



Course Code: CSE 438

Course Title: Smartphone Application Development

Report

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SRS Document:

1	Introduction
1.1 Purpose	<ul style="list-style-type: none">• Create a marketplace where people are able to purchase plants of different types.• Create a community where users can communicate, seek, and offer suggestions on how to nurture trees.• Will make sure that the most trustworthy and important suggestions are acknowledged, enabling users to choose the best options for their trees.
1.2 Intended Audience	<ul style="list-style-type: none">• Development Team.• Project Manager.• Clients and Product Owners.• User Interface Designers.• Quality Assurance and Testing Team.• Technical Writers.
1.3 Intended Use	<ul style="list-style-type: none">• To make it easier to sell trees.• Create a multi-layer user system.• Create a community where users can communicate, seek, and offer suggestions, with the option to "upvote" the best advice.



1.4 Product Scope	<ul style="list-style-type: none">• User Registration and Authentication<ol style="list-style-type: none">1. Users can create accounts to access the platform's features.2. Sellers need to be verified before they can start selling.3. Buyers can register without verification.• Tree Catalog• User Roles (Buyers, Sellers and Admins)<ol style="list-style-type: none">1. Sellers can list and sell trees and plants.2. Buyers can browse and purchase plants listed by verified sellers.3. Admin can verify sellers.• Shopping Cart<ol style="list-style-type: none">1. Cart functionality to allow users to add items for purchase• Query<ol style="list-style-type: none">a. Users are able to post questions regarding their problems.
1.5 Definitions and Acronyms	<ul style="list-style-type: none">• SRS: Software Requirements Specification.• Multi-layer users: suggests that the software system has various user roles or levels of access.• Community chat: A feature that enables users to communicate in real time and get advice on a shared platform.• Upvote: It means clicking a button or icon to express approval or agreement with an idea or message in the community conversation.• Catalog management: The process of organizing and maintaining a collection of items, in this case, trees, including their details, availability.• Notification system: Functionality that sends alerts to users.
2	Overall Description
2.1 User Needs	<ul style="list-style-type: none">• User friendly interface for browsing and looking for available trees• Users can create accounts, log in, and manage their profiles.• Users can add trees to their cart and proceed with secure purchasing options.• In the community chat, users can submit queries and get advice regarding their trees and also participate in discussions and provide helpful advice to other users.• An upvoting system to identify and draw attention to the most trustworthy and insightful suggestions in the community chat.• A user can manage items in their inventory and specify whether they are available or not.



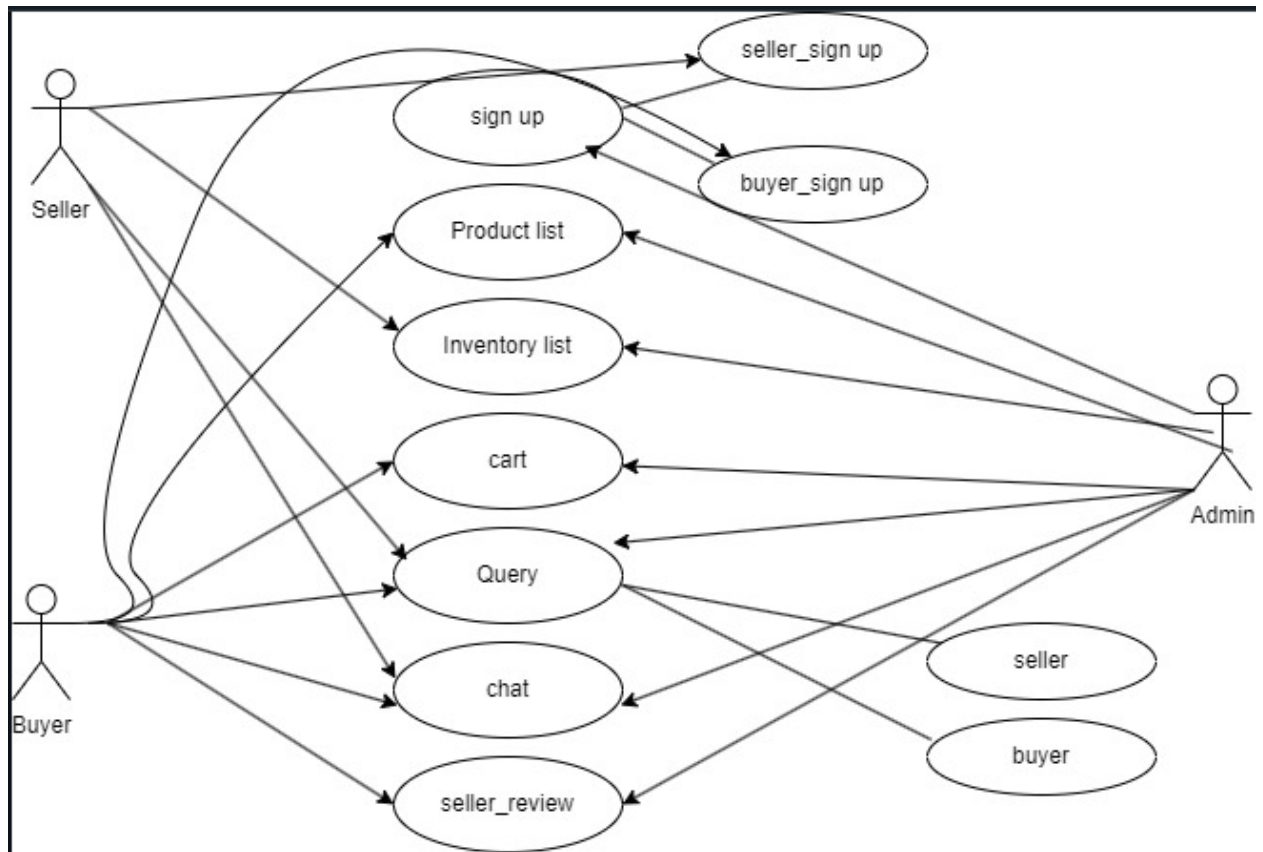
2.2 Assumptions and Dependencies	<p>Assumptions</p> <ul style="list-style-type: none">• Users have access to a device (computer, smartphone.) with an internet connection.• Flutter framework will be used to develop the app.• Users will provide accurate information during the registration process.• Users will follow community rules and conduct themselves appropriately in chat. <p>Dependencies</p> <ul style="list-style-type: none">• Functionality of the app will be limited to the constraints of flutter
3	System Features and Requirements
3.1 Functional Requirements	<ul style="list-style-type: none">• User Interface<ul style="list-style-type: none">○ The system will allow users to create a buyer or seller account.○ The registration information will be validated using google authentication system• Profile Management<ul style="list-style-type: none">○ User will be able to edit their profile information including their name and picture• Product and Inventory Catalog<ul style="list-style-type: none">○ The system will provide a product catalog for buyers to search, filter and sort on different criteria○ The system will provide inventory management for sellers to easily update their product listing.• Shopping Cart<ul style="list-style-type: none">○ User will be able to add items to their shopping cart○ User will be able to update or delete any items or quantity in the shopping cart○ It will have the option for checkout and method of payment.• Admin Dashboard<ul style="list-style-type: none">○ The system should provide an administrative dashboard for authorized administrators.○ Admins should be able to manage products, user accounts,



	<p>and orders.</p> <ul style="list-style-type: none">○ The dashboard should include features like user management, query management.
3.2 External Interface Requirements	<ul style="list-style-type: none">● User Interface<ul style="list-style-type: none">○ The user shall provide a user friendly environment for them to interact.○ The GUI will be followed by the industry standard● Database<ul style="list-style-type: none">○ A database will be created to update and delete data easily.○ The database system shall meet certain goals to ensure confidentiality, integrity and authenticity● Error Handling and Logging:<ul style="list-style-type: none">○ The system will provide appropriate error messages to handle errors and have a fail-safe function
3.3 System Features	<ul style="list-style-type: none">● User Registration and Authentication● Profile Management● Inventory Management● Tree Catalog● User Roles (Buyers, Sellers and Admins)● Cart● Community Chat● Upvoting System● Notification System
3.4 Nonfunctional Requirements	<ul style="list-style-type: none">● The system's response time with the database should be fast● The system should not have any scalability issue● The GUI should designed in such a way that users can easily understand at first glance● The system's code should follow coding standards and best practices for maintainability and readability.● The system should have regular and automated data backup procedures in place to prevent data loss.



Use Case Diagram:





App Outline:

The app was developed using Figma. Using figma the 3 layers of users were designed. The UI shows the representation of Admin, Sellers and Buyers.

