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CHAPTER 1

INTRODUCTION

1.1. Company Profile

About Us: -

Vignharta Technologies is an IT consulting and services for businesses of all sizes. Our mission is to help our clients achieve their business objectives through the effective use of technology. We believe in delivering value to our clients through a combination of technical expertise, industry knowledge, and exceptional customer service.

At Vignharta technologies we are passionate about creating innovative solutions that drive business growth and user satisfaction. Whether you are a startup, a small business, or a large enterprise, we are here to help you harness the full potential of the Android platform. Contact us today to discuss your idea or to learn more about how we can assist you in achieving your goals.

Services: Vignharta Technologies offers a wide range of IT consulting and services, including:

- IT strategy and planning
- Software development
- Web development
- Mobile app development
- Data analytics
- IT infrastructure management

Expertise: Our team of experienced professionals has expertise in a wide range of technologies and industries. We are proficient in programming languages such as Java, Python, and Ruby, as well as web development frameworks such as Django, Flask, and React. Our industry experience includes healthcare, finance, education, and manufacturing.

Team: Our team consists of highly skilled professionals with years of experience in IT consulting and services. Our consultants have advanced degrees in computer science, information technology, and related fields. Our developers have extensive experience in building scalable and robust software solutions. We believe in continuous learning and stay updated with the latest technological advancements to provide the best possible solutions to our clients.

Contact us today to learn more about how Vignharta Technologies can assist you in leveraging technology to drive your business forward. We look forward to working with you and helping you achieve your goals.

1.2. Existing System and Need of System

- **Existing System:**

The existing system refers to the current state or setup of a particular process or system. In the context of e-commerce Android applications, the existing system typically refers to the e-commerce platforms, websites, or applications that are currently in operation and being used by businesses and customers.

The existing system of e-commerce Android applications may vary depending on the specific platform or app being considered. There are numerous e-commerce platforms available, such as Amazon, eBay, Alibaba, Shopify, and more. These platforms provide a range of features and functionalities to facilitate online buying and selling.

The existing system of e-commerce Android applications typically includes features such as product listings, search and filtering options, shopping cart functionality, secure payment gateways, order management, customer reviews, and customer support. The existing systems may also incorporate features like personalized recommendations, loyalty programs, and social sharing.

- **Need of System:**
  - **Convenience**: E-commerce applications provide convenience to customers by allowing them to shop anytime and anywhere using their smartphones. It eliminates the need to physically visit stores, saving time and effort.
  - **Global Reach**: E-commerce apps enable businesses to expand their reach beyond local markets and target customers globally. This opens up opportunities for increased sales and growth.
  - **Cost-Effectiveness**: E-commerce applications can be cost-effective for businesses compared to traditional brick-and-mortar stores. They often require lower initial investments, reduced overhead costs, and can reach a wider audience without the need for physical store space.

- **Customer Insights and Personalization:** E-commerce systems collect data on customer behavior, preferences, and purchasing patterns. This data can be used to gain insights into customer needs and behavior, allowing businesses to offer personalized experiences and targeted marketing.
- **Competitive Advantage**: Having a well-designed and user-friendly e-commerce Android application can give businesses a competitive edge. It allows them to stay relevant in the digital age and cater to the preferences of tech-savvy customers who prefer online shopping.
- **Scalability:** E-commerce systems provide the flexibility to scale operations quickly and efficiently. Businesses can easily add new products, update inventory, and expand their offerings without the constraints of physical store limitations.
- **Integration with Other Systems**: E-commerce applications can integrate with various other systems such as inventory management, customer relationship management (CRM), and analytics tools. This integration streamlines operations, improves efficiency, and provides valuable insights.
- **Improved Customer Service:** E-commerce systems enable businesses to offer efficient customer service through features like live chat, email support, and self-service options. This helps in addressing customer queries and concerns promptly, enhancing the overall customer experience.

1.3. Scope of System

The scope of an e-commerce Android application system refers to the boundaries and extent of its functionalities, features, and capabilities. It defines what the system is intended to accomplish and the specific areas it covers. The scope of a system can vary depending on the specific requirements and objectives of the e-commerce business. Here are some key aspects that define the scope of an e-commerce Android application system:

- **User Registration and Authentication:** The system should allow users to create accounts, log in securely, and manage their personal information. It should implement authentication mechanisms to ensure the security and privacy of user accounts.
- **Product Catalog Management:** The system should provide functionalities for managing the product catalog, including adding new products, updating product details (such as descriptions, images, and pricing), categorizing products, and managing inventory levels.
- **Search and Filtering**: The system should enable users to search for products based on keywords, categories, or specific criteria. It should provide filtering options to refine search results based on attributes like price range, brand, size, color, etc.
- **Shopping Cart and Checkout:** The system should allow users to add products to their shopping cart, modify quantities, and proceed to checkout. It should support secure payment processing, integration with payment gateways, and provide order confirmation and tracking information.
- **User Reviews and Ratings**: The system can include features for users to leave reviews and ratings for products they have purchased. It should provide mechanisms to display and manage user-generated content related to product reviews.
- **Customer Support:** The system may incorporate customer support functionalities such as live chat, email or ticketing system, and self-service

options to address customer inquiries, complaints, or returns.

- **Order Management:** The system should facilitate efficient order management for the e-commerce business, including order tracking, order history, and integration with logistics and shipping services for smooth order fulfillment.
- **Personalization and Recommendations:** The system can leverage user data and preferences to provide personalized product recommendations, special offers, or tailored content to enhance the user experience and encourage repeat purchases.
- **Mobile-Friendly Interface:** As an Android application, the system should have a user-friendly interface optimized for mobile devices, ensuring smooth navigation, responsiveness, and intuitive interactions for users.

1.4. Operating Environment - Hardware and Software

Hardware Requirements	
Required Field	**Expected response with options**
Processor (CPU):	Intel Core i3 or equivalent and above
Operating System:	Microsoft Windows 10 or above
	Linux
Memory:	8 GB RAM
Storage:	1 TB internal HDD or 512 GB internal Solid-State Drive (SSD) or 512 GB HDD

Software Requirements	
Required Field	**Expected response with options**
Programming Language	Java
Database	Firebase
Editor	Android studio

Server-Side

Hardware Requirements	
Required Field	**Expected response from students with options**
Processor (CPU):	Intel Core i3 or equivalent and above
Operating System:	Microsoft Windows 10 or above
	Linux
Memory:	8 GB RAM
Storage:	1 TB internal HDD or 512 GB internal Solid-State Drive (SSD) or 512 GB HDD

Software Requirements	
Required Field	**Expected response from students with options**
Operating System:	Windows 10 and above
Database (Backend)	Firebase
Front End	Javascript,XML
Editor	Android studio
Languages	Java

1.5. Brief Description of Technology Used

1. Android Studio:

Android Studio is an Integrated Development Environment (IDE) for developing Android applications. It is the official IDE for Android app development and is developed by Google. Android Studio provides a range of tools and features to help developers design, code, debug, and test Android apps.

Some of the key features of Android Studio include:

1. Code editor: A powerful code editor with syntax highlighting, auto-completion, and code analysis features.
2. Visual layout editor: A drag-and-drop interface for designing app layouts.
3. Gradle build system: A flexible and powerful build system that allows developers to easily manage dependencies and build Android apps.
4. Emulator: A virtual device that enables developers to test their apps on different versions of Android.
5. Debugger: A powerful debugging tool that allows developers to debug their code and diagnose issues.
6. Profiler: A tool for analyzing app performance and identifying areas that need optimization.
7. Version control: Android Studio integrates with version control systems like Git, allowing developers to manage their codebase more efficiently.

2. Java:

Java is a high-level, general-purpose programming language that is designed to be simple, portable, and platform-independent. It was developed by Sun Microsystems (now owned by Oracle Corporation) in the mid-1990s and is now widely used for developing a wide range of applications, including web applications, mobile apps, desktop software, and enterprise systems.

Java is an object-oriented language, which means that it allows developers to create classes and objects to represent real-world entities or concepts. It supports features like inheritance, encapsulation, and polymorphism, which make it easy to write reusable and maintainable code. Java also provides a wide range of built-in classes and libraries that make it easy to perform common programming tasks.

One of the key features of Java is its "write once, run anywhere" philosophy. Java programs are compiled into bytecode, which can be run on any platform that has a Java Virtual Machine (JVM) installed. This makes Java highly portable and allows developers to write code that can be run on a wide range of devices and platforms without modification.

Java has a large and active community of developers, and there are many resources available for learning and using the language. Overall, Java is a popular and versatile programming language that is widely used in the software industry.

3. Firebase

Firebase is a mobile and web application development platform, originally developed by Firebase Inc. and later acquired by Google in 2014. It provides a comprehensive set of tools and services for building and managing mobile and web applications, including authentication, real-time databases, cloud storage, hosting, and more.

