data is used within the platform to provide recommendations, enhance user experience, and streamline the search and filtering process for investors and users. For instance, based on previous investments or user preferences, investors are directed toward projects that match their interests. Data is also used to optimize operational processes and provide accurate reports for each project's stage.

5.2 Tools Programming Languages and Technologies

To develop the Startup Hub platform, we evaluated various approaches for both the mobile and web applications to ensure maximum reachability and an optimized user experience. For each platform, we considered programming languages, frameworks, and packages, aiming to strike a balance between efficiency, ease of use, and scalability. After thorough research, we selected the best-suited technologies for our project.

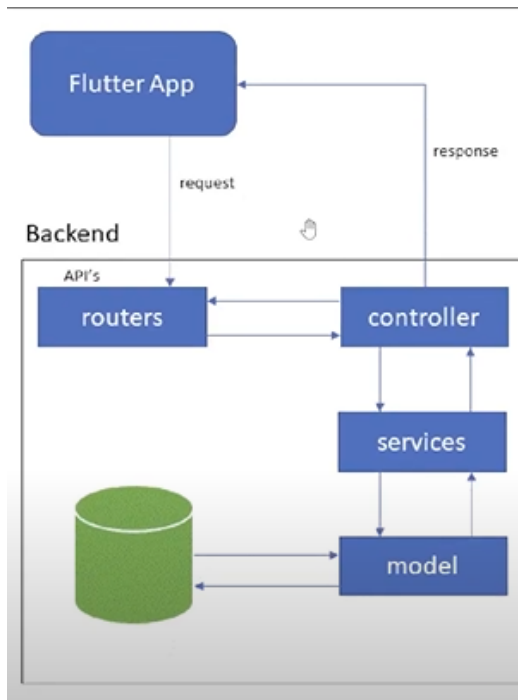


Figure 5.4: Process

5.2.1 Client Side

5.2.1.1 Design:

Designing a user-friendly and visually appealing application was the first step in our development process. Our goal was to ensure a smooth and intuitive experience for all users. We reviewed several similar platforms in the startup ecosystem, focusing on essential features such as the project dashboard, idea submission section, chat functionality, and task management. After several iterations and feedback, we crafted a design that is clean, user-centric, and easy to navigate. The design emphasizes simplicity while incorporating modern UI/UX principles.

5.2.1.2 Frameworks:

For both the web and mobile applications, we chose Flutter as our main framework. Flutter is a powerful open-source UI development kit created by Google, enabling developers to create cross-platform applications with a

single codebase. This choice was made because Flutter allows us to efficiently build native mobile apps and web applications without having to manage separate codebases for each platform.

Flutter's fast development cycle, expressive UIs, and ease of integration with backend services make it the ideal choice for our project. With its growing community and rich ecosystem, we were able to develop both the mobile and web applications in parallel, ensuring uniformity across devices and optimizing the development process

5.2.1.3 Programming Languages:

The primary programming language used for the client-side development is Dart, the language behind Flutter. Dart is an object-oriented, class-based language that compiles to native code for both mobile and web platforms. One of Dart's key strengths is its widget-based architecture, which made it easier to develop a cohesive, modular UI. Dart's simplicity and rich libraries allowed us to create a seamless, responsive experience while developing both the web and mobile applications.

5.2.1.4 Website:

For the website, we decided to leverage Flutter's cross-platform capabilities, ensuring consistency in design and functionality between the mobile app and the web platform. Using Flutter for the web allowed us to maintain the same look and feel across all platforms, and minimize development time by using the same codebase for both the website and mobile apps.

5.2.2 Server Side

5.2.2.1 Architecture of the Server Side:

For the server-side architecture, we adopted a Client-Server model, where the backend (server) communicates with various clients (mobile apps and web) through RESTful APIs. This ensures efficient, scalable, and reliable communication across multiple platforms, allowing for flexibility in handling requests from the mobile and web clients simultaneously

5.2.2.2 Runtime Environment and Approaches:

After careful evaluation, we chose Node.js as our server-side runtime environment. Node.js is a lightweight, non-blocking, event-driven JavaScript runtime, well-suited for handling concurrent client requests and ensuring high performance. Its asynchronous nature makes it an ideal choice for our platform, allowing for fast, real-time interactions with users, especially when handling data related to projects, users, and investments.

Node.js also boasts a vast ecosystem of packages and libraries, making it easy to extend functionality and integrate with other services, such as databases, and push notification services.

5.2.2.3 Frameworks:

On top of Node.js, we utilized the Express.js framework for building the RESTful APIs. Express.js simplifies the development of server-side applications by providing essential features such as robust routing, middleware support, and integration with templating engines. Its flexibility and extensive support for various HTTP methods made it the perfect choice for building the backend of our platform.

5.2.3 IDEs and Code Editors

For coding the client and server side of the platform, we utilized the following Integrated Development Environments (IDEs):

1- Android Studio:

Used for Flutter development on both mobile and web platforms. It provides powerful tools like the Flutter plugin, debugging tools, and a simulator/emulator for testing. It also offers a clean workspace and easy access to Flutter's extensive libraries and widgets.

2- VS Code (Visual Studio Code):

Employed for server-side development. VS Code is a versatile, lightweight code editor with strong support for JavaScript, Node.js, and various extensions that enhance productivity. It allows us to streamline our development process, manage version control, and run tests.

Android Studio



Figure 5.5: Android Studio

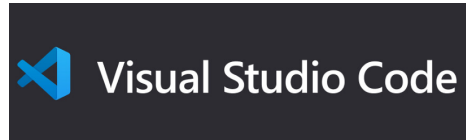


Figure 5.6: VS Code

5.2.4 Version Control

To manage and track the progress of our development, we implemented Git for version control. We set up multiple GitHub repositories to separate the frontend and backend codebases. This allowed us to easily collaborate as a team, keep track of changes, and manage different branches for development, testing, and production environments.

GitHub served as a reliable backup, ensuring the stability of the code and making it easier to revert to previous versions when necessary. It also enabled smooth collaboration between team members, reducing conflicts and ensuring that everyone was working with the latest version of the project.

5.2.5 Database

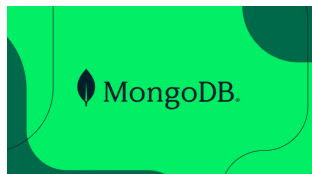


Figure 5.7: MongoDB

For the database, we used MongoDB, a NoSQL database that is highly

scalable and flexible. MongoDB’s dynamic schema makes it easy to store diverse project and user data, including project details, investments, user profiles, and business model canvases. The document-oriented structure of MongoDB allows us to store data in a way that adapts well to the platform’s evolving needs.

MongoDB’s distributed architecture and replication features ensure high availability, data durability, and the ability to handle large volumes of data, which is essential for our growing platform.

- user table

Field	Type	Required	Description
name	String	true	The name of the user
email	String	true	unique, The confirmation status of the users’ sign-up (to check if the email is real by verifying it through an email message).
password	String	true	The password of the user (should be 7 or more characters with capital letter, small letters, numbers, and special characters).
phoneNumber	String	false	The phone number of the user
gender	String	true	The gender of the user.
role	String	true	The role of the user, enum: ['user', 'admin', 'investor']
confirmEmail	Boolean	false	The user is not allowed to log in unless their email is confirmed by sending a code to verify if the email is real or not.
sendCode	String	false	Generated randomly.
lastLogin	Date	false	To get the last active user.

Table 5.1:

- project table

Field	Type	Required	Description
question1	String	false	The first question in the task.
answer1	Boolean	false	The answer to the first question, either true or false.
question2	String	false	The second question in the task.
answer2	Boolean	false	The answer to the second question, either true or false.
question3	String	false	The third question in the task.
answer3	Boolean	false	The answer to the third question, either true or false.
question4	String	false	The fourth question in the task.
answer4	Boolean	false	The answer to the fourth question, either true or false.
question5	String	false	The fifth question in the task.
answer5	Boolean	false	The answer to the fifth question, either true or false.
question6	String	false	The sixth question in the task.
answer6	Boolean	false	The answer to the sixth question, either true or false.
question7	String	false	The seventh question in the task.
answer7	Boolean	false	The answer to the seventh question, either true or false.
question8	String	false	The eighth question in the task.
answer8	Boolean	false	The answer to the eighth question, either true or false.

Table 5.2: Task Schema Table

Field	Type	Required	Description
stageName	String	false	The name of the stage in the project.
tasks	Array of taskSchema	false	An array of tasks associated with the stage.

Table 5.3: Stage Schema Table

Field	Type	Required	Description
noteText	String	false	The text content of the note.
createdAt	Date	false	The timestamp when the note was created.

Table 5.4: Note Schema Table

Field	Type	Required	Description
investor	ObjectId (ref: "user")	false	The investor associated with the rating.
rating	Number	false	The rating given by the investor, ranging from 1 to 5 stars.

Table 5.5: Rating Schema Table

Field	Type	Required	Description
title	String	true	The title of the project.
name	String ref:user	true	The user who created the project.
description	String	true	A description of the project.
currentstage	String	true	The current stage of the project.
isPublic	Boolean	true	Whether the project is public or private.
location	String	true	The location of the project.
category	String	true	The category of the project.
website	String	false	The website URL for the project.
email	String	false	The email address of the project.
summary	String	false	A summary of the project.
date	Date	true	The creation date of the project.
image	String	true	The image associated with the project.
createdBy	ObjectId	true	The user who created the project.
stages	Array of stageSchema	false	An array of stages related to the project.
searchCount	Number	false	The number of times the project has been searched.
recommendations	Array of ObjectId (ref: "project")	false	An array of recommended projects.
notes	Array of noteSchema	false	An array of notes related to the project.
ratings	Array of ratingSchema	false	An array of ratings associated with the project.
averageRating	Number	false	The average rating of the project.

Table 5.6: Project Schema Table

- investment table

Field	Type	Required	Description
investorId	ObjectId (Ref: user)	Yes	The ID of the investor making the investment
investorName	String	Yes	The name of the investor
investorEmail	String	Yes	The email of the investor
projectId	ObjectId	Yes	The ID of the related project
projectName	String	Yes	The name of the related project
investmentAmount	Number	Yes	The amount invested by the investor
investmentDate	Date	Yes	The date when the investment was made
investmentDuration	Number	No	The duration of the investment in months
ownershipPercentage	Number	No	The ownership percentage acquired by the investor
dueDate	Date	No	The due date for the investment return
investmentStatus	String	Yes	The current status of the investment

Table 5.7: Investment Schema

- idea table

Field	Type	Required	Description
createdBy	ObjectId	Yes	The ID of the user who created the like or comment
commentId	ObjectId	Yes	The ID of the comment that the like is associated with (for likesSchema)
ideaId	ObjectId (Ref: Idea)	Yes	The ID of the idea that the like is associated with (for ideaLikesSchema)
createdAt	Date	Yes	The date when the like or comment was created
content	String	Yes	The content of the comment (for commentSchema)
userName	String	Yes	The name of the user who created the comment
isPublic	Boolean	No	Indicates whether the idea is public or private (for ideaSchema)
category	String	Yes	The category to which the idea belongs
likes	Array of likesSchema or ideaLikesSchema	No	Array of likes associated with the comment or idea
comments	Array of commentSchema	No	Array of comments associated with the idea
createdBy	ObjectId	Yes	The ID of the user who created the idea
createdAt	Date	Yes	The date when the idea was created

Table 5.8: Schema for Likes, Comments, and Ideas

- BMC table

Field	Type	Required	Description
projectId	ObjectId (Ref: project)	Yes	The ID of the related project
keyPartners	Array of Strings	No	List of key partners involved in the project
keyActivities	Array of Strings	No	List of key activities necessary for the project
keyResources	Array of Strings	No	List of key resources needed for the project
valuePropositions	Array of Strings	No	The value propositions offered by the project
customerRelationships	Array of Strings	No	Strategies for managing customer relationships
channels	Array of Strings	No	Channels through which the project will communicate and deliver its value
customerSegments	Array of Strings	No	Target customer segments for the project
costStructure	Array of Strings	No	The cost structure for the project
revenueStreams	Array of Strings	No	Revenue streams for the project

Table 5.9: businessCanvas Schema

- request table

Field	Type	Required	Description
investorId	ObjectId (Ref: user)	Yes	The ID of the investor making the request
projectId	ObjectId (Ref: project)	Yes	The ID of the related project
investmentAmount	Number	Yes	The amount requested by the investor
investmentDate	Date	Yes	The date when the investment request was made
investmentDuration	Number	No	The duration of the requested investment
ownershipPercentage	Number	No	The ownership percentage requested
dueDate	Date	No	The requested due date for the investment
investmentStatus	String	Yes	The status of the investment
requestStatus	String	Yes	The status of the investment request
requestDate	Date	Yes	The date when the investment request was made

Table 5.10: Request Schema

- action request table

Field	Type	Required	Description
investmentId	ObjectId (Ref: Investment)	Yes	The ID of the investment related to the request
requestedBy	ObjectId (Ref: user)	Yes	The user making the request
receiverId	ObjectId	Yes	The user receiving the request
requestType	String	Yes	The type of request being made
newDetails	Object	No	Contains details like investment amount, duration, status, etc. for modification requests
status	String	Yes	The status of the request

Table 5.11: ActionRequest Schema

- feedback table

Field	Type	Required	Description
description	String	Yes	The feedback description provided by the user
createdBy	ObjectId (Ref: user)	Yes	The ID of the user who created the feedback
userName	String (Ref: user)	Yes	The name of the user who created the feedback

Table 5.12: Schema for Feedback

- conversation table

Field	Type	Required	Description
sender	ObjectId (Ref: user)	Yes	The ID of the user who sent the message
senderRole	String (Enum: ['user', 'admin'])	Yes	The role of the sender (either user or admin)
message	String	Yes	The content of the message
timestamp	Date	No	The date and time when the message was sent (default: current time)
parentMessageId	ObjectId (Ref: Message)	No	The ID of the parent message for replies (default: null)
userId	ObjectId (Ref: user)	Yes	The ID of the user involved in the conversation
adminId	ObjectId (Ref: user)	Yes	The ID of the admin involved in the conversation
messages	Array of messageSchema	No	Array of messages in the conversation

Table 5.13: Schema for Messages and Conversations

- educational course table

Field	Type	Required	Description
nameOfCompany	String	Yes	The name of the company offering the educational course
nameOfEducationalCourse	String	Yes	The name of the educational course
description	String	Yes	A description of the educational course
DateOfCourse	Date	Yes	The date when the course is scheduled to take place
createdBy	ObjectId (Ref: user)	Yes	The ID of the user who created the educational course entry

Table 5.14: Schema for Educational Courses

- educational course form table

Field	Type	Required	Description
name	String	Yes	The name of the user filling out the form
phoneNumber	String	Yes	The phone number of the user
email	String	Yes	The email address of the user
nameOfEducationalCourse	String	Yes	The name of the educational course the user is interested in
createdBy	ObjectId (Ref: user)	Yes	The ID of the user who created the form entry
userNameCreated	String (Ref: user)	Yes	The username of the user who created the form entry

Table 5.15: Schema for Form Education

- grant table

Field	Type	Required	Description
nameOfCompany	String	Yes	The name of the company offering the grant
nameOfGrant	String	Yes	The name of the grant being offered
description	String	Yes	The description of the grant, including the purpose and goals
DateOfEndoFGrant	Date	Yes	The end date of the grant
createdBy	ObjectId (Ref: user)	Yes	The ID of the user who created the grant entry
userName	String (Ref: user)	Yes	The username of the user who created the grant entry

Table 5.16: Schema for Grant

- grant form table

Field	Type	Required	Description
name	String	Yes	The name of the user filling out the grant form
phoneNumber	String	Yes	The phone number of the user
email	String	Yes	The email address of the user
nameOfGrant	String	Yes	The name of the grant the user is interested in
createdBy	ObjectId (Ref: user)	Yes	The ID of the user who created the form entry
userNameCreated	String (Ref: user)	Yes	The username of the user who created the form entry

Table 5.17: Schema for Form Grant

5.2.6 OTP

One of the key features in our application is allowing the user to change their password in case they forget it. To ensure that only the user who owns the account can change the password, we send a randomly generated One-Time Password (OTP) to their email. The user must enter this OTP in the application, and the system will compare the inputted code with the generated one. If the codes match, the user will be allowed to change their password. To further enhance security, the OTP has a limited validity period, and once it expires, it becomes useless. This approach ensures that only the rightful account owner can reset the password and prevents unauthorized access attempts.

5.2.7 Server and API Testing

When developing the backend of the application, it was crucial to test the functionality of the routes and APIs to ensure the server handles requests correctly and sends the proper and expected response. To achieve this, we used a tool called Postman.

Postman is a powerful and user-friendly tool for testing APIs that allows developers to create, test, and manage APIs effectively. It provides a graphical interface to write and execute HTTP requests and analyze responses. Postman supports various request methods such as GET, POST, PUT, and DELETE, and offers features like environment variables, scripting, and collections to organize and run tests systematically. Its ease of use and extensive functionality make it a popular choice for developers and QA teams to ensure the reliability and performance of APIs.

and handle their responses. Project Owner Website:

Displays the user's project data and business plan for each project, allows browsing of the user's projects, as well as the main projects page, shows the projects with the highest ratings, their progress, contact information, and project description, in addition to the chat between the client and project owner. These operations work using the same types of requests (GET, POST, PATCH, DELETE) executed similarly to the admin website.

Project Data Display Website:

Displays dynamic data related to a specific project to be imported and added to the system.

Investor Website:

Displays a list of investments in projects and the investor's investment requests, as well as requests for modifications and deletions related to investments and projects. It also allows the investor to evaluate projects, provide feedback on ideas, and interact with them. These operations are carried out using GET, POST, PATCH, and DELETE requests, in line with the admin and project owner websites.

5.3.3 The Data and API server

The best way to describe the server is as the heart that gives life to the application, as it is the link between the mobile application and the website. The primary function of the server is to handle all the requests sent from the mobile application and the website, then send responses that can be effectively and easily used by the client.

The main objectives of the server are:

- Receiving requests from the client-side and providing the required response from the database, such as displaying projects or users on the admin website.
- Receiving requests to add data to the database via the request body, such as submitting an investment request for a specific project or adding a new project or idea.

- Updating existing data in the database, such as modifying project information on the project owner website.
- Deleting data from the database when necessary, such as deleting a specific project or idea or removing an investment request made by an investor or removing a specific interaction with an idea, whether it was liked or commented on

5.4 System Features and Implementation

5.4.1 Websites

We created three websites, one for the admin, one for the project owners, and one for a investor.

5.4.1.1 Authentication

- Welcome Page



Figure 5.9: Welcome Page



لماذا حاضنة ستارت أب؟

تعتبر حاضنة ستارت أب الخيار المثالي لرواد الأعمال الذين يرغبون في تحويل أفكارهم إلى مشاريع ناجحة. تقدم الحاضنة دعمًا شاملًا، يشمل التمويل، التوجيه من خبراء، ودورات تدريبية متخصصة. كما توفر بيئة عمل تحفيزية للتعاون والابتكار، وتتيح لك التواصل مع شبكة من المستثمرين للحصول على التمويل اللازم. باختيارك حاضنة ستارت أب، تستثمر في مستقبلك كريادي. انضم إلينا وابدأ رحلتك نحو النجاح!

Figure 5.10: Welcome Page



هل أنت مستعد لتحويل فكرتك المبتكرة إلى عمل مزدهر؟
انضم إلى *مركز الشركات الناشئة* اليوم

سجل الآن

Figure 5.11: Welcome Page

+	ما هي حاضنة ستارت أب؟
+	كيف يمكنني التقديم؟
+	ما هي المزايا المقدمة؟
+	هل هناك رسوم للتسجيل؟
+	ما هي فترة البرنامج؟
+	كيف يمكنني التواصل معكم؟

Figure 5.12: Welcome Page



Figure 5.13: Welcome Page

- Login Page Here the users and admin can log into the website using the email used in registering and password , and of course the password used is hashed and protected in the database.

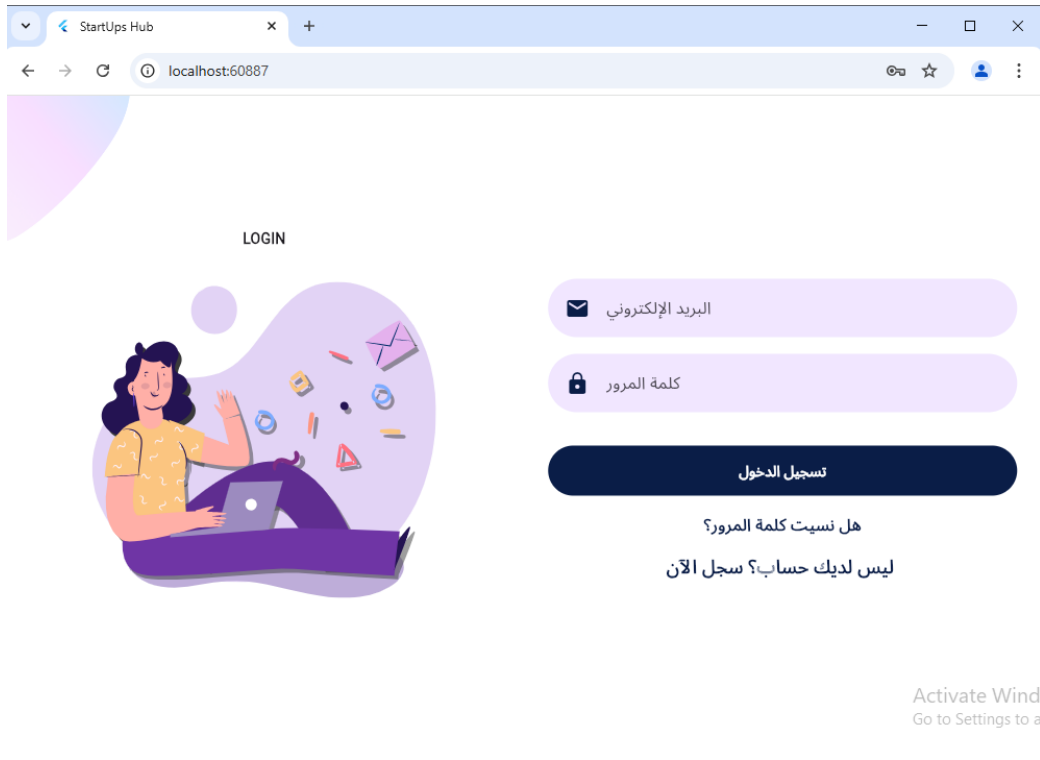


Figure 5.14: Login Page

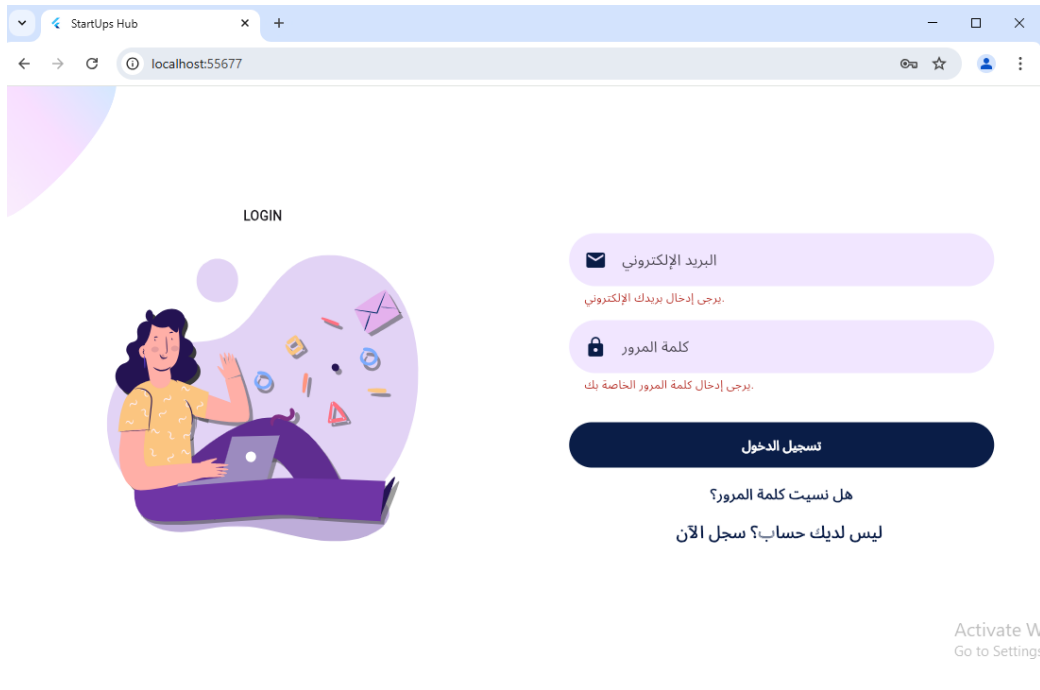


Figure 5.15: Login Page

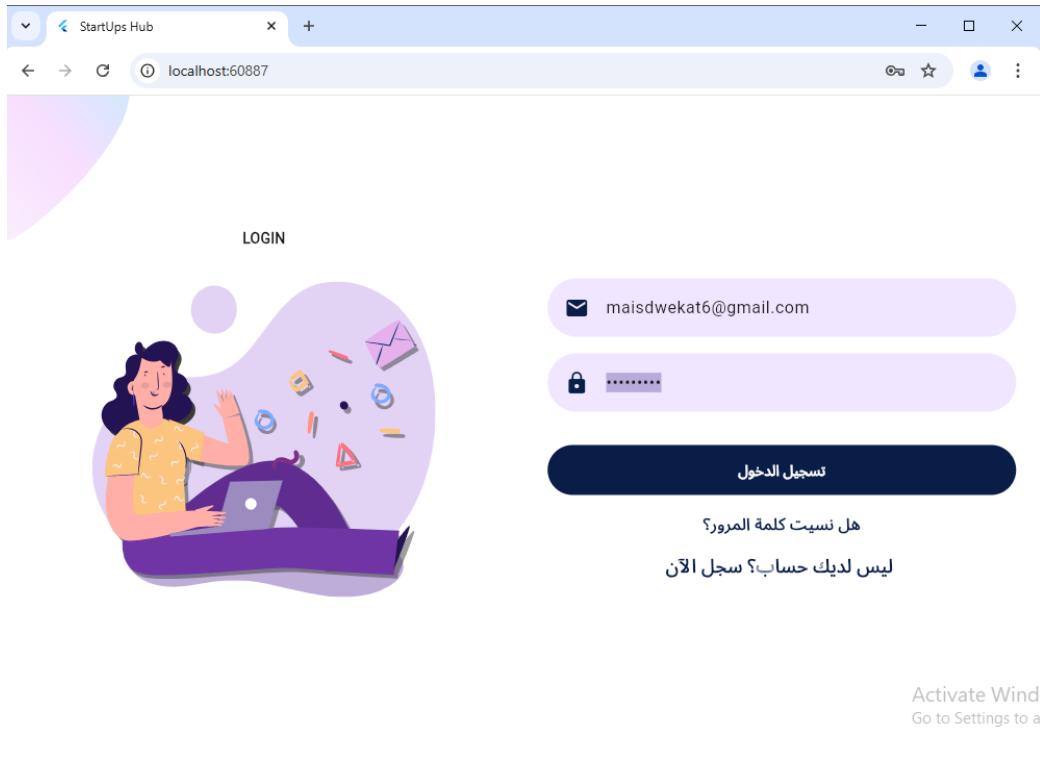


Figure 5.16: Login Page

- Sign up Page

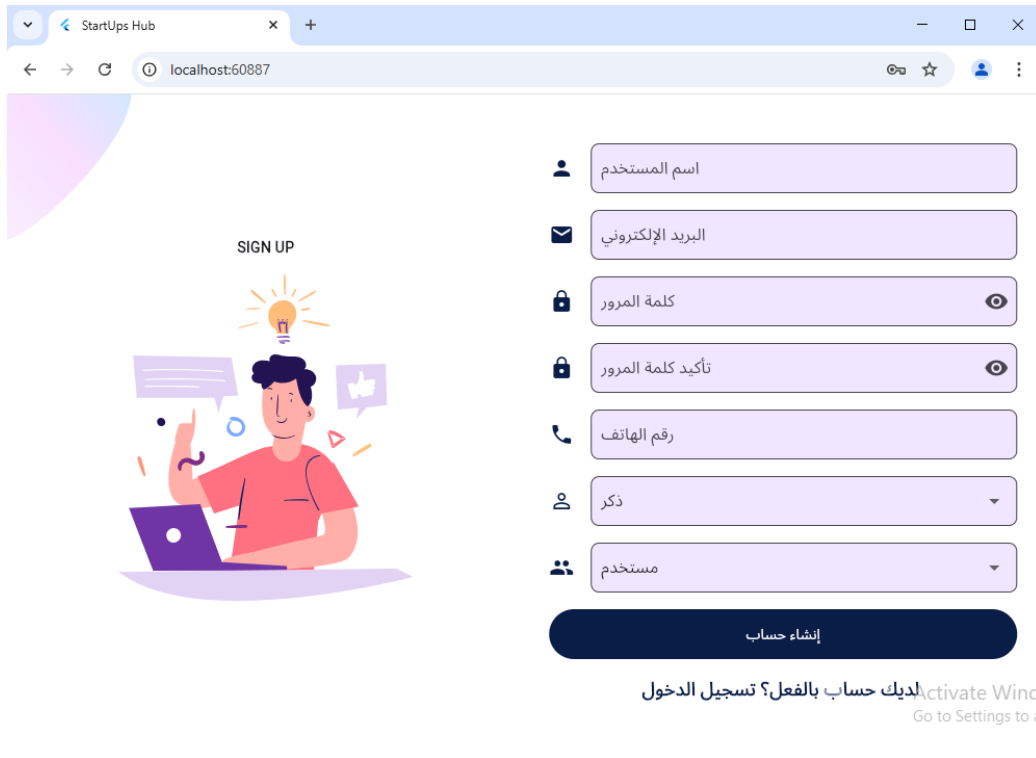


Figure 5.17: Sign up Page



Figure 5.18: Sign up Page

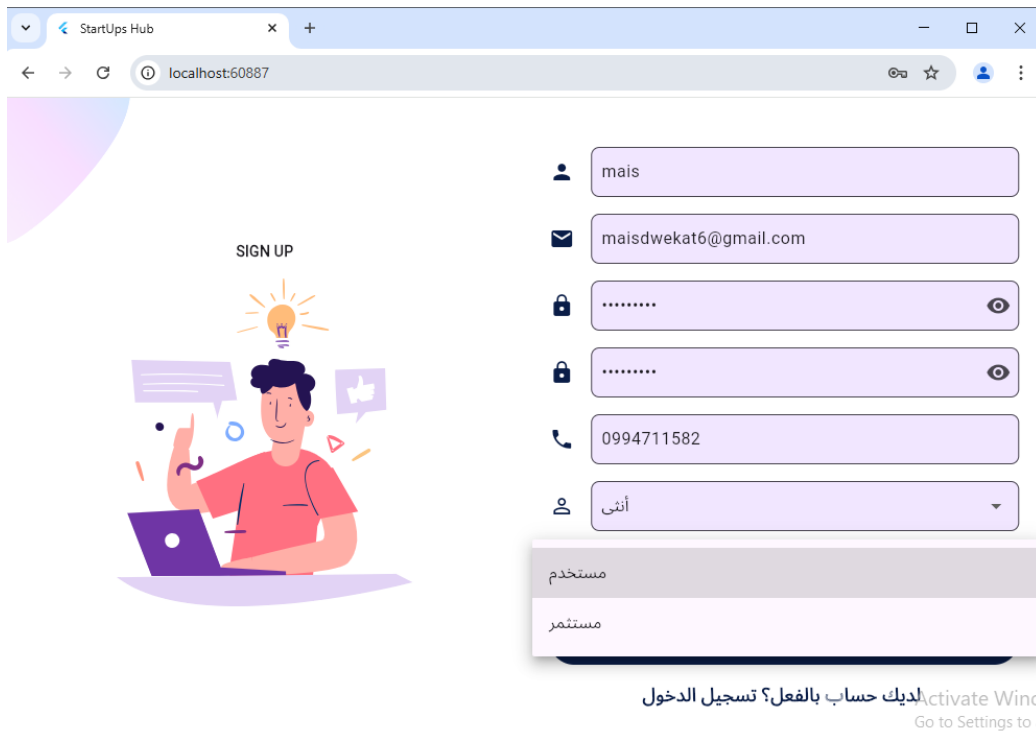


Figure 5.19: Sign up Page

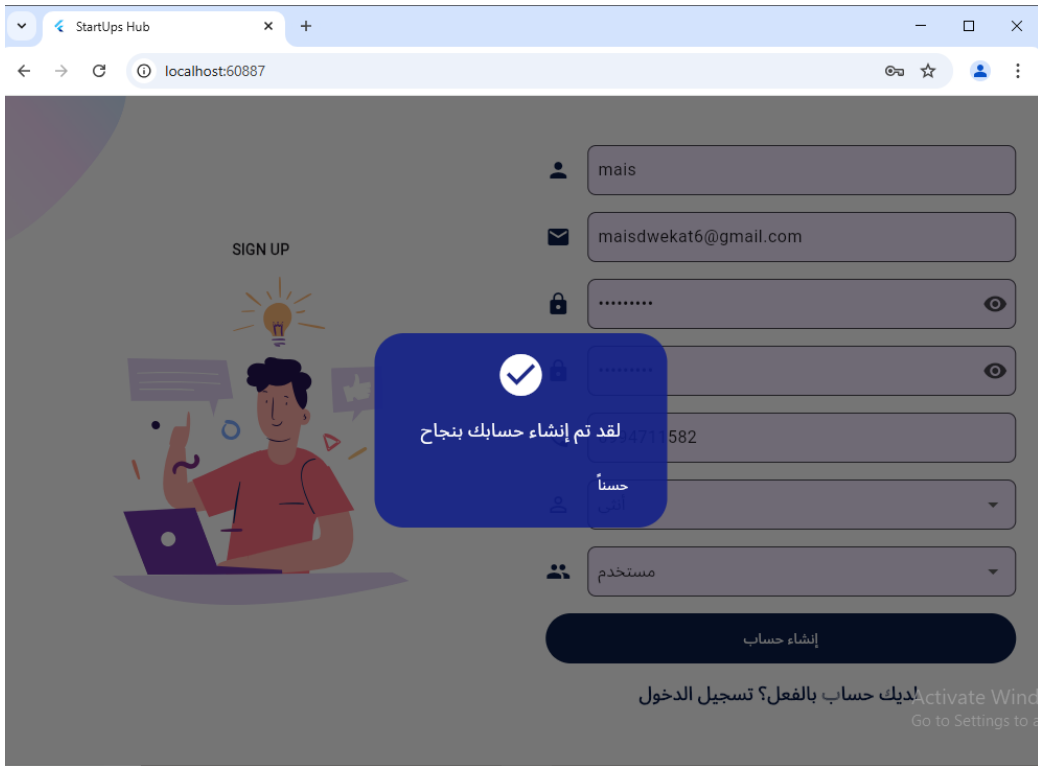


Figure 5.20: Sign up Page

”In case the user has registered, they should confirm their email by receiving a confirmation email from our website. After verifying, the user will be able to enter the website.”