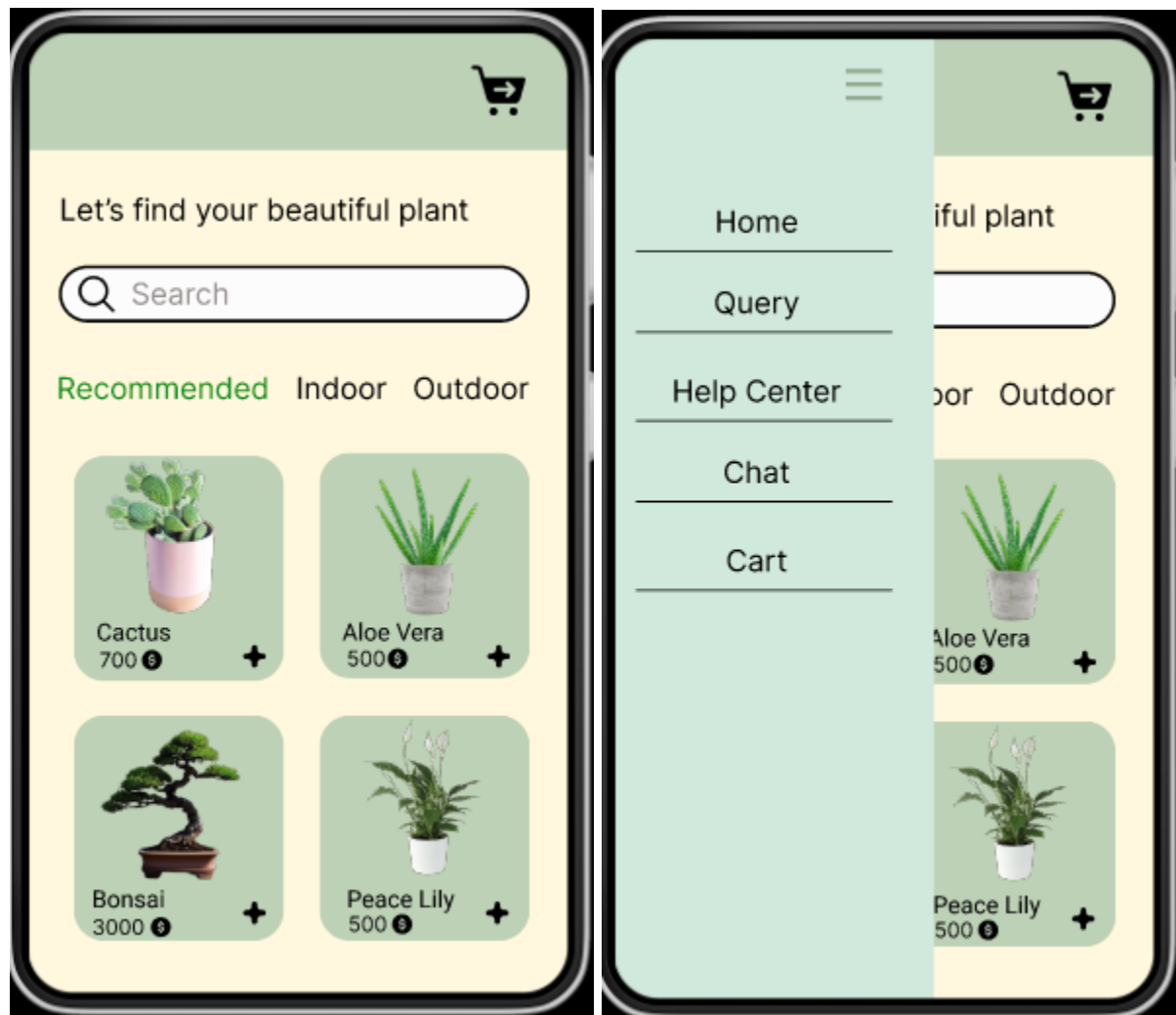
The image displays two mobile app screens for the 'WOODIFY' app, which has a green background and a logo featuring a stylized green leaf and a circular emblem.

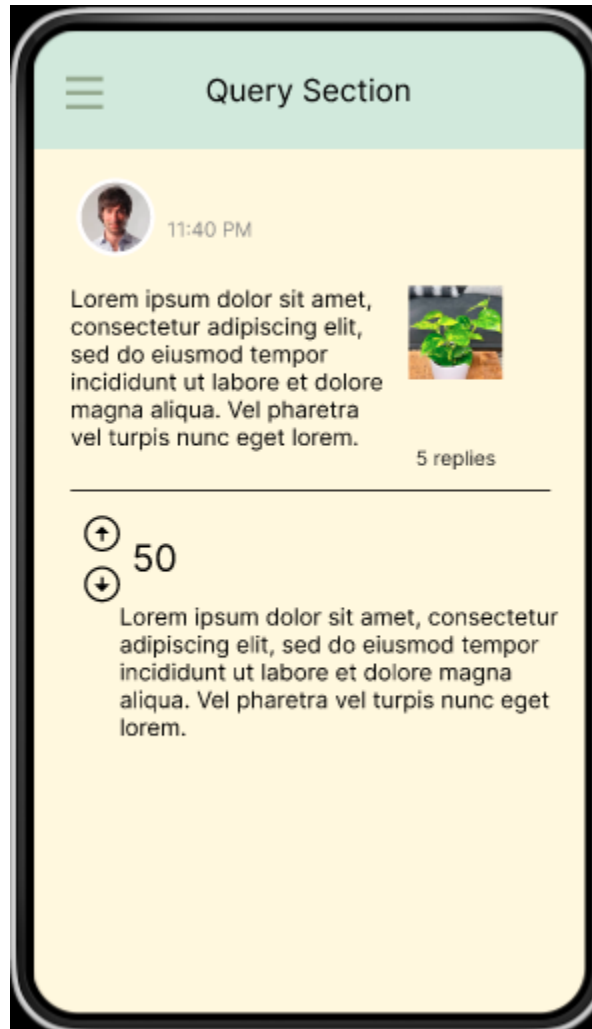
Left Screen (Login):

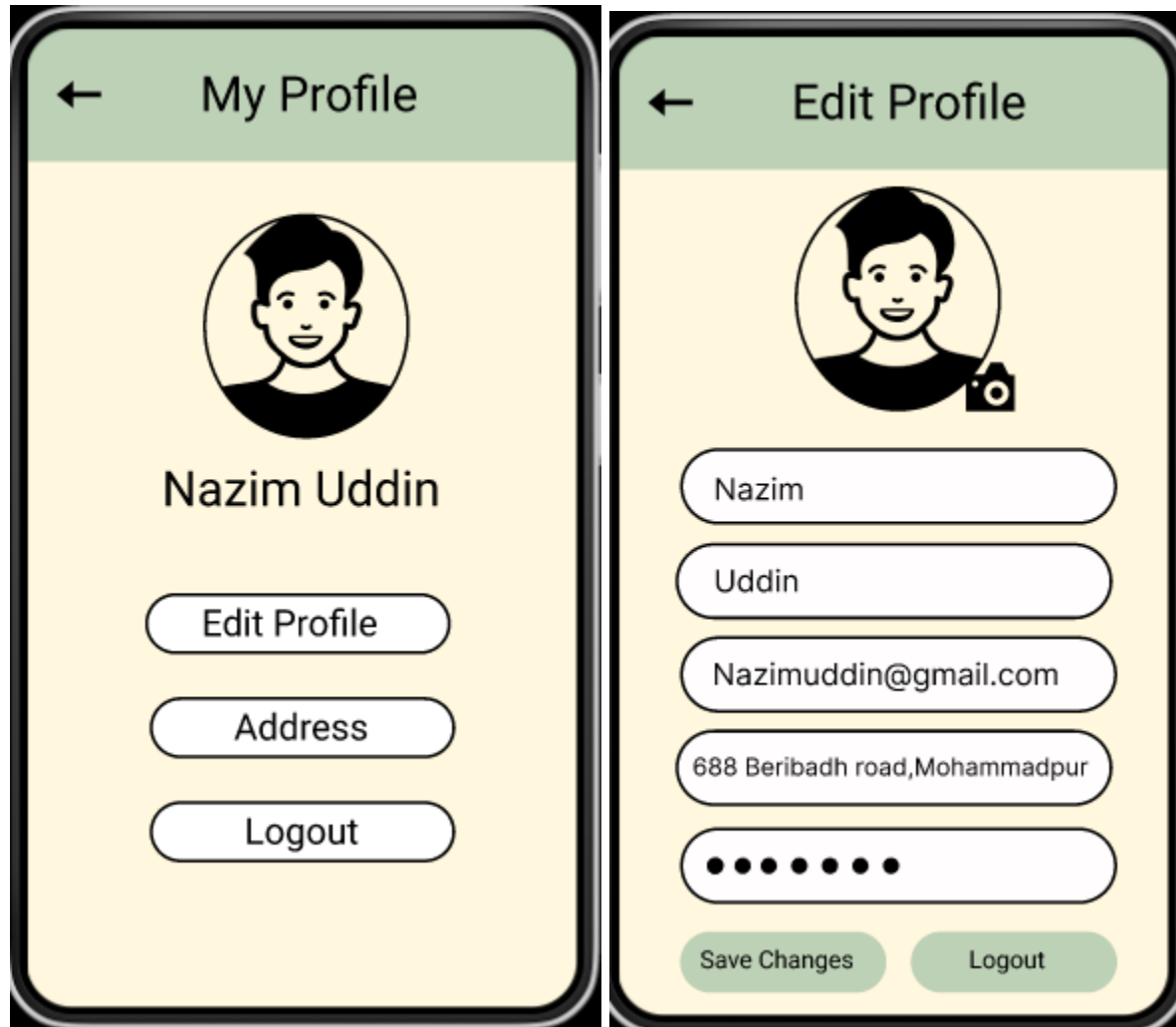
- Logo: WOODIFY
- Input field: Enter you Email
- Input field: Enter you Password
- Button: Submit
- Text: Don't have an account? [Create Account](#)