Firebase is designed to make it easy for developers to build high-quality mobile and web applications without having to worry about server infrastructure or complex backend development. With Firebase, developers can quickly and easily set up and deploy cloud-based services that scale to meet the needs of their applications.

Some of the key features of Firebase include:

- Real-time database: A cloud-hosted NoSQL database that allows developers to store and sync data in real-time across multiple clients.
- Authentication: A secure authentication system that allows developers to easily add sign-in and sign-up functionality to their applications.
- Cloud storage: A scalable and secure cloud storage solution for storing and serving user-generated content, such as images, videos, and audio files.
- Hosting: A fast and reliable hosting service that allows developers to deploy web applications and static content with a single command.
- Analytics: A powerful analytics platform that provides detailed insights into app usage and user behaviour
- Cloud functions: A serverless computing solution that allows developers to run backend code in response to events triggered by Firebase or third-party services.

4. XML

XML (Extensible Markup Language) is a markup language used to store and transport data across different systems and applications. It is a simple and flexible language that allows developers to define their own customized tags and attributes to represent data.

XML documents consist of structured text data and contain tags that describe the structure and meaning of the data. The tags used in XML documents are defined by the developer and can be used to create a hierarchy of elements.

XML documents can be used for a wide range of applications, including data storage, data exchange between systems, and configuration files. XML is often used in web development, particularly for storing and exchanging data between web applications and servers.

One of the key features of XML is its platform-independent nature. XML documents can be read and processed by any application or platform that supports the language, regardless of the operating system or programming language being used.

XML documents are often validated against a schema, which defines the structure and content of the document. This helps ensure that the document is well-formed and contains the required elements and attributes.

Overall, XML is a powerful and flexible markup language that allows developers to define their own customized tags and attributes to represent data, making it a popular choice for data storage and exchange in various applications.

CHAPTER 2

PROPOSED SYSTEM

2.1. Proposed System

The proposed system for an e-commerce Android application builds upon the existing system by introducing new features and improvements to enhance the user experience and address specific business needs. Here are some components of the proposed system:

- Enhanced User Interface: The proposed system will have a modern and intuitive user interface that provides seamless navigation, appealing visual design, and easy access to key functionalities. It will prioritize mobile responsiveness and ensure a smooth user experience across different screen sizes.
- Personalization and Recommendations: The proposed system will leverage user preferences and purchase history to offer personalized product recommendations. It will analyze user behavior, interests, and past purchases to suggest relevant products, special offers, and promotions, thereby enhancing the overall shopping experience and increasing customer engagement.
- Social Integration: The proposed system will integrate social media functionalities, allowing users to share their favorite products, write reviews, and interact with other users. This will help generate user-generated content, enhance brand visibility, and foster a sense of community among users.
- Seamless Checkout and Payment: The proposed system will provide a streamlined and secure checkout process. It will support various payment methods, including credit/debit cards, digital wallets, and other popular payment gateways. It will also offer guest checkout options to minimize barriers for new customers.

- Customer Support and Feedback: The proposed system will include multiple channels for customer support, such as live chat, in-app messaging, and a comprehensive help center. It will also allow users to provide feedback, report issues, and request assistance, ensuring timely and efficient customer support.

2.2. Feasibility Study

Feasibility study aim to objectively rotationally uncover the strengths and weakness of the existing business purpose venture, opportunities and threats as presented by the environment, the resource required to carry through, and ultimately the prospectus for success in its simplest term, the two criteria to judge feasibility cost required and value to be attend. As such, well designed feasibility study should provide the historical background of the business of project, descriptions of the product or service, accounting statement, details of the operations and management, marketing research and policies financial data, legal requirements, text obligation. Generally, feasibility studies precede technical development and project implementation.

2.1.1 ECONOMIC FEASIBILITY

Economic analysis is the most frequently used method for evaluating the effectiveness of a newsystem. More commonly known as cost/ benefit analysis, the procedure is to determine the benefits and the saving that are accepted from a candidate system and compare them with costs.If benefits outweigh cost, then the decision is made to design and implement the system. And entrepreneur must accurately weigh the cost versus benefits before taking an action.

- Cost Based Study: It is important to identity cost and benefit factor which can be categories as follows:
  1. Development costs
  2. Operating costs

     This is an analysis of the cost to be incurred in the system and the benefits derivableout of the system.
- Time based study This is an analysis of the time required to achieve a return investment. The future value of the project is also a factor
- Conduct a detailed cost analysis, including development expenses, ongoing maintenance costs, hosting fees, and licensing fees.
- Calculate the potential return on investment (ROI) and assess the projected profitability of the e-commerce Android application.
- Consider revenue generation models, such as transaction fees, subscriptions, or advertising revenue.
- Evaluate the financial viability of the project and determine if it aligns with the available budget and resources.

2.1.2 TECHNICAL FEASIBILITY

The assessment is based on outline design of system requirements in term of input, processes,output, fields, programs and procedures. This can be quantified in terms of volumes of data, trends, frequency of updating, etc. in order to estimate whether the new system will perform adequately or not. Technical feasibility is carried out to determine whether the company has the capability in terms of software, hardware, personal and expertise, to handle the completionof the project. When writing a feasibility report the following should be taken to consideration:

- A brief description of the business to assess more possible factors which could affect the study
- The part of business being examined.
- The human and economic factor.
- The possible solution to the problems.
- At this level, the concern is whether the proposal is both technically and legally feasible.
- Evaluate the technical requirements and capabilities of the proposed e-commerce Android application.
- Assess the availability of skilled developers and resources with expertise in Android app development.
- Determine if the necessary technologies and frameworks are readily accessible and compatible with the Android platform.
- Consider integration requirements with payment gateways, inventory management systems, and other third-party services.

2.1.3 OPERATIONAL FEASIBILITY

Proposed project of beneficiary only if they turned into information system that will meet organization operating requirement. Simply stated this test of feasibility asks if the system willwork when it is developed and installed. Which is major barrier for implementation? Here is question that will help tested operation feasibility of project.

Is current business method acceptable to the user? If they are not, user may welcome the changethat will about more operation and useful system.

- Assess the impact of implementing the e-commerce Android application on existing business processes, systems, and personnel.
- Identify potential operational challenges and evaluate the feasibility of overcoming them.
- Analyze the feasibility of integrating the application with existing systems, such as inventory management and customer support.
- Consider the capacity to handle increased transaction volumes, order fulfillment, and logistics.

2.3. Objectives of System

The objectives of an e-commerce Android application system are the specific goals and outcomes that the system aims to achieve. These objectives define the purpose and desired results of implementing the system. Here are some common objectives of an e-commerce Android application system:

- **Provide a Convenient Shopping Experience:** The system aims to offer users a seamless and convenient shopping experience on their Android devices. It should enable easy product browsing, intuitive navigation, and smooth transaction processes, ultimately making it convenient for users to find and purchase products.

- **Increase Sales and Revenue:** One of the primary objectives of an e-commerce Android application system is to drive sales and generate revenue. It aims to attract more customers, increase customer engagement, and ultimately increase the number of successful transactions and overall sales volume.
- **Expand Customer Base**: The system aims to reach and attract new customers to the e-commerce business. It strives to expand the customer base by targeting Android users, leveraging mobile-specific features, and implementing marketing strategies to promote the application to a wider audience.
- **Enhance Customer Satisfaction and Loyalty**: The system aims to provide an exceptional user experience that leads to high customer satisfaction. It seeks to exceed customer expectations by offering personalized recommendations, easy-to-use features, efficient customer support, and timely order fulfillment. By doing so, it aims to foster customer loyalty and encourage repeat purchases.
- **Improve Operational Efficiency:** The system aims to streamline and automate various e-commerce processes, such as order management, inventory control, and payment processing. It seeks to enhance operational efficiency by reducing manual efforts, minimizing errors, and optimizing resource allocation.
- **Gather and Utilize Customer Data:** The system aims to collect and utilize customer data to gain insights into user behavior, preferences, and buying patterns. It aims to leverage this data for targeted marketing campaigns, personalized recommendations, and improving overall business strategies.

- **Enhance Brand Image and Visibility:** The system aims to strengthen the brand image and increase brand visibility in the market. It focuses on creating a positive brand perception through a well-designed and user-friendly application, engaging customer interactions, and consistent delivery of high-quality products and services.
- **Adapt to Market Trends and Technology Advances:** The system aims to stay up-to-date with the latest market trends and technological advancements in the e-commerce industry. It strives to incorporate new features, functionalities, and integrations to meet evolving customer expectations and stay competitive in the market.

2.4. Module Specification

- **Profile Module:**

Admin can add update and delete the products according to their availability.It can manage the orders. Allow administrators to update product details, inventory, and pricing. For business monitoring and decision-making.

Customer can edit, update and delete his information. He can create his profile on site. Can add multiple addresses for his convenience

- **Product Module:**

The main aim to develop this module is to provide detailed information of products. This module contains product description, details like price, quantity, photos of products. This module gives clear idea about product.

In this module user can do the payment of the purchased product himself by providing required information. Once Payment done then user get the mail of order accepted from the admin.