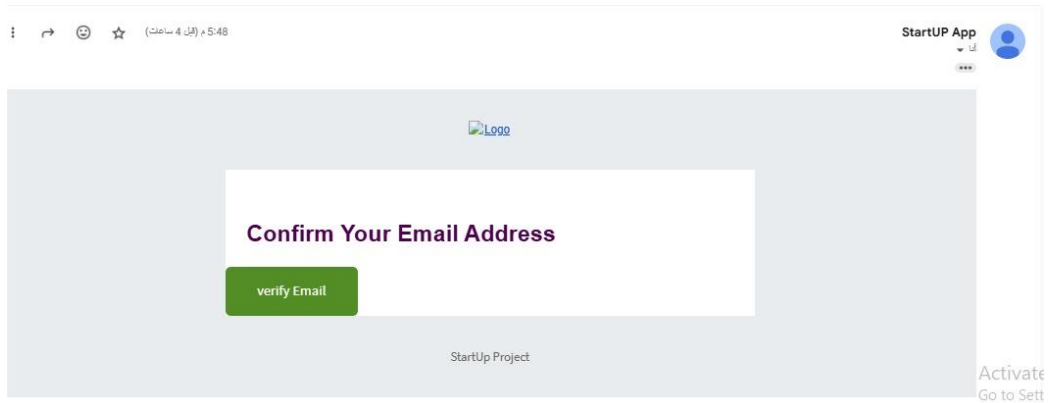


Figure 5.21: Sign up Page

- Forget Password Page
 - If the user forgets their password, they can reset it by entering the email associated with their account on the website.

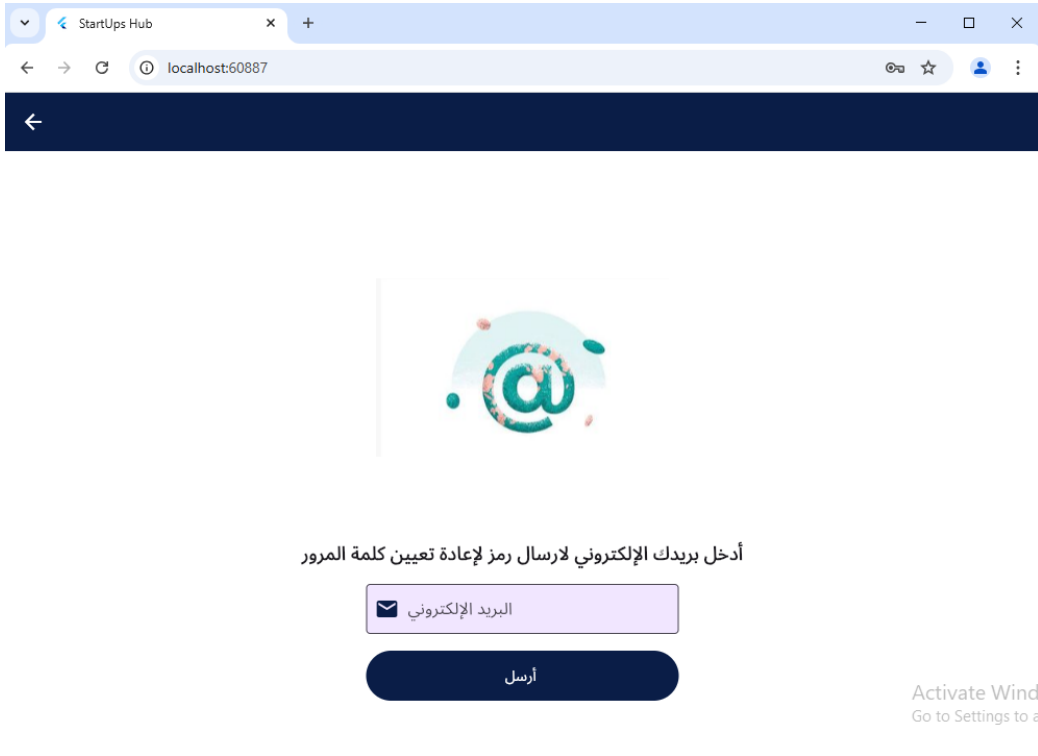


Figure 5.22: Forget Password Page



Figure 5.23: Forget Password Page

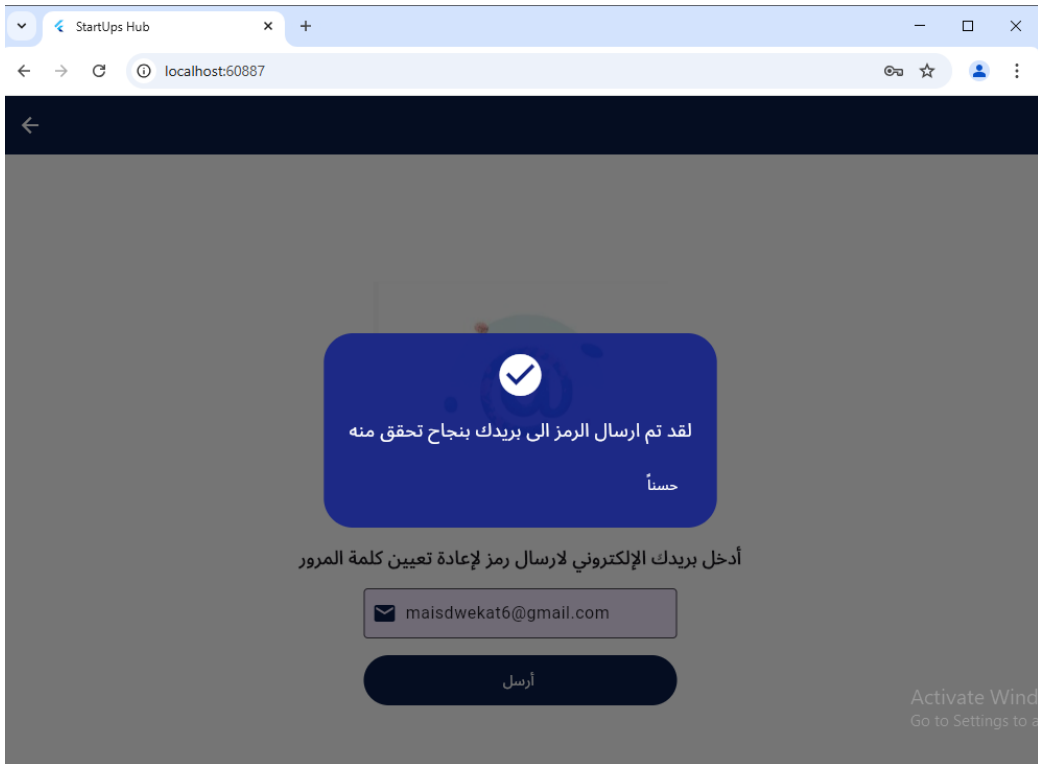


Figure 5.24: Forget Password Page

- A verification code will be sent to the user's email, which must be entered on the provided page for confirmation

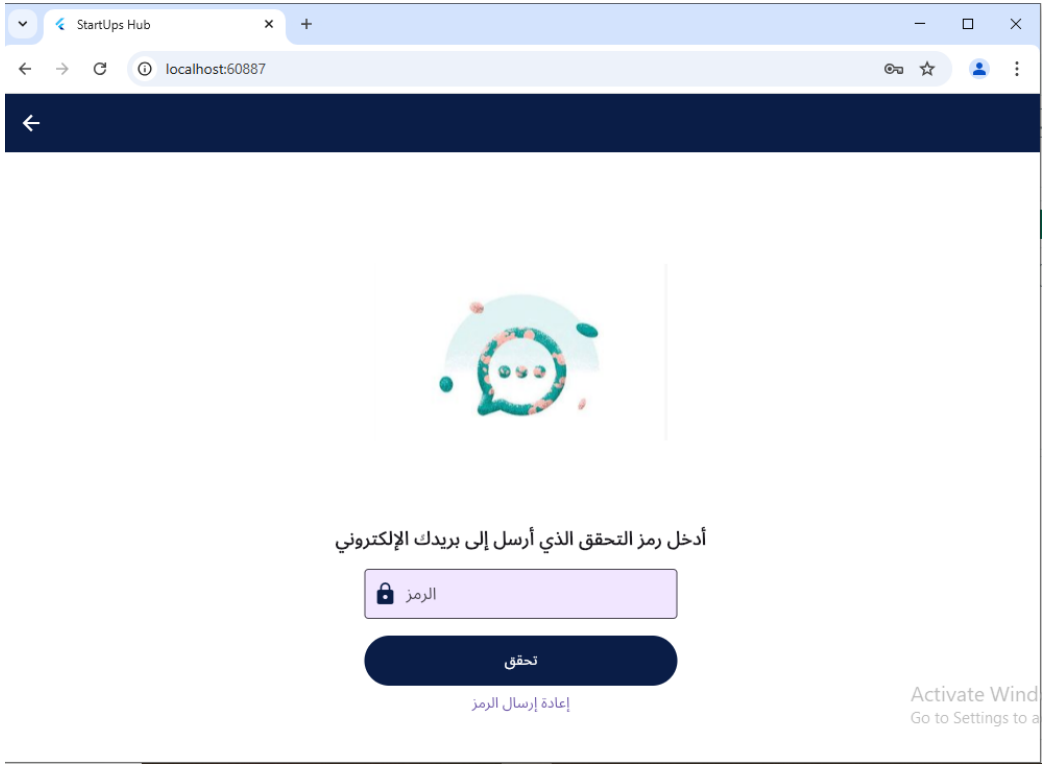


Figure 5.25: Forget Password Page

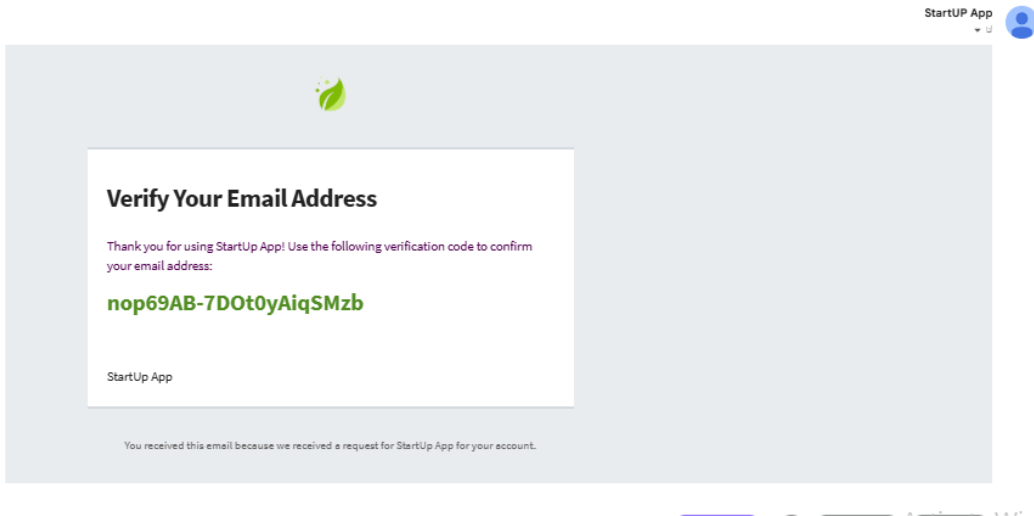


Figure 5.26: Forget Password Page

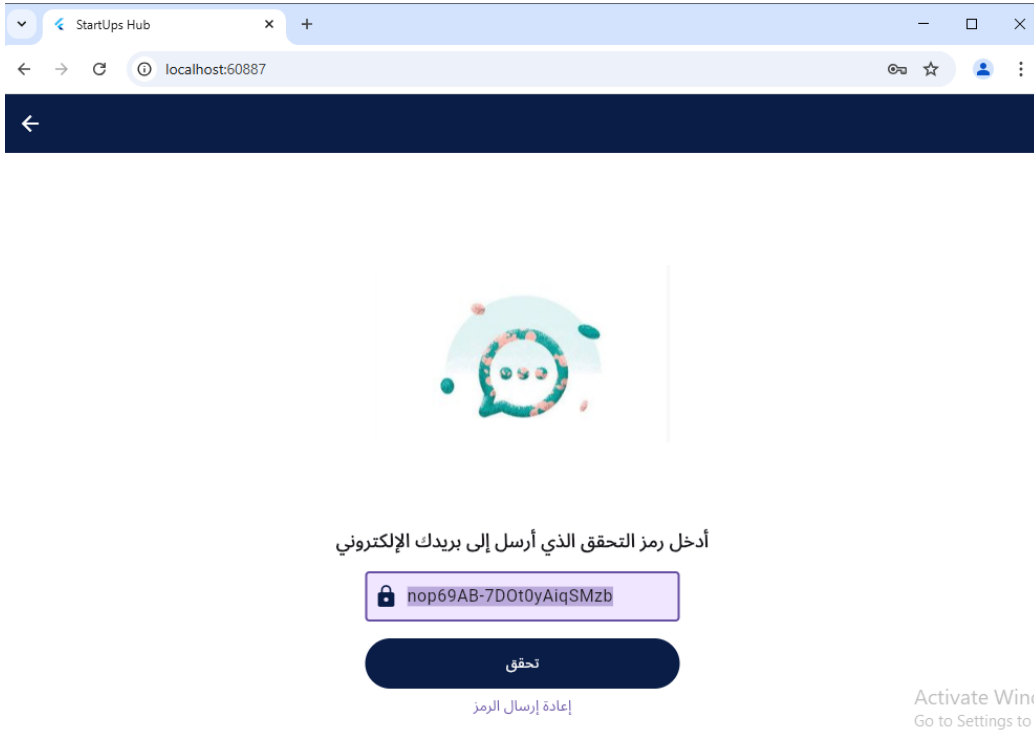


Figure 5.27: Forget Password Page

- If the code is correct, the user will be redirected to the password reset page to create a new password.

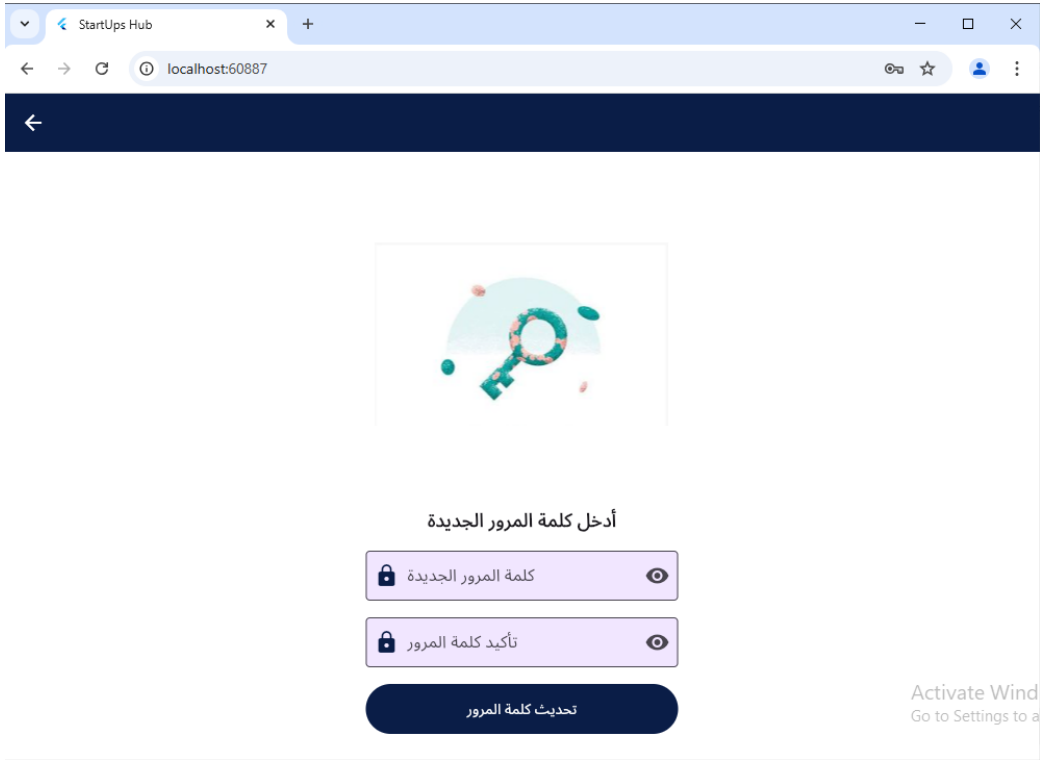


Figure 5.28: Forget Password Page

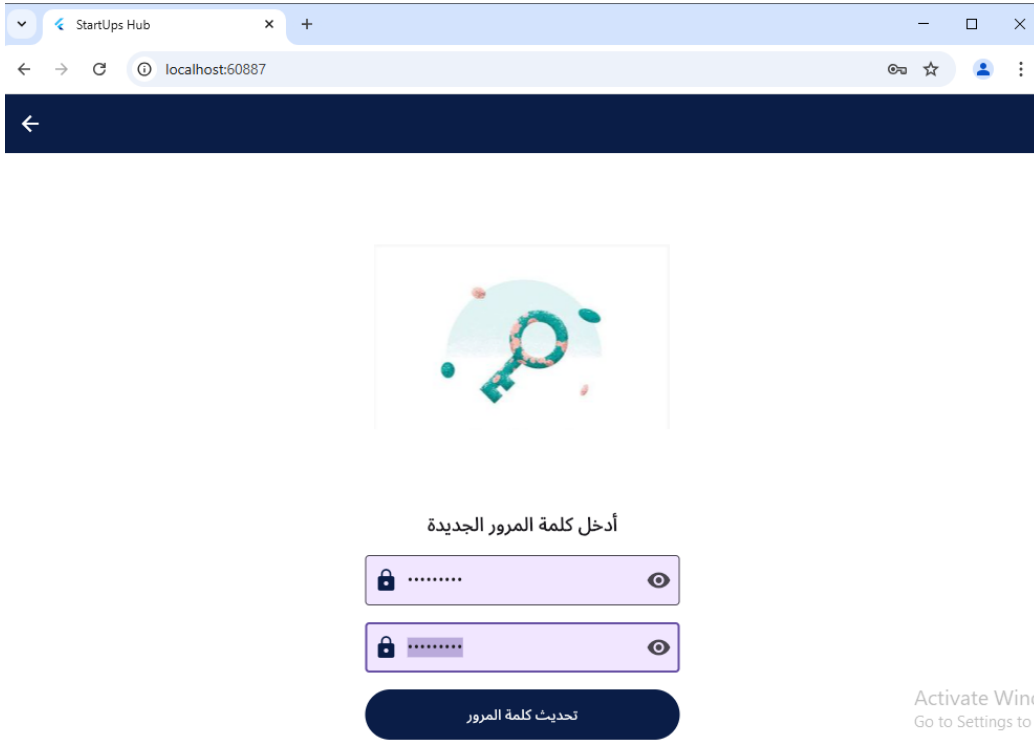


Figure 5.29: Forget Password Page

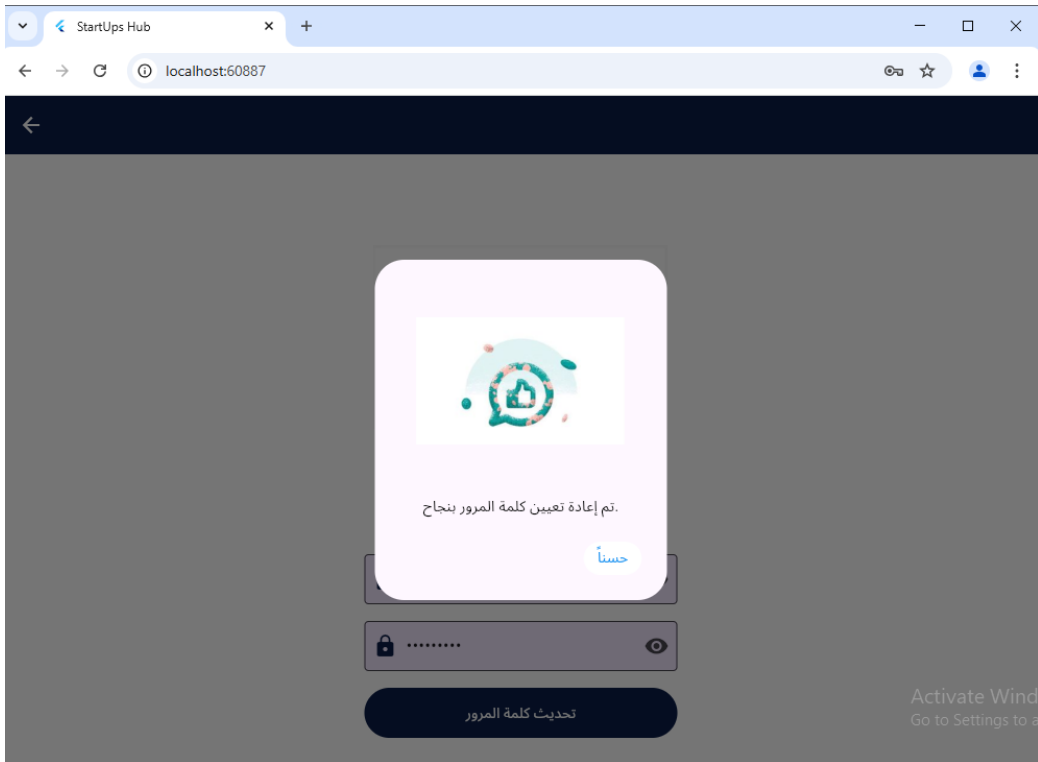


Figure 5.30: Forget Password Page

5.4.1.2 Admin Interface

- Dashboard Page

Similar to the admin website, this dashboard page contains a comprehensive overview of user submissions and requests, helping the admin manage and track user activities effectively. The following features are displayed in this dashboard:

- Submission Requests:

Displays a list of requests submitted by users, categorized as either "Publishing an Idea" or "Publishing a Project." This helps the admin quickly identify the type of request for review.

- User Details: Each row in the table contains the user’s name and email address, making it easy to contact or identify users.
- Actions:
The admin has three action buttons for each submission:
 - * Approve: The admin can approve a user’s submission request.
 - * Reject: The admin can reject the submission if it does not meet platform criteria or standards.

 - * View Details: Allows the admin to view more information about the submission before deciding to approve or reject it.
- Filter Views: The admin can toggle between viewing submissions ”As Shown to the User” or ”As Shown to the Investor,” providing flexibility in viewing data from different perspectives.
- Search Bar: A search bar is provided at the top of the page, allowing the admin to quickly find specific user submissions by name or email.
- Navigation Menu: On the left, there is a vertical navigation menu with options such as:
 - * Dashboard: Returns to the main admin overview page.
 - * Users: Manage user profiles and activities.
 - * Projects: Manage project listings submitted by users.
 - * Ideas: Manage submitted ideas.
 - * Courses: Manage courses available to users.
 - * Top Active Users: Displays statistics of the most active users on the platform.
 - * Feedback: Allows the admin to review user feedback or complaints.
 - * Grants: Manage grant opportunities for users.
 - * Notifications: Manage and send notifications to users.

- * Messages: Review and manage messages between users and the admin.
- * Logout: Sign out of the admin dashboard.

These features help the admin efficiently manage and monitor all user activities related to idea and project submissions.

اسم المستخدم	طلب التقديم	البريد الإلكتروني	الإجراءات
noor	نشر فكرة	noor@gmail.com	✓ - ✖ ⚙
samer	نشر مشروع	samer@gmail.com	✓ - ✖ ⚙
Louie	نشر مشروع	Louie@gmail.com	✓ - ✖ ⚙
Mira	نشر مشروع	Mira@gmail.com	✓ - ✖ ⚙
mai	نشر فكرة	mai@gmail.com	✓ - ✖ ⚙

Figure 5.31: Dashboard

- Users Page

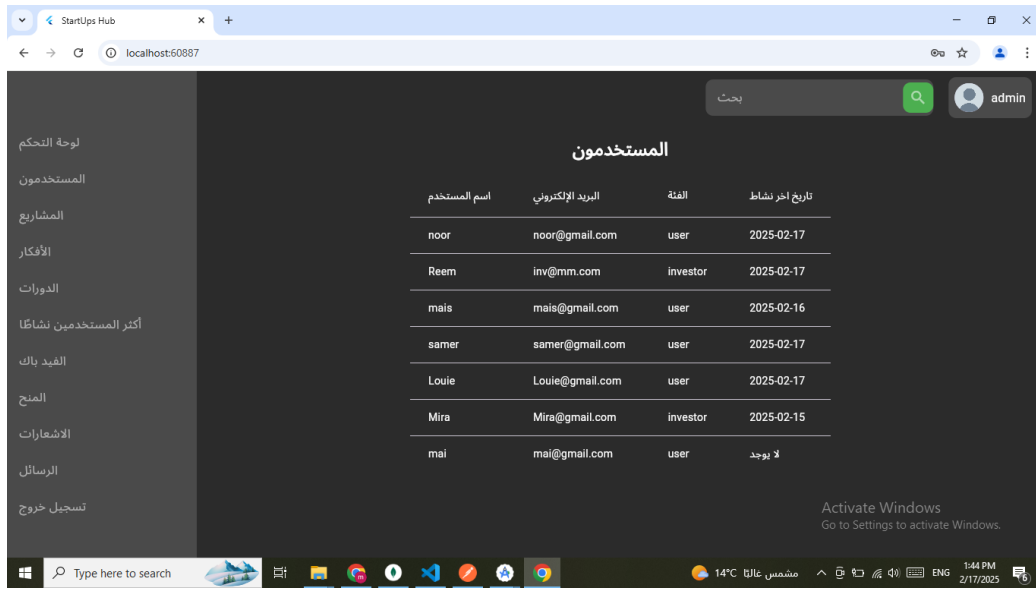


Figure 5.32: UsersPage

- Projects Page

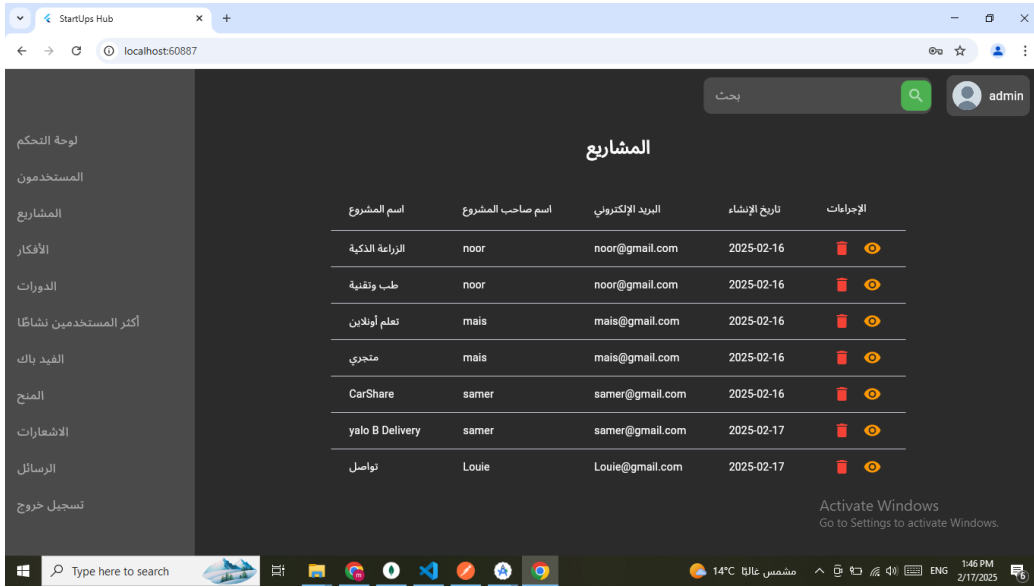


Figure 5.33: ProjectsPage

If the admin clicks on "View," the complete project details will be displayed. As shown here:

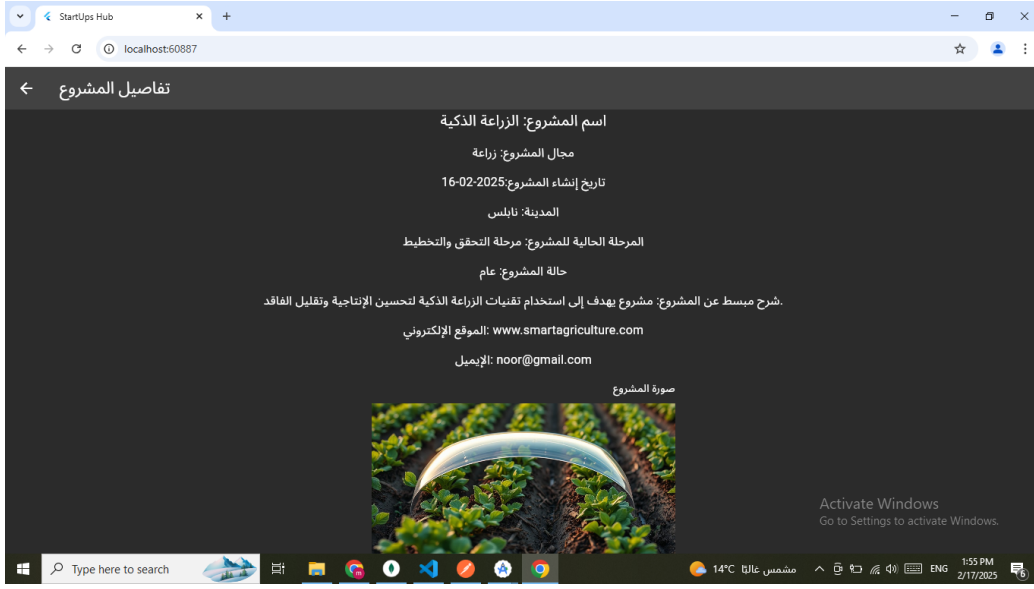


Figure 5.34: ProjectsDetails

- Ideas Page

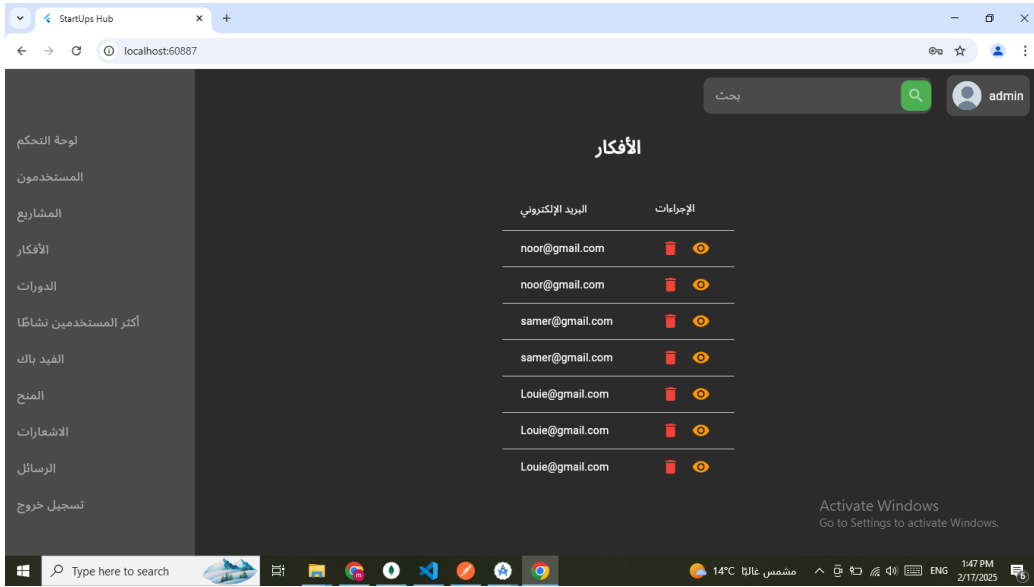


Figure 5.35: IdeasPage

If the admin clicks on "View," the complete idea details will be displayed. As shown here:

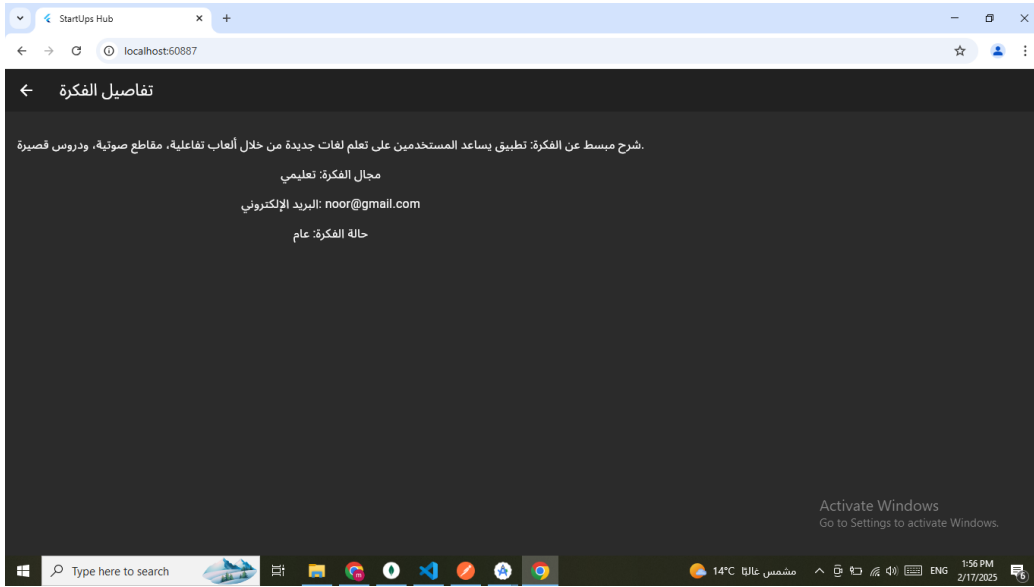


Figure 5.36: IdeasDetails

- Courses Page

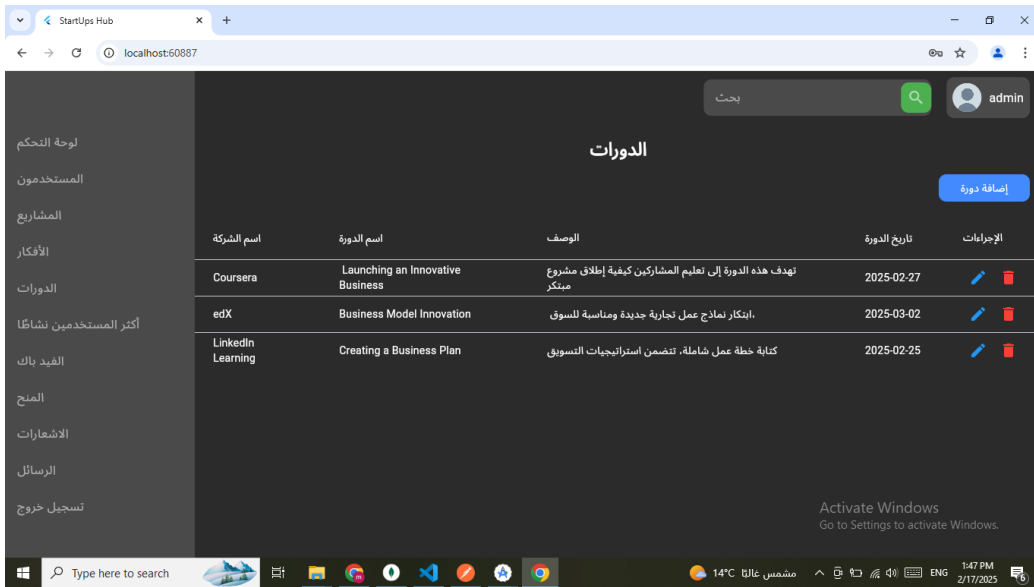


Figure 5.37: Courses

If the admin clicks on "add course" the course form details will be displayed. As shown here:

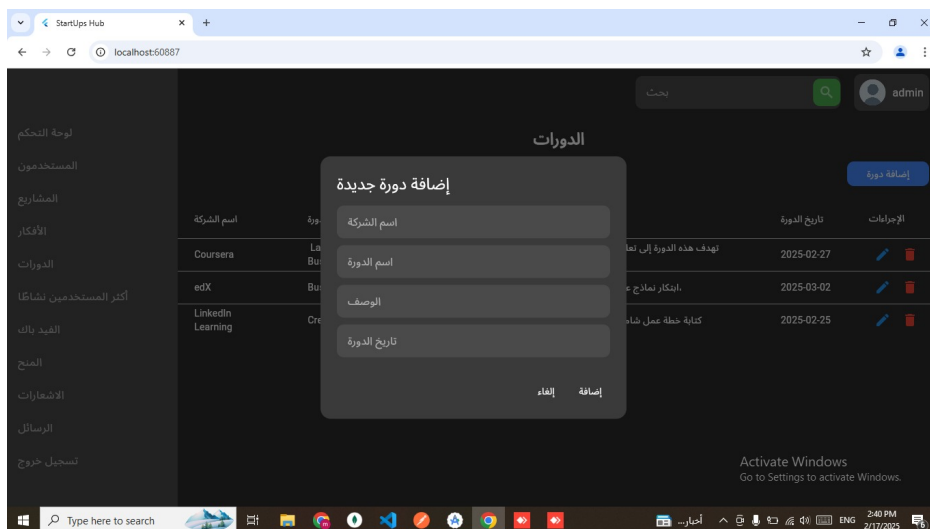


Figure 5.38: Courses

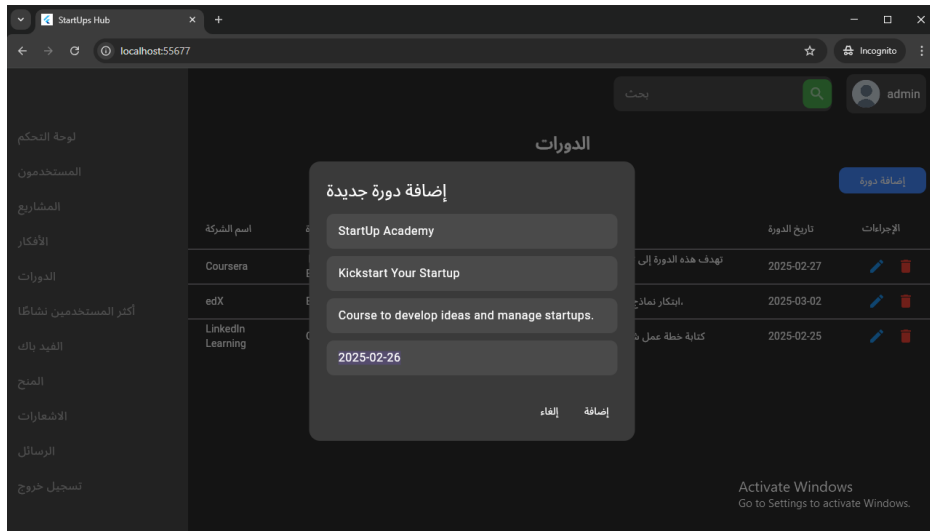


Figure 5.39: Courses

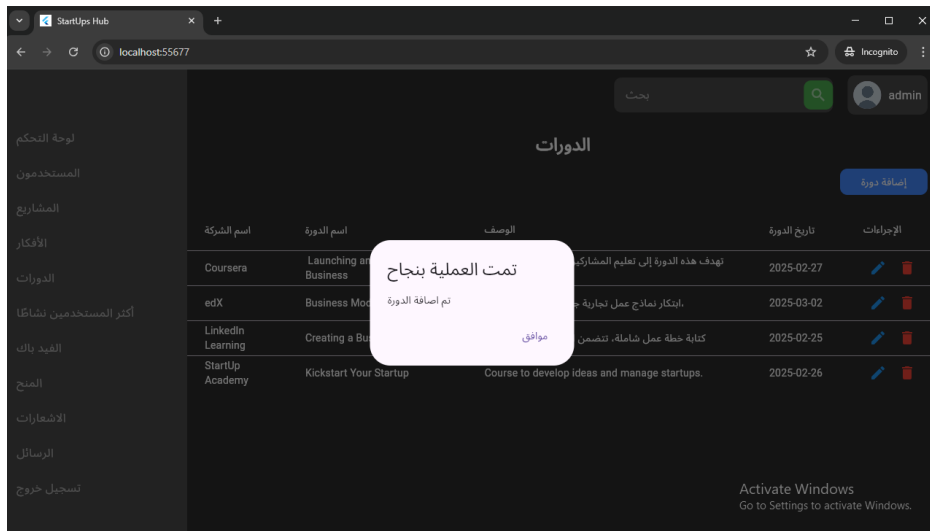


Figure 5.40: Courses

or the admin can delete courses as shown here :

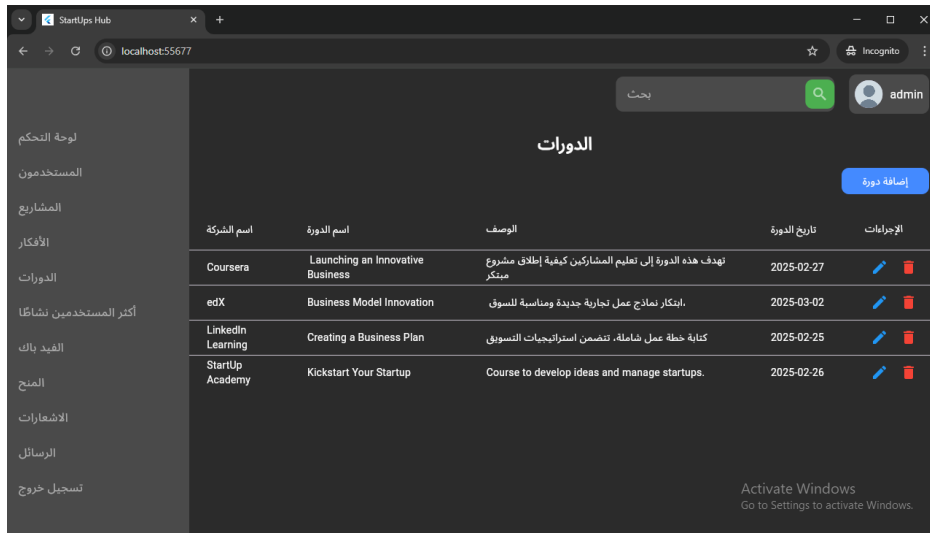


Figure 5.41: Courses

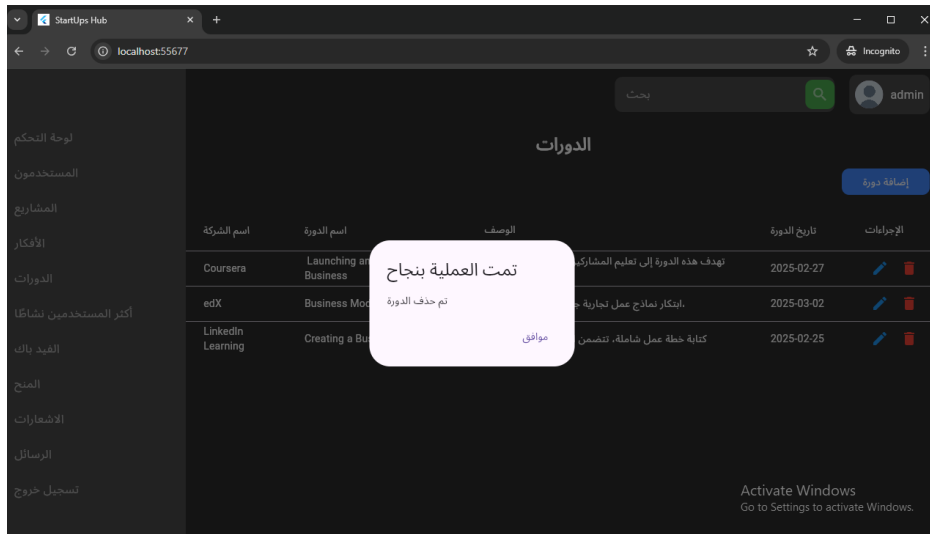


Figure 5.42: Courses

- Active Users

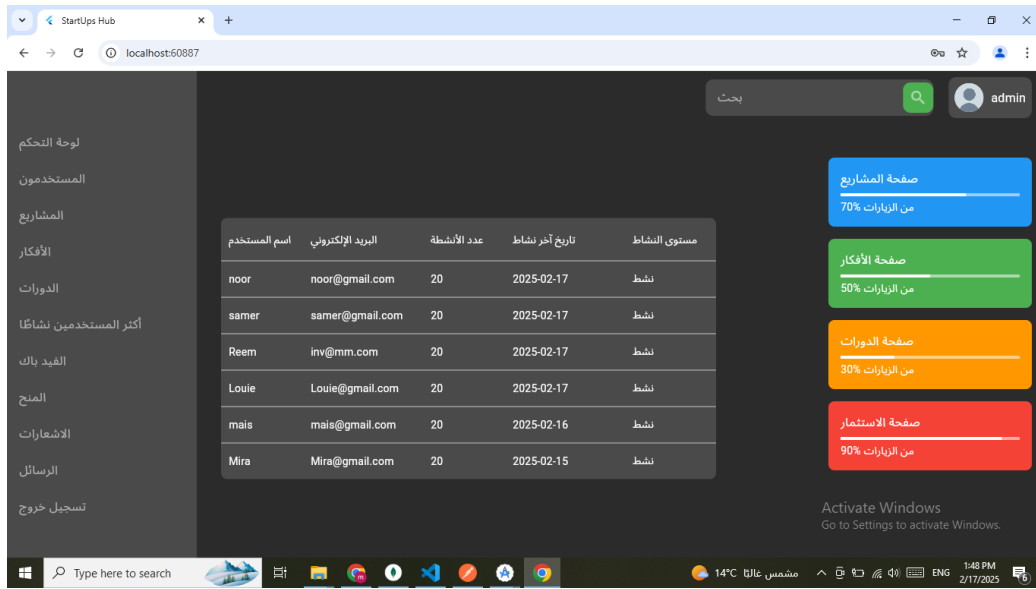


Figure 5.43: ActiveUsersTable

- Feedback Page

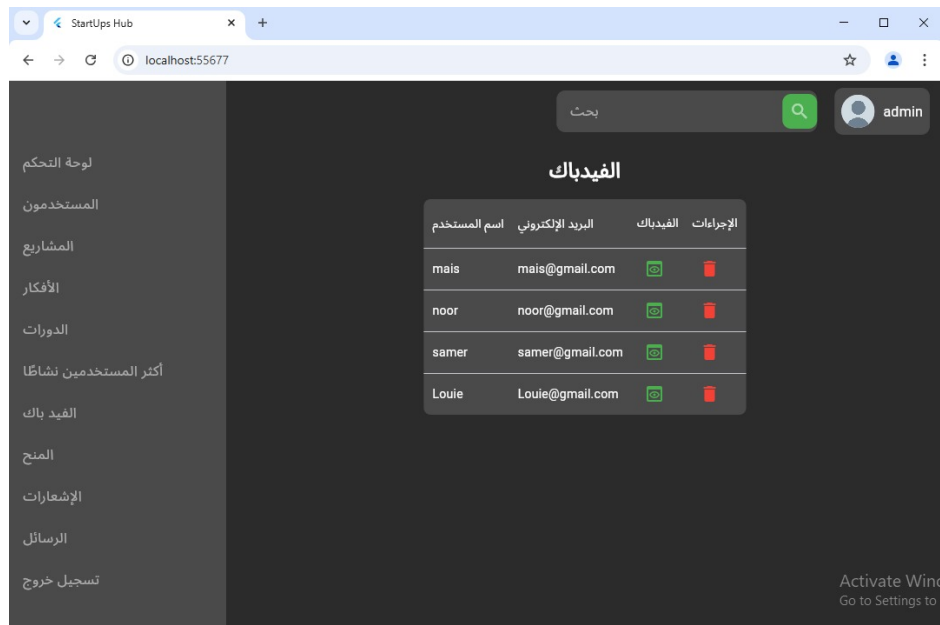


Figure 5.44: FeedbackPage

If the admin clicks on "veiw" the feedback details will be displayed. As shown here:

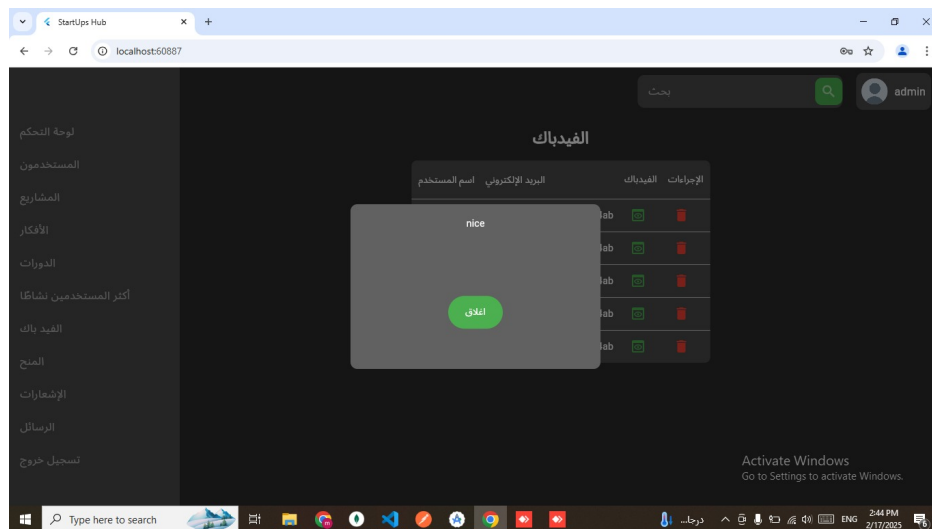


Figure 5.45: Grants

The admin can add or delete grants on the website, and they will be dynamically added to the grants page.

- Grant page

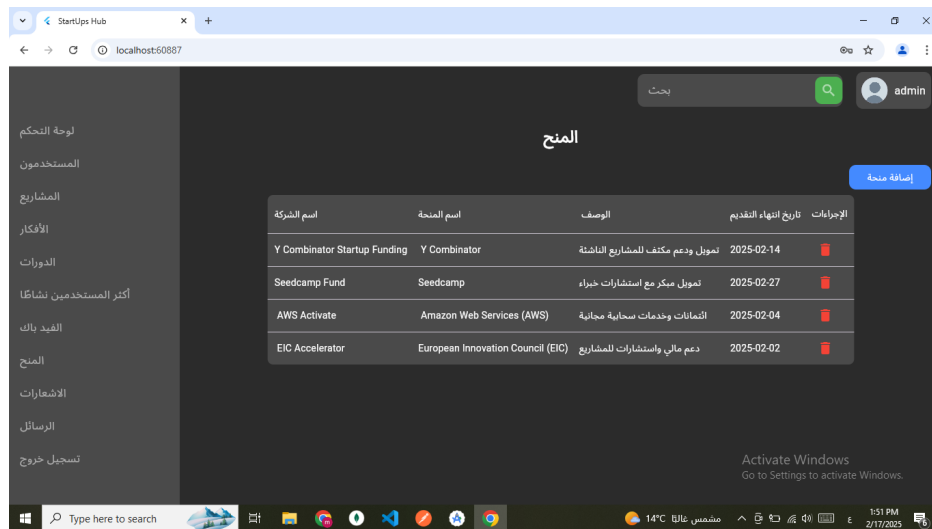


Figure 5.46: Grants

If the admin clicks on "add grants" the grant form details will be displayed. As shown here:

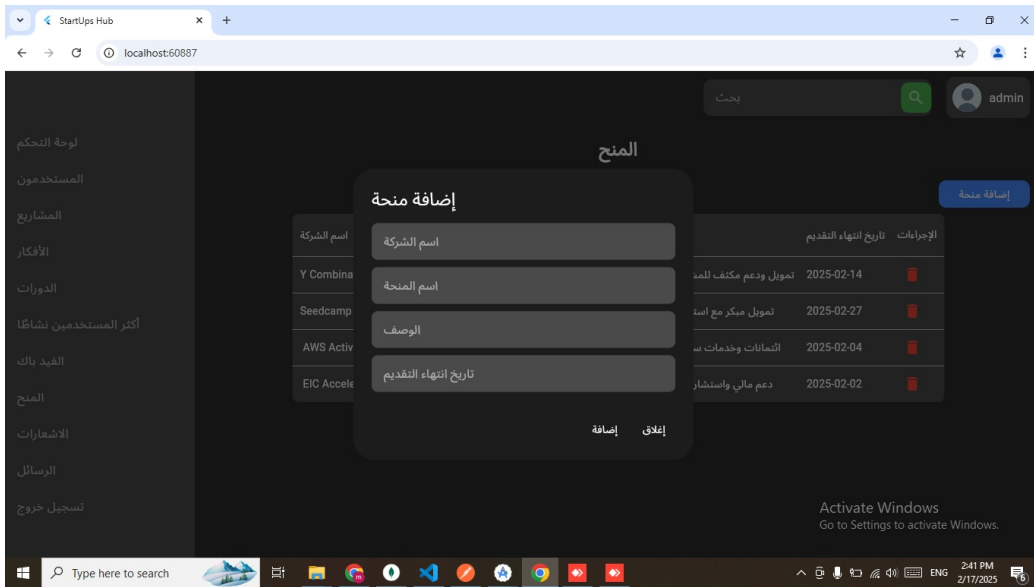


Figure 5.47: Grants

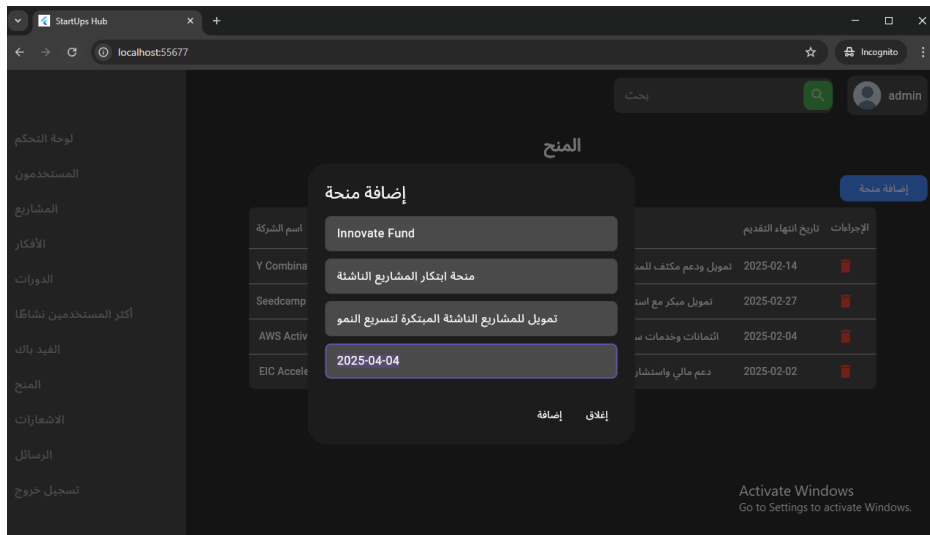


Figure 5.48: Grants

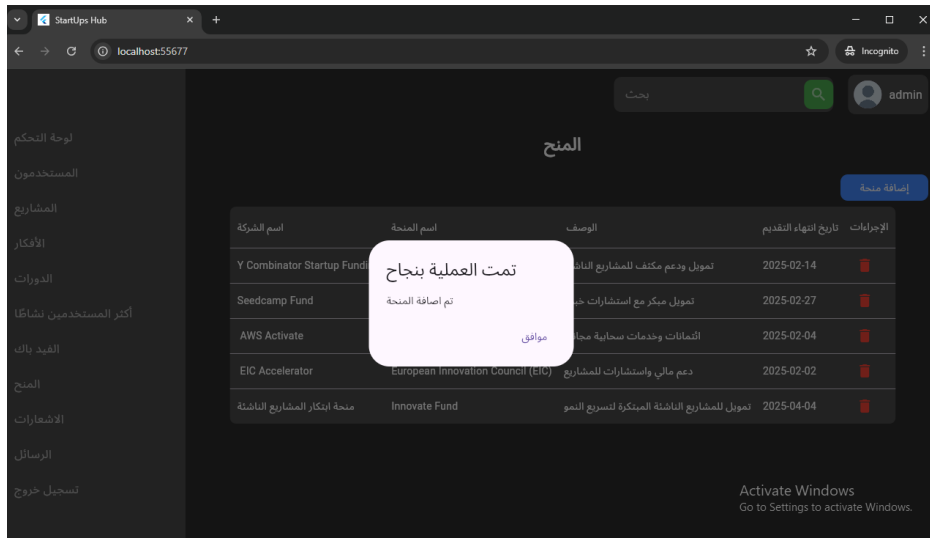


Figure 5.49: Grants

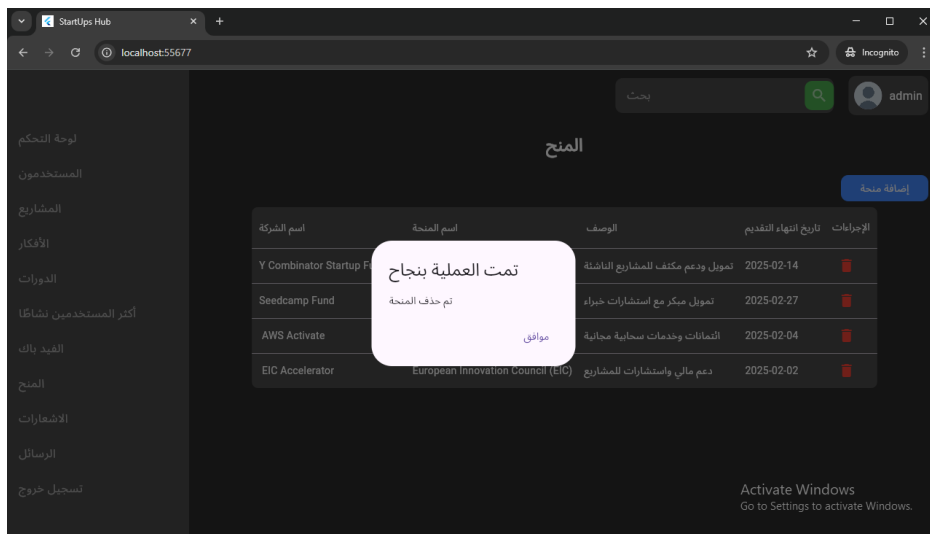


Figure 5.50: Grants

- Notifications Page

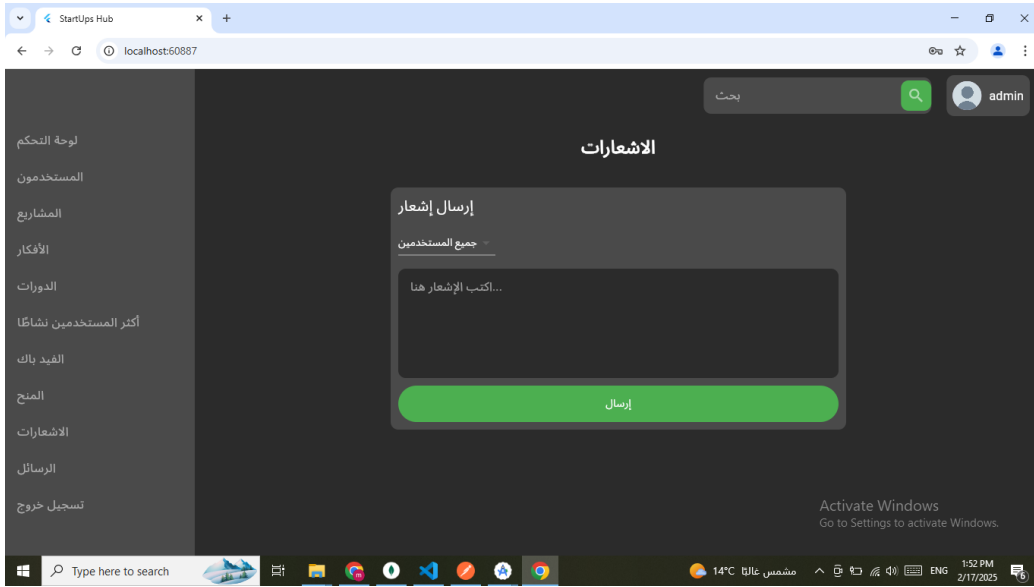


Figure 5.51: Notifications

- chat Page

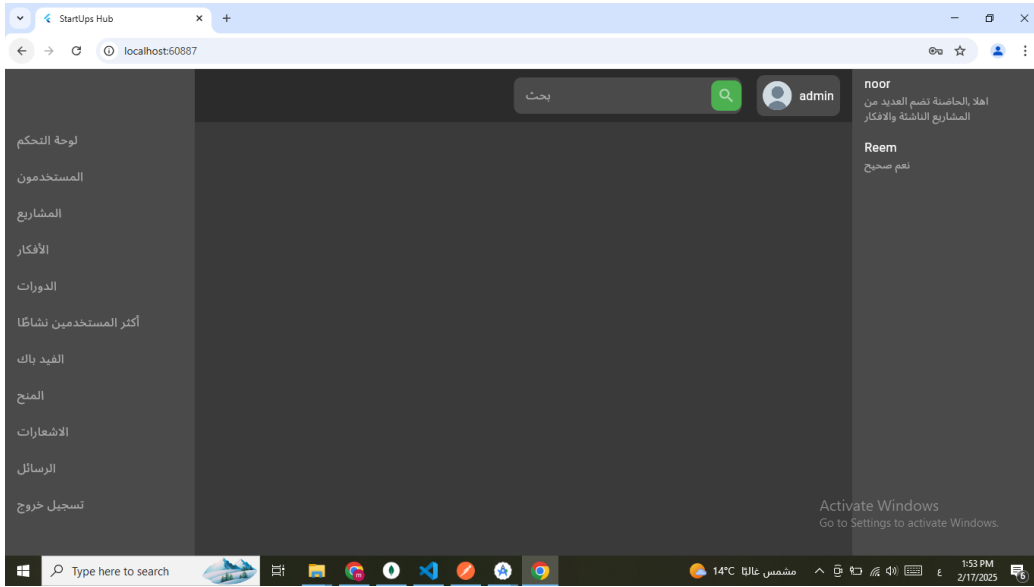


Figure 5.52: chats

5.4.1.3 Project Owners and Investors Interface

We have two main types of users on our website:

- Project Owner: For the Project Owner, there are three main sections:

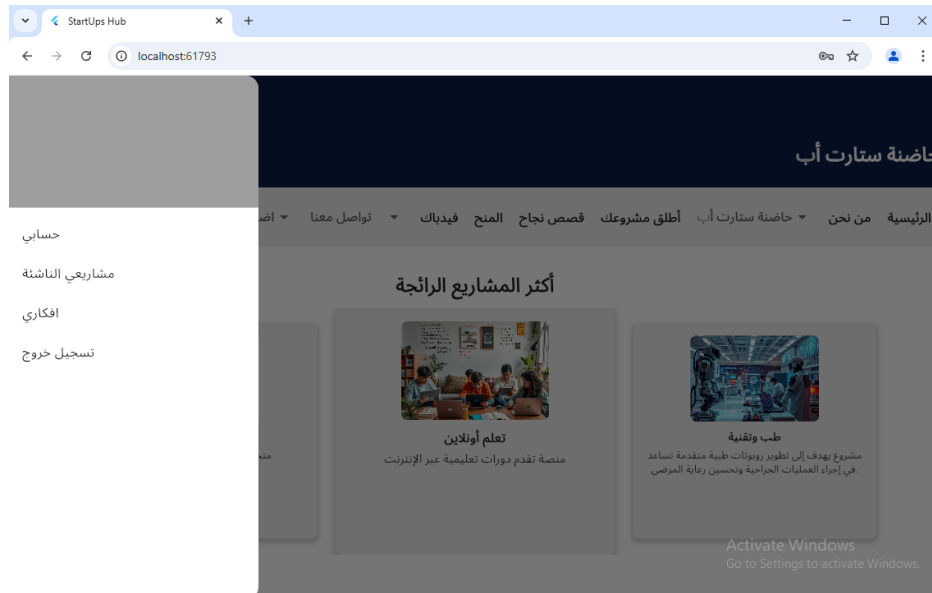


Figure 5.53: Project Owner

- My Account Page: This page contains their personal information, which they can view and edit as follows:

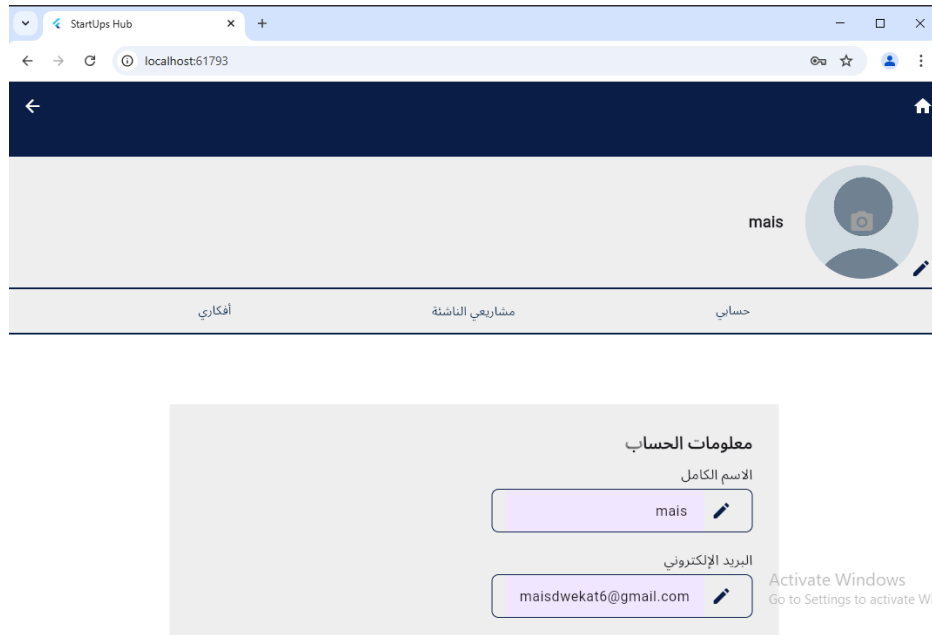


Figure 5.54: My Account

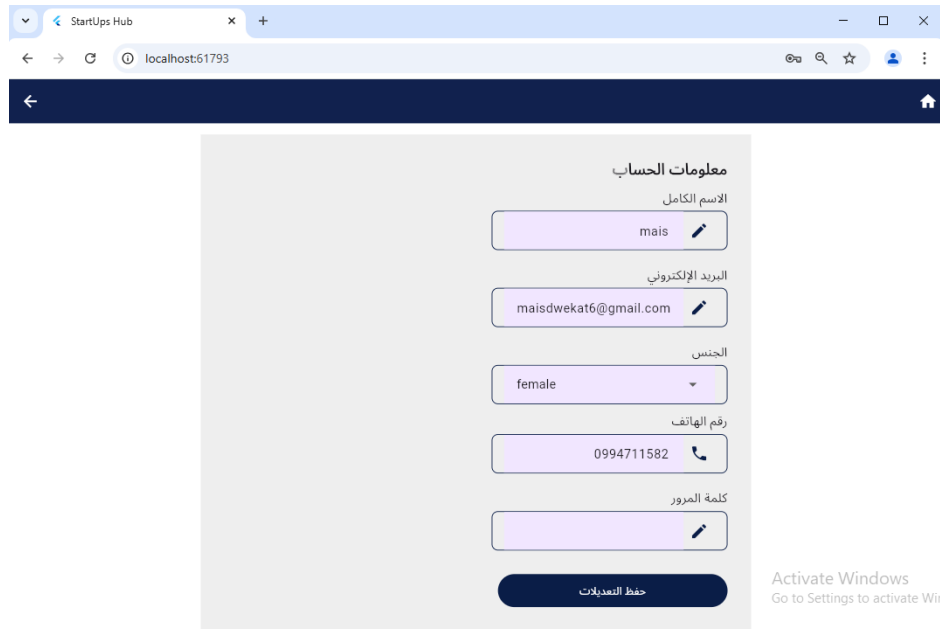


Figure 5.55: My Account

- My Startups Page: Here, they can display their own projects and create new ones as follows:

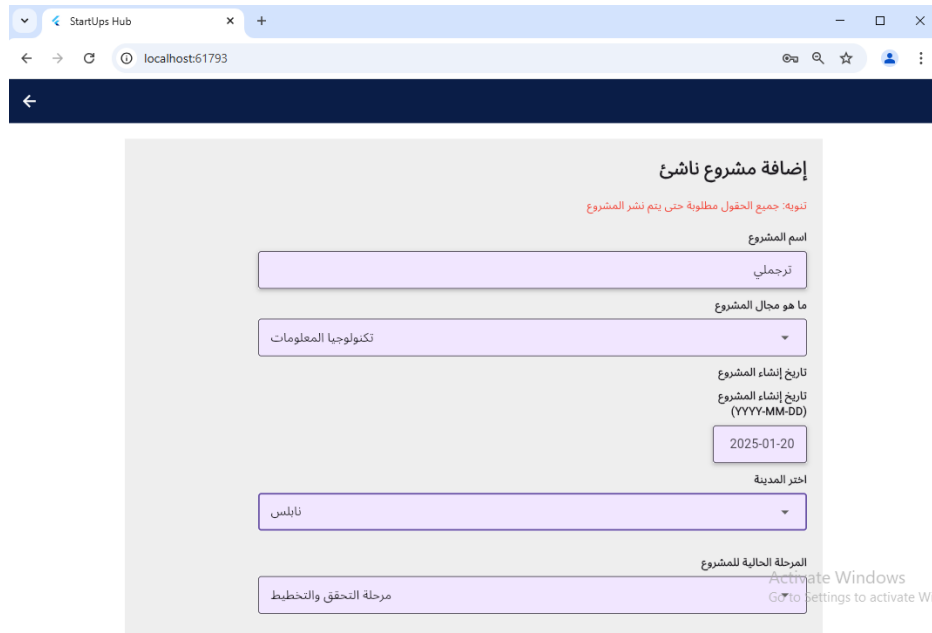


Figure 5.56: My Account



Figure 5.57: My Account

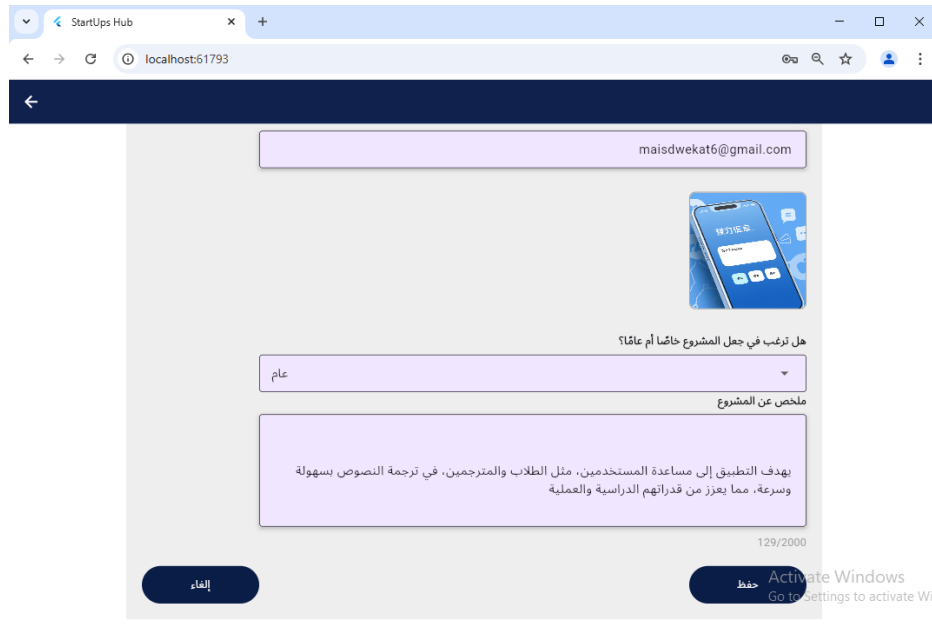


Figure 5.58: My Account

StartUps Hub x +

localhost:61793

←

إنشاء نموذج العمل التجاري

العملاء المستهدفون: من هم العملاء الذين تستهدفهم الشركة؟

قيمة العرض: ما هي المنتجات أو الخدمات التي تقدمها الشركة وما القيمة التي تقدمها للعملاء؟