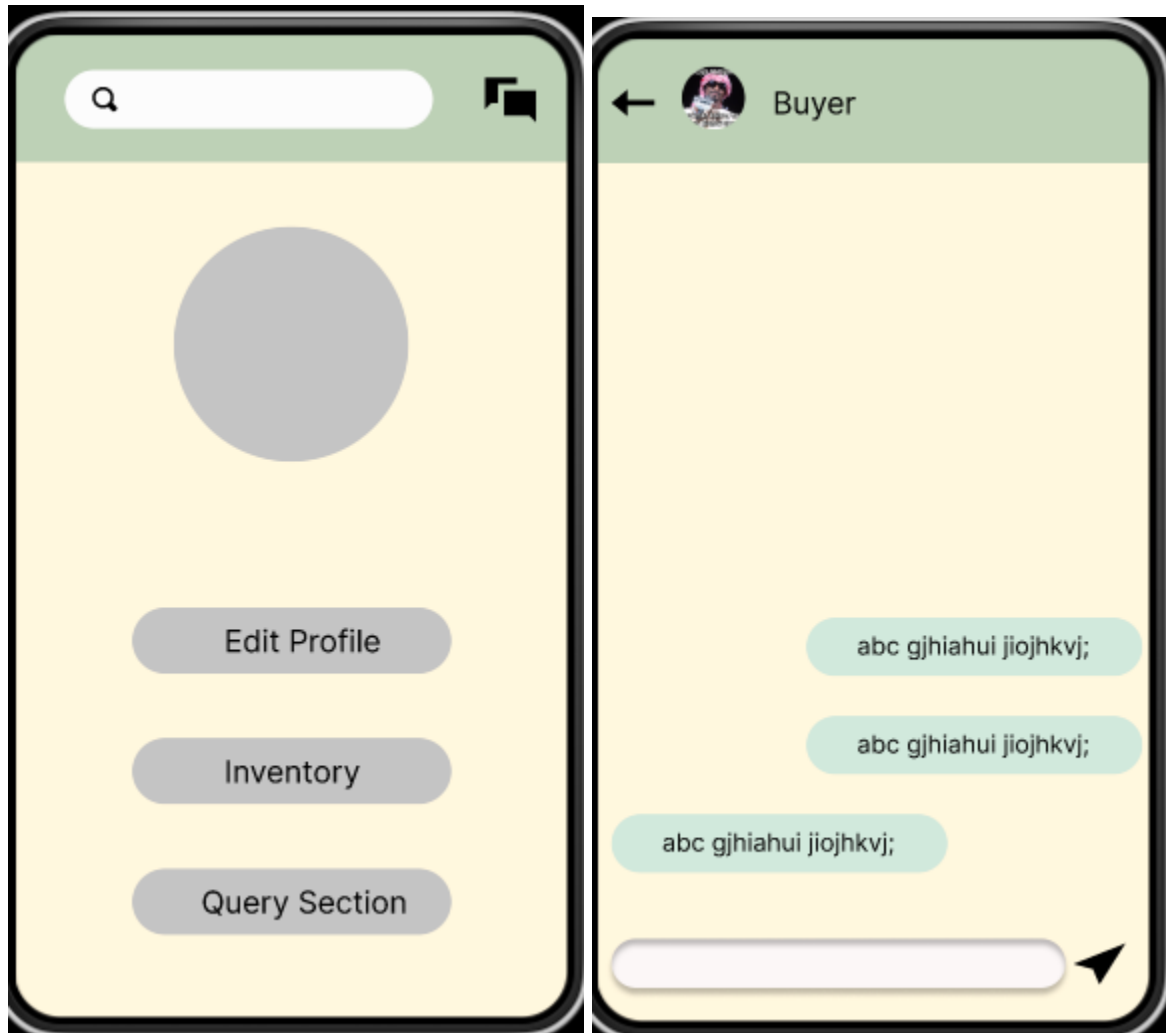
Right Screen (Registration):

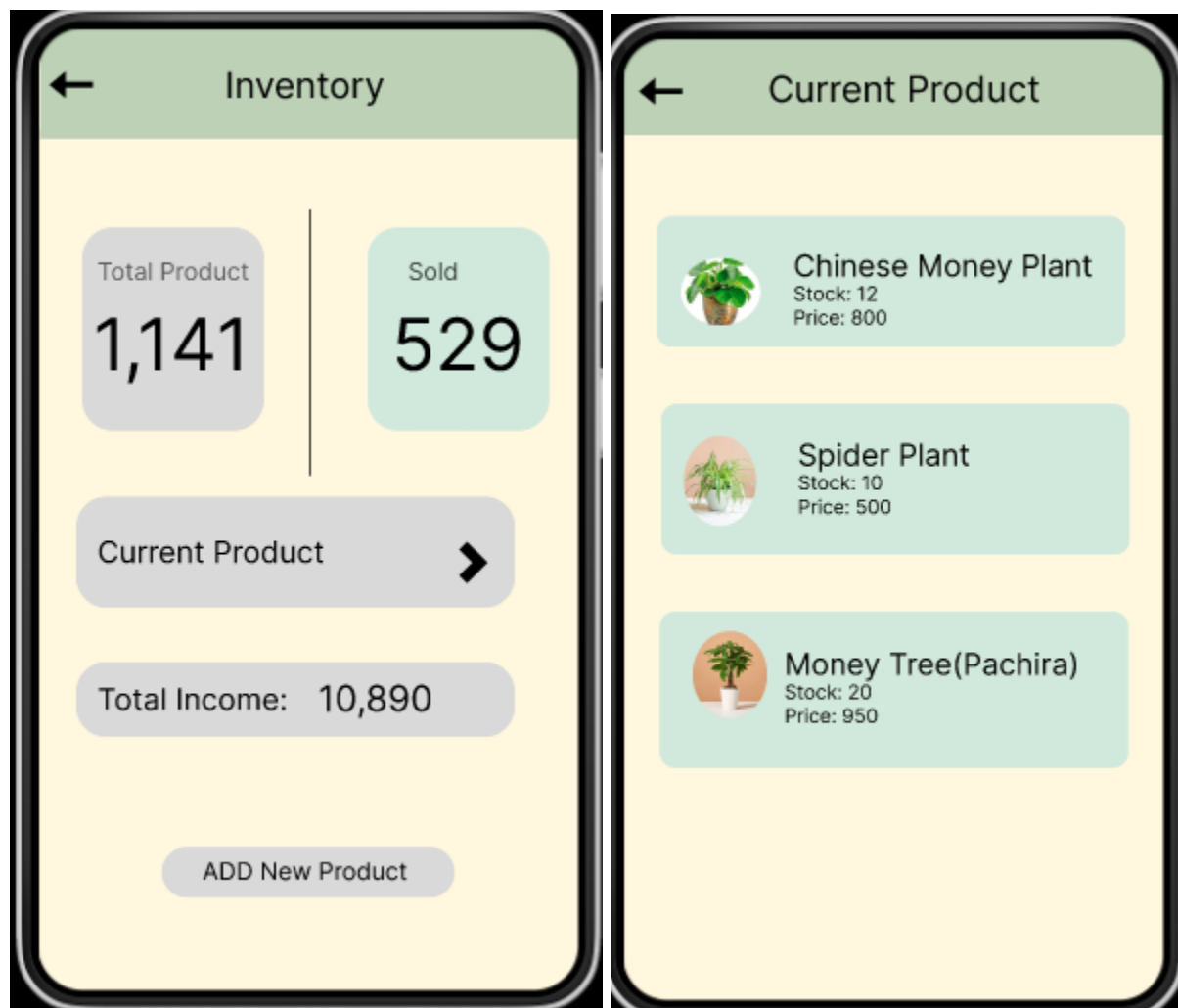
- Logo: WOODIFY
- Input field: First Name
- Input field: Last Name
- Input field: Email Address
- Input field: Password
- Button: Submit