- **Cart Module:**

The cart module plays a vital role in facilitating the shopping experience for users, enabling them to manage their selected items, review costs, and proceed with a secure and convenient checkout process

- **Order Module:**

This module of site performs main task that is order summary once customer choose what he wants to buy then customer have to add that product to cart and then order will be processed. objective of this module is to maintain all orders and order details.

- **Payment Module:**

In this module user can do the payment of the purchased product himself by providing required information. Once Payment done then user get the mail of order accepted from the admin.

- **Feedback Module:**

Customers can effectively submit feedback, read reviews, and engage in meaningful discussions. The feedback module serves as a valuable tool for businesses to gather insights, improve their products and services, and foster customer satisfaction.

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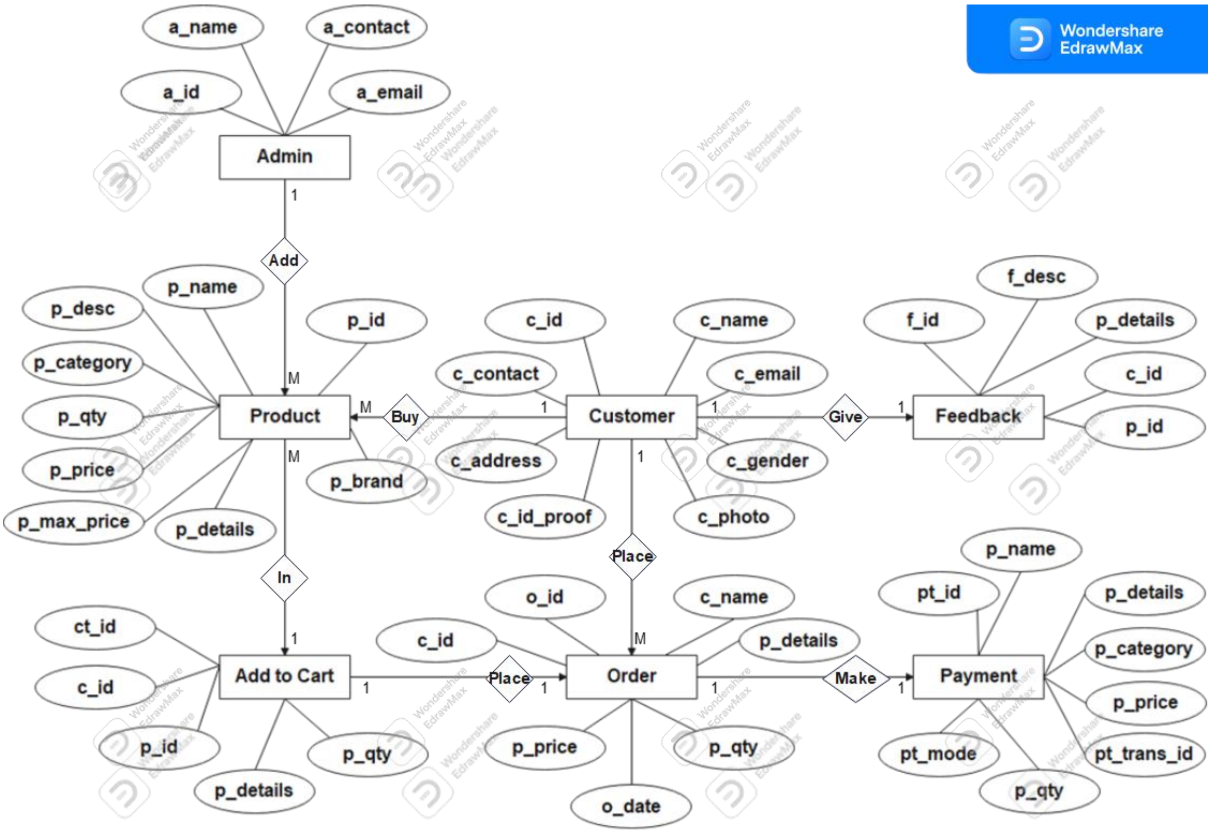
CHAPTER 3