قنوات التوزيع: كيف سيتم توصيل المنتجات أو الخدمات للعملاء؟

علاقات العملاء: كيف ستفاعل الشركة مع عملائها وتبني علاقات معهم؟

Activate W
Go to Settings

Figure 5.59: My Account

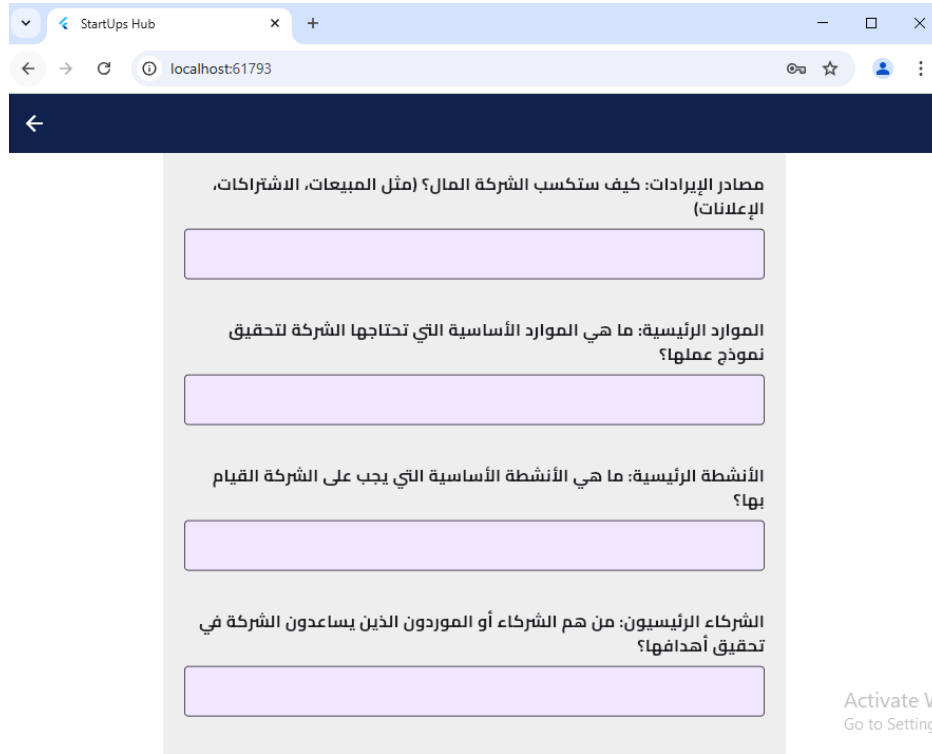


Figure 5.60: My Account

StartUps Hub

localhost:61793

عملها؟

الأنشطة الرئيسية: ما هي الأنشطة الأساسية التي يجب على الشركة القيام بها؟

الشركاء الرئيسيون: من هم الشركاء أو الموردون الذين يساعدون الشركة في تحقيق أهدافها؟

هيكل التكاليف: ما هي التكاليف المرتبطة بتشغيل نموذج العمل؟

إلغاء تحويل إلى خطة العمل حفظ

Activate Wire
Go to Settings to

Figure 5.61: My Account

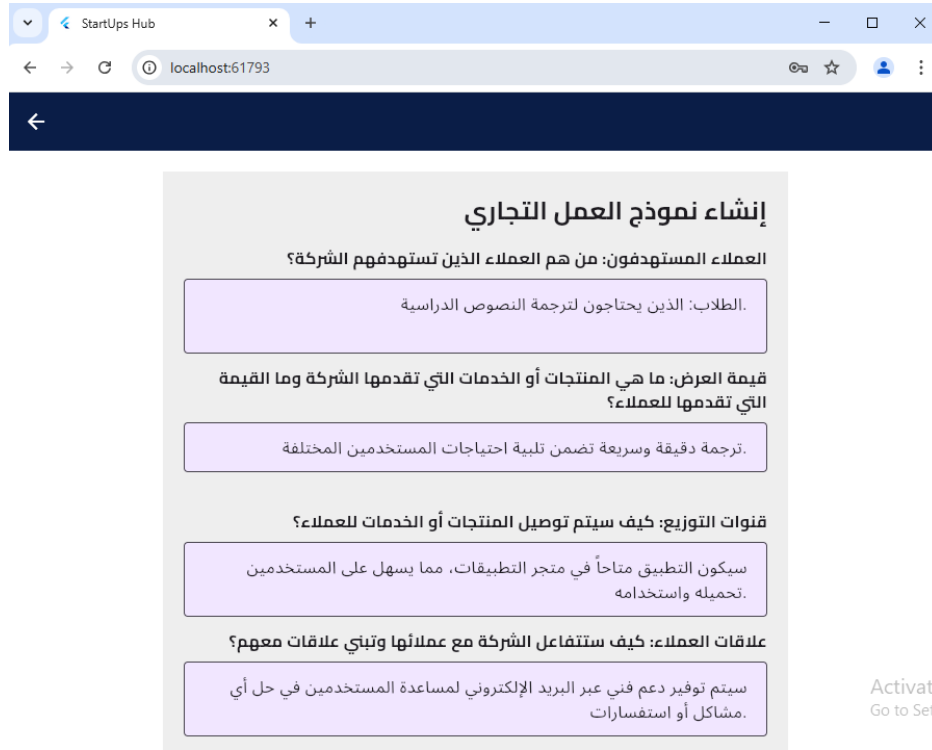


Figure 5.62: My Account

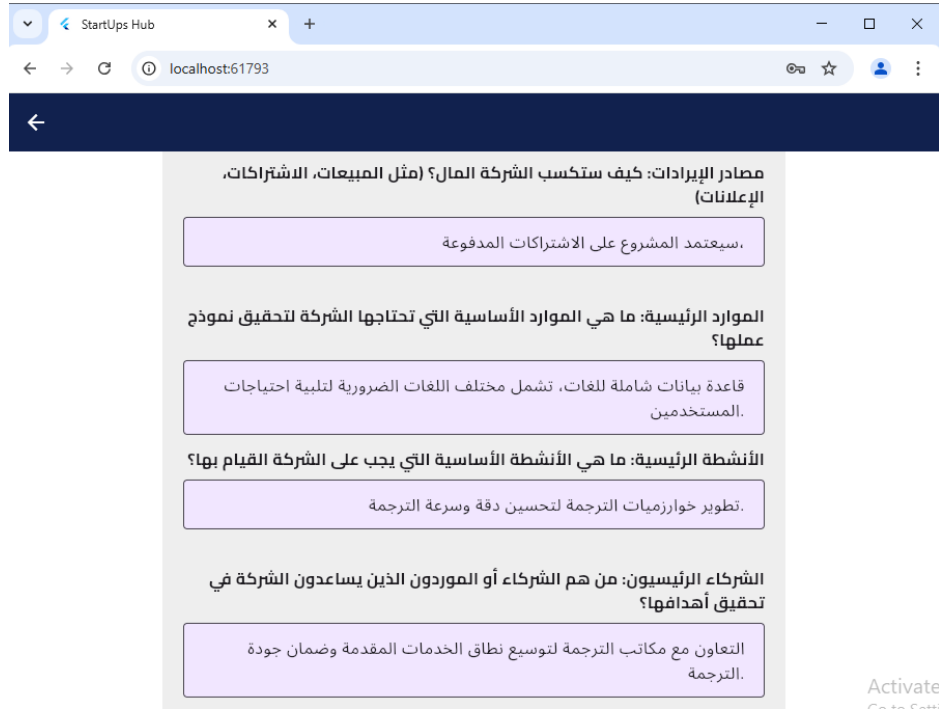


Figure 5.63: My Account

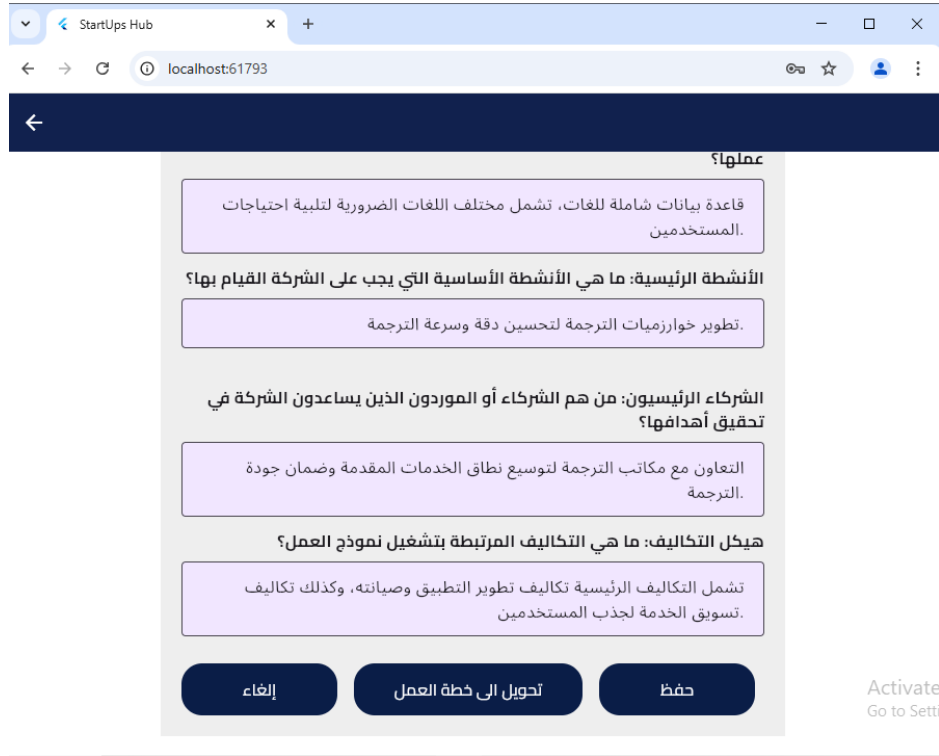


Figure 5.64: My Account

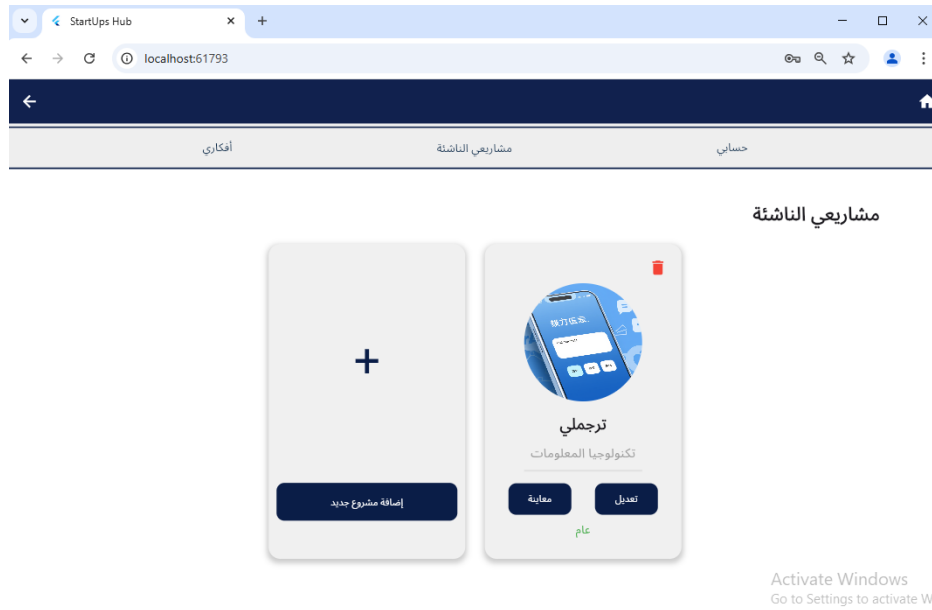


Figure 5.65: My Account

The Project section contains several subsections for each individual project, about: a section that provides an overview of the project.

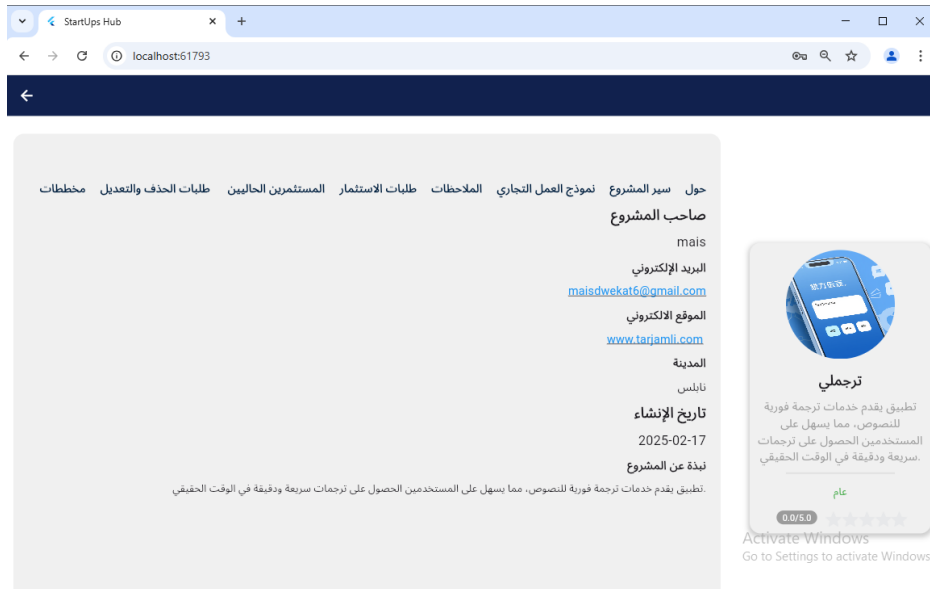


Figure 5.66: Project

BMC (Business Model Canvas): Displays the project's business model, including key activities, partners, resources, and more.

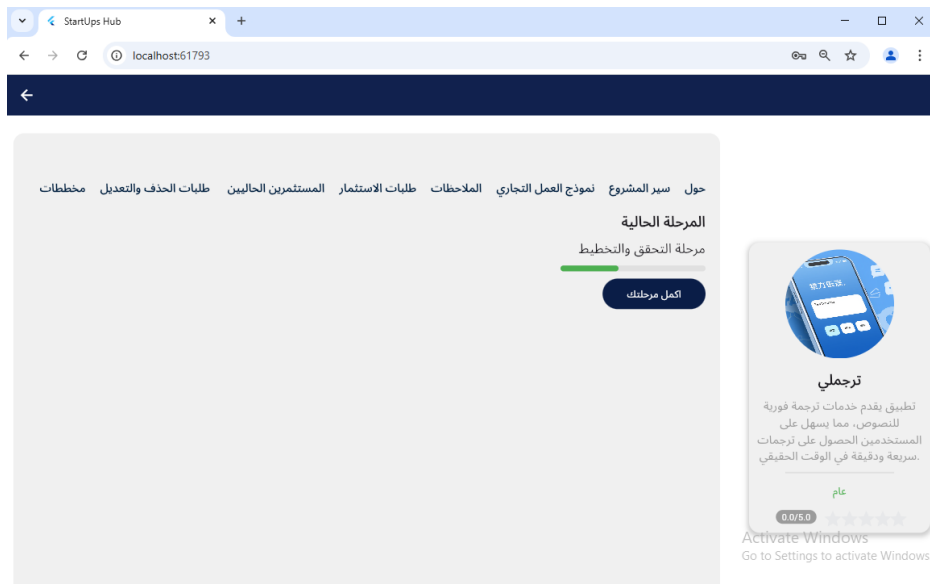


Figure 5.67: Project

Notes: Allows the project owner to add, delete, and edit notes related to the project.

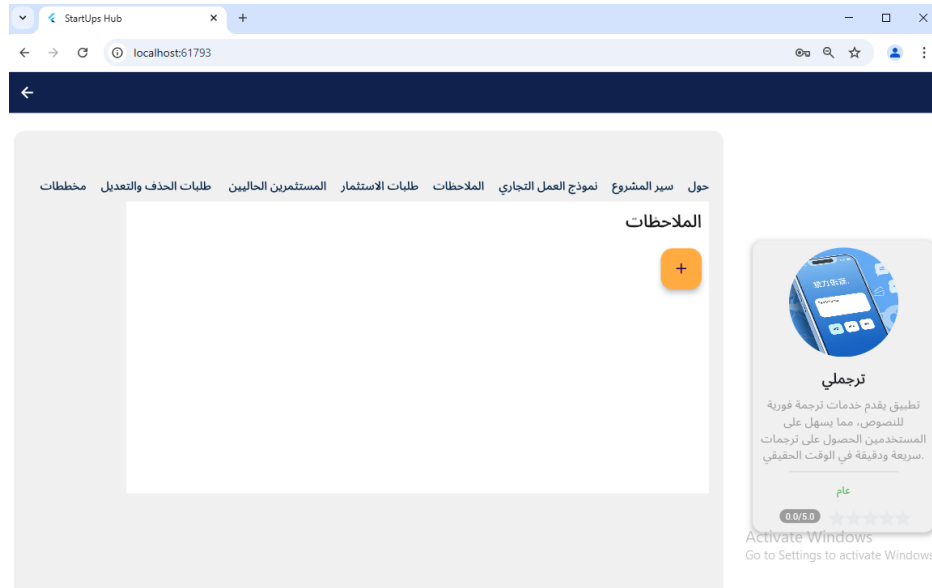


Figure 5.68: Project

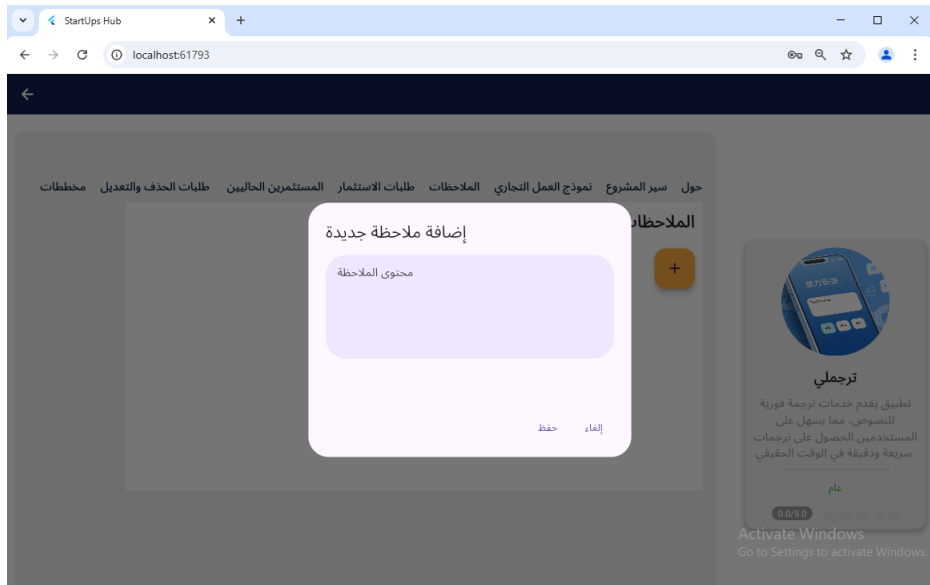


Figure 5.69: Project

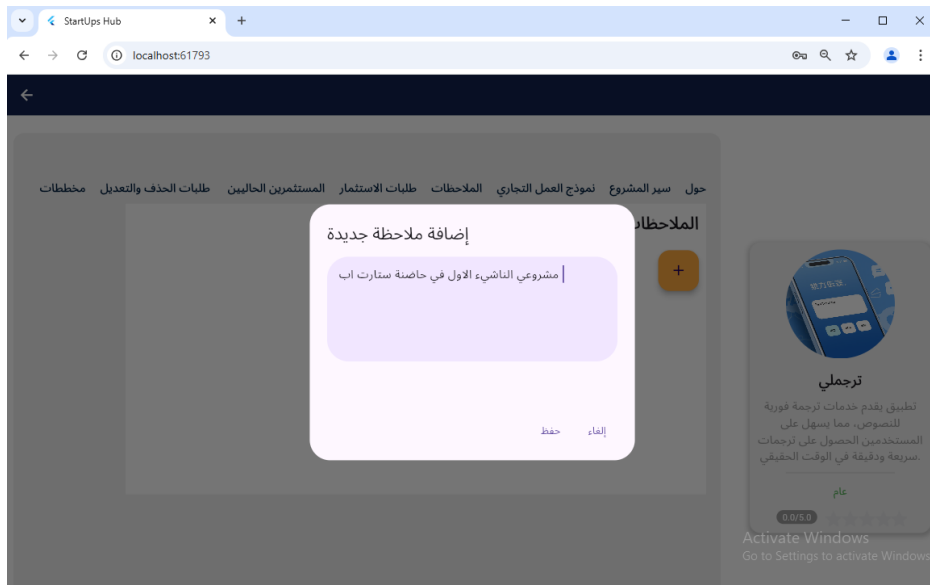


Figure 5.70: Project

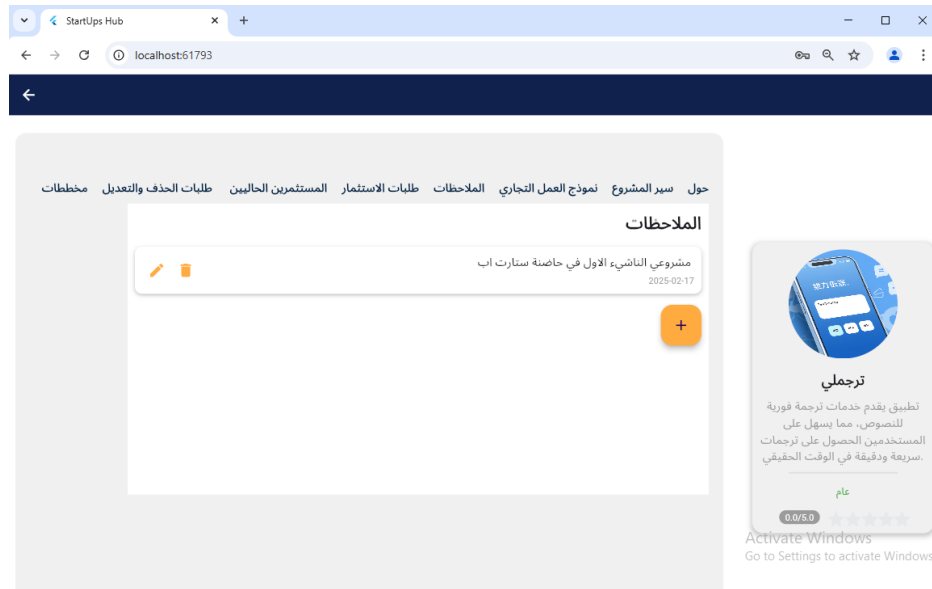


Figure 5.71: Project

Investments: Lists all investments in the project, including investment requests and any deletion or modification requests related to the project.

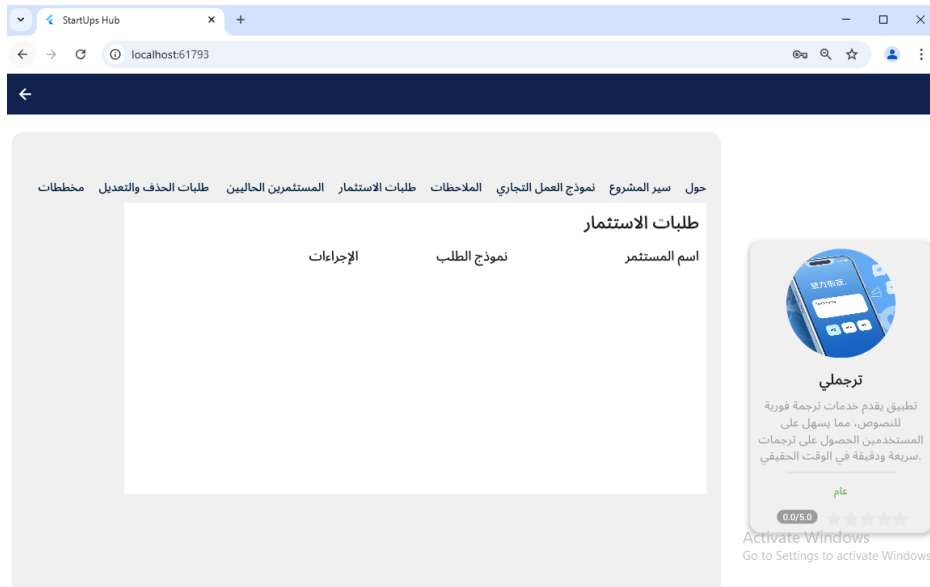


Figure 5.72: Project



Figure 5.73: Project

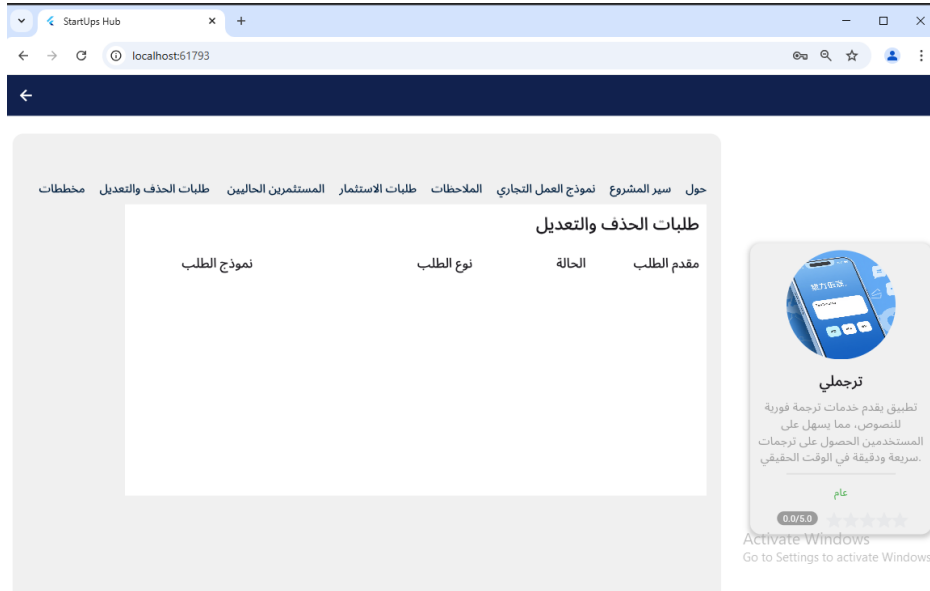


Figure 5.74: Project

- My Ideas Page: This section showcases all their ideas with the option to add new ideas as follows:

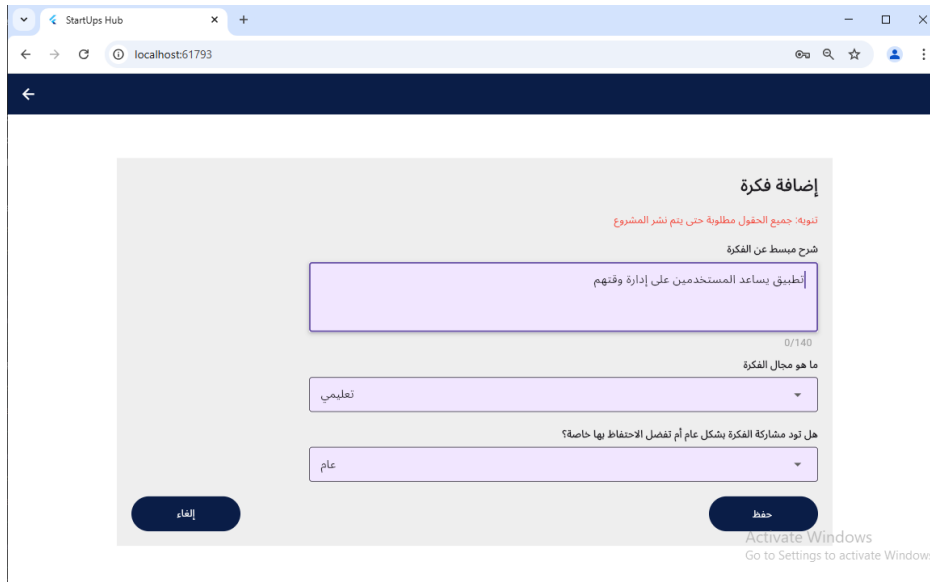


Figure 5.75: My Ideas Page

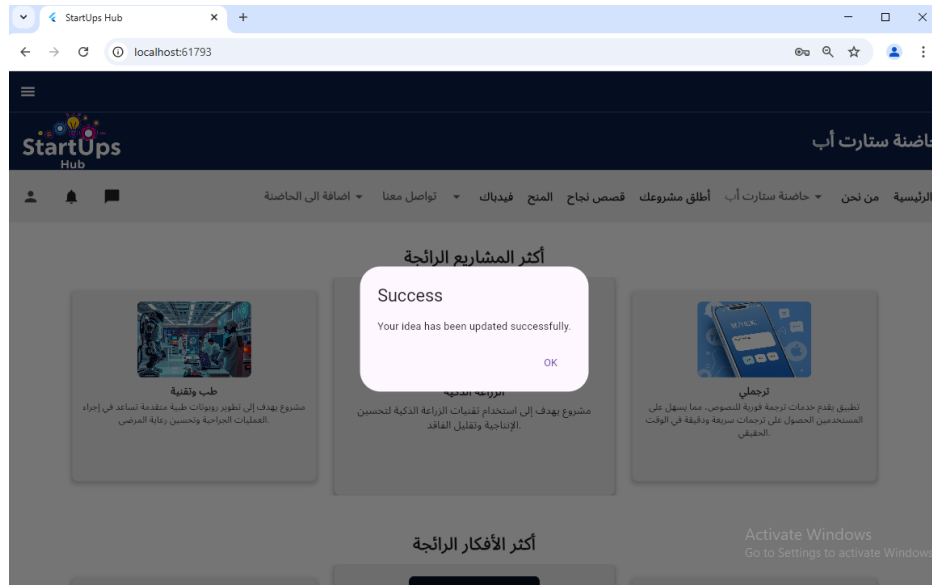


Figure 5.76: My Ideas Page

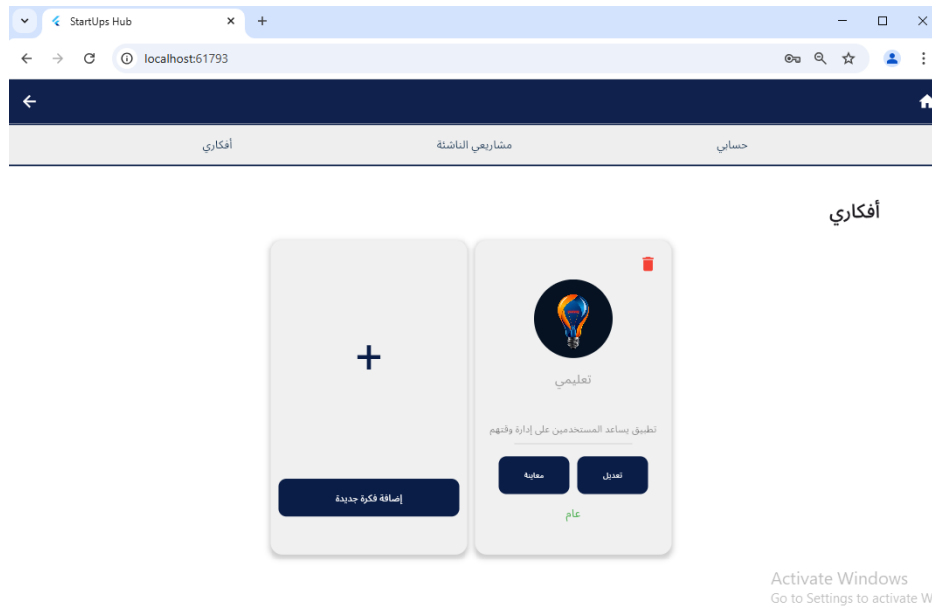


Figure 5.77: My Ideas Page

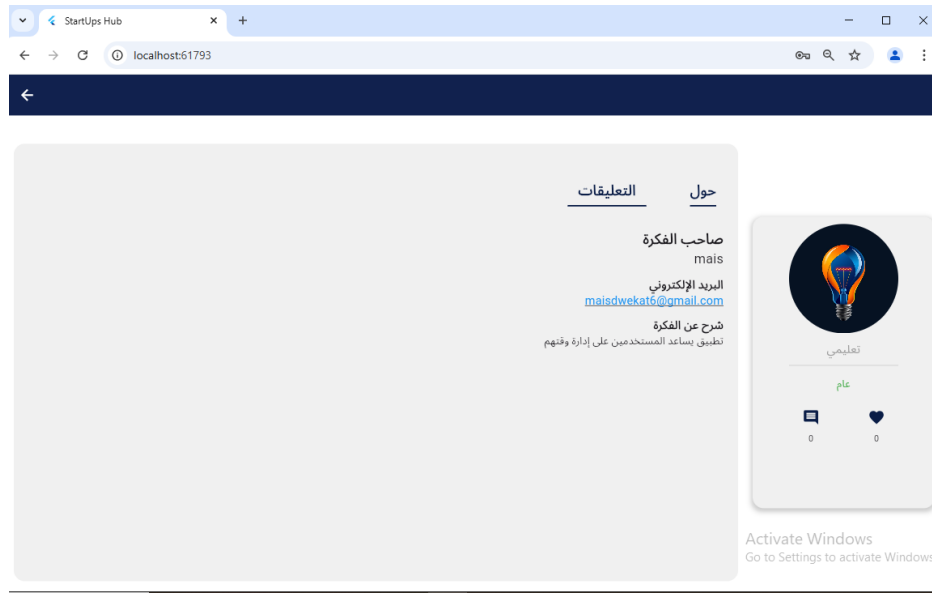


Figure 5.78: My Ideas Page

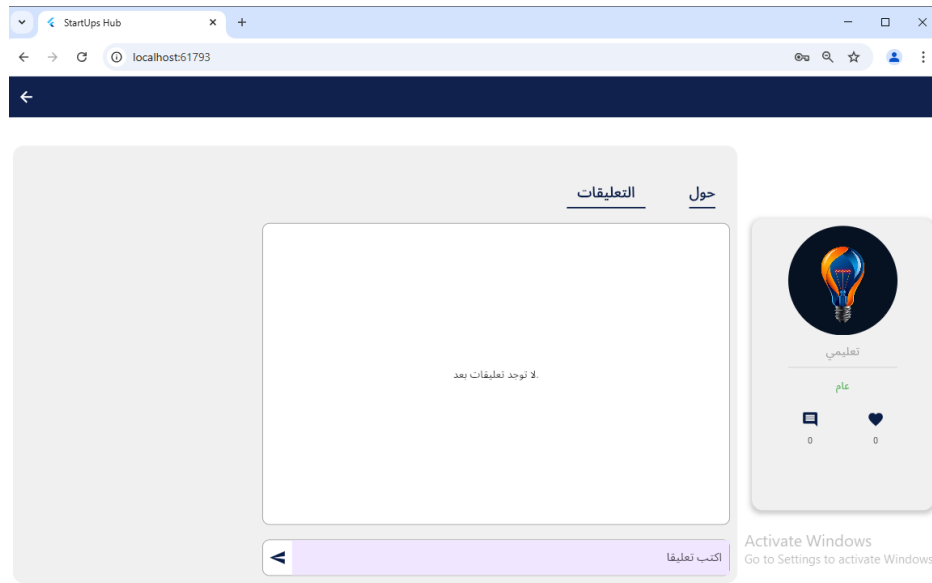


Figure 5.79: My Ideas Page

- Investor For the Investor, there are also three main sections:

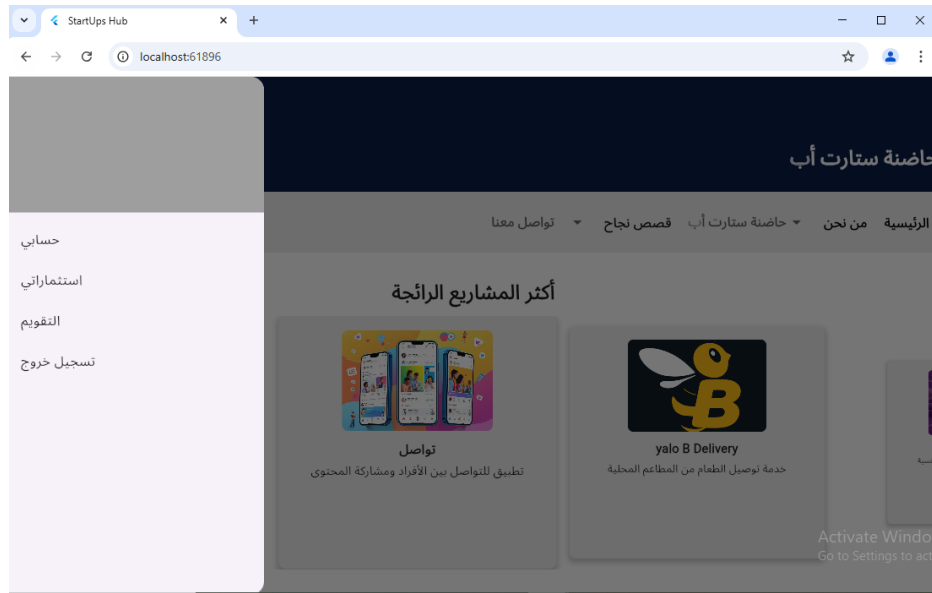


Figure 5.80: Investor

- My Account Page: This page contains the investor’s personal information
- My Investments Page: This section displays the investor’s current investments, as well as any investment requests they have sent to various projects. It also includes requests for deletion or modification of existing investments.