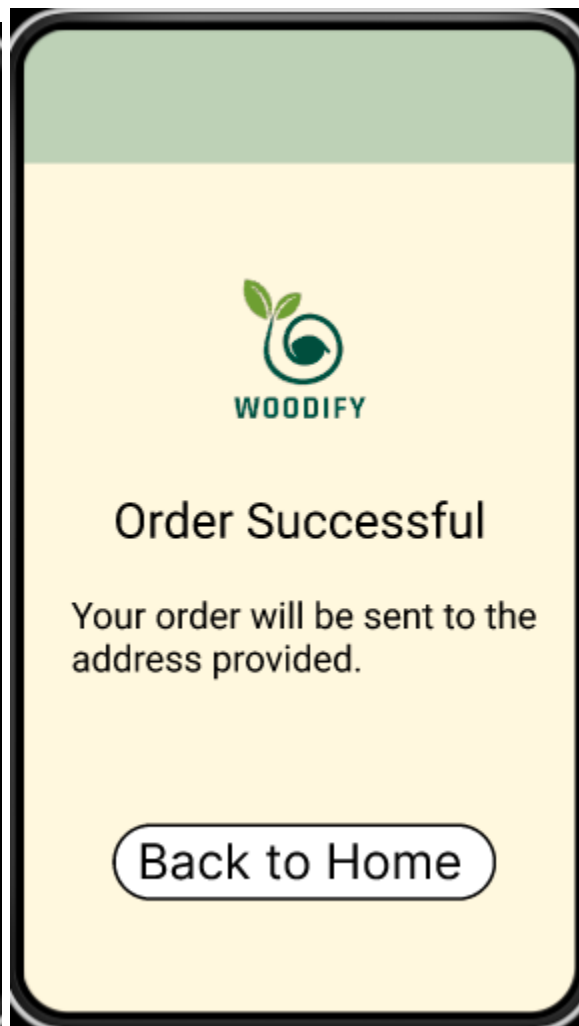


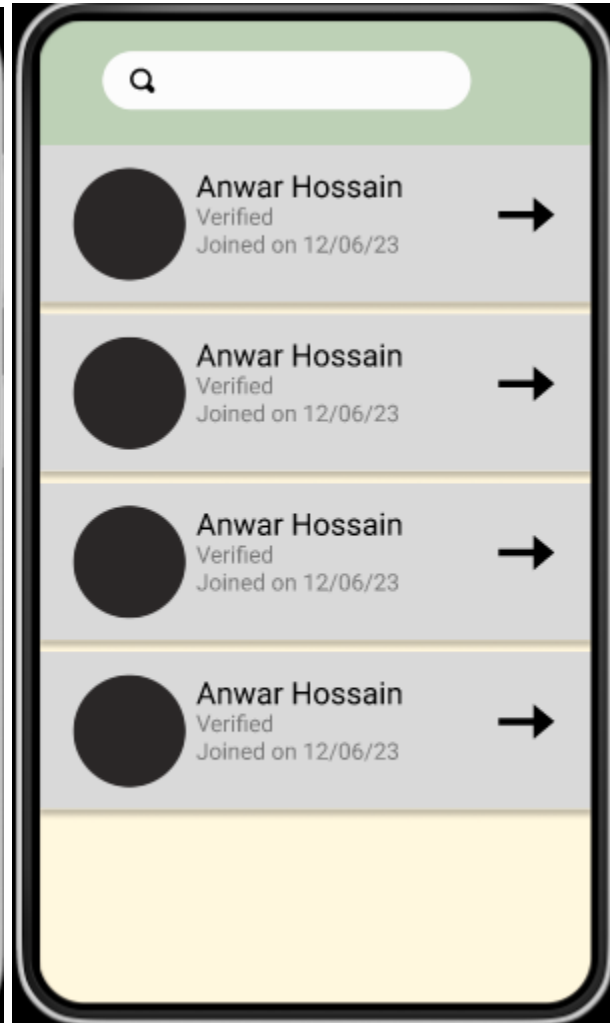
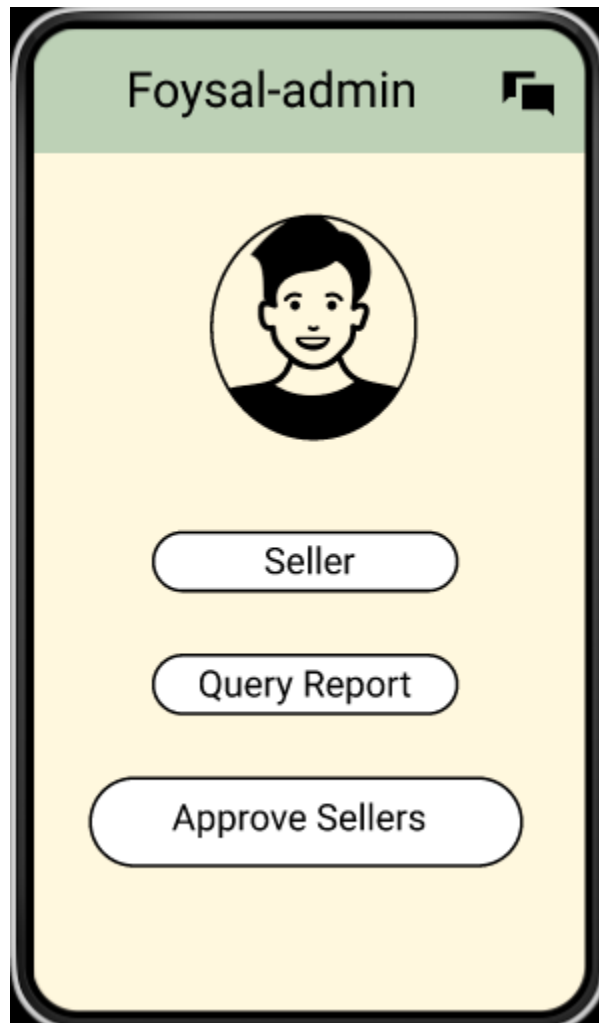


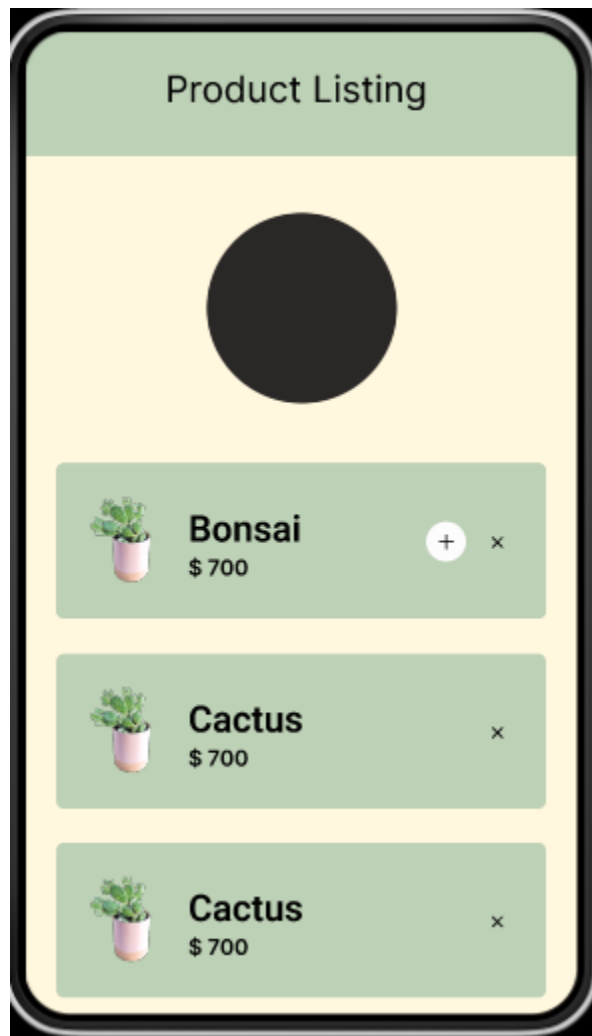




Click to add Photo









APP DEMO:

1. Introduction

About Woodify

Woodify is a unique platform that brings together tree sellers, customers, and enthusiasts. It's a one-stop destination for buying and selling trees, engaging in tree-related discussions, and connecting with others who share your passion for nature.

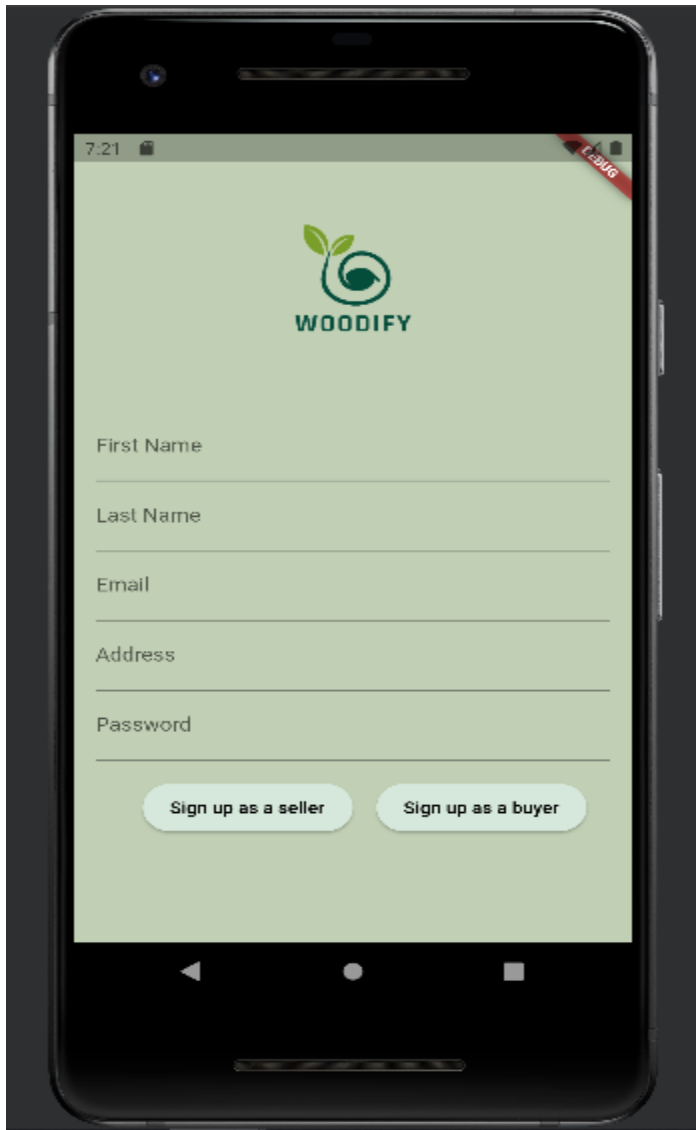
Key Features

- **Homepage:** Browse and buy a variety of trees listed by sellers.
- **Queries and Comments:** Post questions, share insights, and leave comments about trees and related topics.
- **Chat System:** Connect with other users through real-time chat.
- **User Profiles:** Create detailed profiles.
- **Search Functionality:** Easily find specific trees, queries, or users.