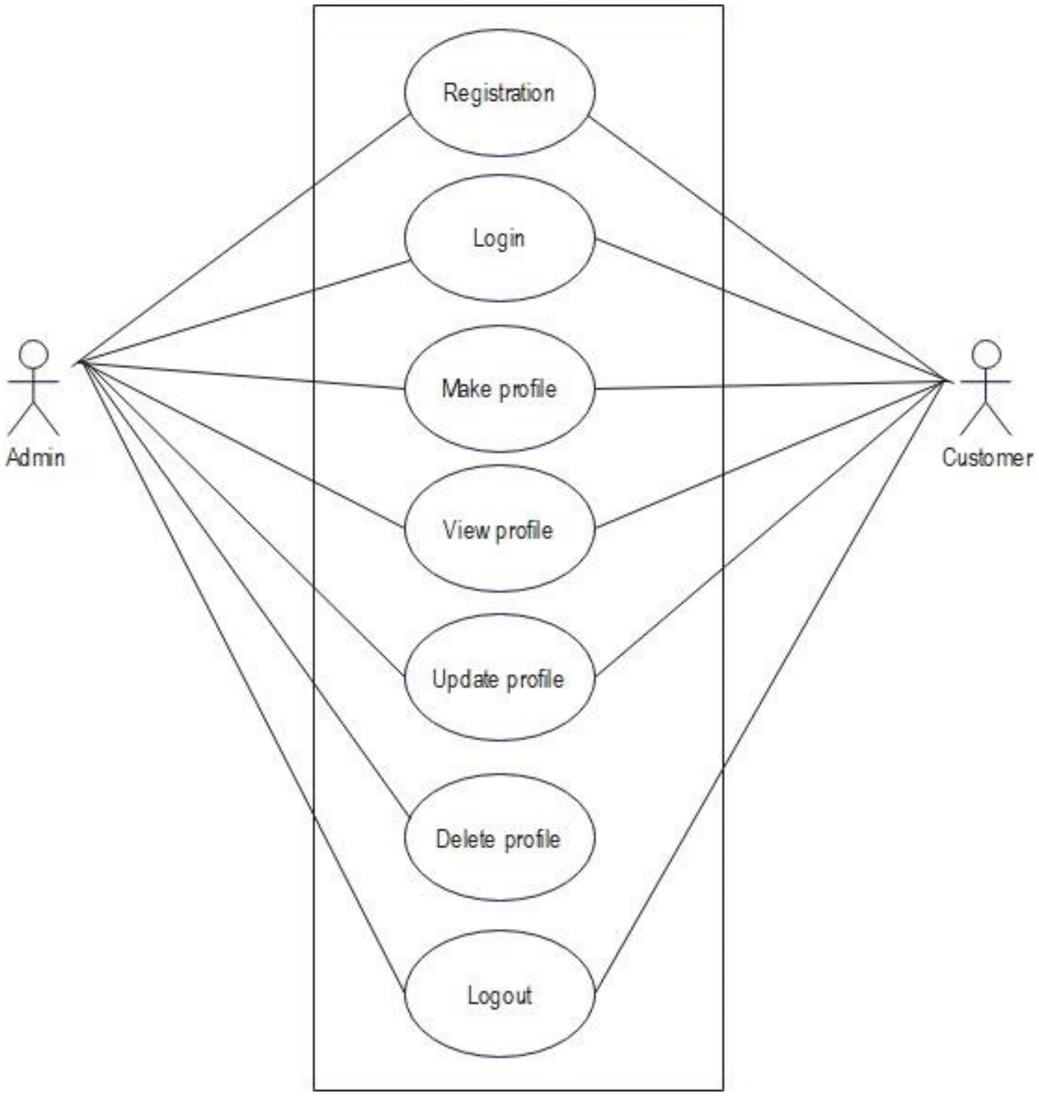
ANALYSIS AND DESIGN

3.1. Entity Relationship Diagram

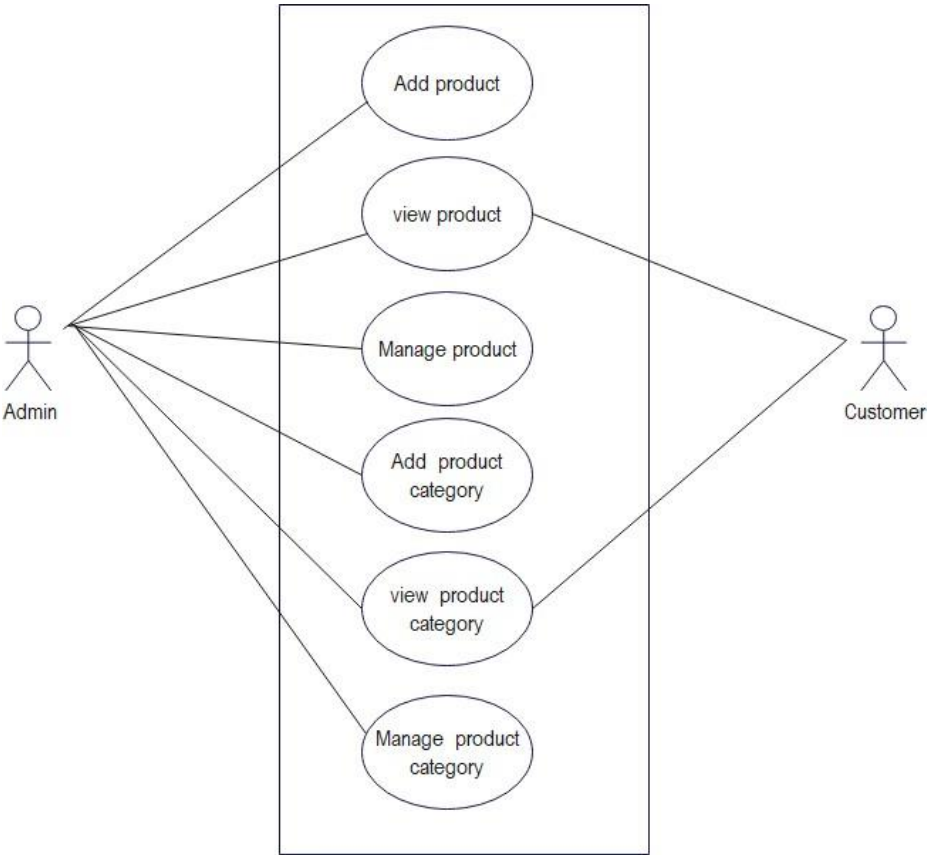


3.2. Use Case Diagram

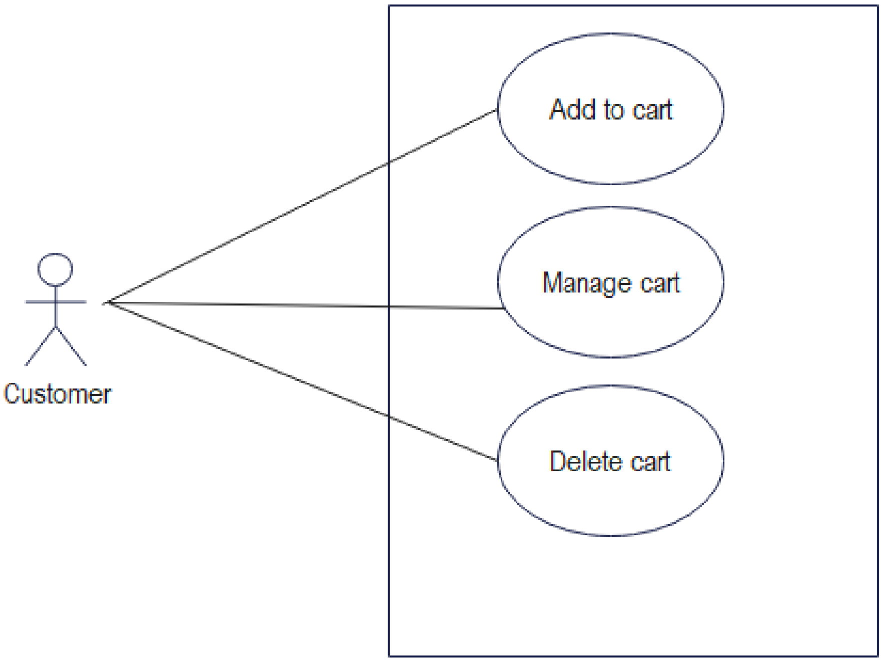
- **Profile Module**



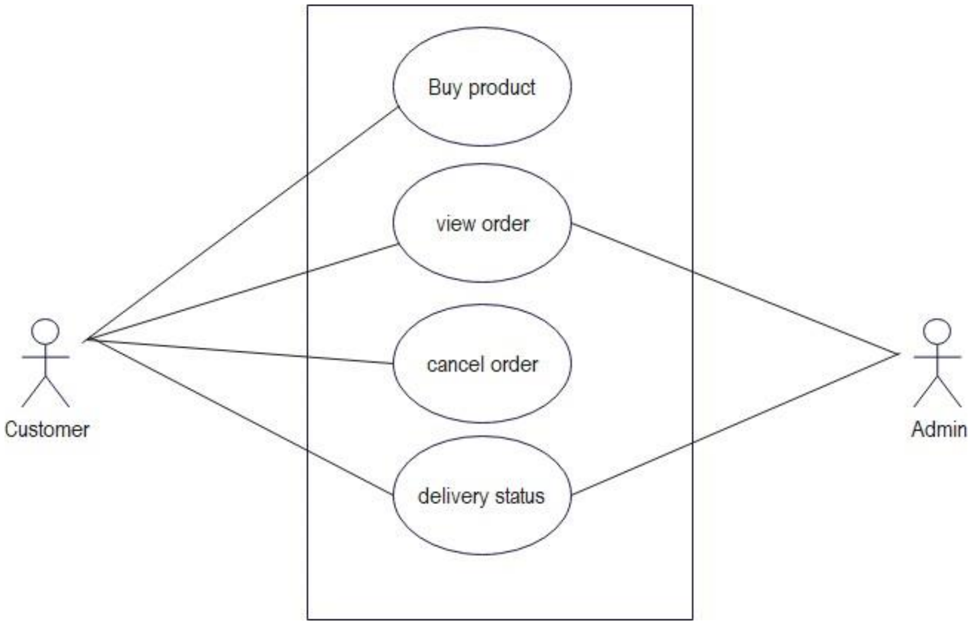
- **Product module**