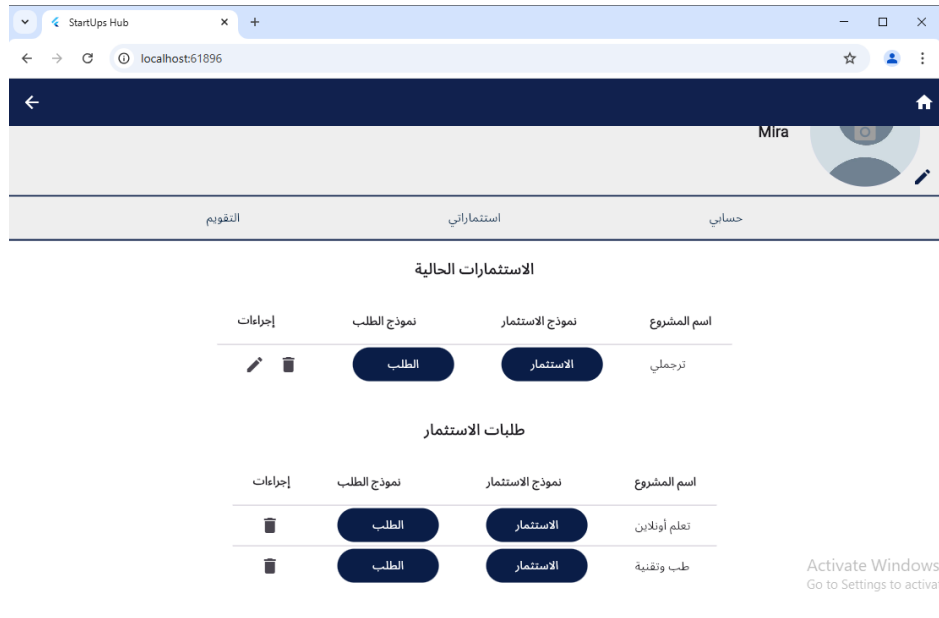


Figure 5.81: Investor

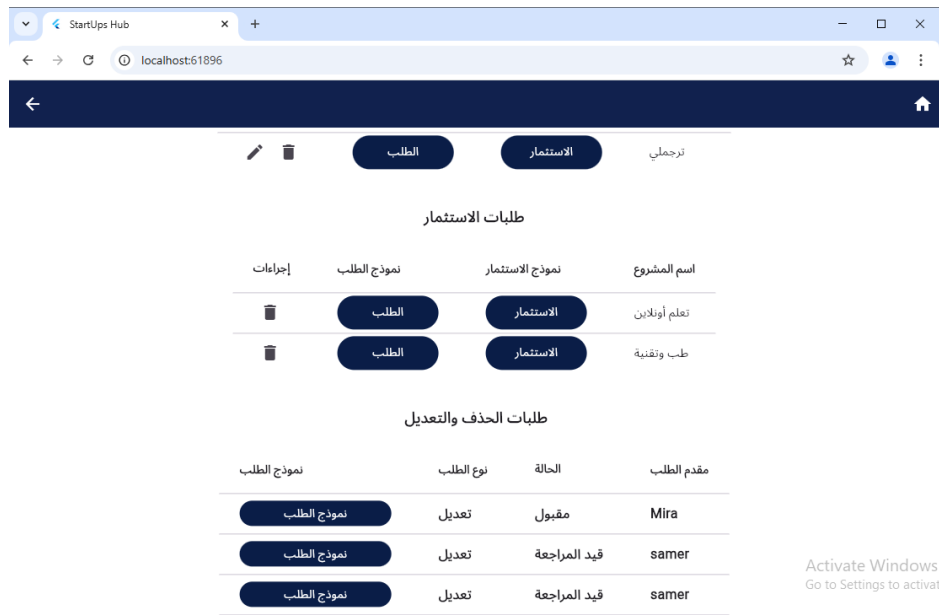


Figure 5.82: Investor

From the project page in the main Startups section, the investor can submit an investment request for the project. This request will then appear in the Investment Requests page for that specific project.

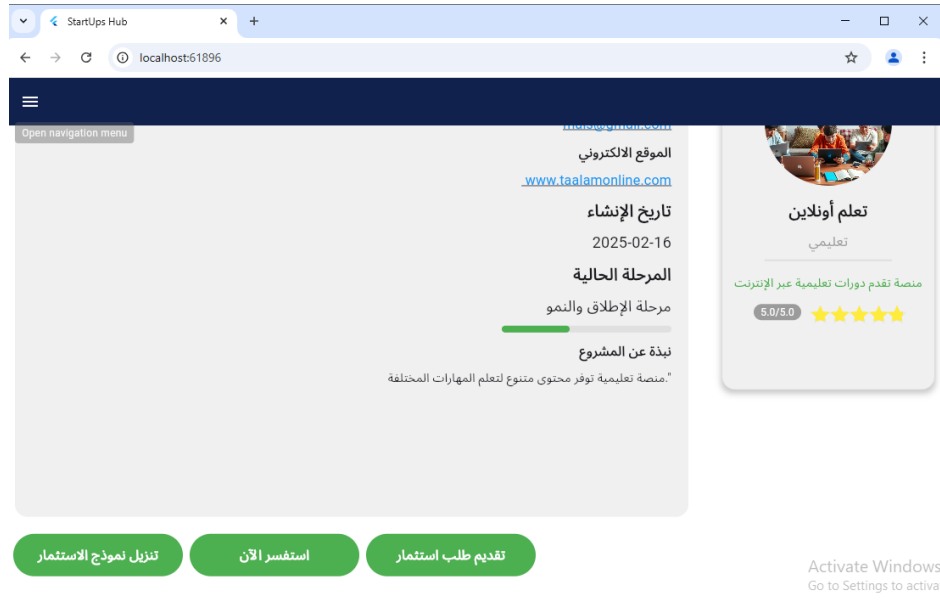


Figure 5.83: Investor

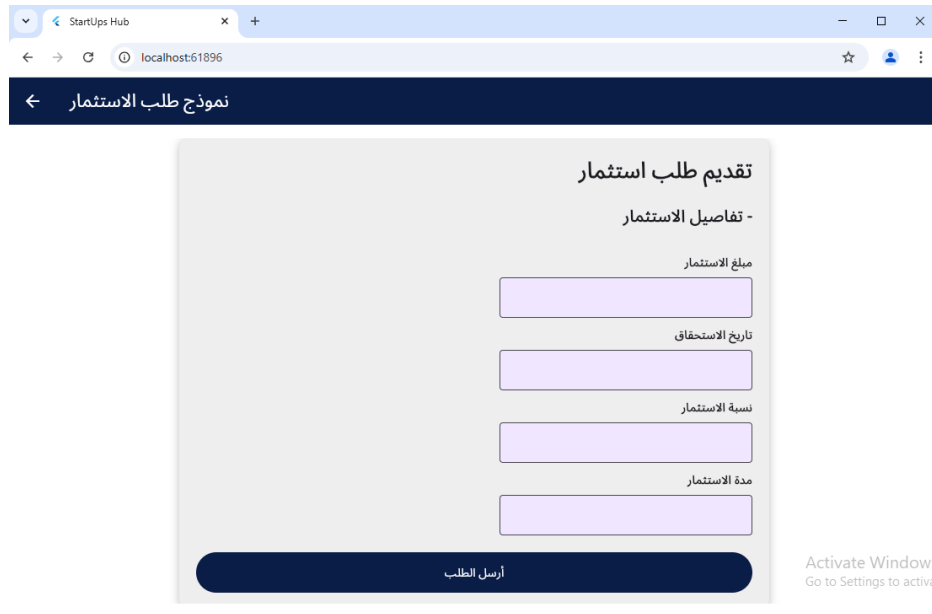


Figure 5.84: Investor

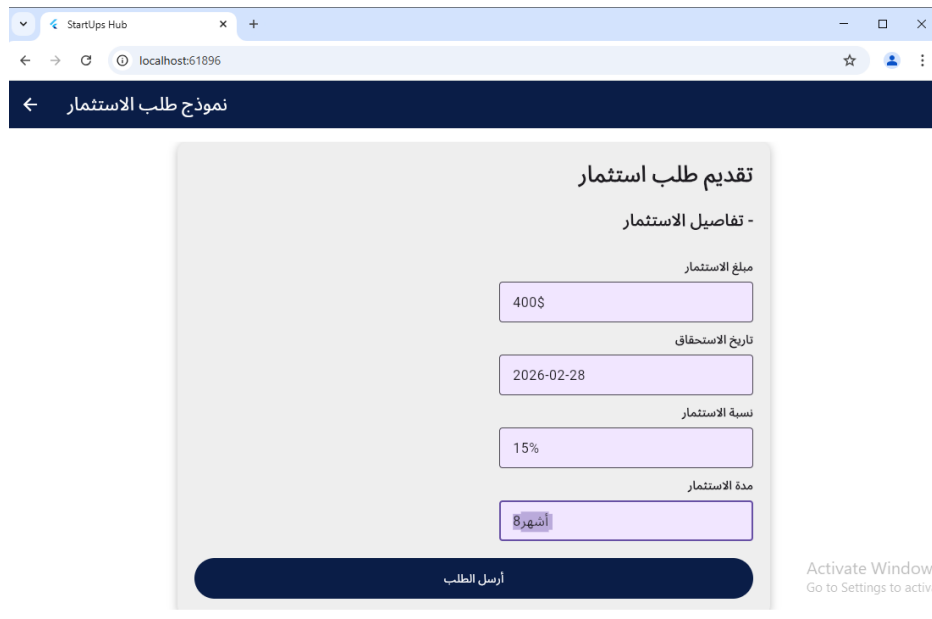


Figure 5.85: Investor

When the request is submitted, it will be added to the investor's Investment Requests, when the request is approved, it will be moved to the 'My Current Investments' section.

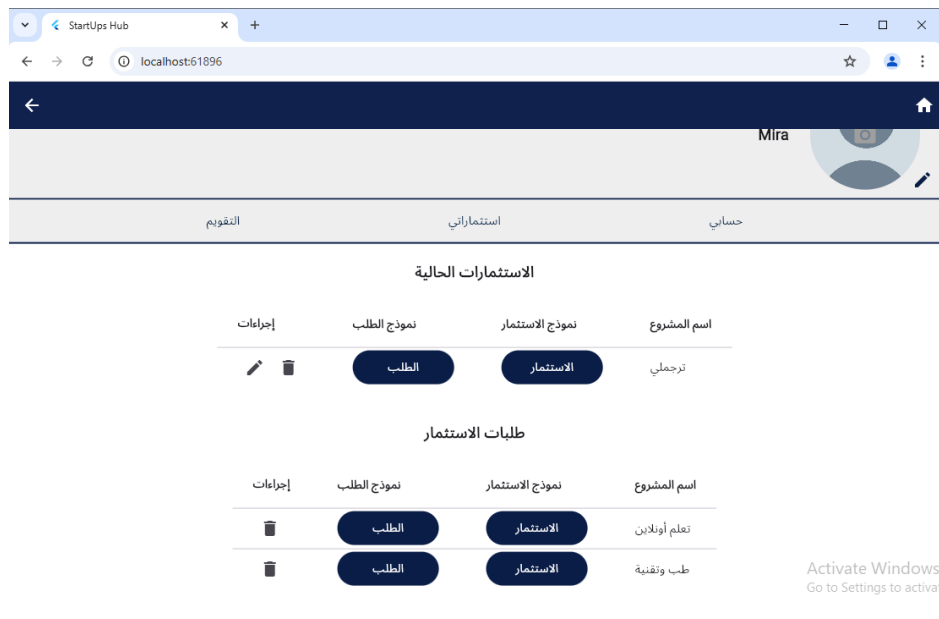


Figure 5.86: Investor

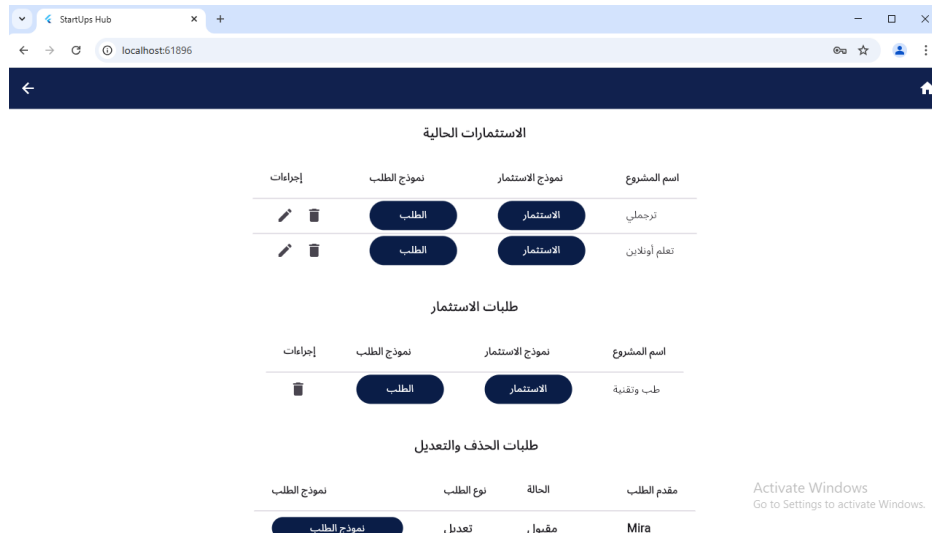


Figure 5.87: Investor

For the user, in the project page, the investment request will appear in the Investment Requests section. Once it is approved, it will automatically be added to the Current Investors section.

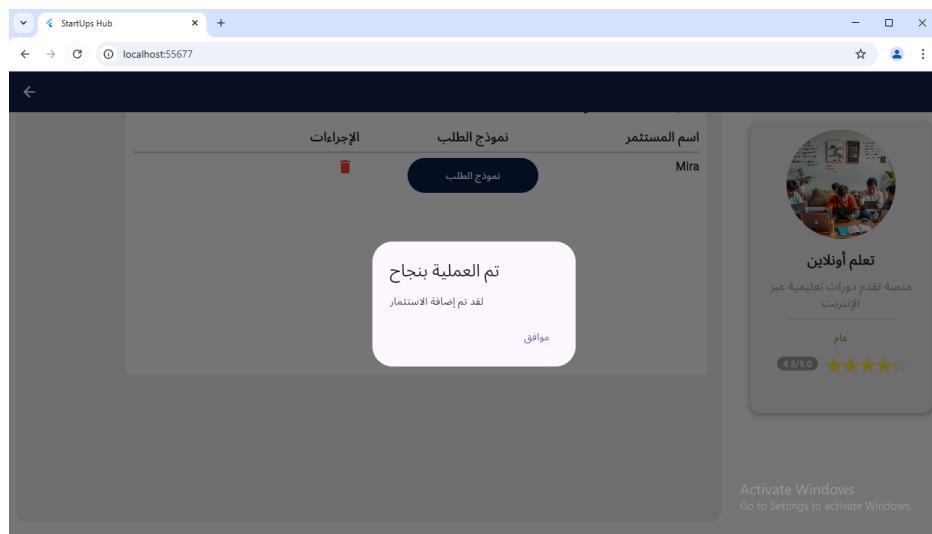


Figure 5.88: Investor



Figure 5.89: Investor

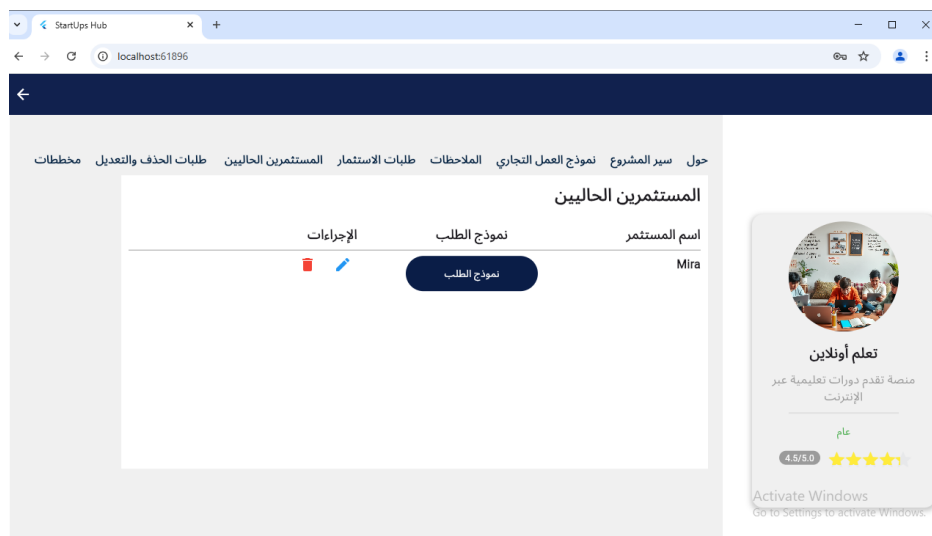


Figure 5.90: Investor

It is important to note that if there is an investment contract between the investor and the project owner, neither party can modify the investment unless the other party approves the modification,

which is managed here.

For example, the investor can submit a modification request for a specific investment.

The screenshot shows a web browser window with the URL localhost:55677. The page displays a form for managing an investment. The form fields are as follows:

Field Label (Arabic)	Value
مبلغ الاستثمار	70
تاريخ البدء بالاستثمار	2025-02-18
تاريخ الاستحقاق	2026-01-01
نسبة الاستثمار	null
مدة الاستثمار	8

At the bottom of the form, there is a dark blue button with the text "حفظ التعديلات وإعادة الإرسال" (Save changes and resend). To the right of the form, there is a small text "Activate W Go to Settings".

Figure 5.91: Investor

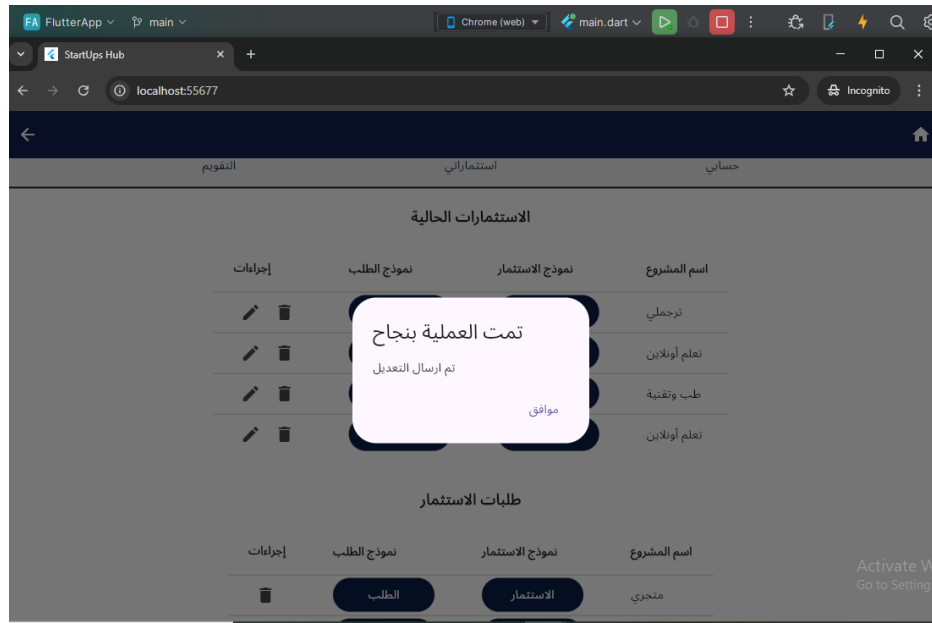


Figure 5.92: Investor

This request will be sent to the project's Deletion and Modification Requests section, allowing the user to either approve or reject it.

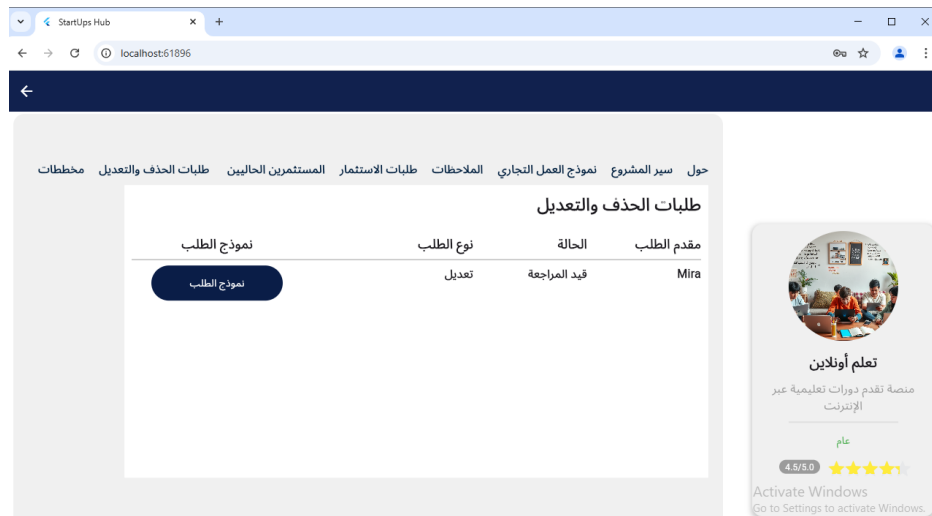


Figure 5.93: Investor



Figure 5.94: Investor



Figure 5.95: Investor



Figure 5.96: Investor

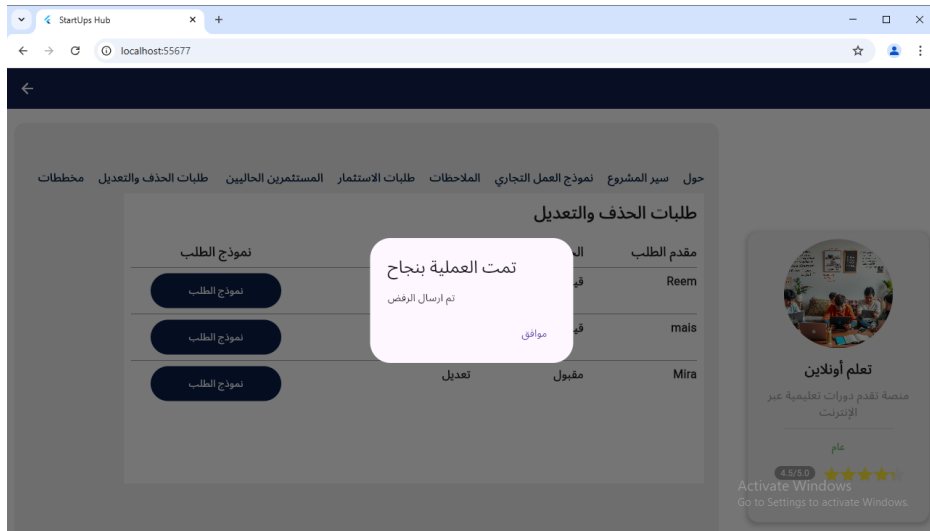


Figure 5.97: Investor



Figure 5.98: Investor

For the investor, the request will appear as follows:

طلبات الحذف والتعديل		
نموذج الطلب	نوع الطلب	الحالة
نموذج الطلب		
نموذج الطلب		
نموذج الطلب		موافق
نموذج الطلب	تعديل	مقبول
نموذج الطلب	تعديل	مرفوض
نموذج الطلب	تعديل	مرفوض
نموذج الطلب	تعديل	قيد المراجعة

تم العملية بنجاح
تم رفض التعديل

Figure 5.99: Investor

طلبات الحذف والتعديل		
نموذج الطلب	نوع الطلب	الحالة
نموذج الطلب		
نموذج الطلب		
نموذج الطلب		موافق
نموذج الطلب	تعديل	مقبول
نموذج الطلب	تعديل	مرفوض
نموذج الطلب	تعديل	مرفوض
نموذج الطلب	تعديل	قيد المراجعة

تم العملية بنجاح
تم التعديل على الاستثمار

Figure 5.100: Investor

- Calendar Page: This page helps the investor track due dates for the projects they have invested in.

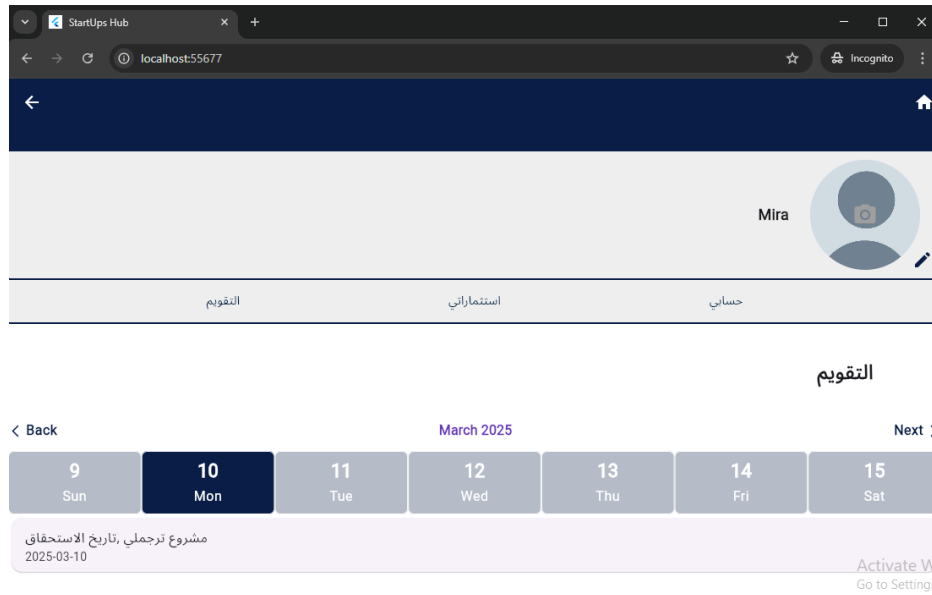


Figure 5.101: Investor

5.4.1.4 Project Overview and Main Website Pages

- Home Screen

The home screen is the center of our application, where we can access all other pages of the application. The first thing you will see is the main categories of our project. For the displayed groups, at the top, there are the most popular projects, automatically calculated based on the number of visits, searches, and ratings. Below that, there is the ideas section, which displays the most engaging ideas based on user interaction. At the bottom, there are the most requested courses in the job market based on the number of visits, making it easier for users, whether project owners or investors, to access the highest-rated items in each category. Finally, there is the navigation bar at the top of the screen that shows the icon for each page: Home, About Us, Startup Incubator, Contact Us, Grants, Notifications, Chats, Search Bar, and Profile.

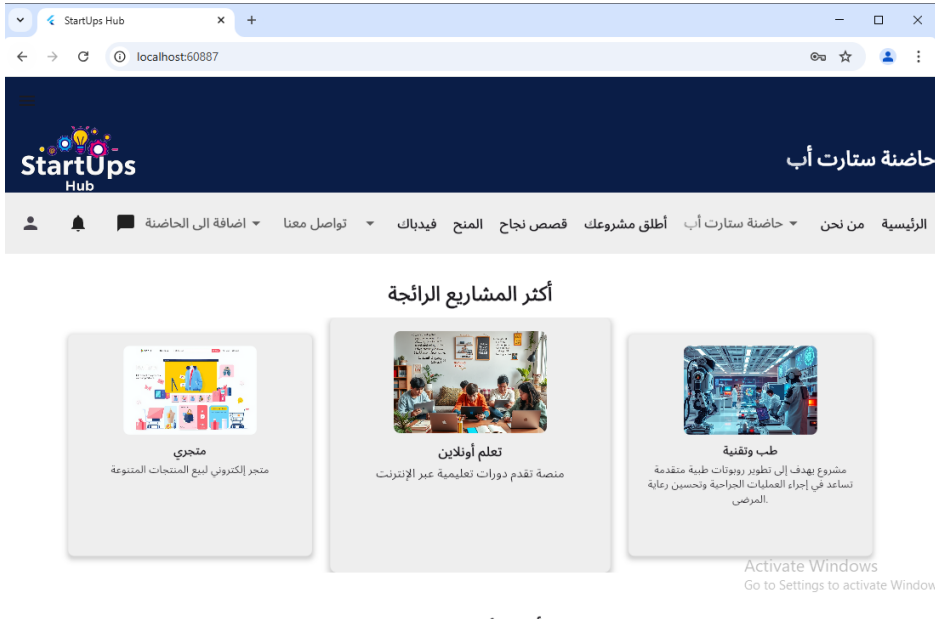


Figure 5.102: home

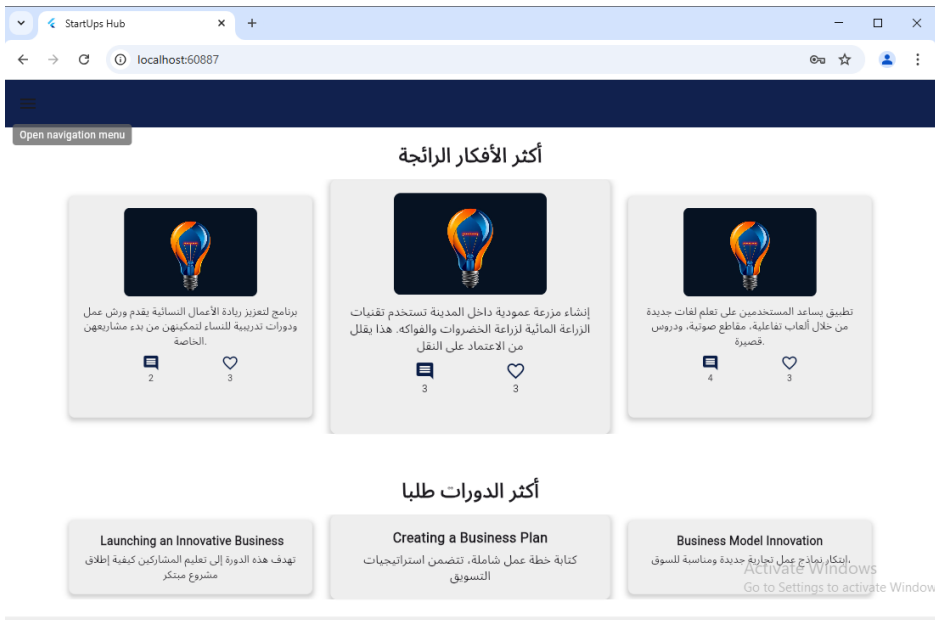


Figure 5.103: home

– About us Page:



Figure 5.104: home

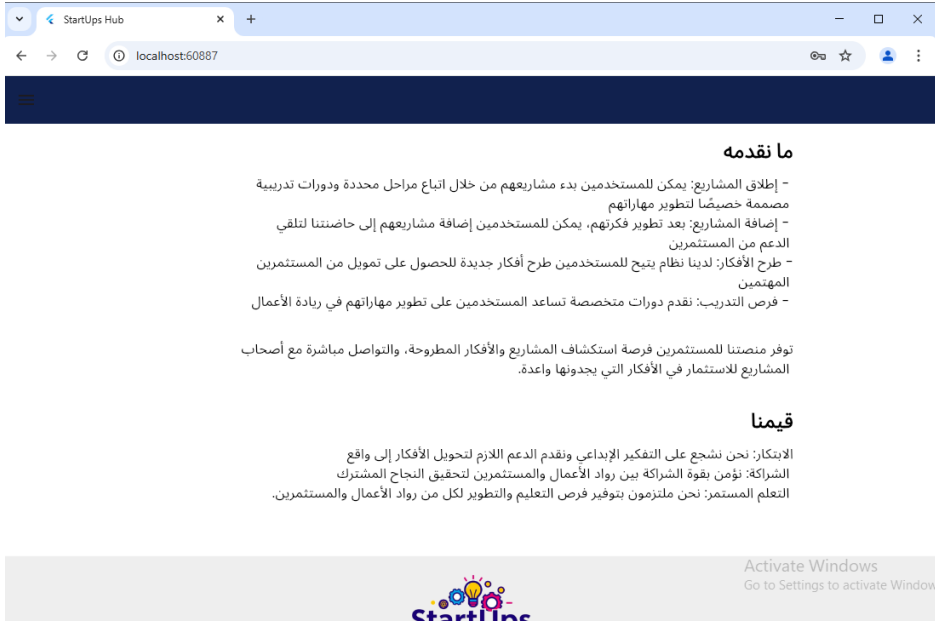


Figure 5.105: home

– Startup Hup

- * Projects The "Startup Projects" page is one of the most important pages on our platform, serving as the go-to destination for both users and investors. It contains all the projects that have been published on the platform and approved.