2. Getting Started

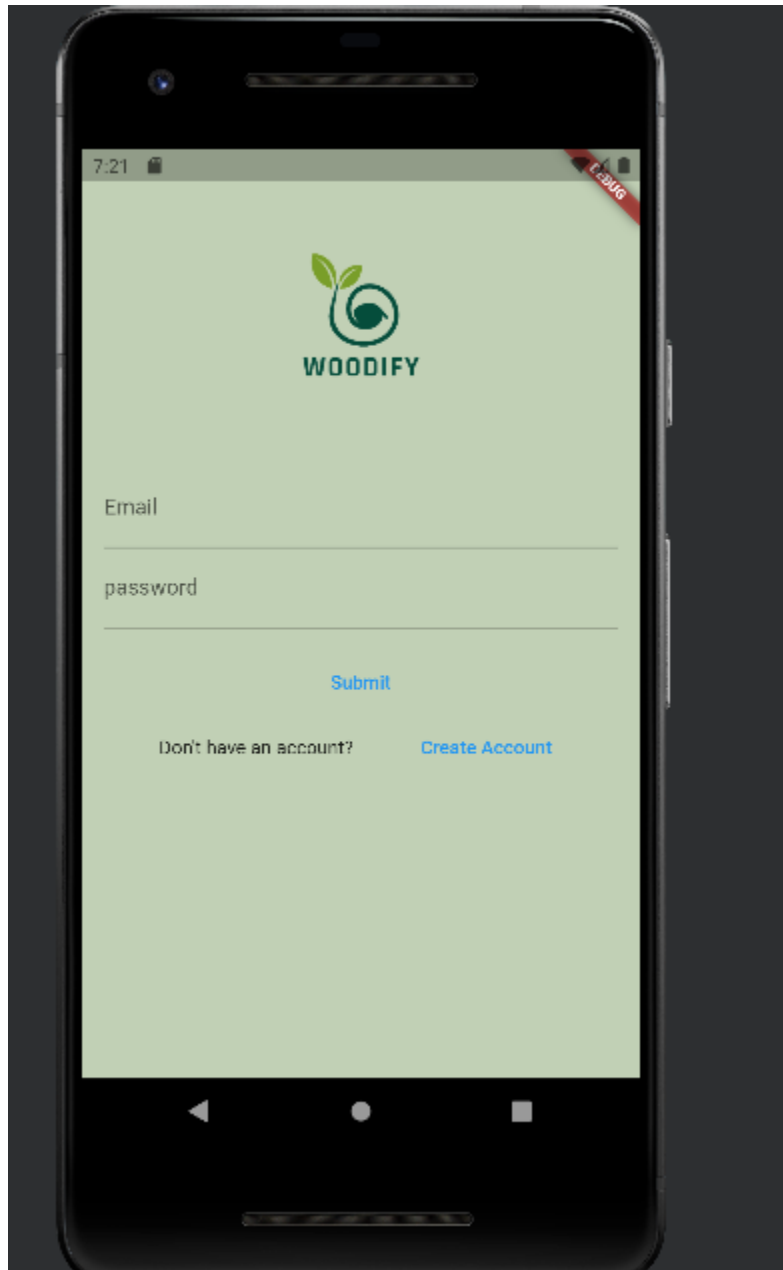
Account Creation

- Download and install the Woodify app from your app store.
- Open the app and click on "Sign Up."
- Provide your email address, choose a secure password, required information and follow the on-screen instructions to complete your profile setup.



Logging In

- Open the Woodify app.
- Click on "Log In."
- Enter your registered email and password to access your account.



3. User Roles

Seller

- Sellers can add various trees for sale in the Homepage.



- They can upload images and provide descriptions of the trees they are selling.
- Sellers have access to the chat system to communicate with potential buyers.
- Sellers can comments on any buyers post.

Customer

- Customers can browse the Homepage for trees they wish to purchase.
- They can post queries, share comments, and engage in discussions related to trees.
- Customers can also use the chat system to communicate with sellers and other users.

Admin

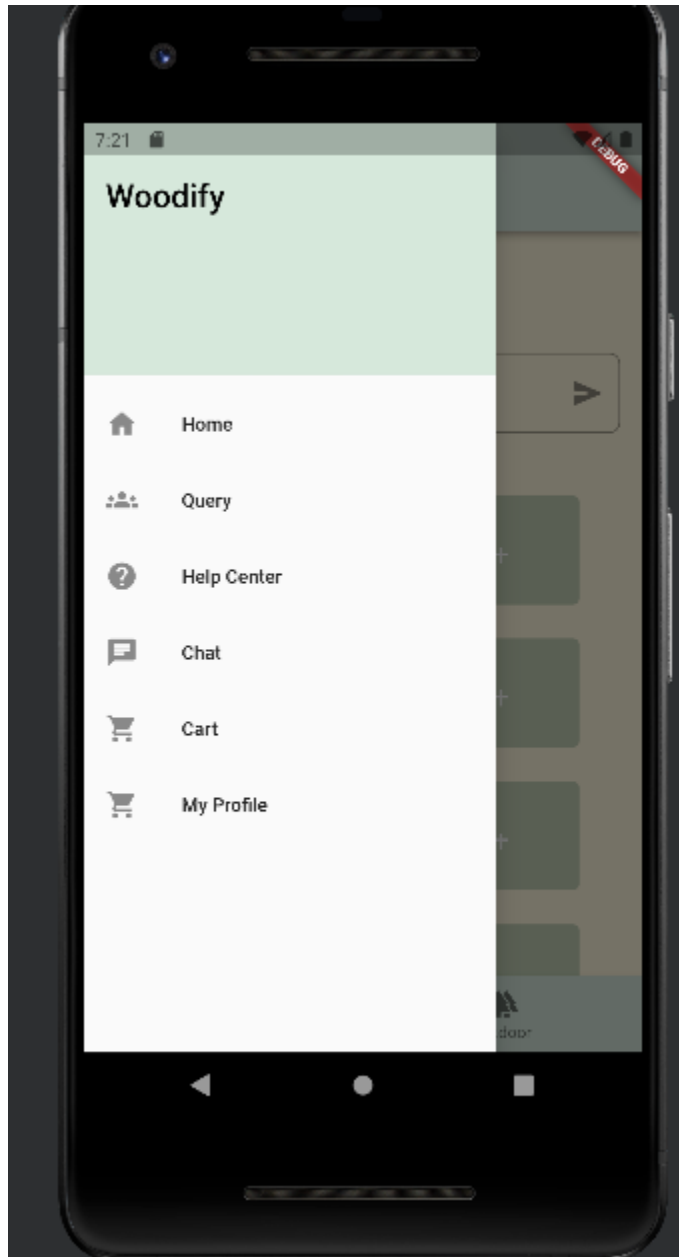
- Admin can see seller list and product list.
- Admin can verify sellers.

4. Exploring the App

Navber

The home screen presents a dashboard with quick access to the Home, Query, Chat, Cart, My Profile and Help Center.

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Home

Browse a diverse range of trees listed by sellers. Each listing includes images, descriptions, prices, and seller information.

Query and Comments

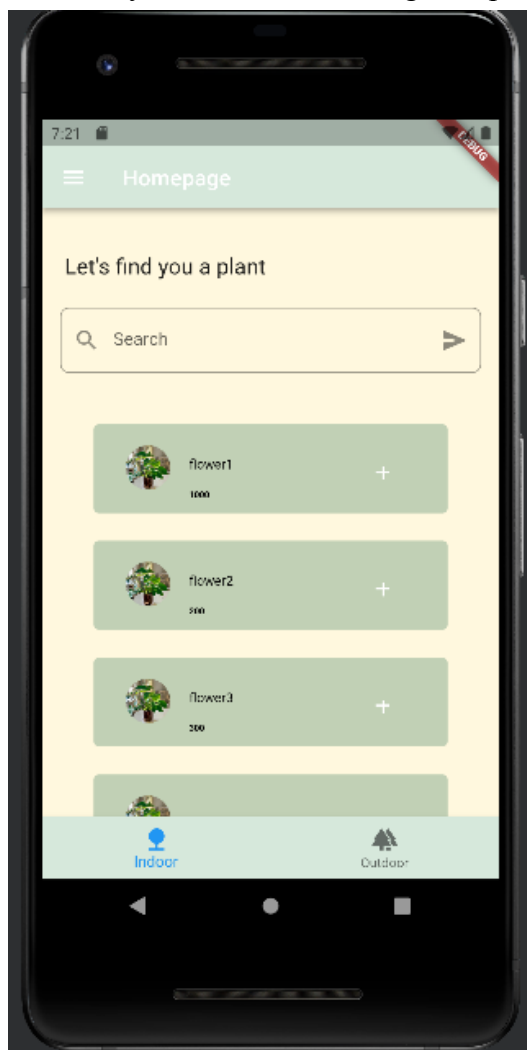
Engage with the community by posting queries, sharing insights, and leaving comments on various tree-related topics.