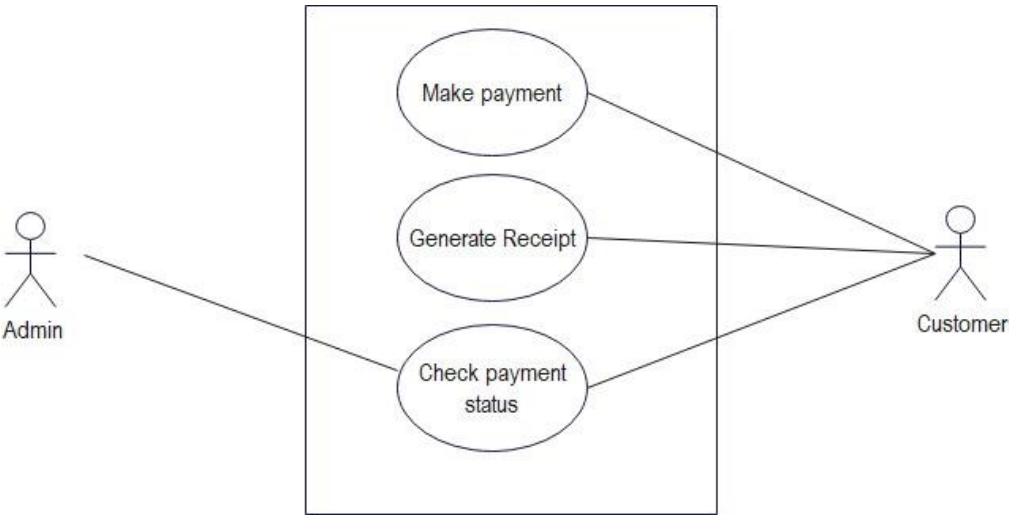
- **Cart Module**



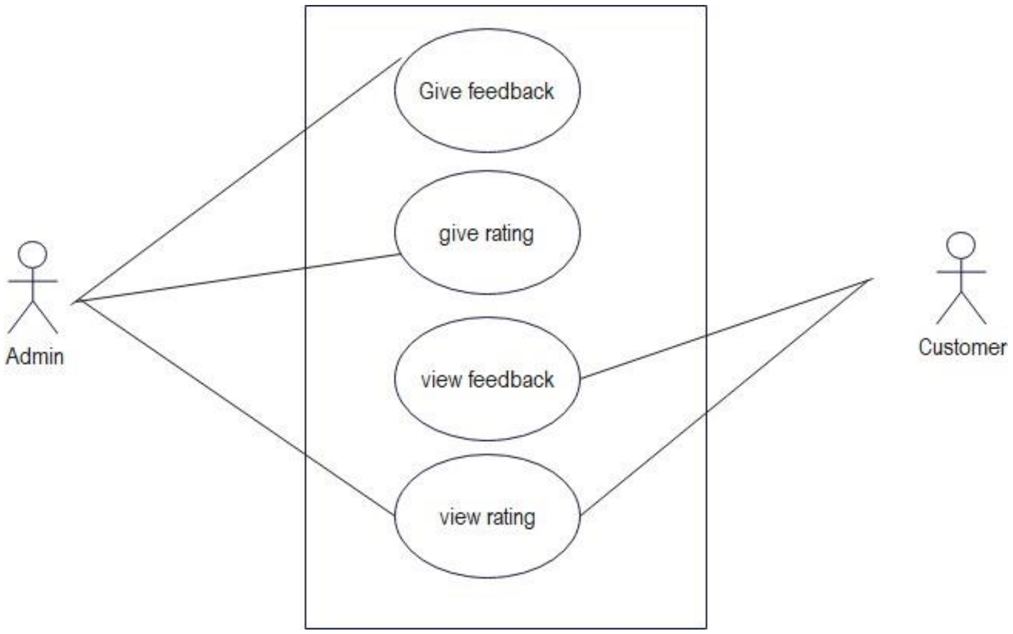
- **Order Module**



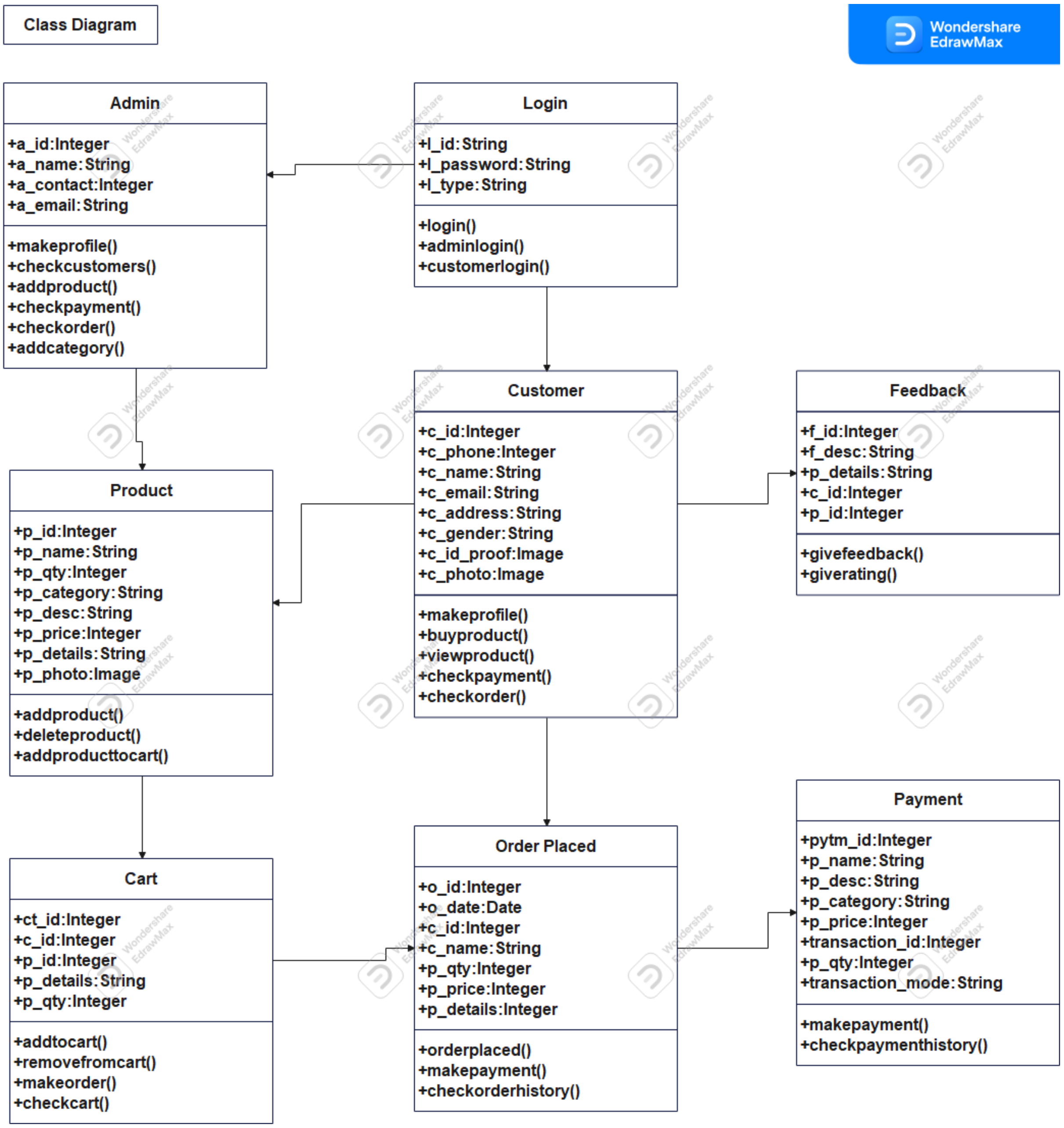
- **Payment**


Make payment
Generate Receipt
Check payment status
Admin
Customer

- **Feedback Module**

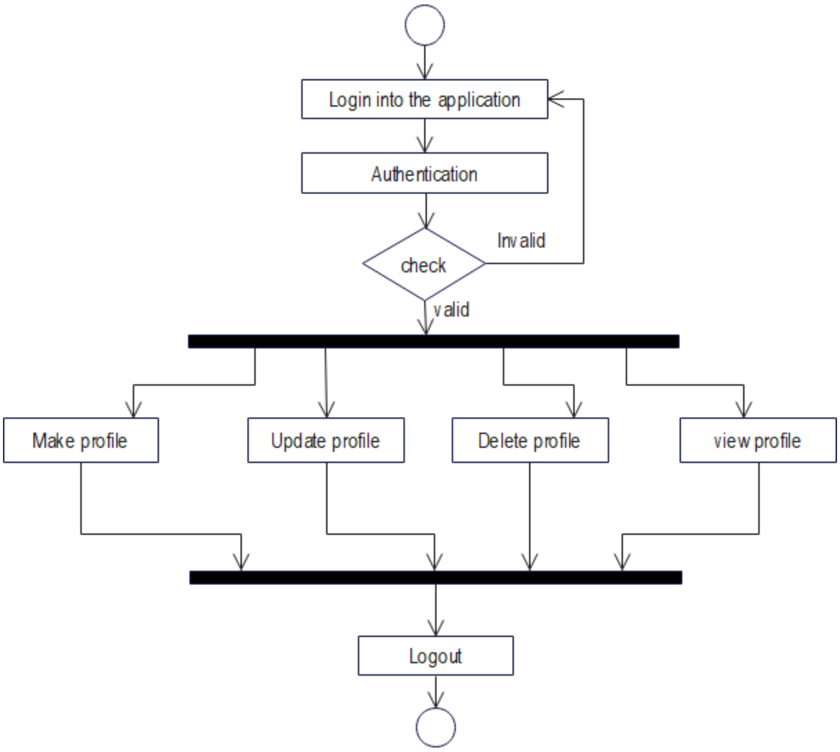