Figure 5.106: Projects

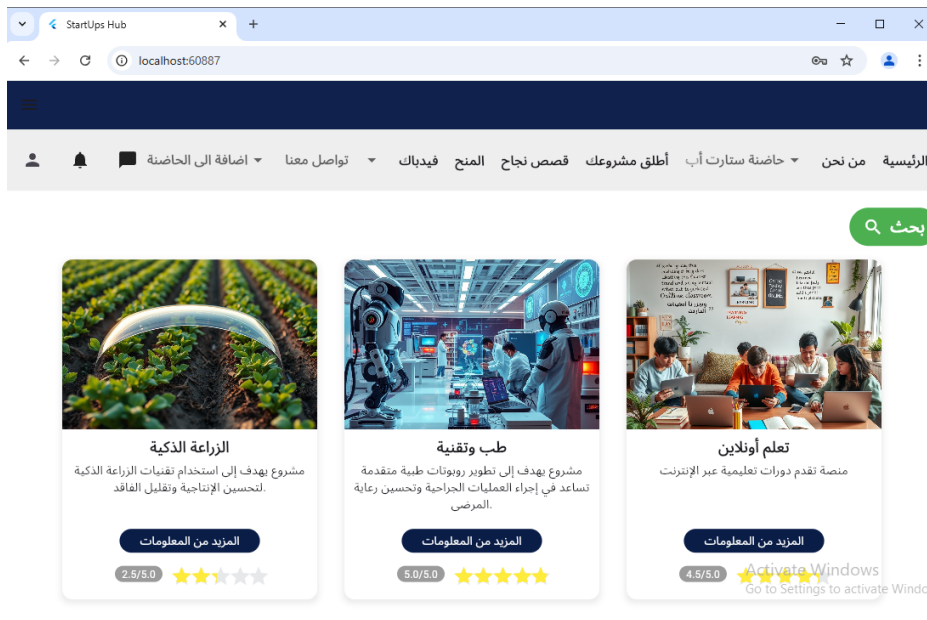


Figure 5.107: Projects

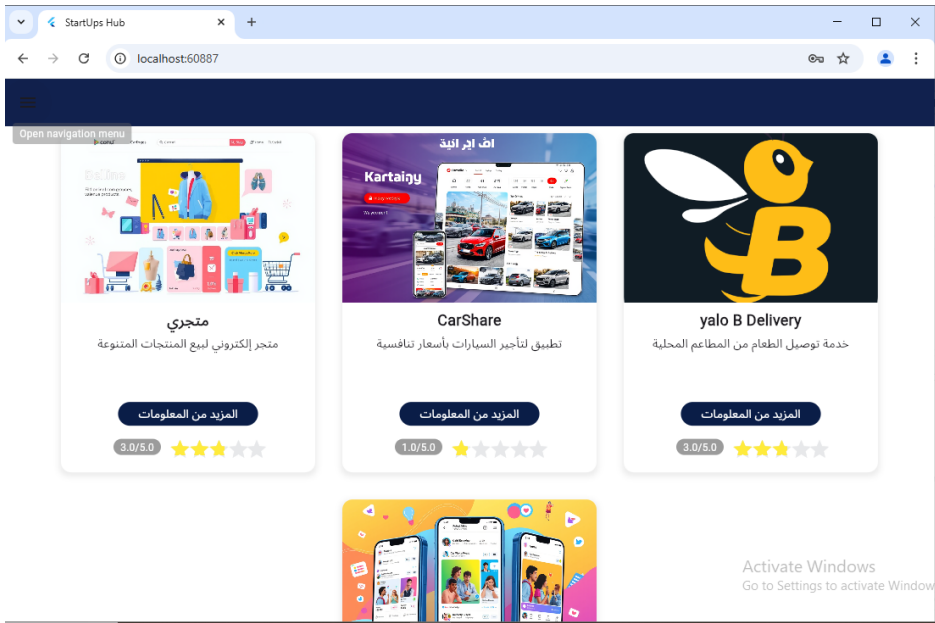


Figure 5.108: Projects Page

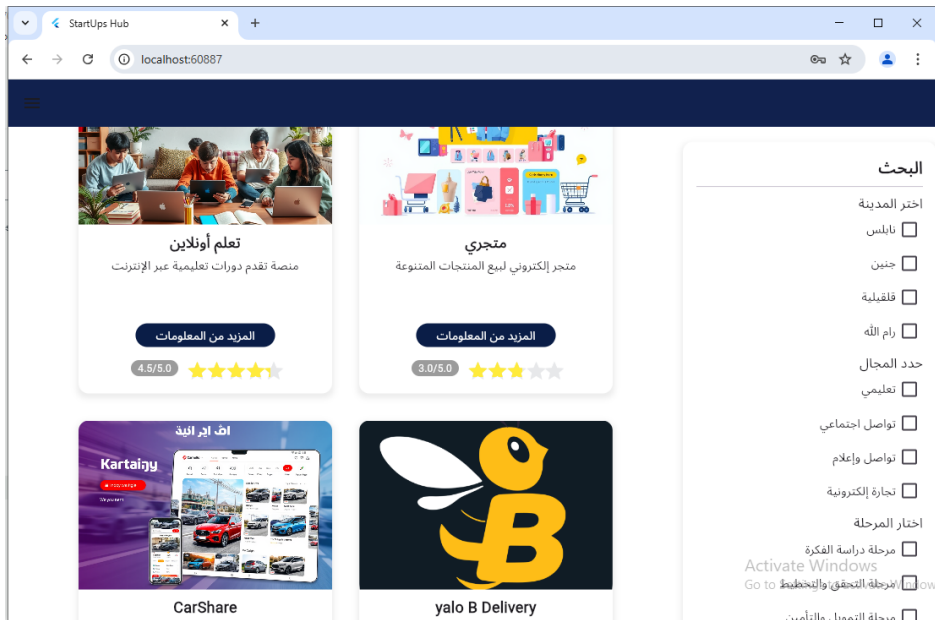


Figure 5.109: Projects

When accessing the details of a specific project, you will be directed to two main sections. The first section contains information about the project owner and general details about the project, as shown here.

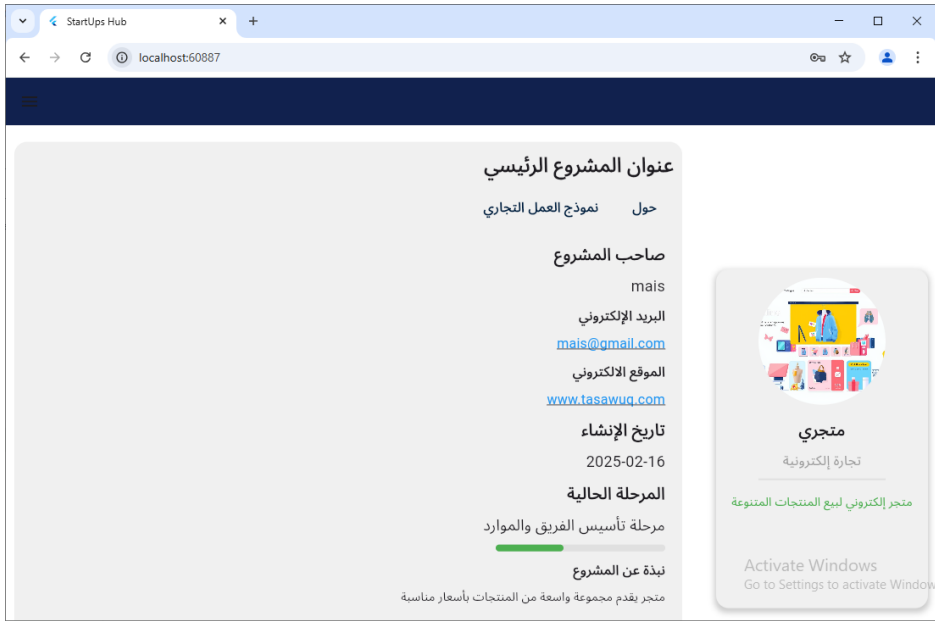


Figure 5.110: Projects

The second section is related to the project's business plan, which provides a clear overview of the project. This step is essential for attracting investors.



Figure 5.111: Projects

- * Ideas Page As for the main ideas page, it serves as a platform where ideas are displayed interactively. Users can engage with the ideas and share their opinions in a flexible and simple manner.

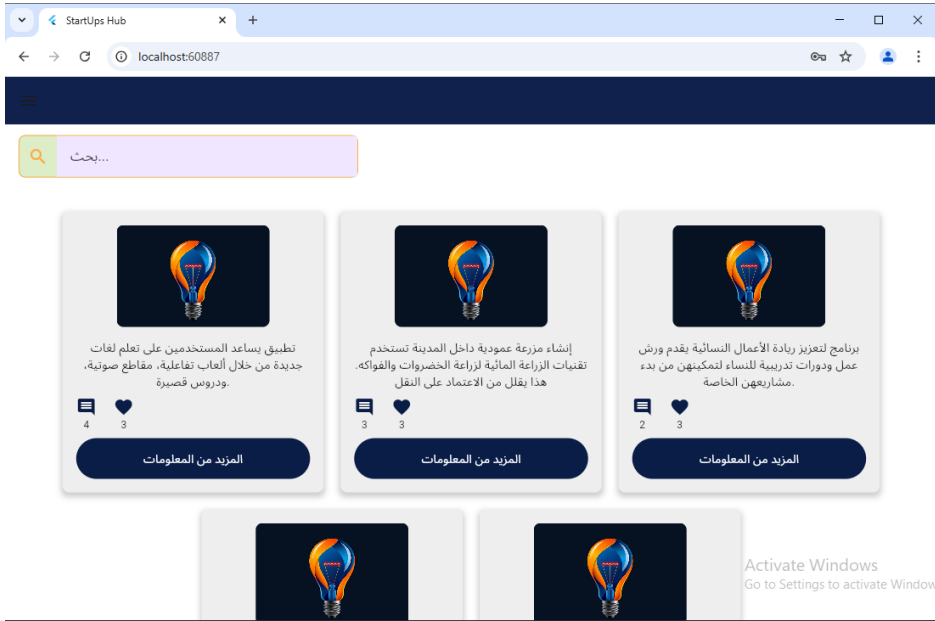


Figure 5.112: home

This window displays general information about the idea owner and their contact details.

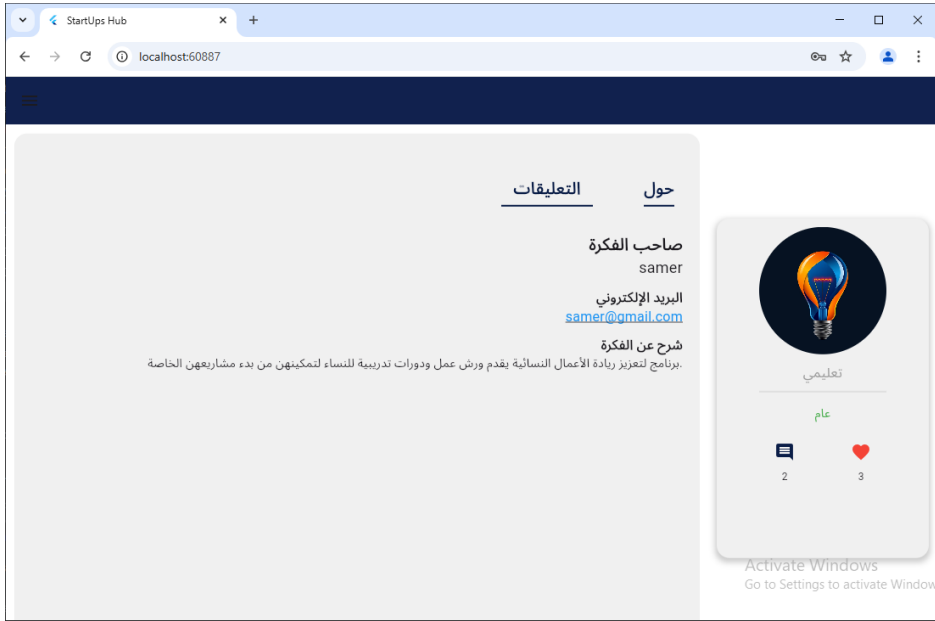


Figure 5.113: home

A comments section where users can view and interact with the feedback received on the idea, along with the option to reply to these comments.



Figure 5.114: home

- Project Incubation Journey
This journey is divided into five stages that the project goes through within each stage, there is information specific to that stage to help users understand it in a simple and smooth way. This information has been added and quoted from books on successful projects and startups. It consists of a series of tips and steps from experts in this field.

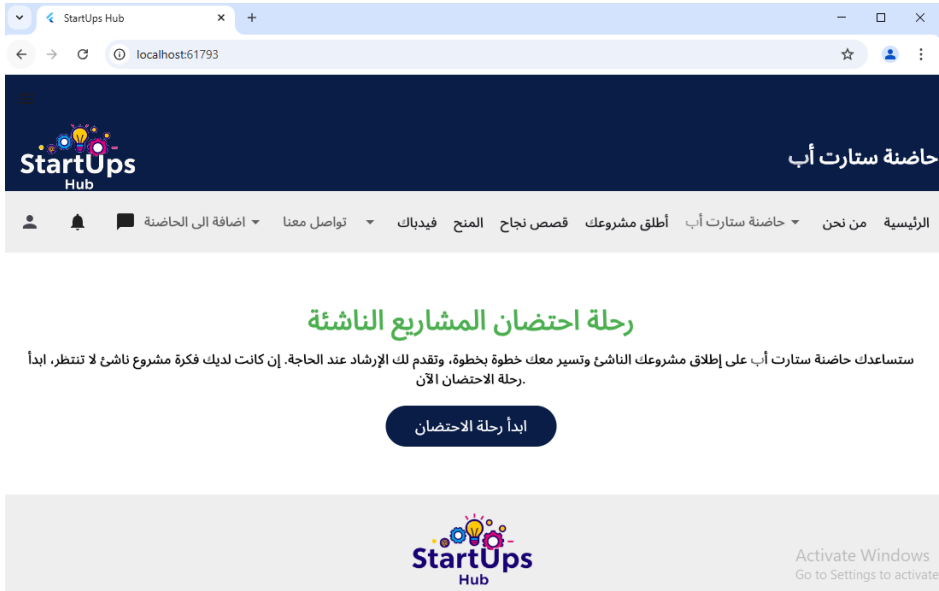


Figure 5.115: Project Journey

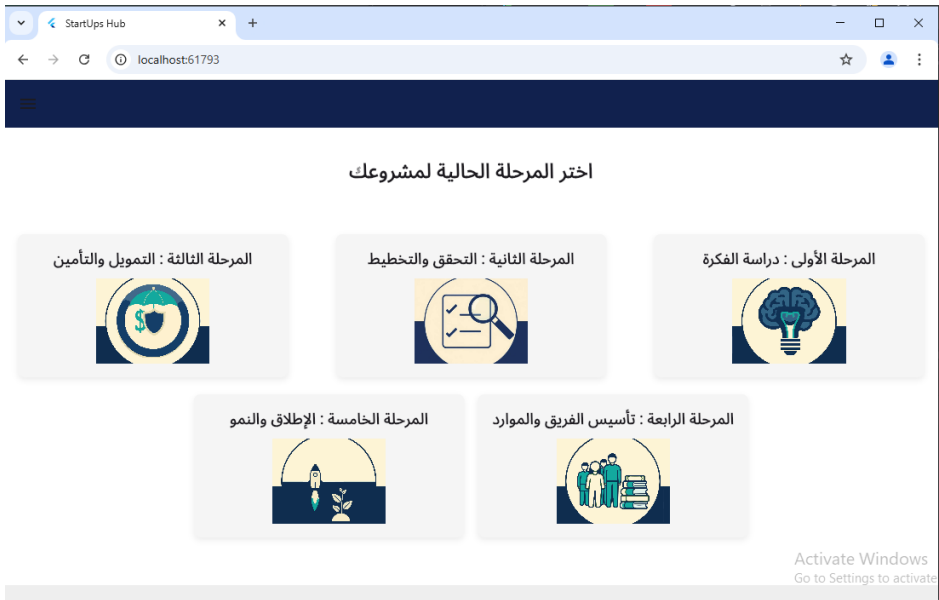


Figure 5.116: Project Journey

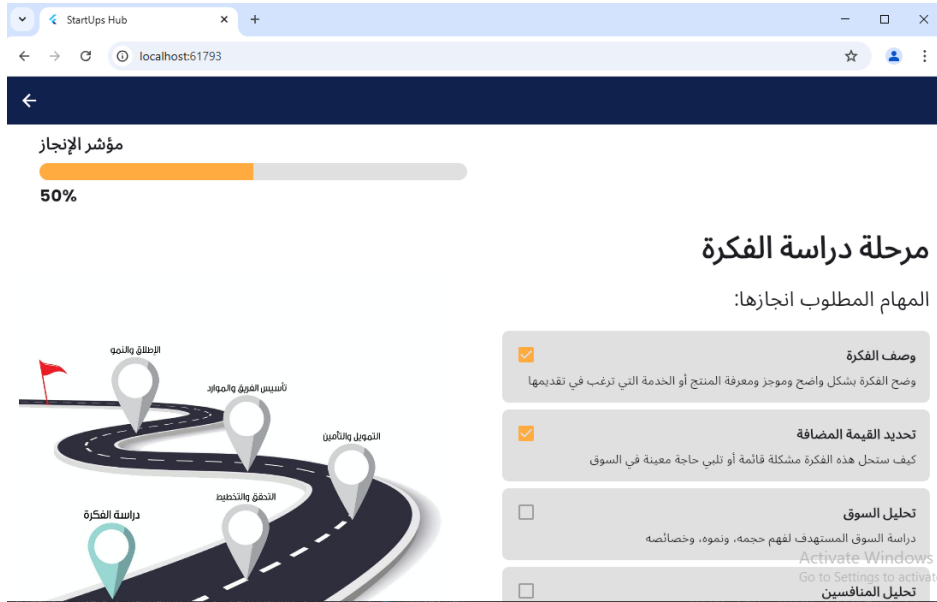


Figure 5.117: Project Journey

Each stage in these phases contains a booklet that provides information about the stage, making it easier to understand and explain the steps in a simple and smooth manner for the user to work with.

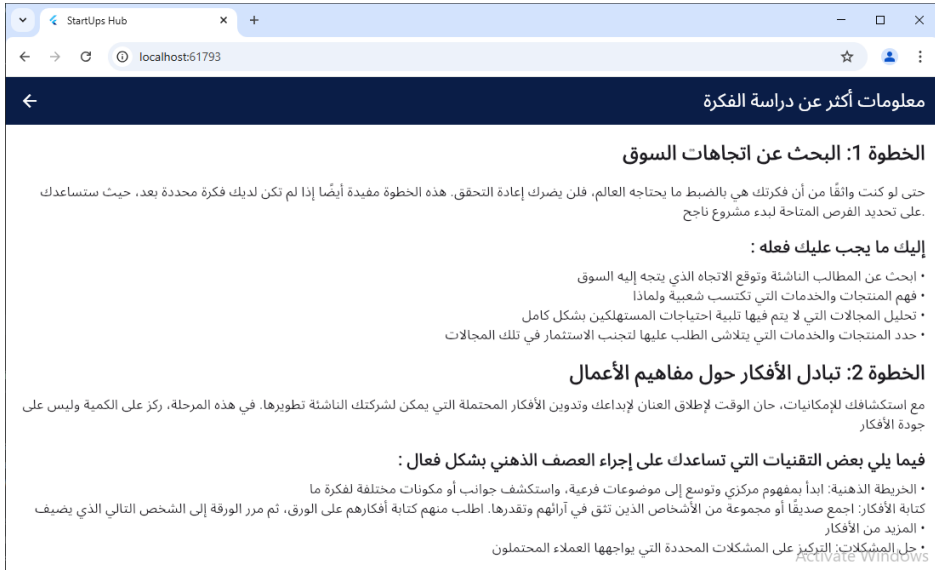


Figure 5.118: Project Journey



Figure 5.119: Project Journey

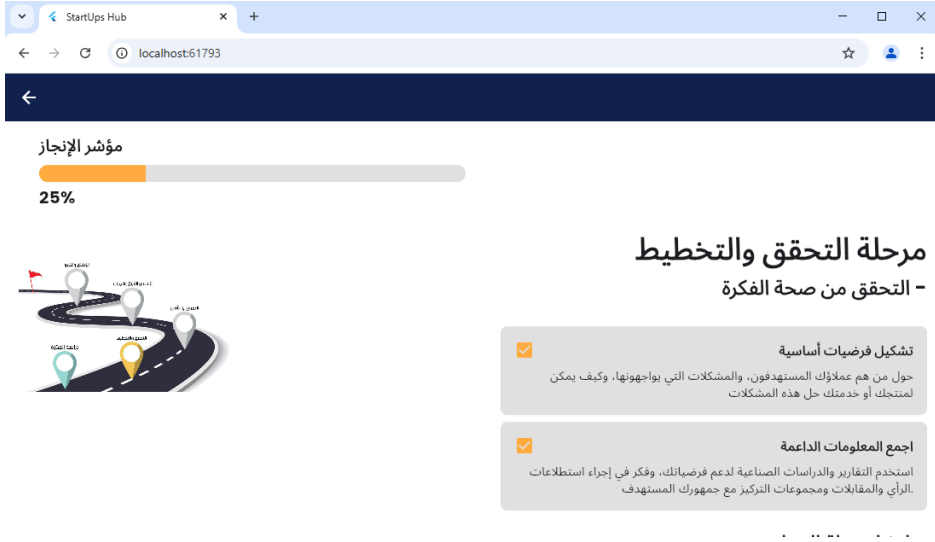


Figure 5.120: Project Journey

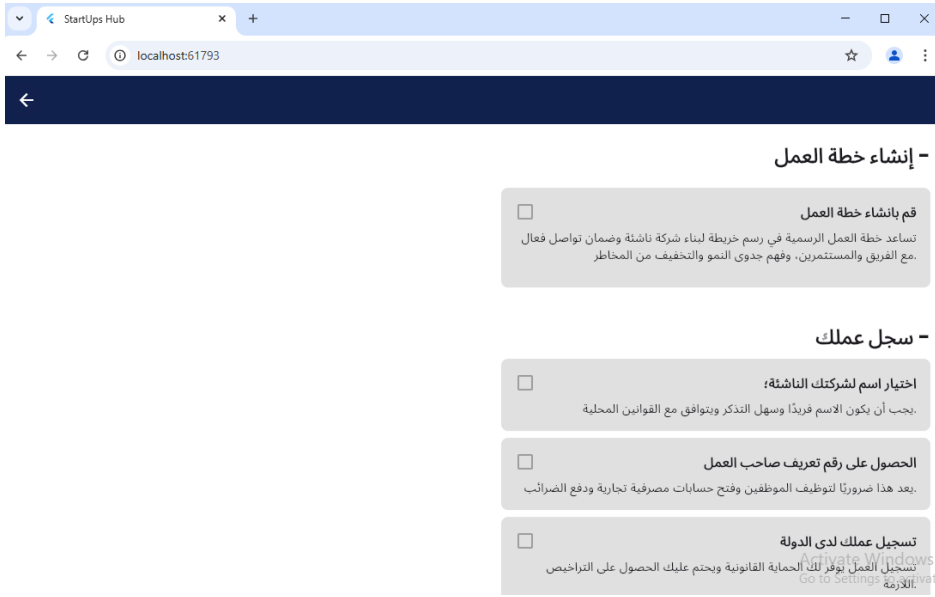


Figure 5.121: Project Journey

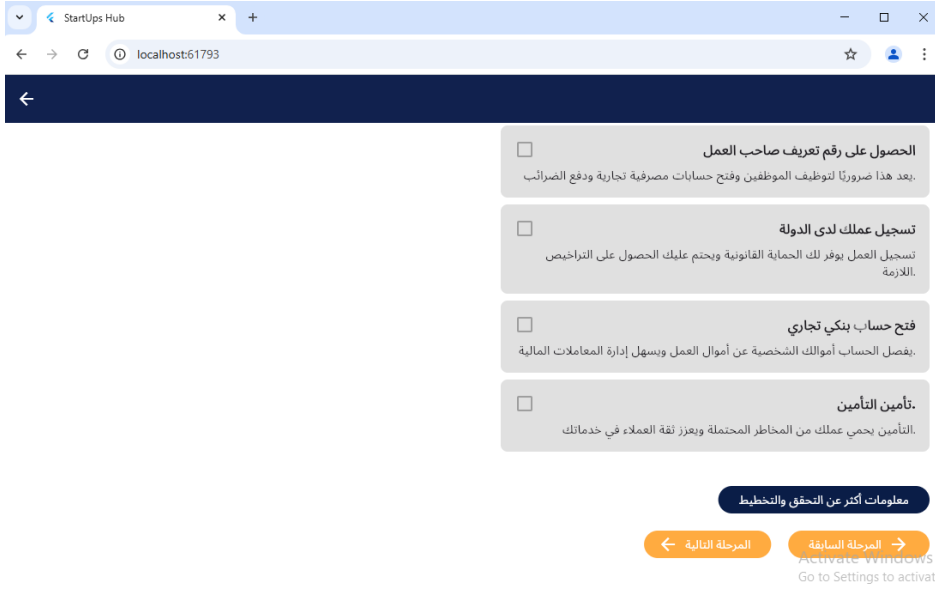


Figure 5.122: Project Journey

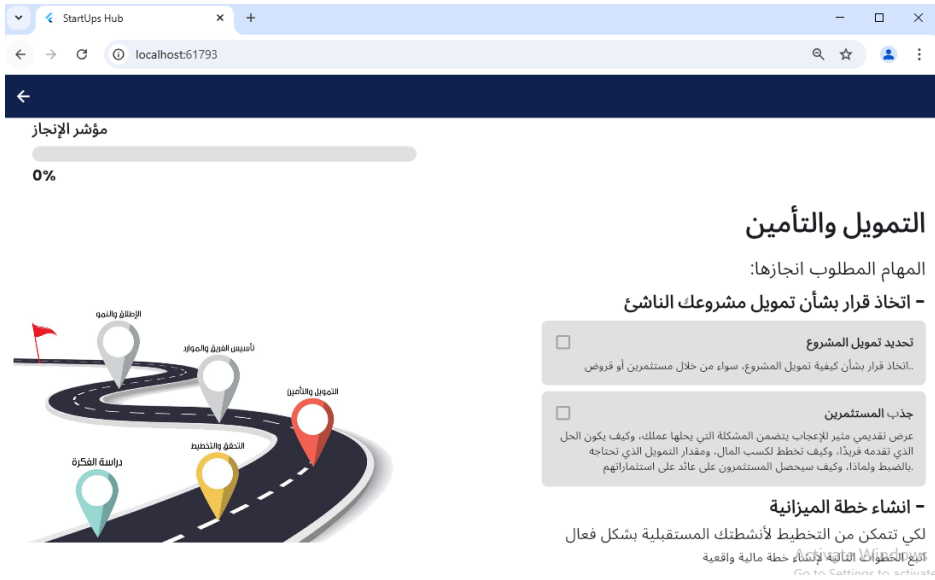


Figure 5.123: Project Journey



Figure 5.124: Project Journey

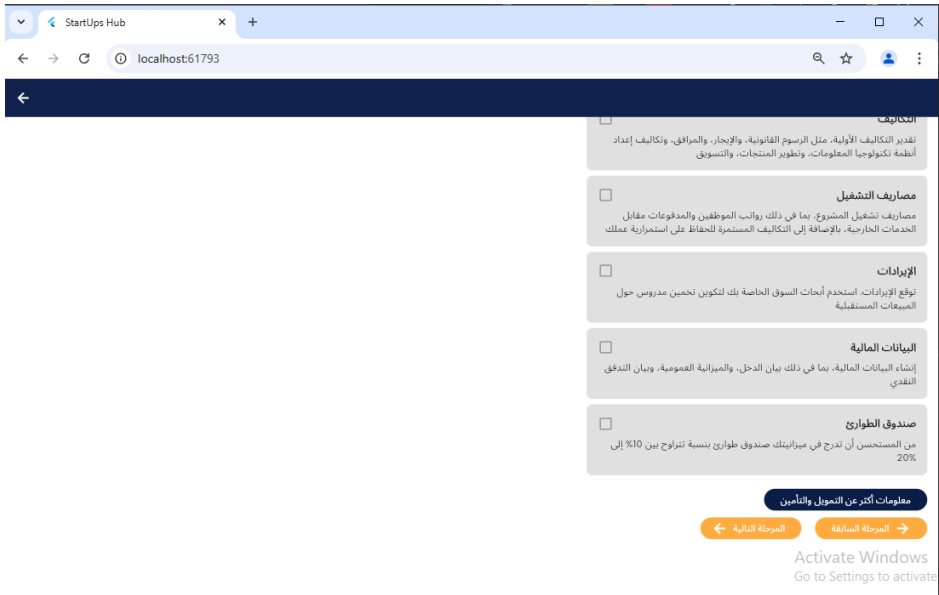


Figure 5.125: Project Journey



Figure 5.128: Project Journey

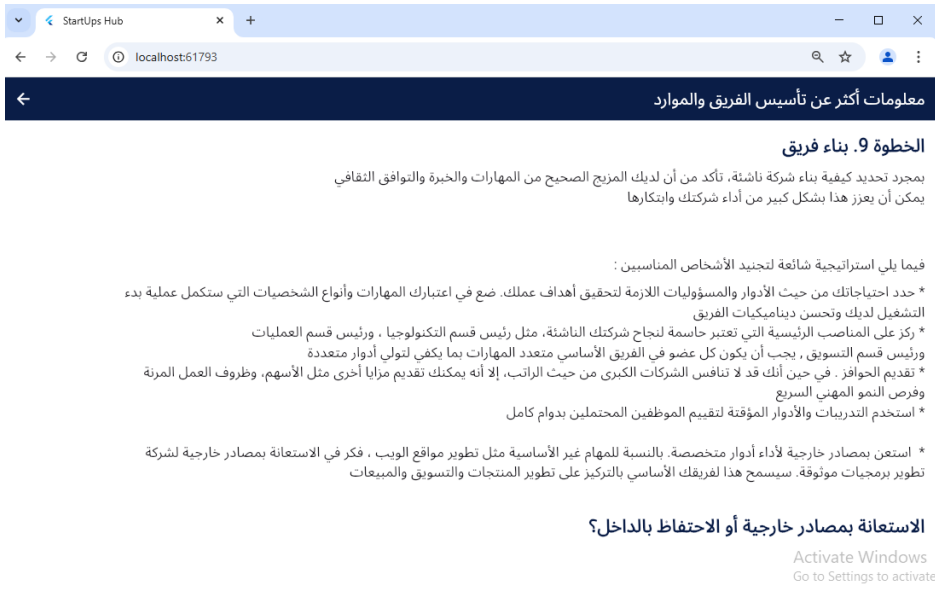


Figure 5.129: Project Journey

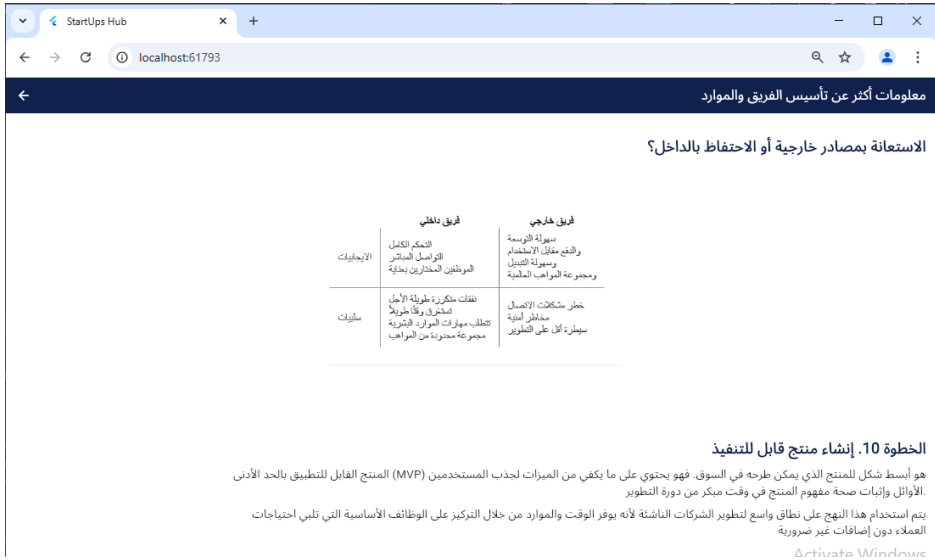


Figure 5.130: Project Journey

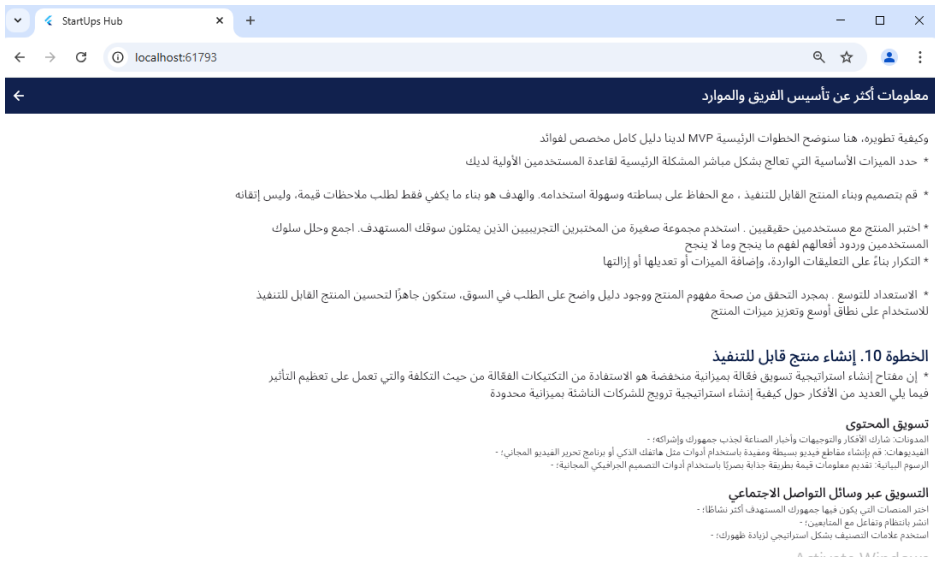


Figure 5.131: Project Journey

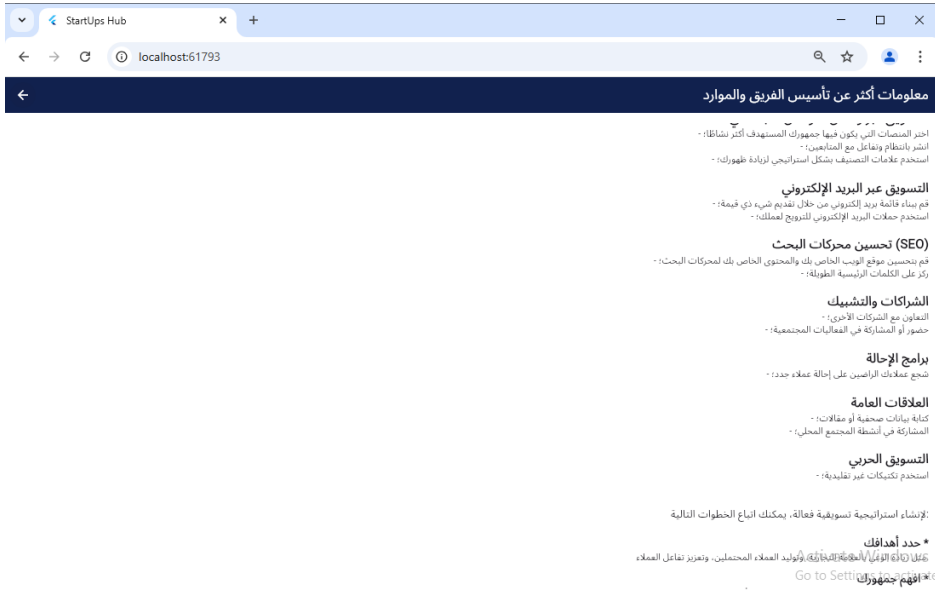


Figure 5.132: Project Journey



Figure 5.133: Project Journey

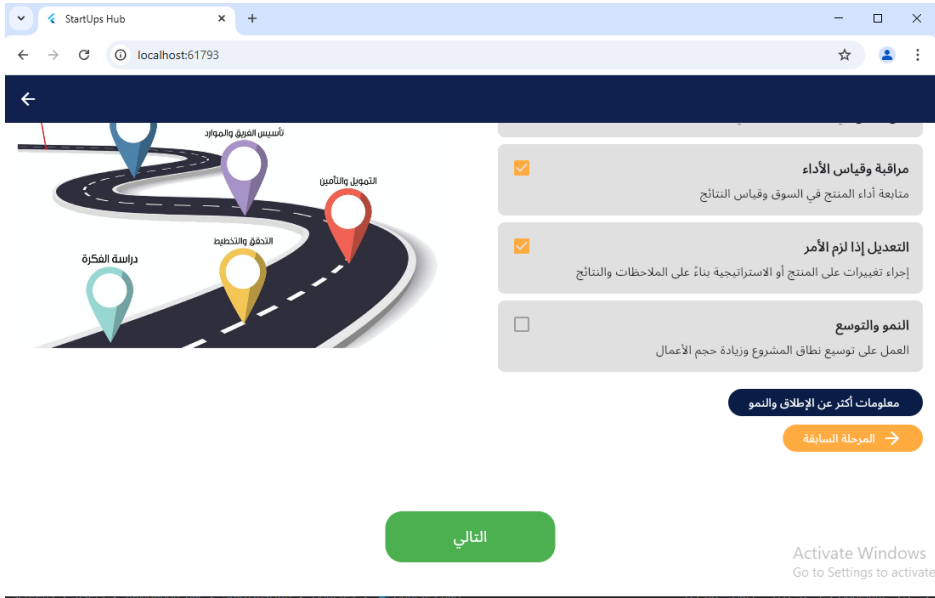


Figure 5.134: Project Journey

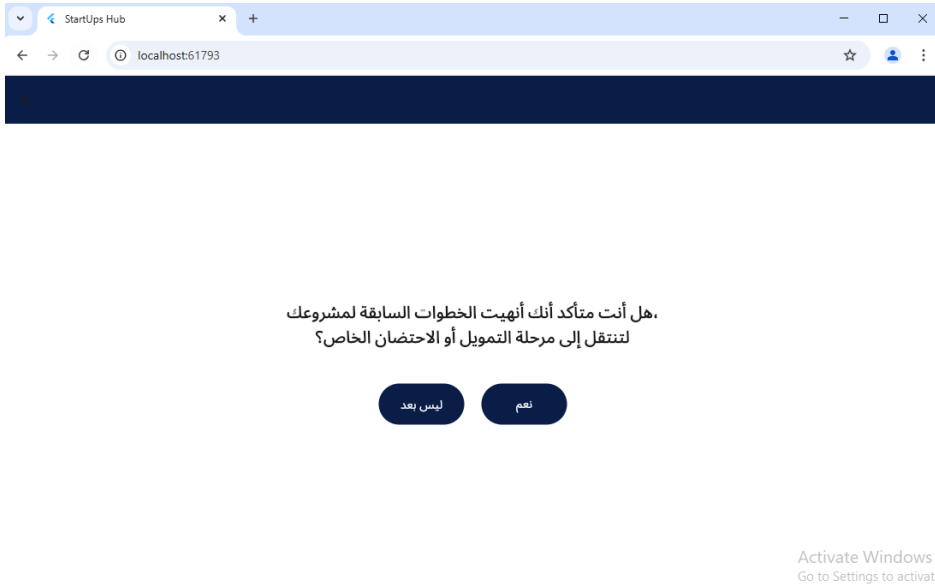


Figure 5.135: Project Journey

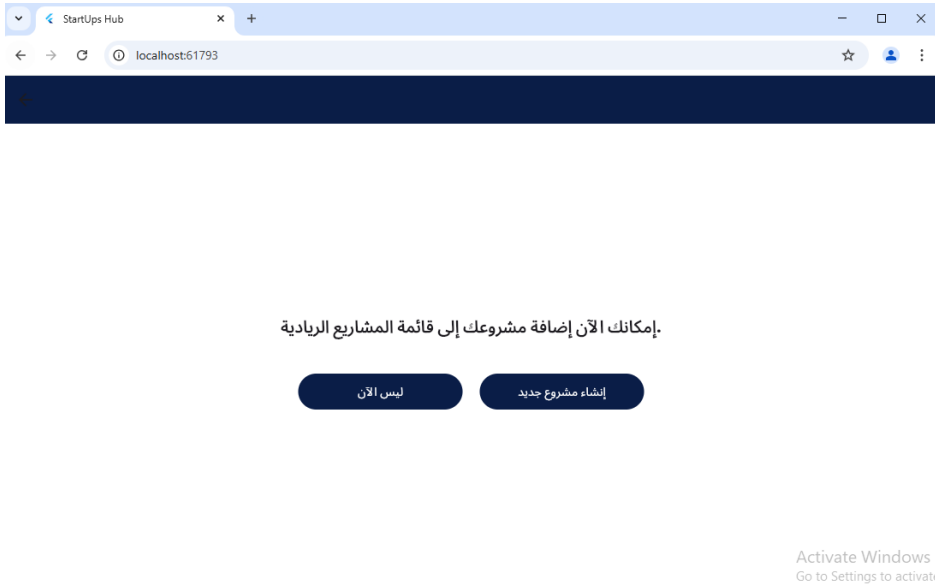


Figure 5.136: Project Journey

from the idea and preparation stage to the launch and growth stage until the project becomes ready for launch and publication. It is then launched on the startup platform to seek investments and market it.