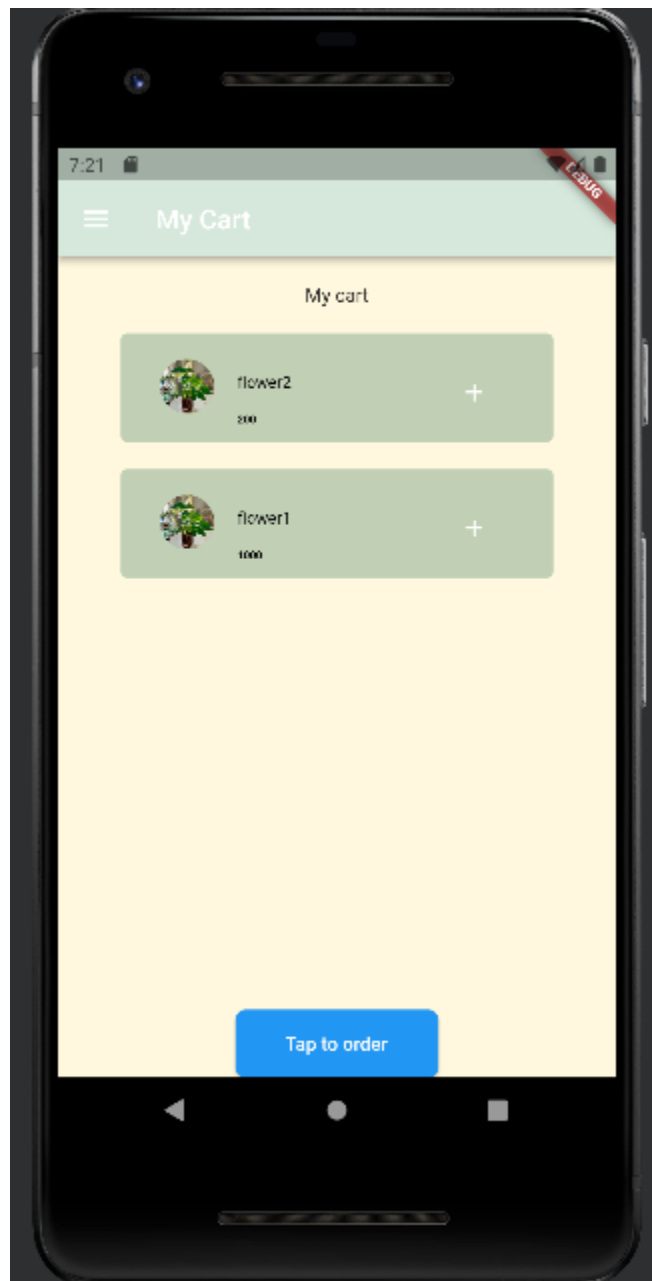


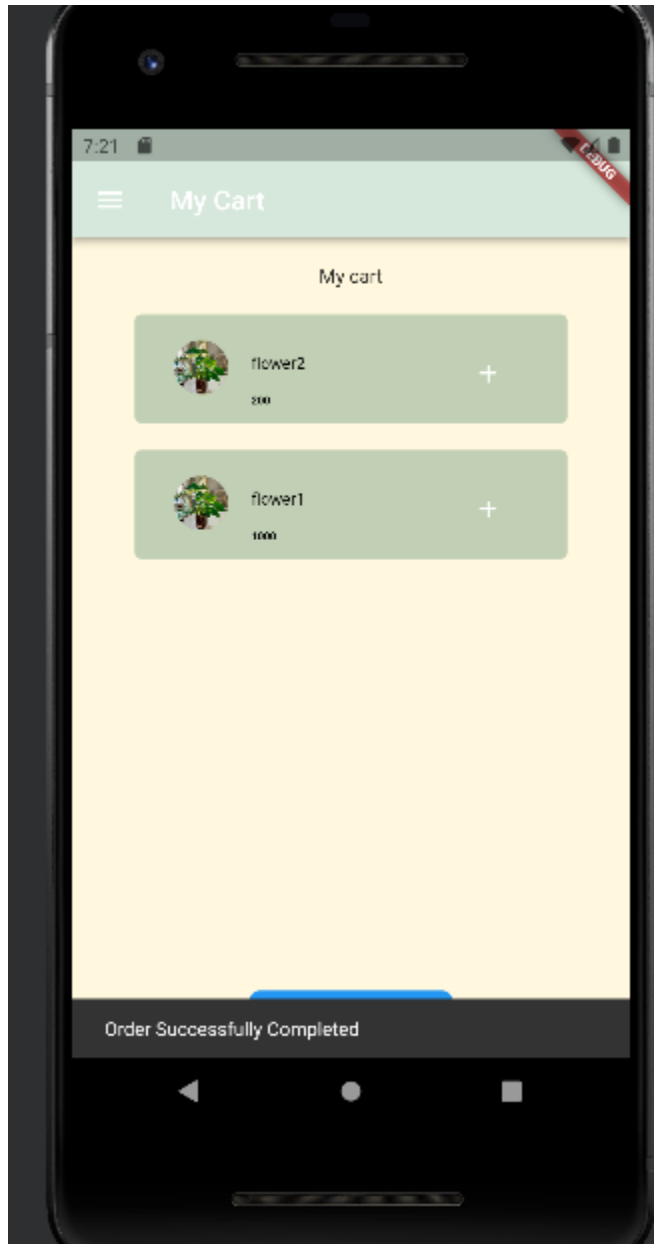
5. Using Woodify

Buying Trees

- Browse the Homepage to find trees you're interested in.
- Click on a listing to view details.
- Use the chat feature to communicate with the seller for more information.
- If you're satisfied, arrange the purchase details with the seller.

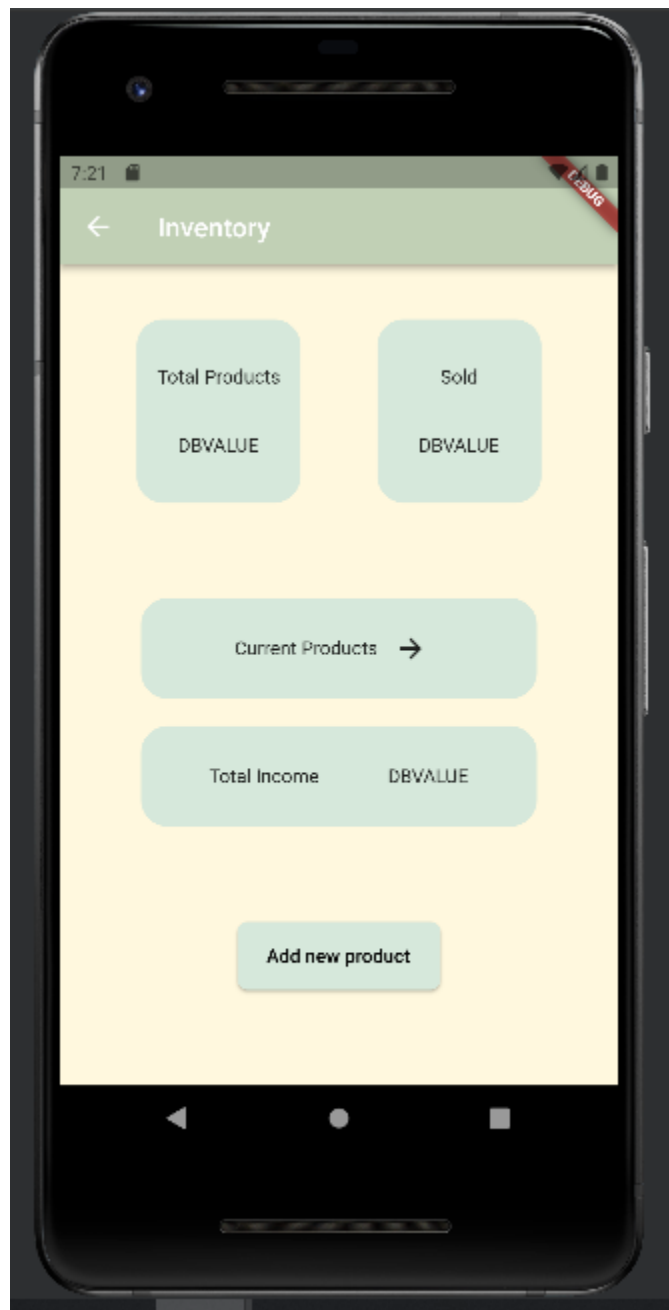


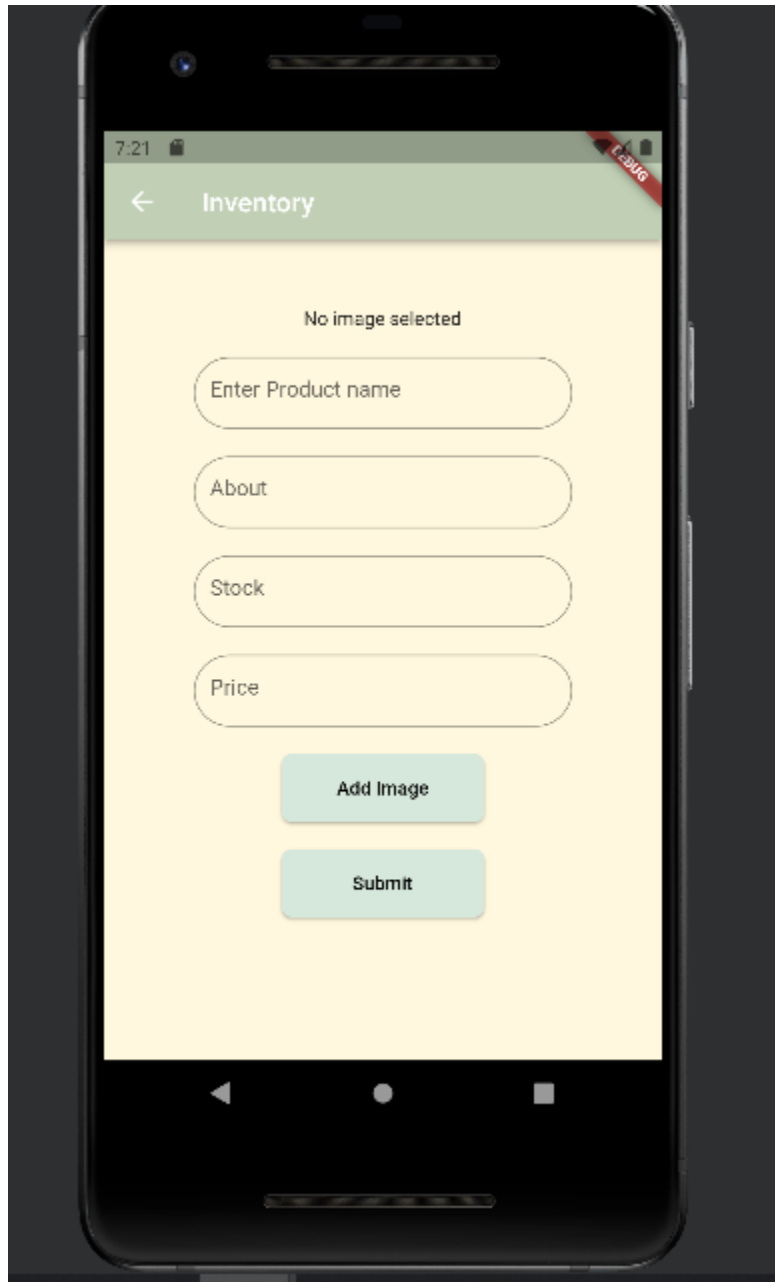




Selling Trees

- In the Inventory section, click on "Add New Product".
- Provide images, descriptions, and pricing for the tree you're selling.
- In the Inventory section, sellers can see their inventory details.