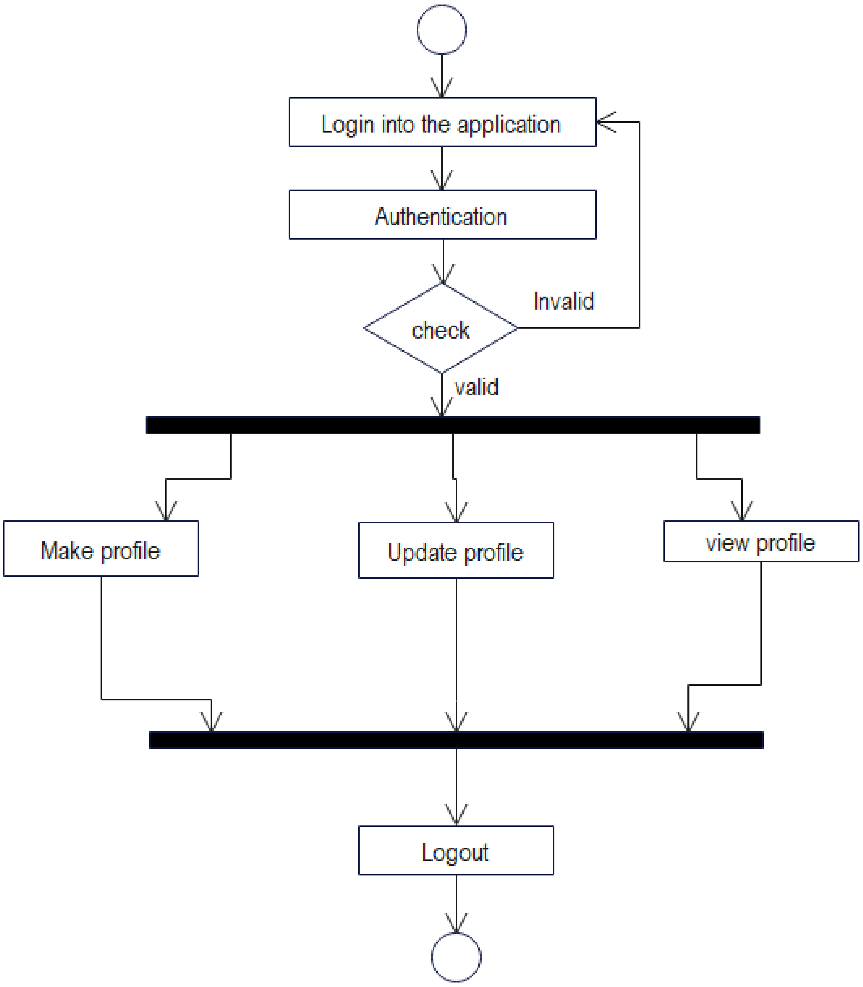
3.3. Class Diagram



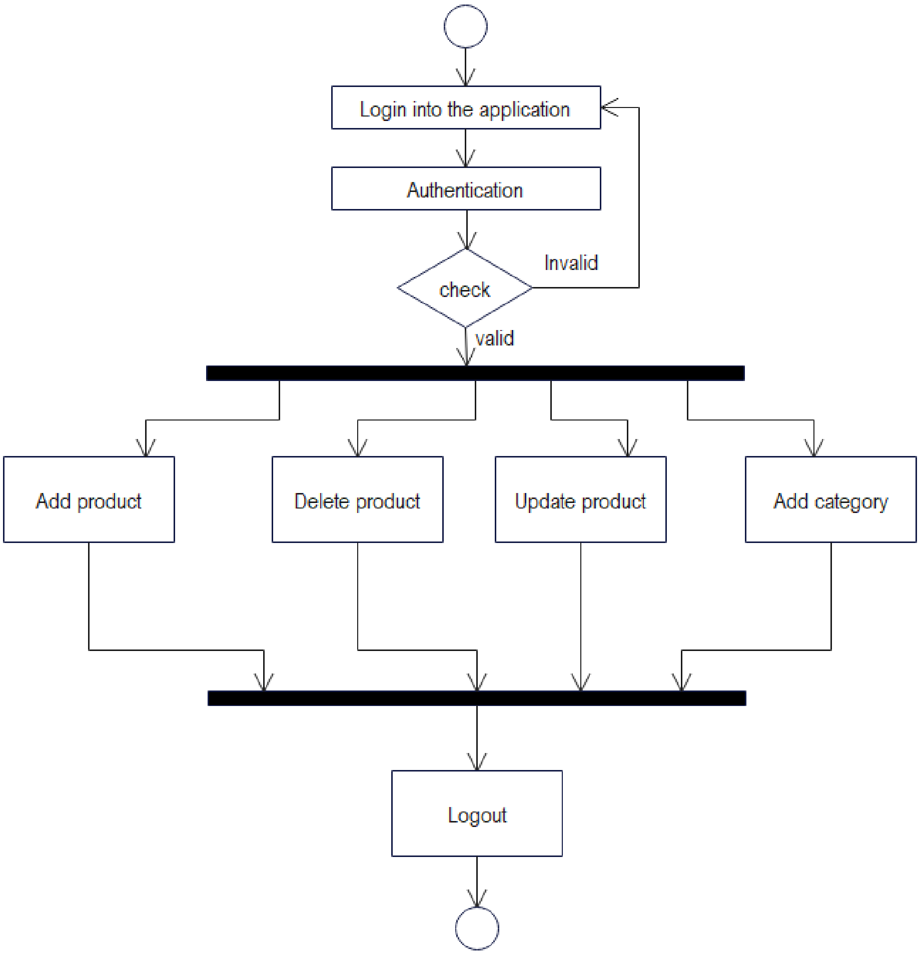
3.4. Activity Diagram

- **Profile Module**

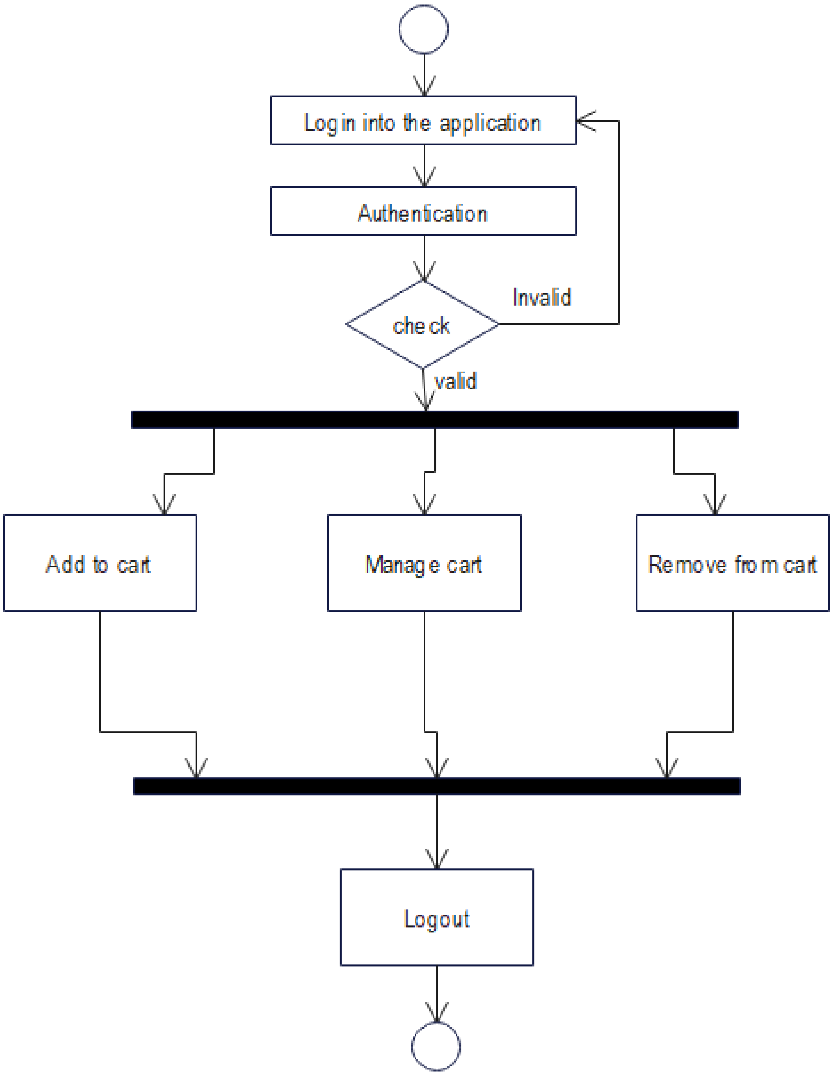



Login into the application
Authentication
check
Invalid
valid
Make profile
Update profile
view profile
Logout