- Courses The Courses section is designed to help project owners access educational courses offered by entrepreneurial companies. The admin adds these courses through the dashboard, and they are dynamically displayed here. This section contains all the course information, along with the application link.

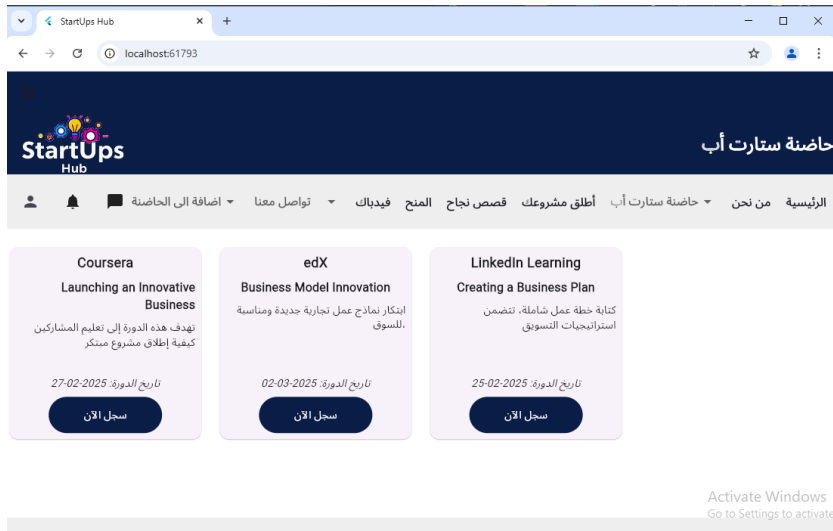


Figure 5.137: Courses

- Feedback One of the aspects we focused on is feedback and user opinions. Therefore, we created an interface where users can submit their opinions and send any comments they have about the website. These comments will be sent directly to the admin's page.

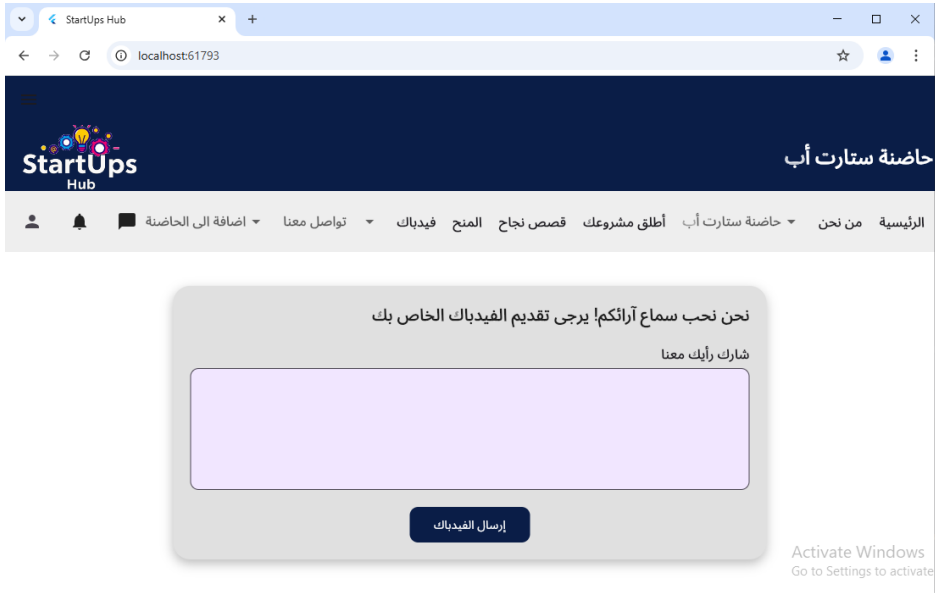


Figure 5.138: Feedback

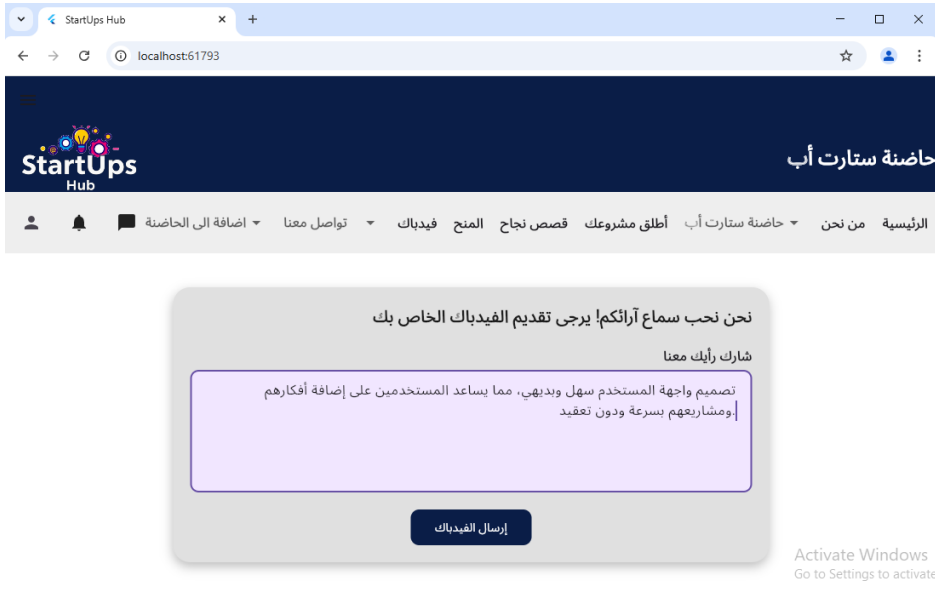


Figure 5.139: Feedback

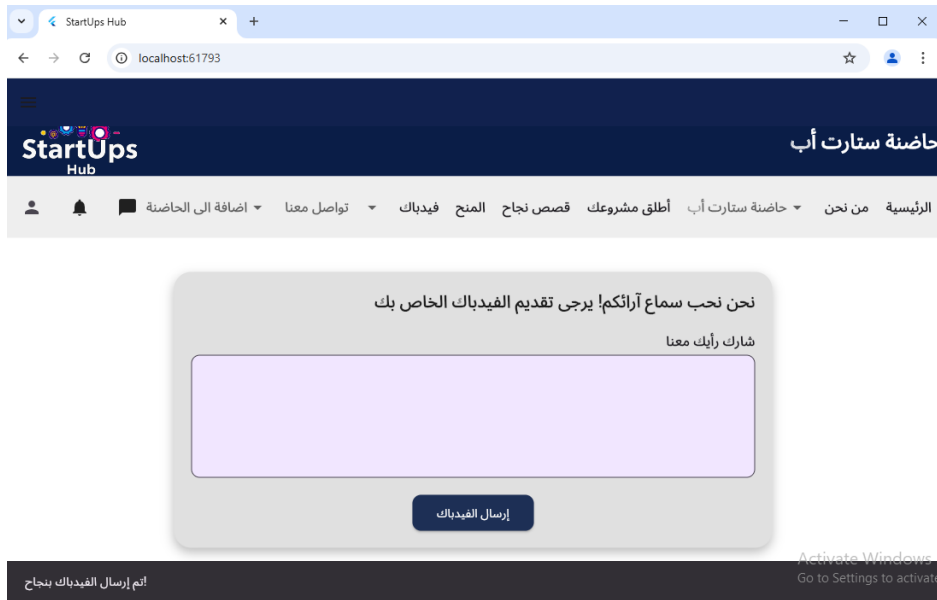


Figure 5.140: Feedback

- Grants This window contains a collection of grants provided by various entities interested in offering funding and support to startup projects. The admin manually adds these grants through the dashboard page, and they are then dynamically displayed here for project owners, along with the grant announcement and a link to the application form.

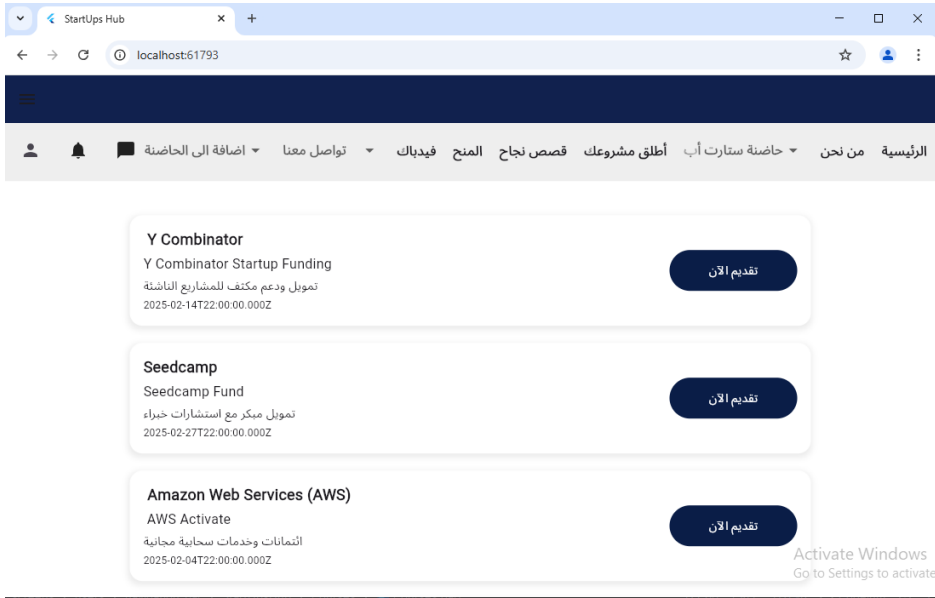


Figure 5.141: Grants

– Contact Us



Figure 5.142: Contact Us

This section acts as a communication link between the admin and all users on the website, allowing users to contact the admin through this page.

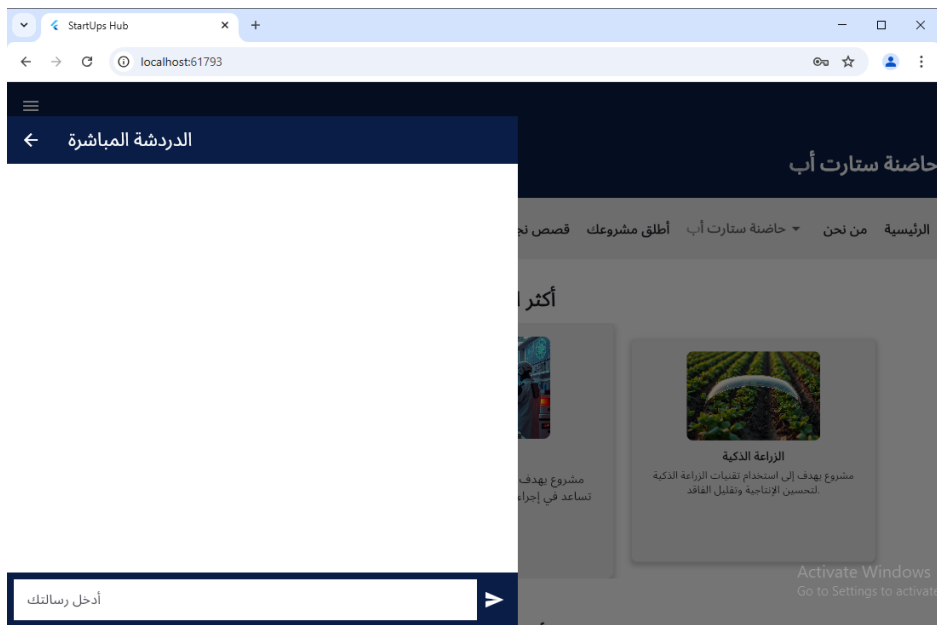


Figure 5.143: Contact Us

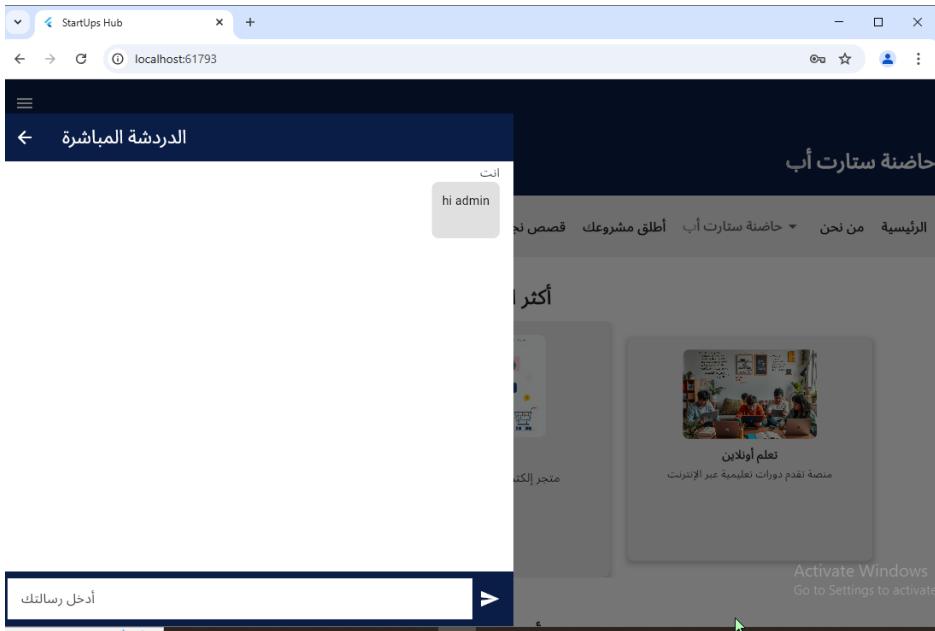


Figure 5.144: Contact Us

- Notification: This section represents the notifications received by the user.

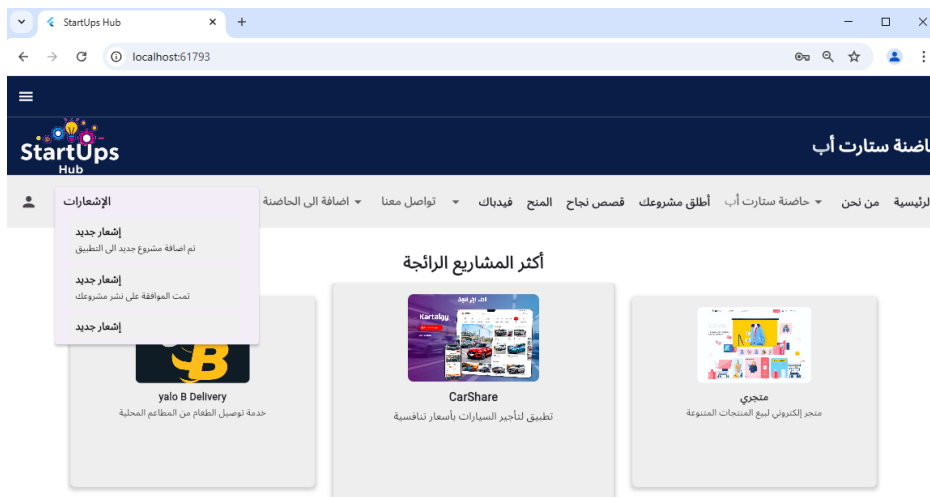


Figure 5.145: Notification

- Chats: This section represents all the user’s conversations, serving as a communication link between investors and project owners, allowing both parties to interact and communicate with each other.

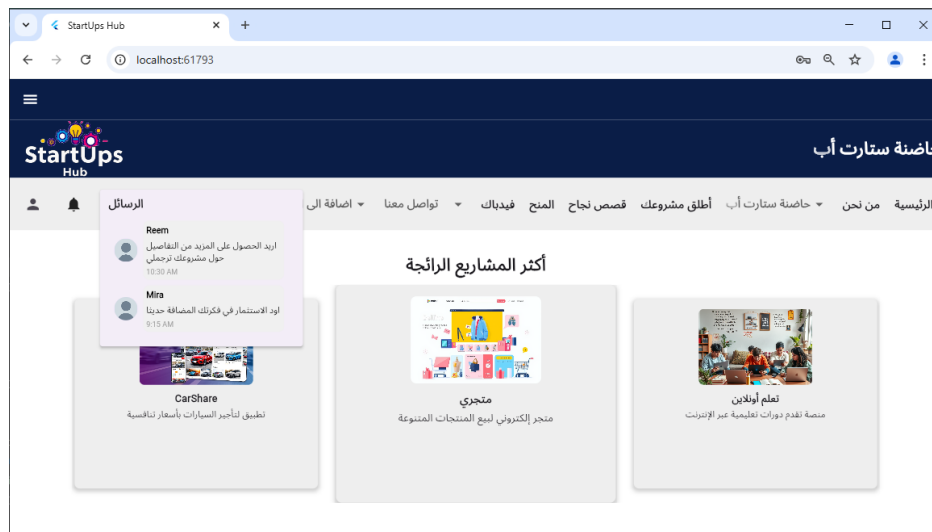


Figure 5.146: Chats

5.4.1.5 Features Added to the Platform

- Search Filter on the Project page The Search Filter on the Project page allows users to easily filter and find specific projects based on various criteria.

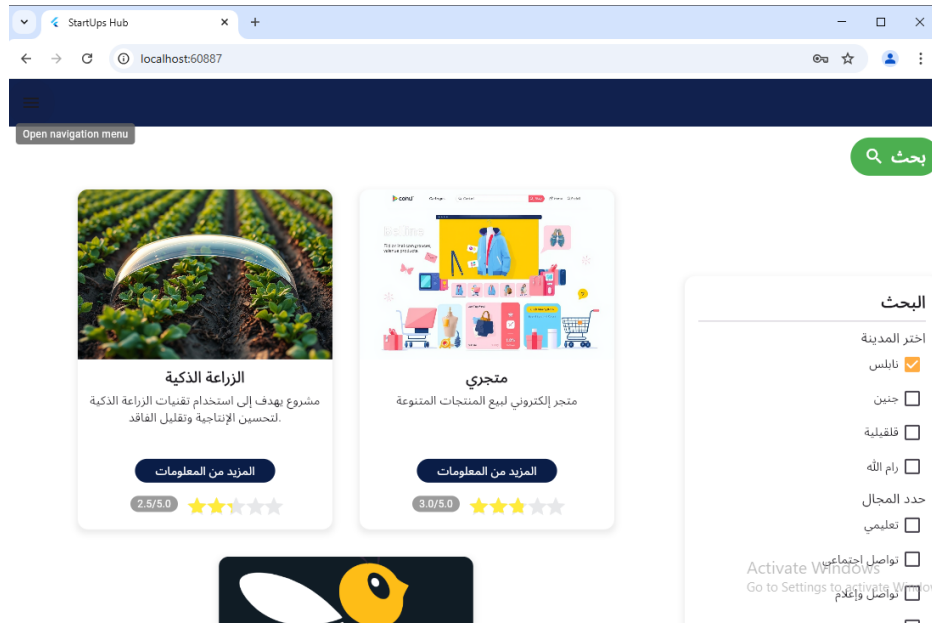


Figure 5.147: Search

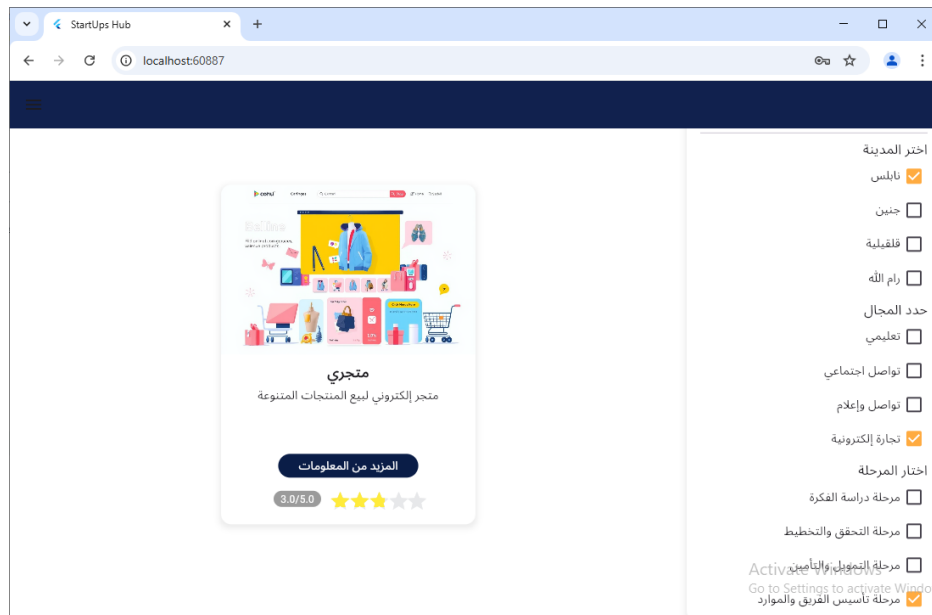


Figure 5.148: Search

- Top Rated Projects and Ideas section on the Home Page showcases the highest-rated projects and ideas, allowing users to quickly view the most popular and highly recommended options

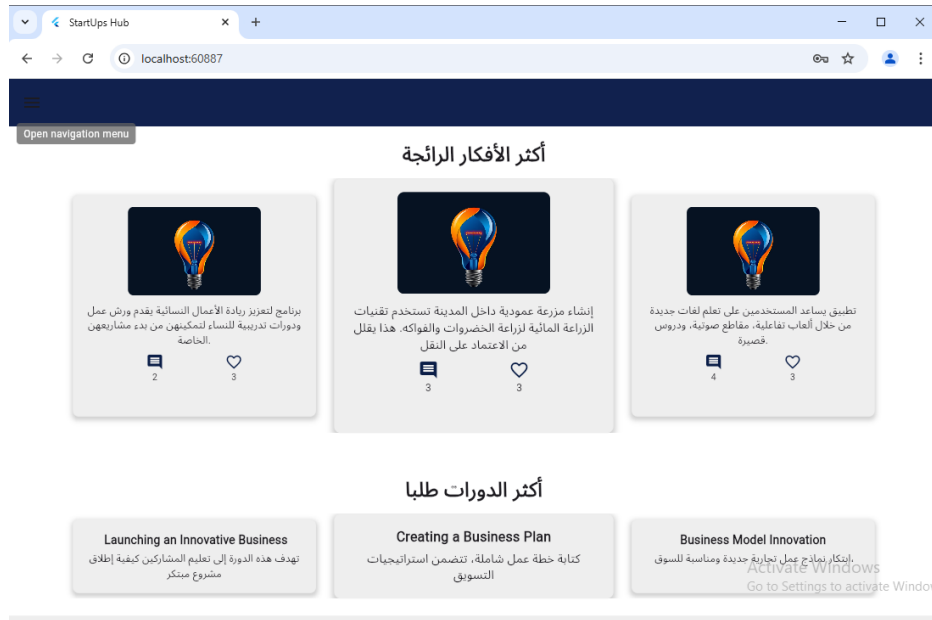


Figure 5.149: top rated

- Ratings and Reviews Ratings and Reviews on the Project Page by Investors refers to the section where investors can rate and leave feedback on projects they have viewed or invested in, providing valuable insights and opinions for other users and potential investors.

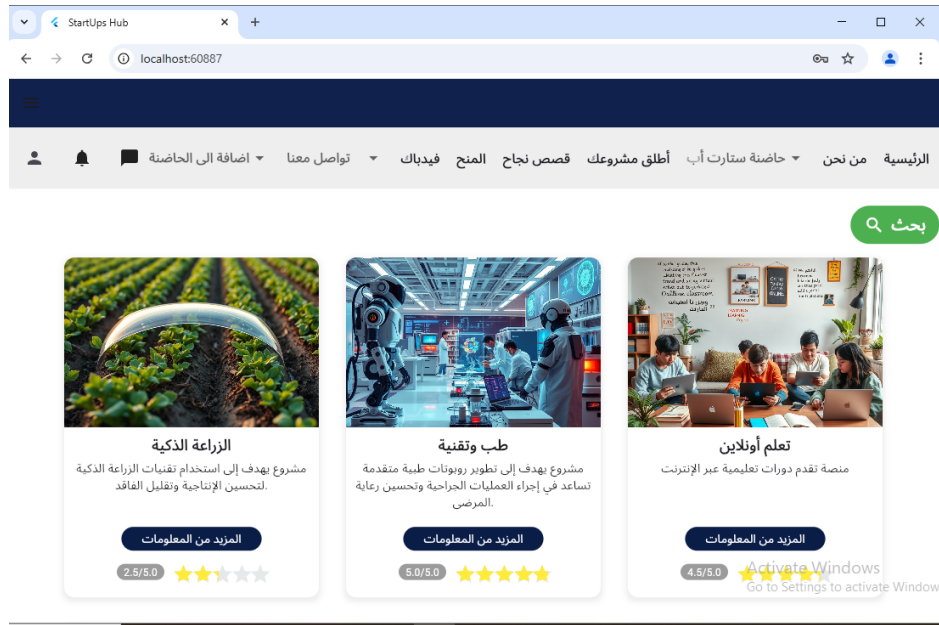


Figure 5.150: Reviews

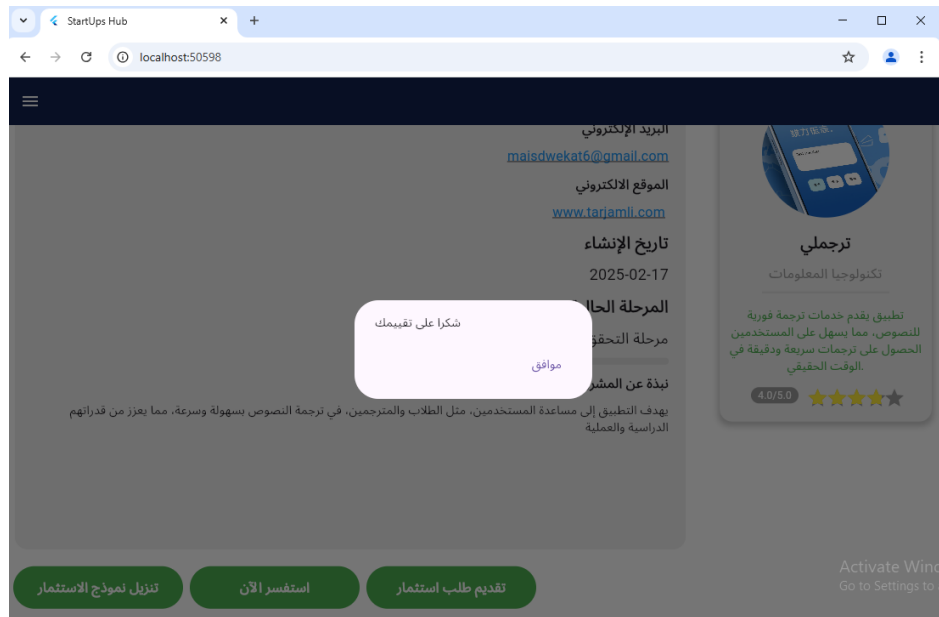


Figure 5.151: Reviews

- Live Chat The chat feature within the site is one of the most important features, serving as a communication bridge between the admin and users, or between the users themselves. This is something we have aimed to implement in our application