Posting Queries

- Navigate to the Queries section.
- Click on "Ask a question" to ask a question or start a discussion.
- Engage with other users by responding to comments on your queries.



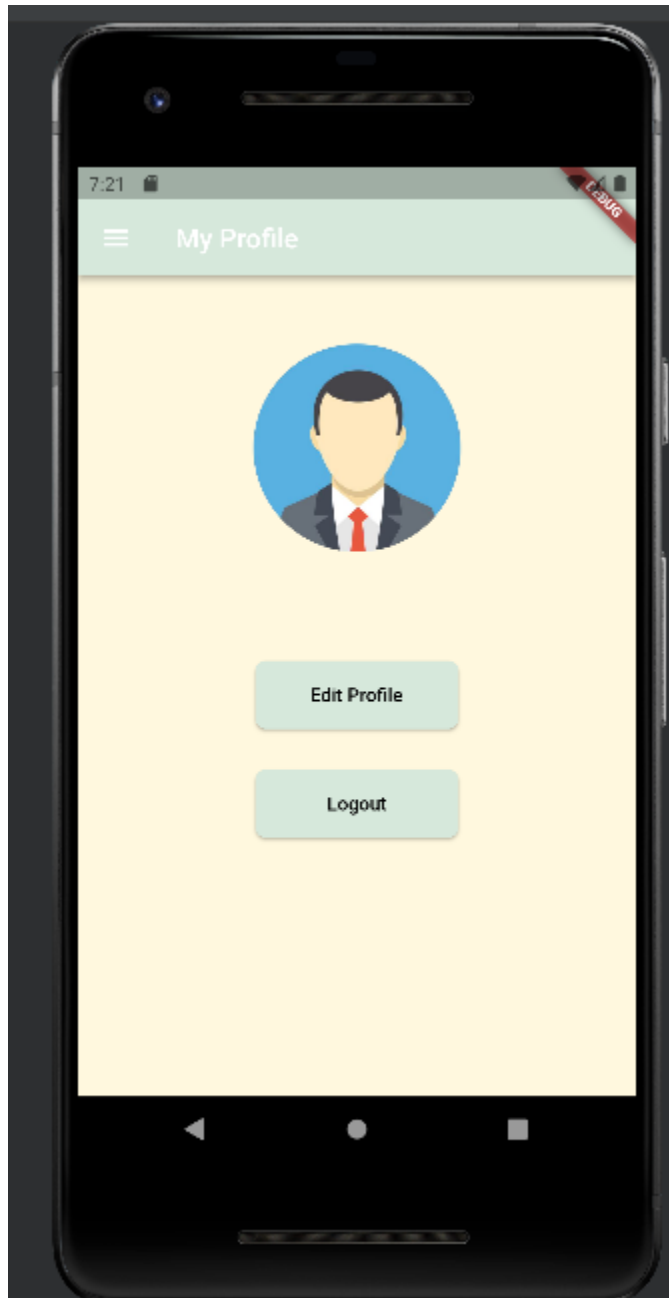
6. Account Management

Editing Profile

- Go to your profile.
- Click on "Edit Profile" to update your information and profile picture.



Buyers:



A black smartphone mockup displaying an 'Edit Profile' application interface. The screen has a light green header with a hamburger menu icon and the title 'Edit Profile'. Below the header is a light yellow form area with five input fields: 'First Name', 'Last Name', 'Email', 'Address', and 'Password'. At the bottom of the form are two light green buttons: 'Save Changes' and 'Go Back'. The status bar at the top shows the time '7:21' and a battery icon. A red 'League' logo is visible in the top right corner of the app screen. The phone's navigation bar at the bottom shows three icons: a back arrow, a home circle, and a recent apps square.

7:21

Edit Profile

First Name

Last Name

Email

Address

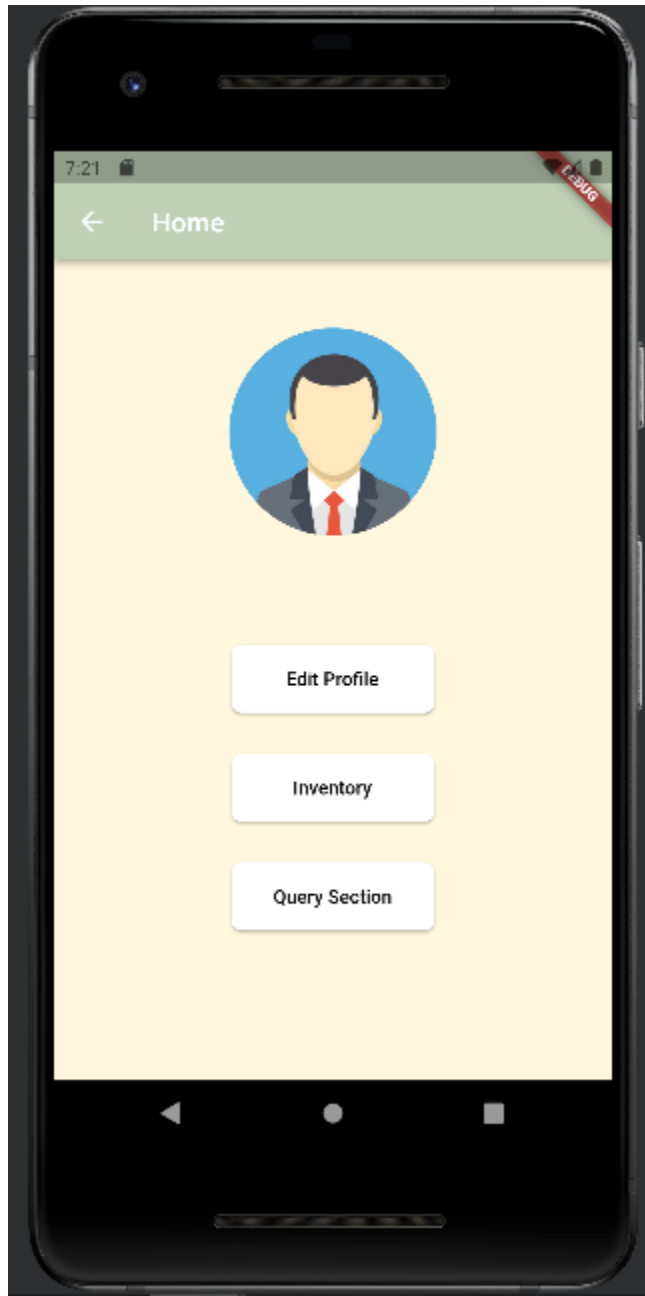
Password

Save Changes

Go Back



Seller:

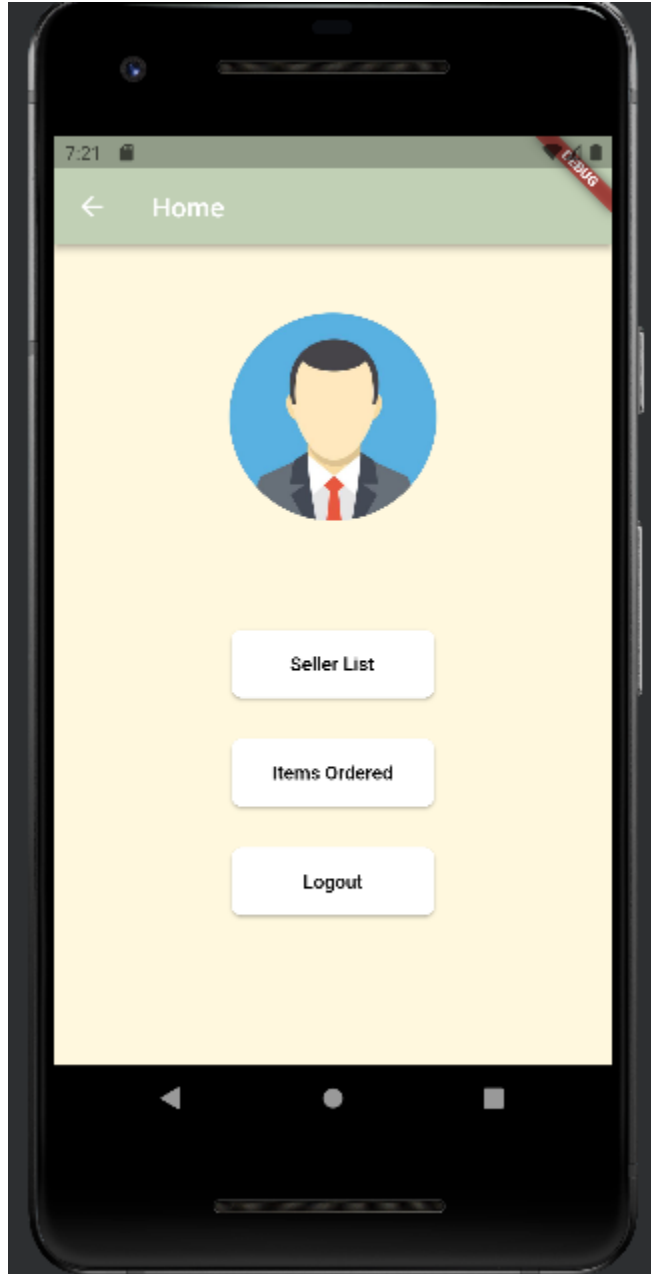


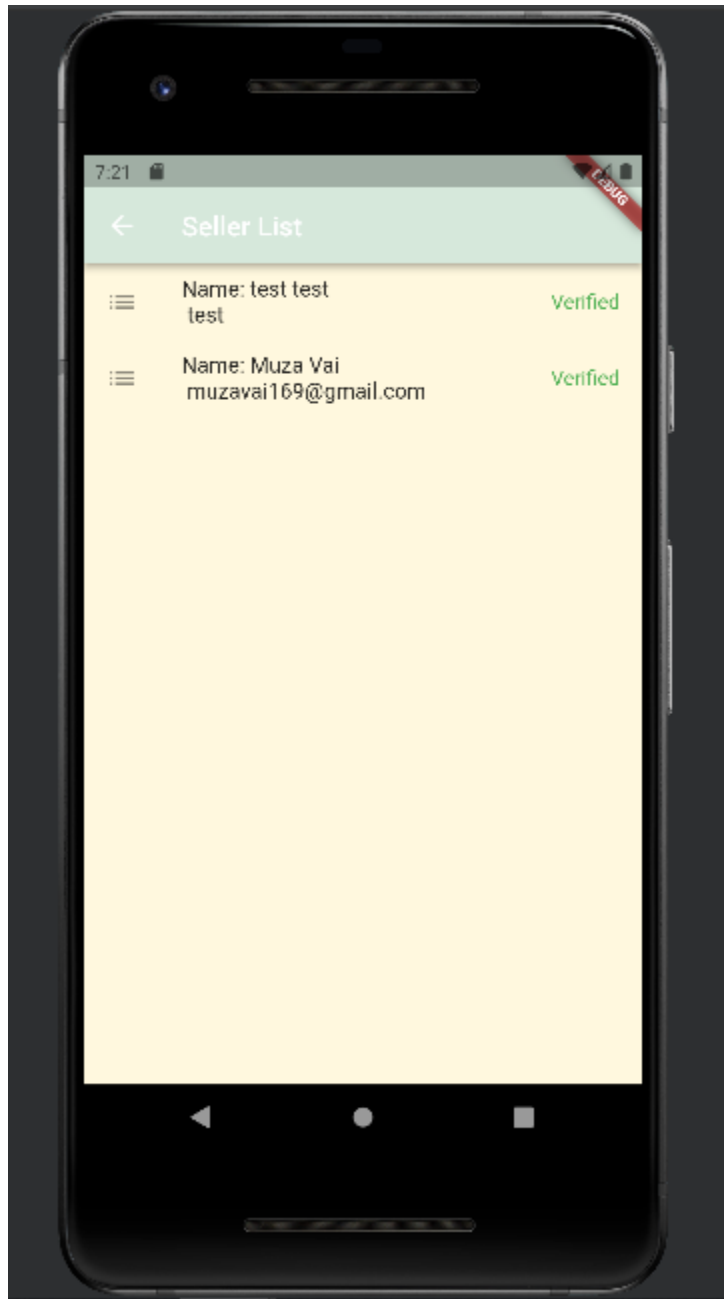
A screenshot of a mobile application's 'Edit Profile' screen. The screen is displayed on a black smartphone. At the top, the status bar shows the time 7:21 and battery level. The app's header is a light green bar with a hamburger menu icon on the left and the title 'Edit Profile' in the center. A red ribbon sticker with the word 'Loading' is placed on the top right corner of the app screen. The main content area has a light yellow background and contains five text input fields labeled 'First Name', 'Last Name', 'Email', 'Address', and 'Password' from top to bottom. At the bottom of the form are two light green buttons: 'Save Changes' on the left and 'Go Back' on the right. The smartphone's Android navigation bar is visible at the very bottom.

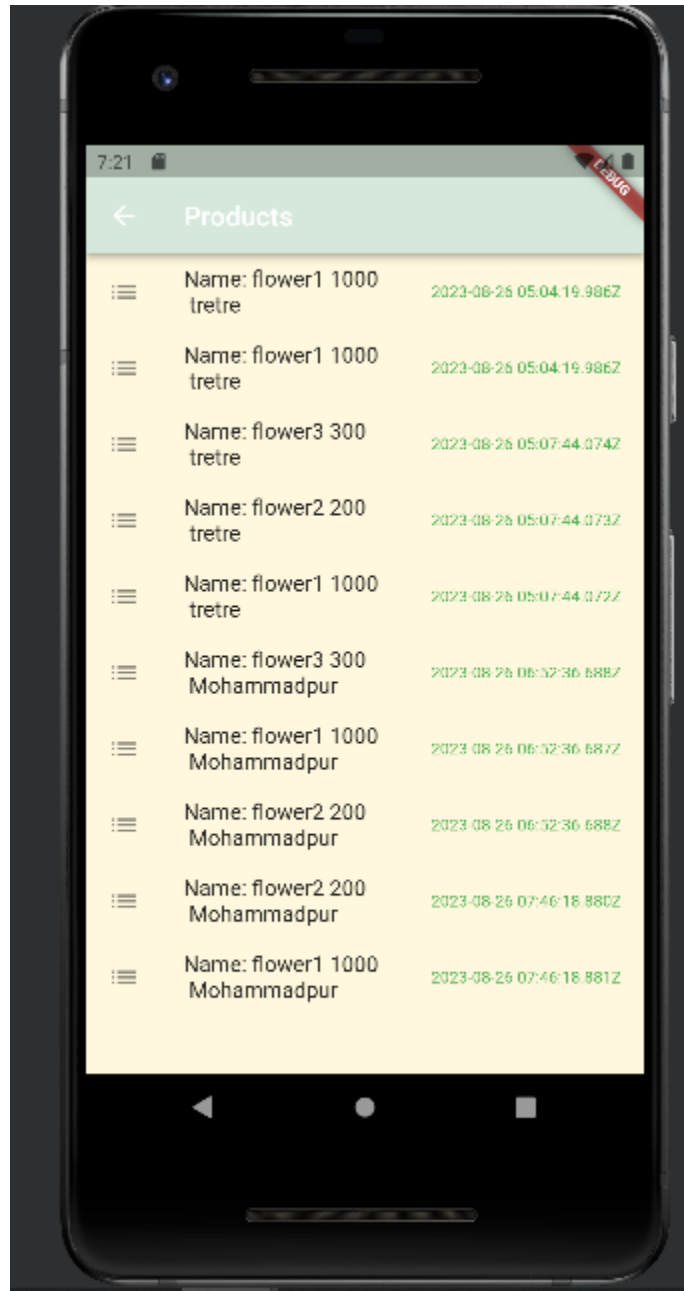


7. Admin

Admin can verify sellers. They can also see seller list and product list.

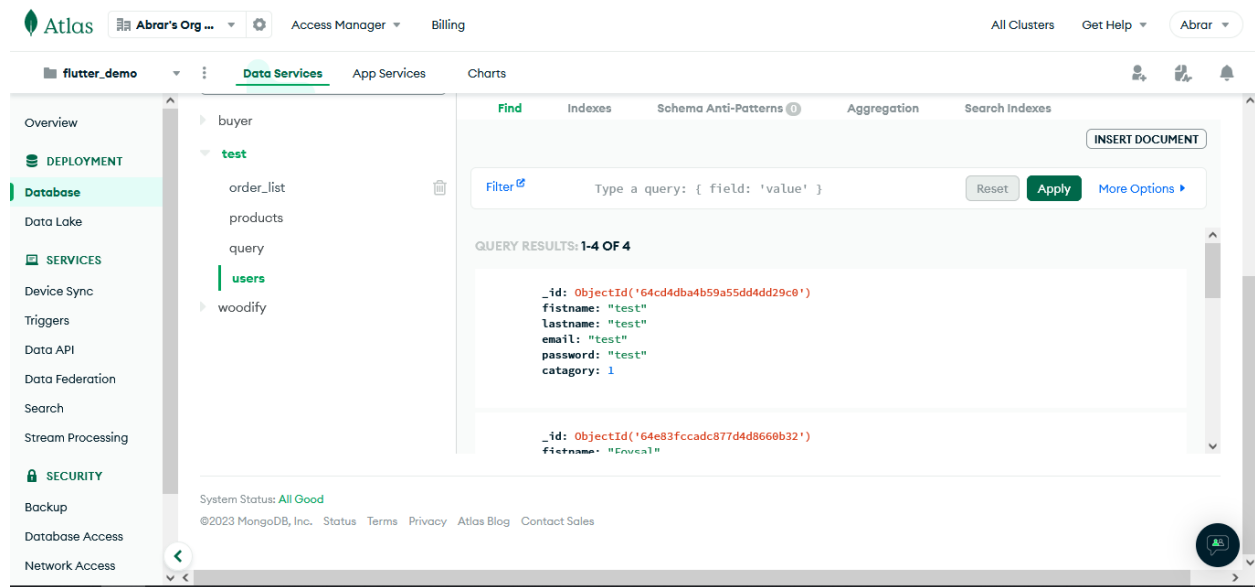








8. Database



The database that we have used in this project is MongoDB atlas. We have used a total of 4 collection to store data and manage the app.