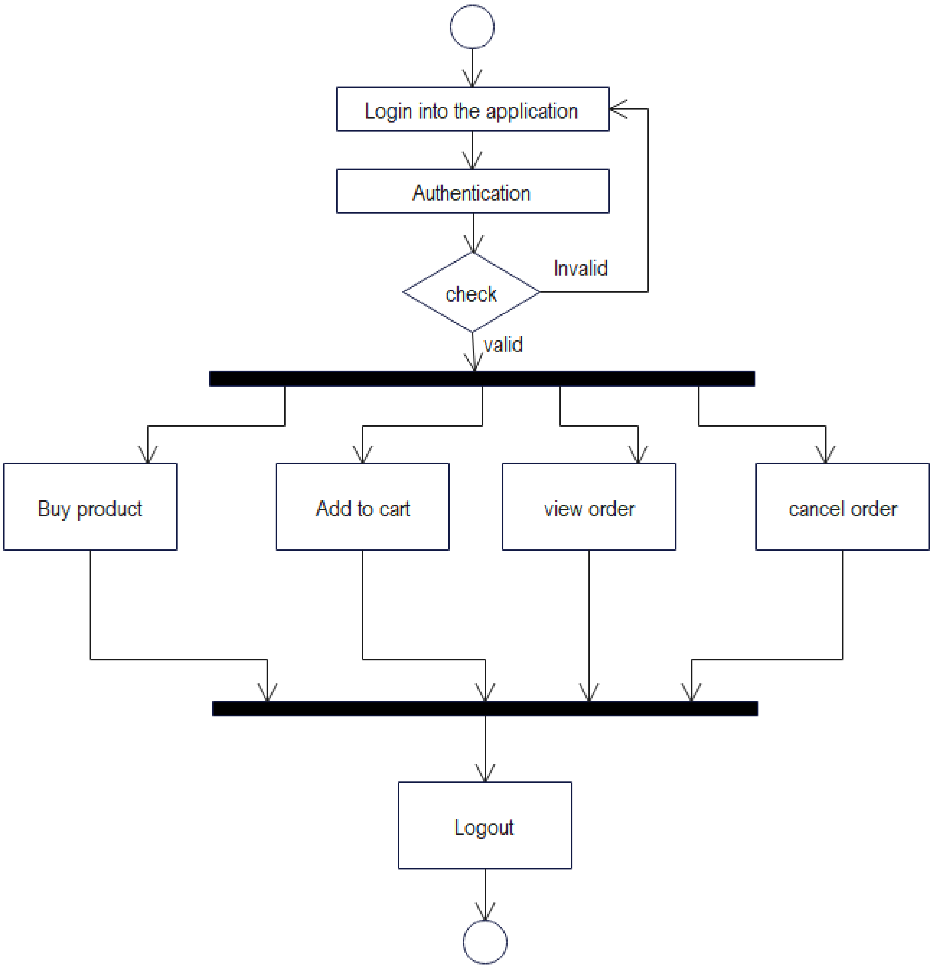
- **Product Module**



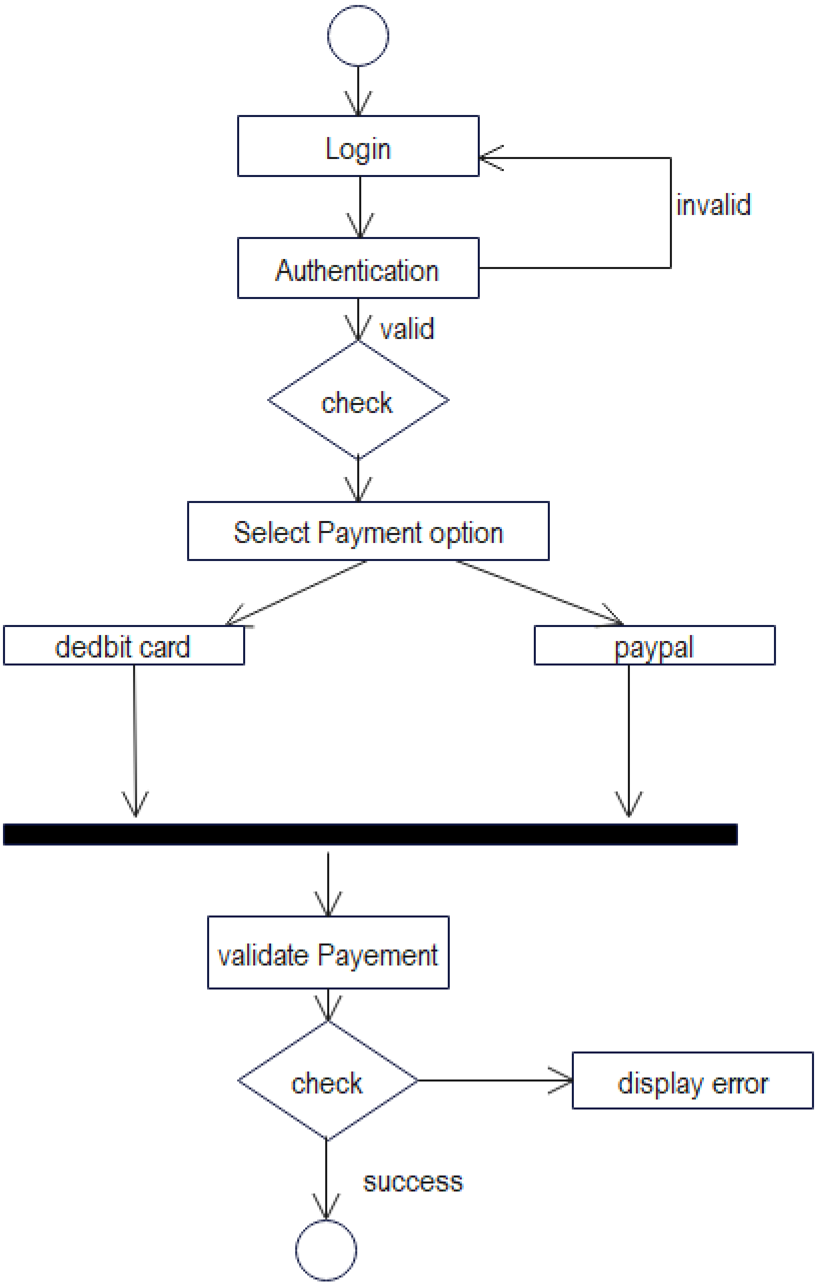
- **Cart Module**


Login into the application
Authentication
Invalid
check
valid
Add to cart
Manage cart
Remove from cart
Logout

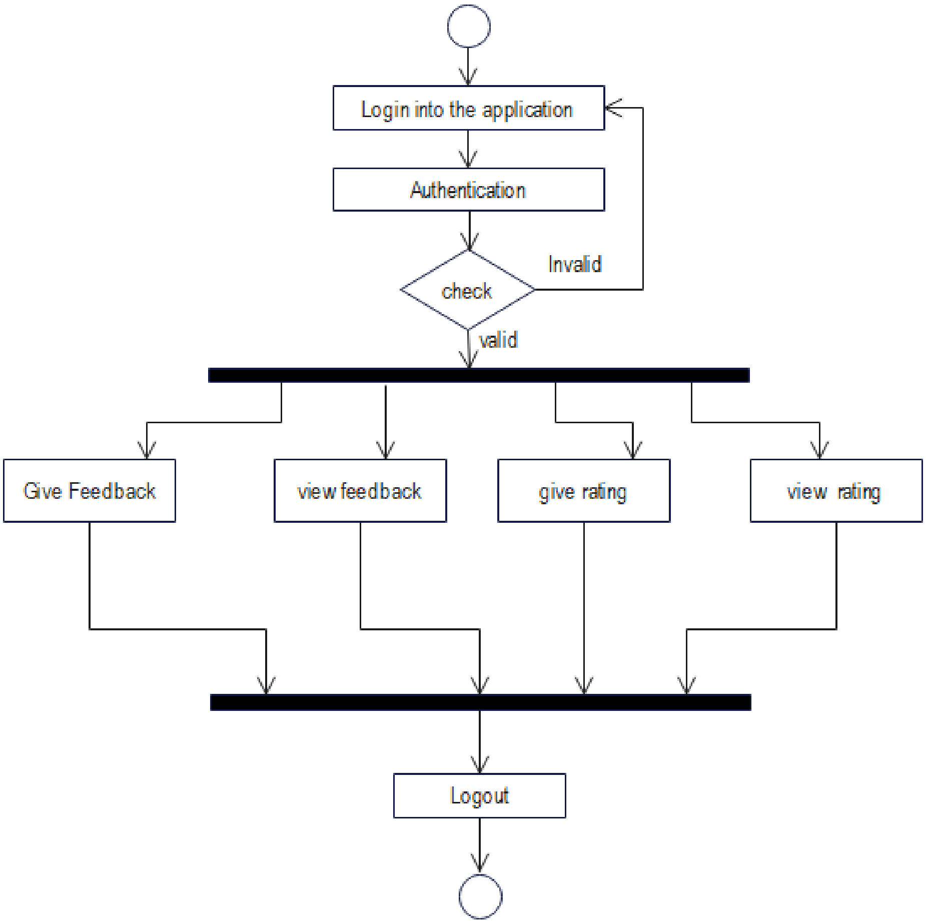
- **Order Module**



- **Payment Module**

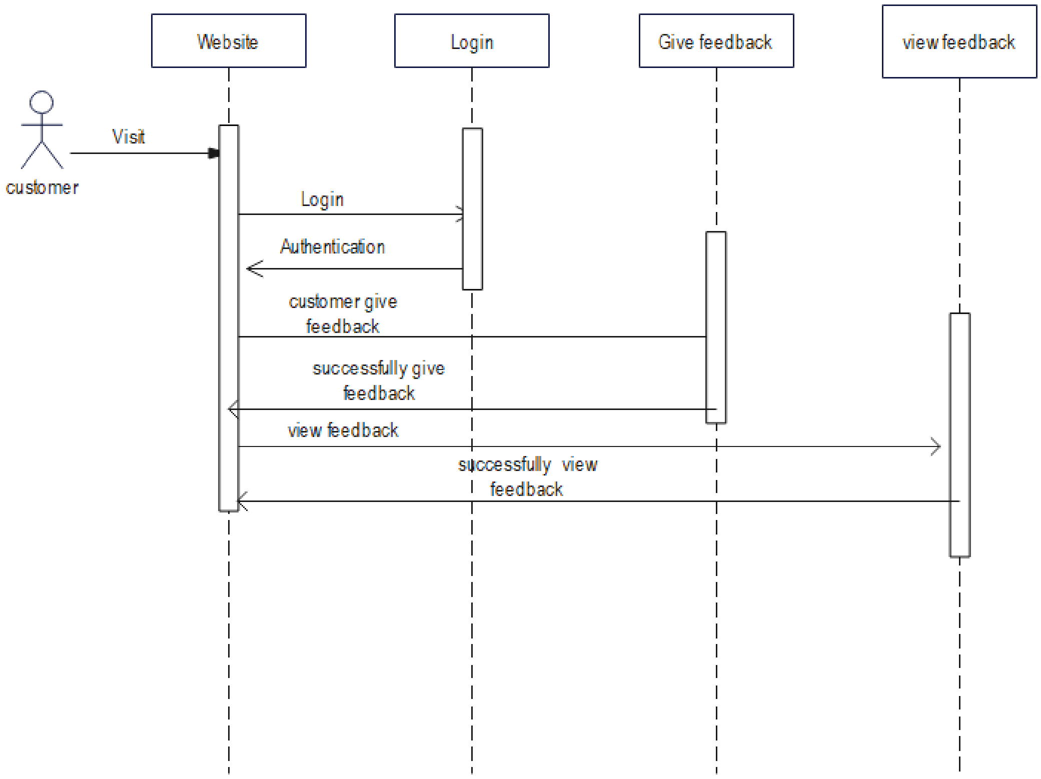


- **Feedback**


Login into the application
Authentication
check
Invalid
valid
Give Feedback
view feedback
give rating
view rating
Logout