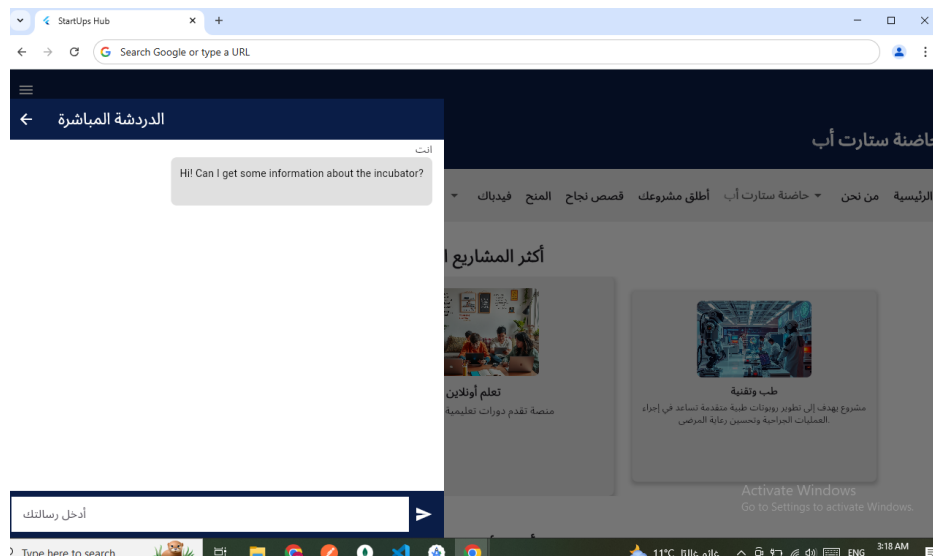


Figure 5.152: Chat

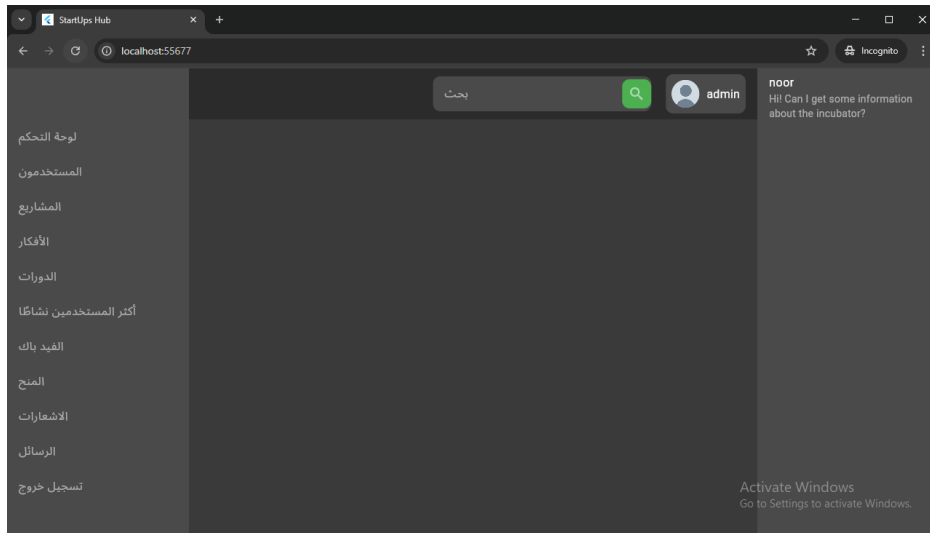


Figure 5.153: Chat

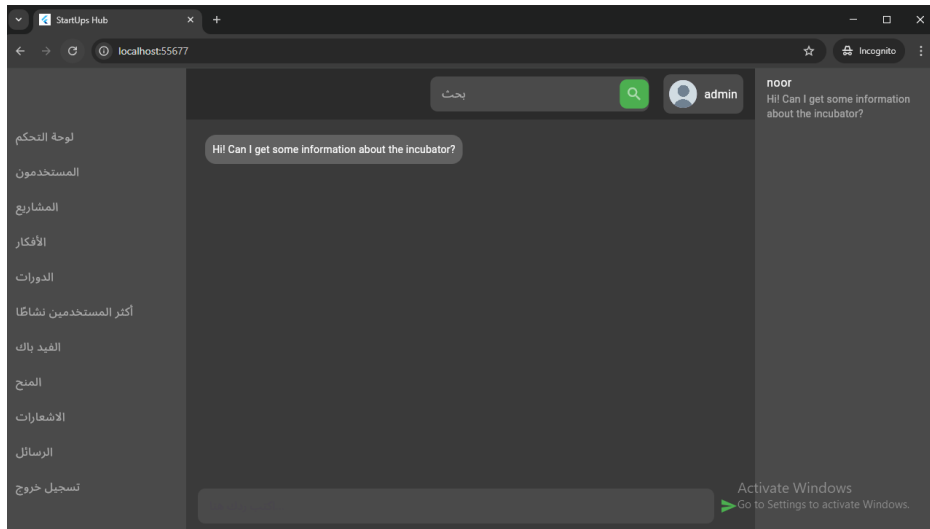


Figure 5.154: Chat

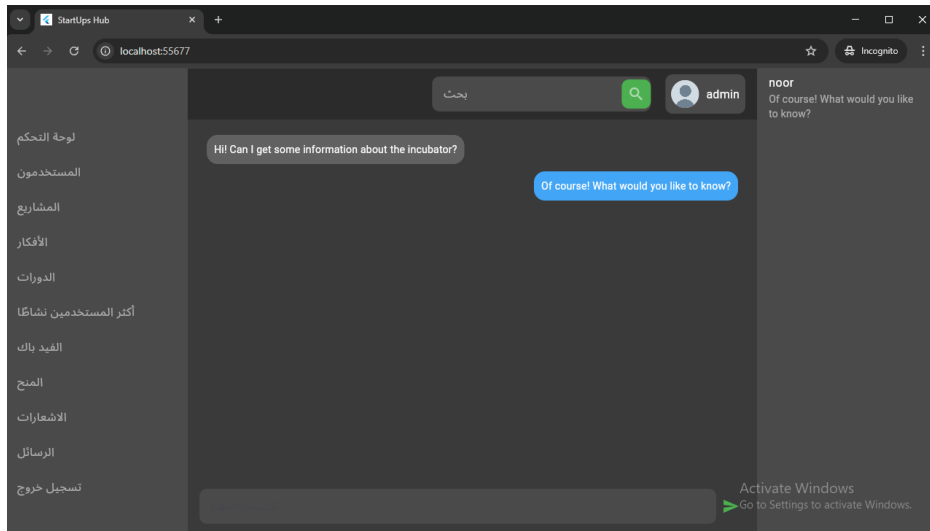


Figure 5.155: Chat

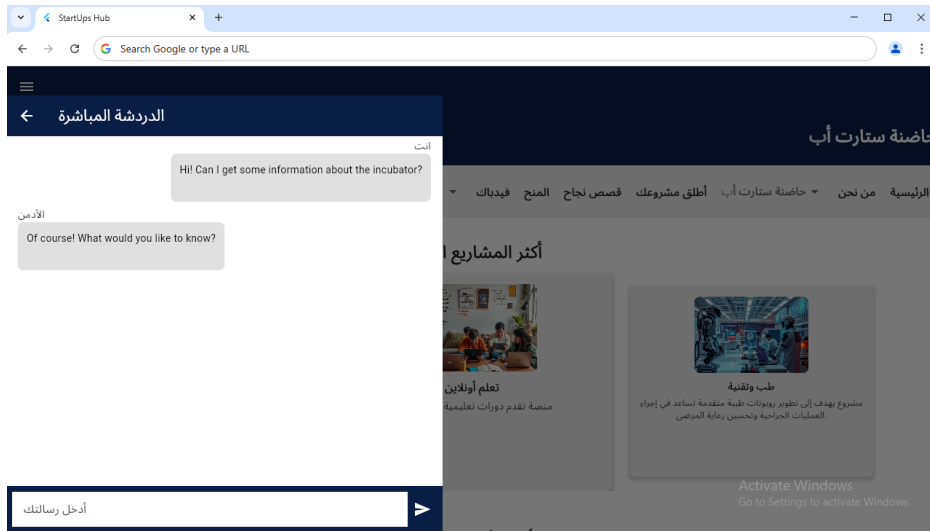


Figure 5.156: Chat

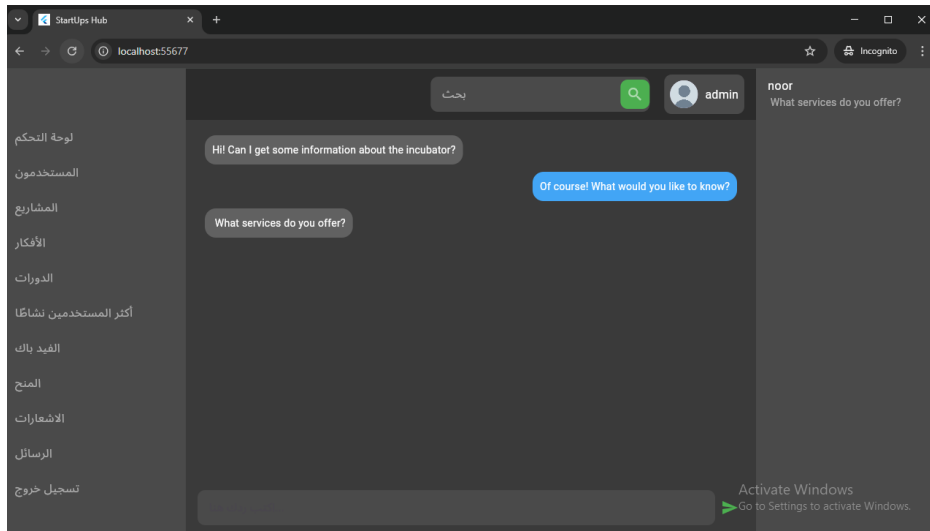


Figure 5.157: Chat

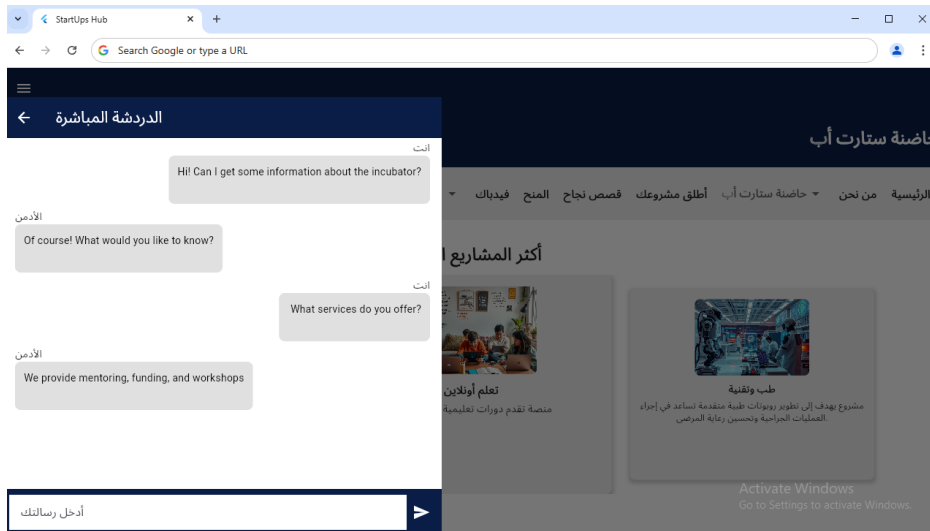


Figure 5.158: Chat

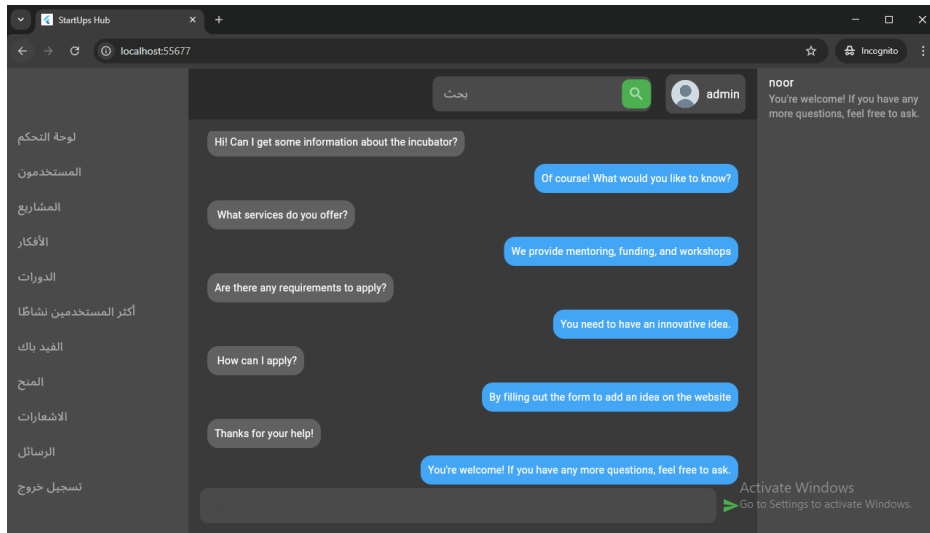


Figure 5.159: Chat

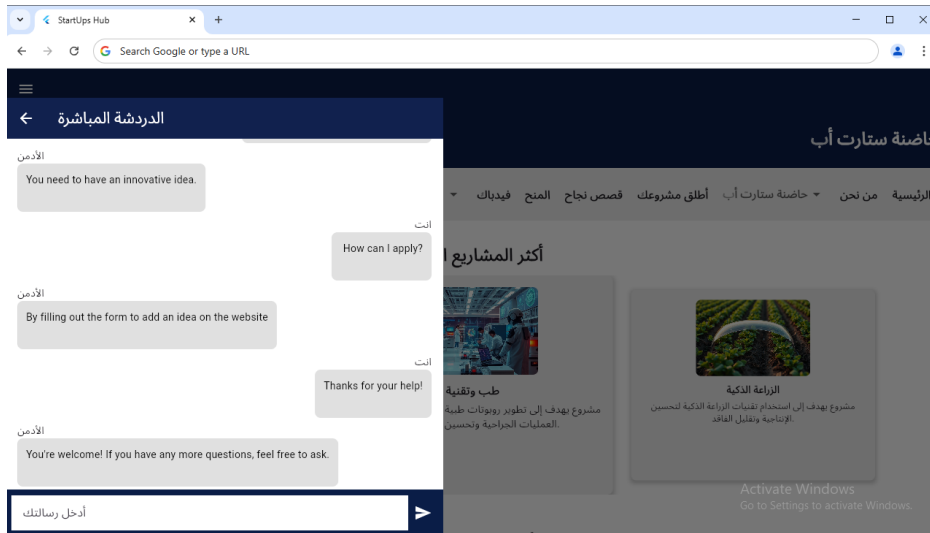


Figure 5.160: Chat

- Notifications Screen There are two types of notifications: 1- Notifications sent by the admin to users, where the admin can assign the content.

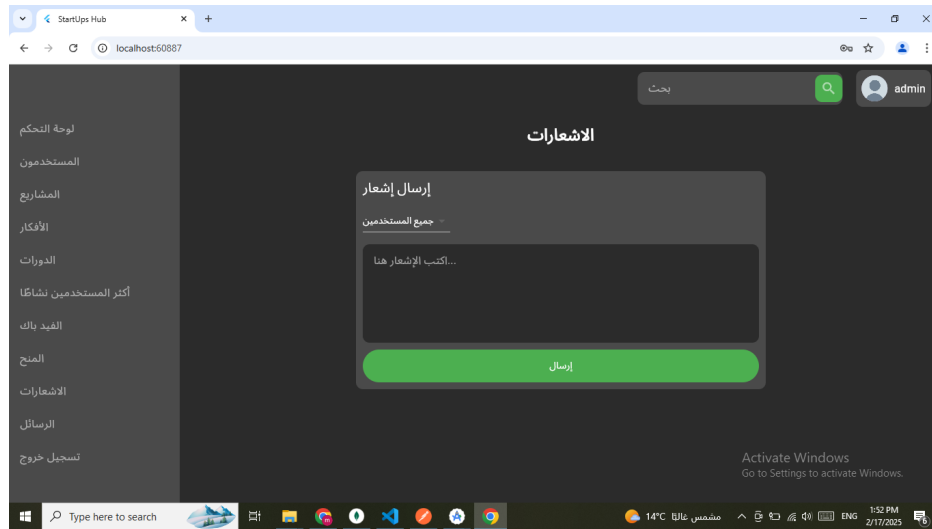


Figure 5.161: Notifications

2-Automated notifications that are triggered when a user completes a specific task. For example, when an investment request from the investor is approved, or when the due date for a specific project is approaching.

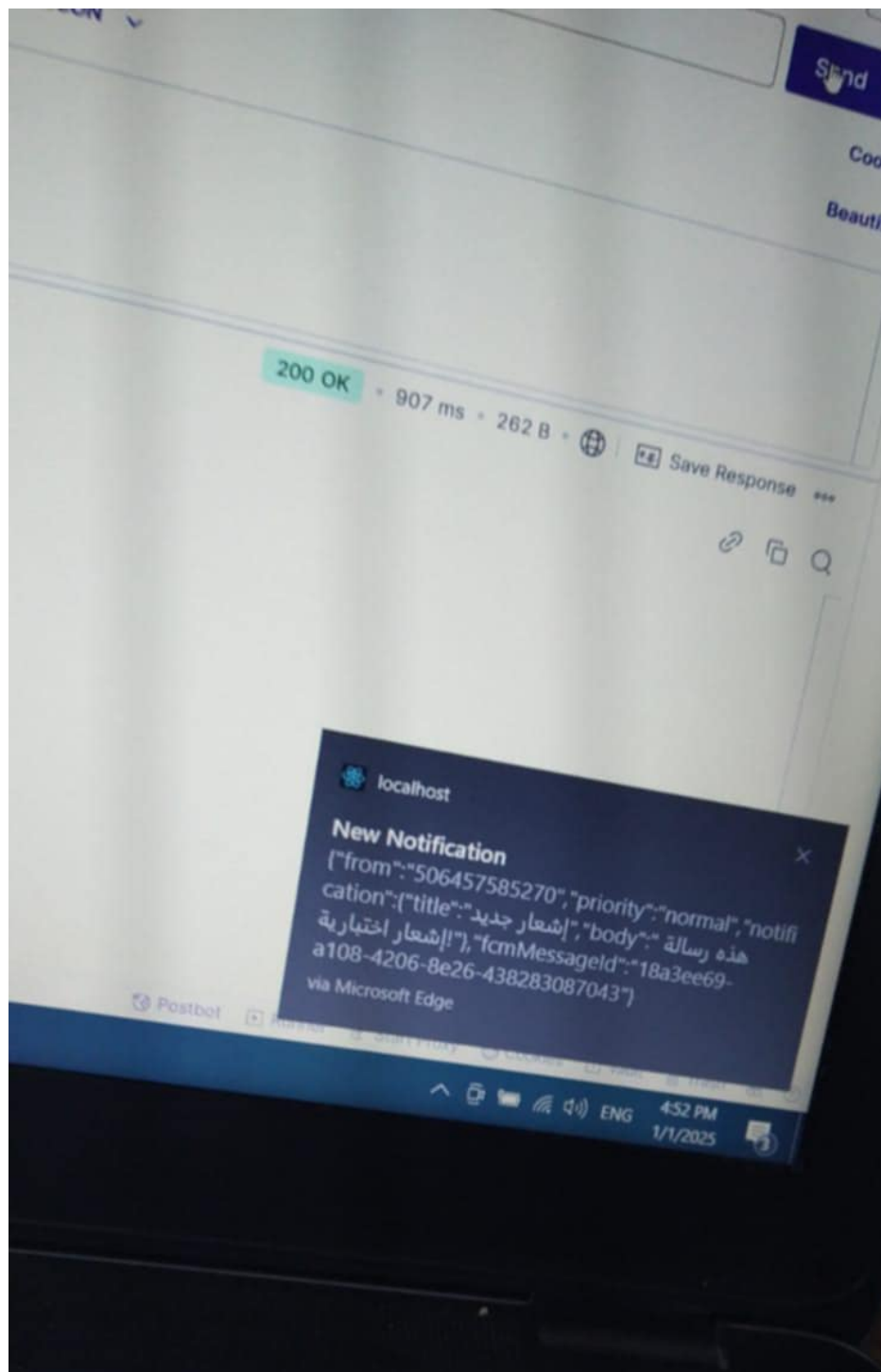


Figure 5.162: Notifications
155

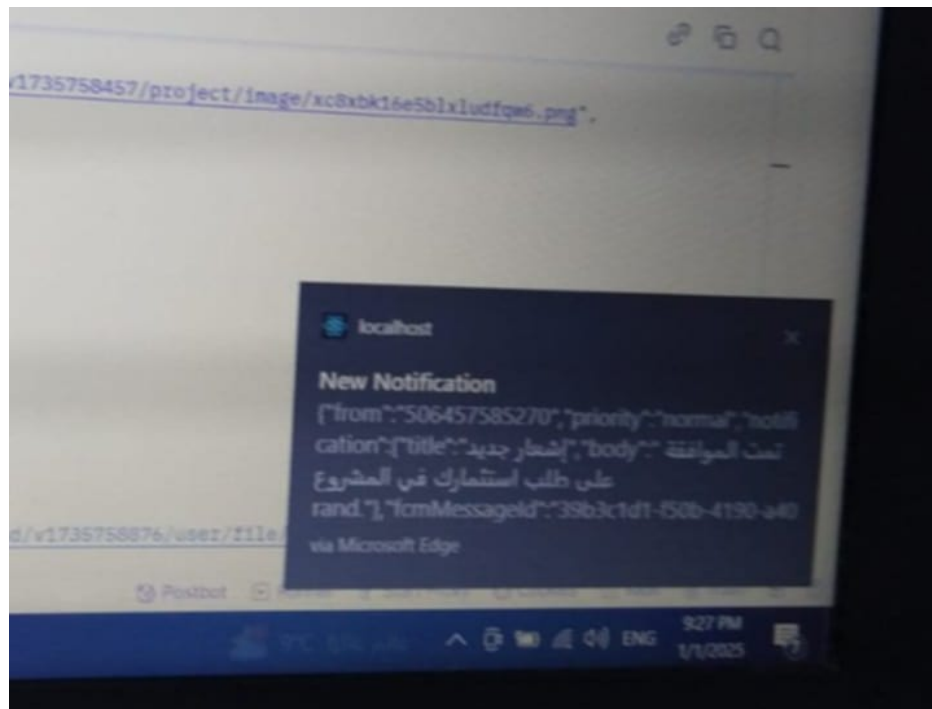


Figure 5.163: Notifications

5.4.2 Mobile Application

- Authentication and Welcome Pages:



لماذا حاضنة ستارت أب؟

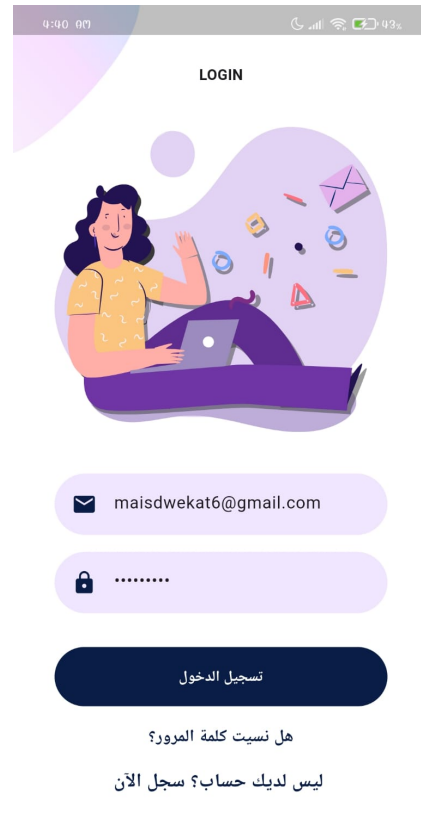
تعتبر حاضنة ستارت أب الخيار المثالي لرواد الأعمال الذين يرغبون في تحويل أفكارهم إلى مشاريع ناجحة. تقدم الحاضنة دعماً شاملاً يشمل التمويل، التوجيه من خبراء، ودورات تدريبية متخصصة. كما توفر بيئة عمل



Figure 5.164:



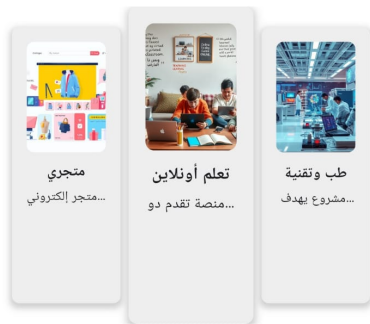
Figure 5.166:



- Home Page Interface



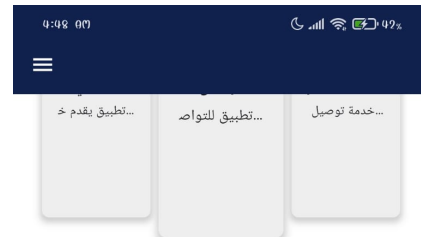
أكثر المشاريع الرائجة



أكثر الأفكار الرائجة



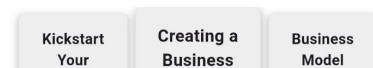
Figure 5.168:



أكثر الأفكار الرائجة



أكثر الدورات طلبا





حاضنة ستارت أب

تعتبر حاضنة ستارت أب الخيار المثالي لرواد الأعمال الذين يرغبون في تحويل أفكارهم إلى مشاريع ناجحة . تقدم الحاضنة دعماً شاملاً يشمل التمويل، التوجيه من خبراء، ودورات تدريبية متخصصة. كما توفر بيئة عمل تحفيزية للتعاون والابتكار، وتتيح لك التواصل مع شبكة من المستثمرين للحصول على التمويل اللازم. باختيارك حاضنة ستارت أب، تستثمر في مستقبلك كريادي. انضم إلينا وأبدأ رحلتك نحو النجاح!

رؤيتنا

نسعى لتمكين الأفراد من إطلاق مشاريعهم الخاصة من الصفر وتوفير الفرص للمستثمرين . دعم هذه المشاريع وتحقيق عوائد مميزة.

ما نقدمه



Figure 5.170:

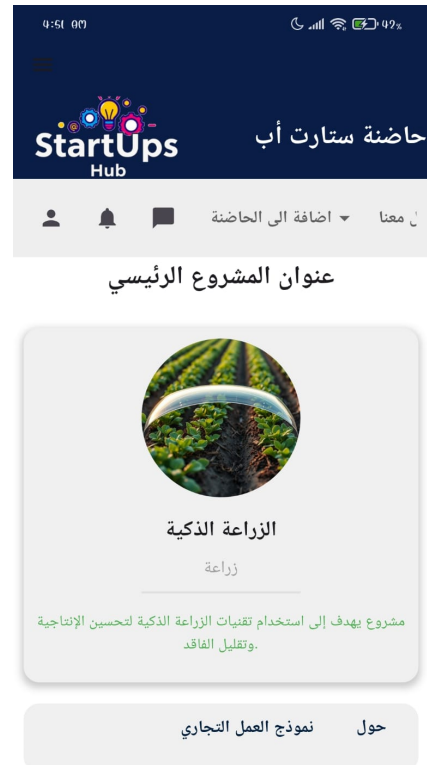
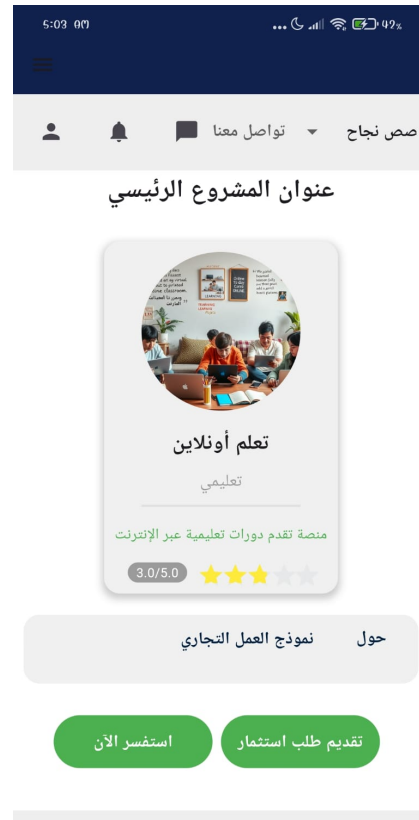




Figure 5.172:



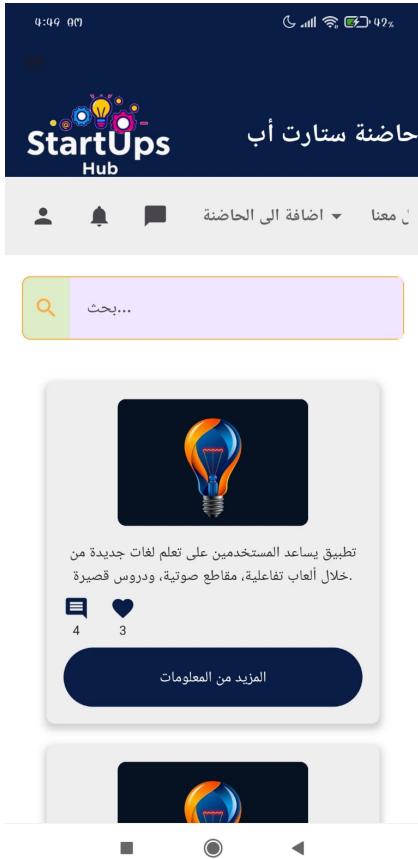
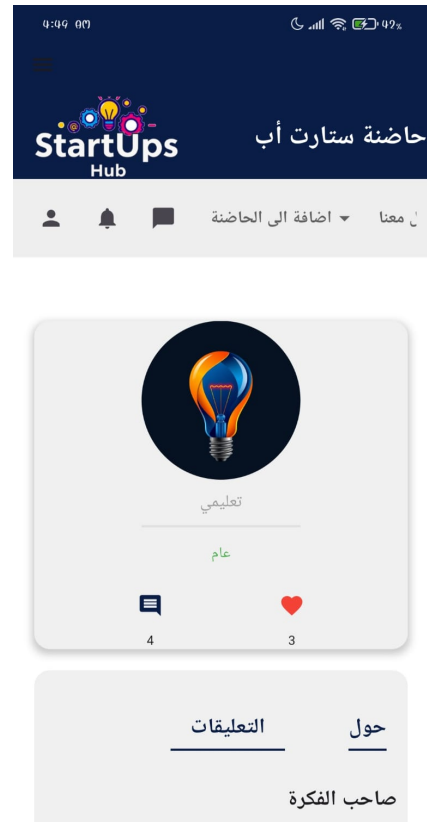


Figure 5.174:



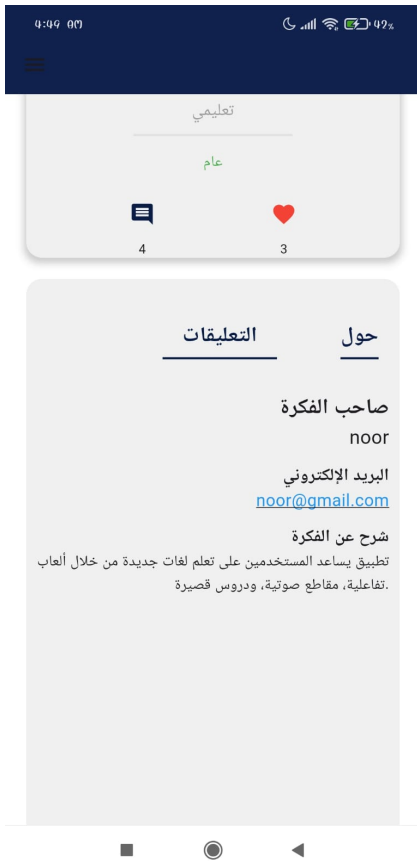


Figure 5.176:



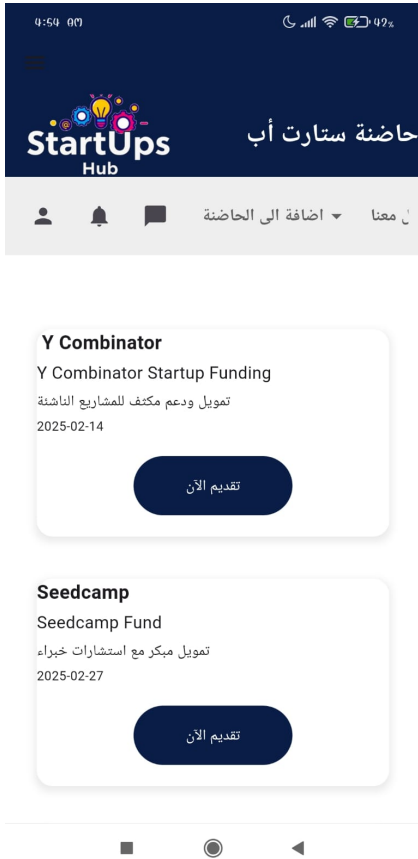
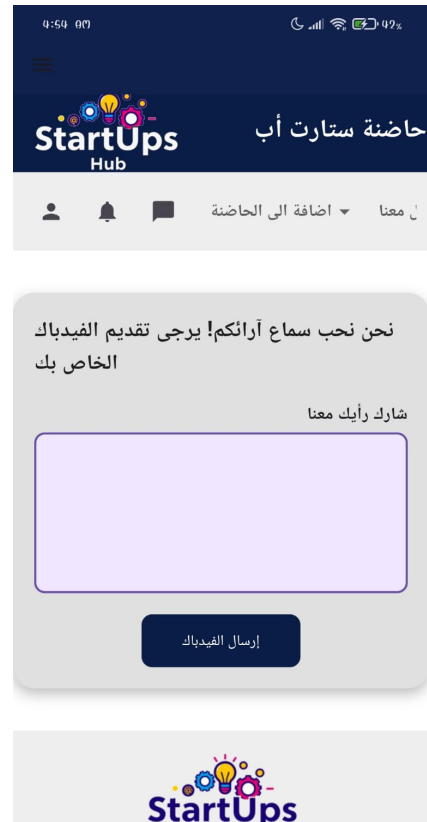


Figure 5.178:



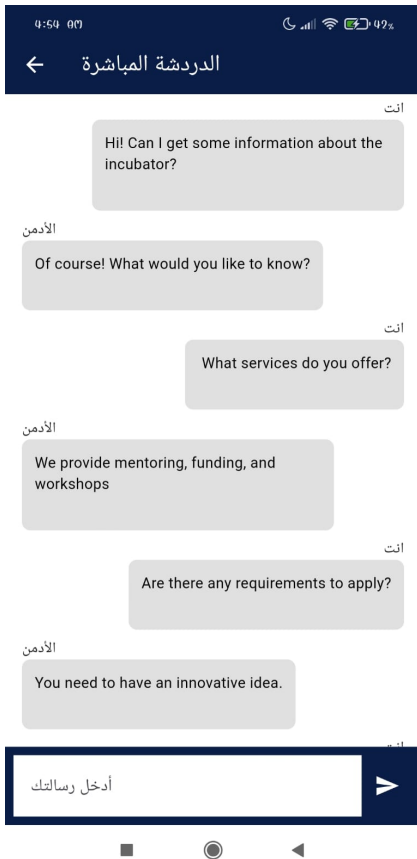


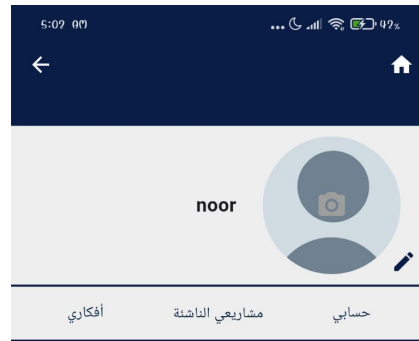
Figure 5.180:



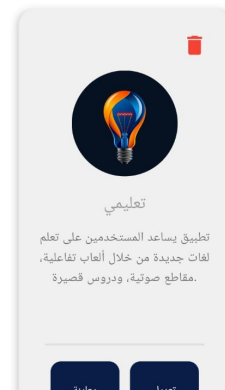
- User Interface



Figure 5.182:



أفكاري



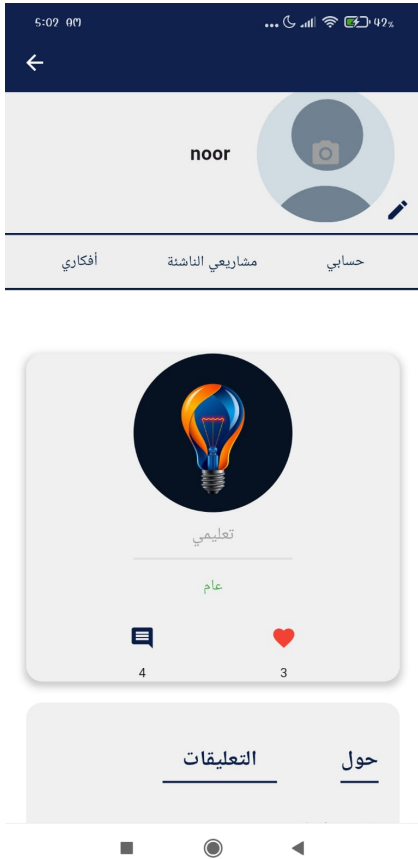


Figure 5.184:

4:56 00 42%

إضافة مشروع ناشئ

تنويه: جميع الحقول مطلوبة حتى يتم نشر المشروع

اسم المشروع

ما هو مجال المشروع

تاريخ إنشاء المشروع

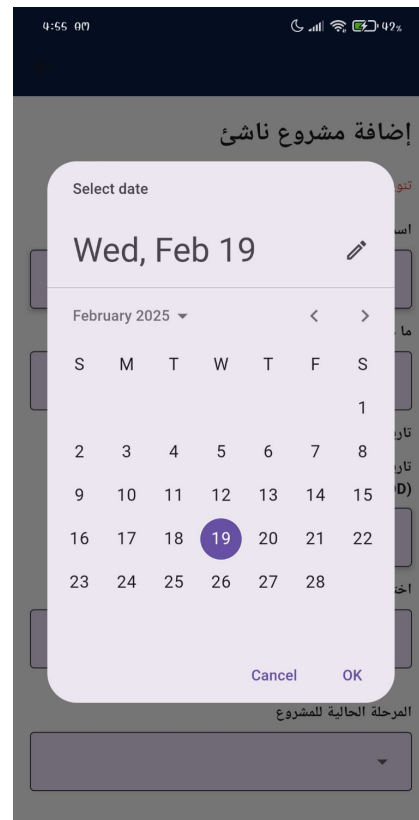
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اختر المدينة

المرحلة الحالية للمشروع



Figure 5.186:



5:01 AM 42%

إضافة مشروع ناشئ

تنويه: جميع الحقول مطلوبة حتى يتم نشر المشروع

اسم المشروع

مشروع حلويات

ما هو مجال المشروع

تصنيع

تاريخ إنشاء المشروع

تاريخ إنشاء المشروع (YYYY-MM-DD)

2022-08-05

اختر المدينة

جنين

المرحلة الحالية للمشروع

مرحلة تأسيس الفريق والموارد

Figure 5.188:

5:01 AM 42%

www.sweet.com

الإيميل

noor@gmail.com

أضف صورة لمشروعك



ملخص عن المشروع

مشروع صناعة حلويات بيتية

25/2000

إلغاء التالي



Figure 5.190:





اختر المرحلة الحالية لمشروعك

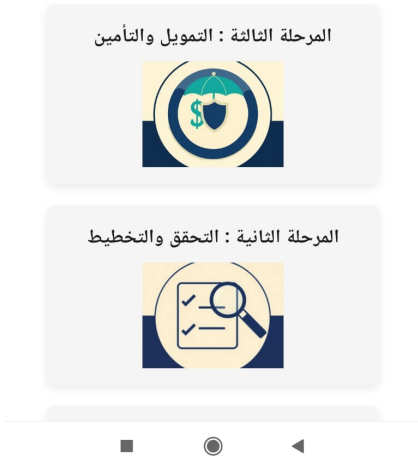


Figure 5.192:





Figure 5.194:





Figure 5.196:





Figure 5.198:



Chapter 6

Discussion, Conclusion, Recommendation and Future Work

6.1 Discussion

The project objectives were successfully achieved, as the platform facilitated interaction between project owners and investors, providing the necessary tools for growth. Modern technologies like Flutter and Node.js were used to support core functionalities.

6.2 Conclusion

An effective platform was developed to support startups and foster interaction between project owners and investors, contributing to the promotion of entrepreneurship.

6.3 Recommendation

It is recommended to enhance the platform by adding new features such as analytical reports and increasing interaction through social media networks.

6.4 Future Work

Technologies like AI can be added to analyze the potential success of projects, and the platform can be expanded to include new countries.

Chapter 7

References

1. Books:

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- Delvin R. Chatterson, *Your Uncle Ralph - The Complete Do-It-Yourself Guide to Business Plans - 2020 Edition: Get the Results You Want!*, Uncle Ralph's Publishing, 2020.

2. Online Source:

- How to Build a Startup - Syndicode Blog.

3. Articles:

- *The 7 Steps to Create Startups* - Harvard Business Review
- *How to Start a Business* - Entrepreneur Magazine