3.5. Sequence Diagram

- **Profile Module**



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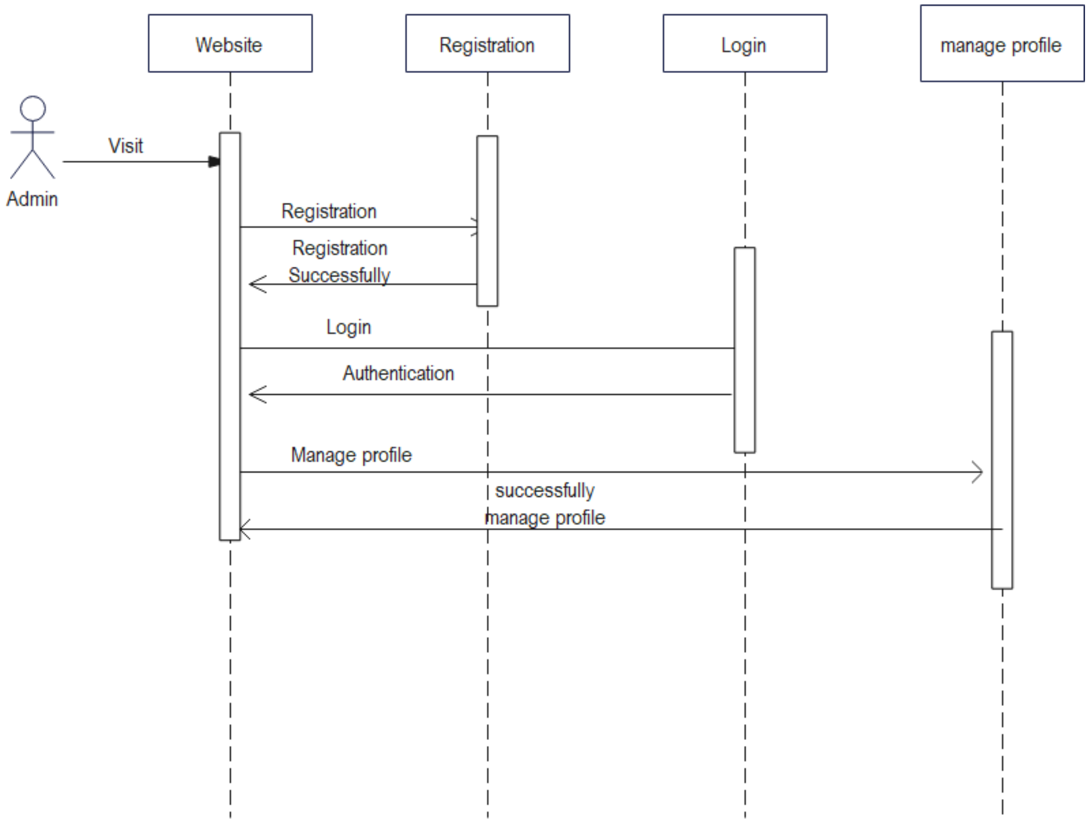
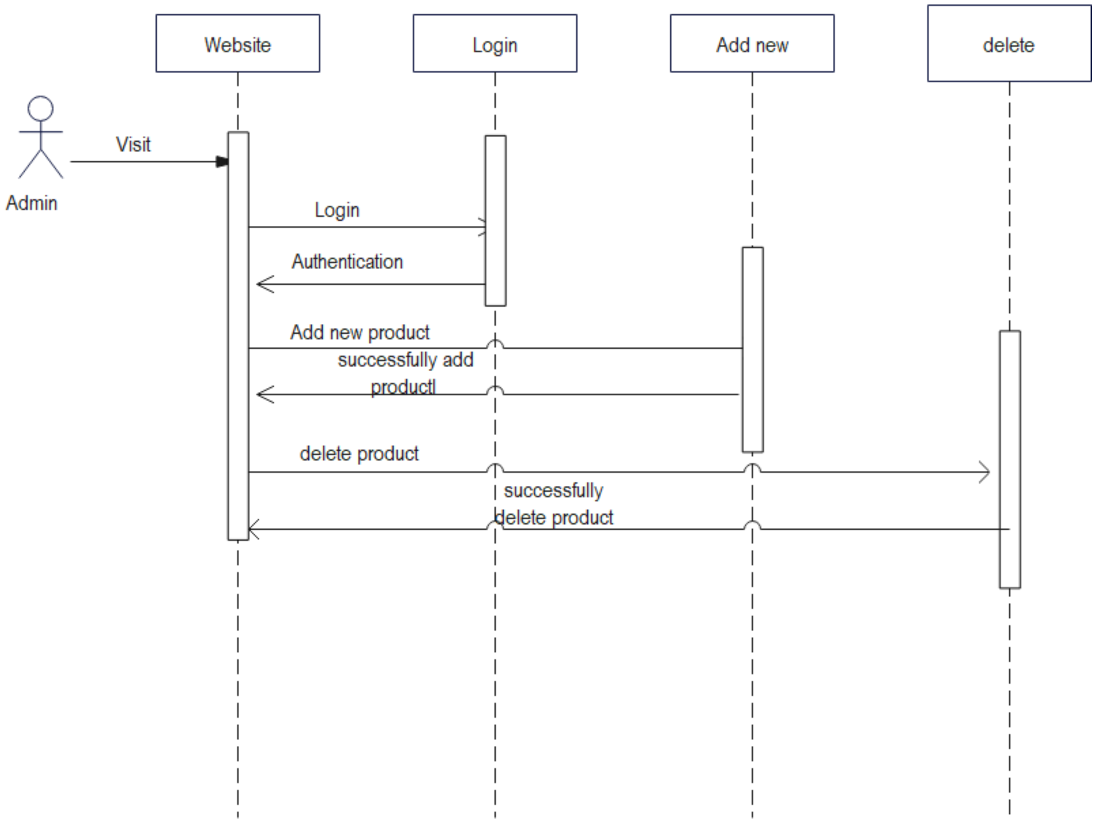
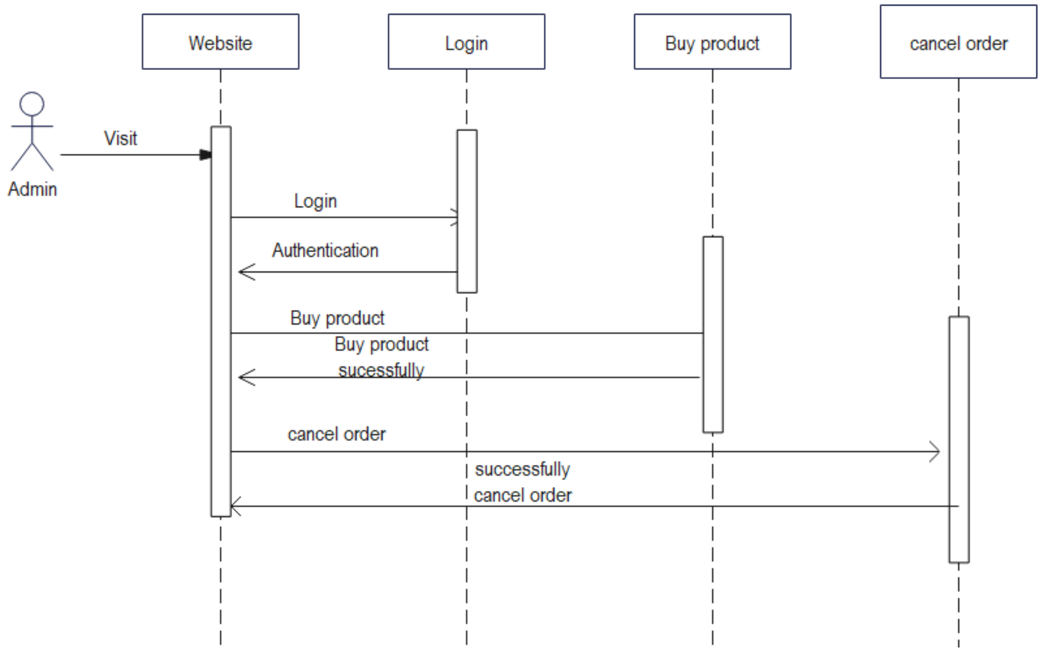

Website
Registration
Login
manage profile
Admin
Visit
Registration
Registration Successfully
Login
Authentication
Manage profile
successfully manage profile

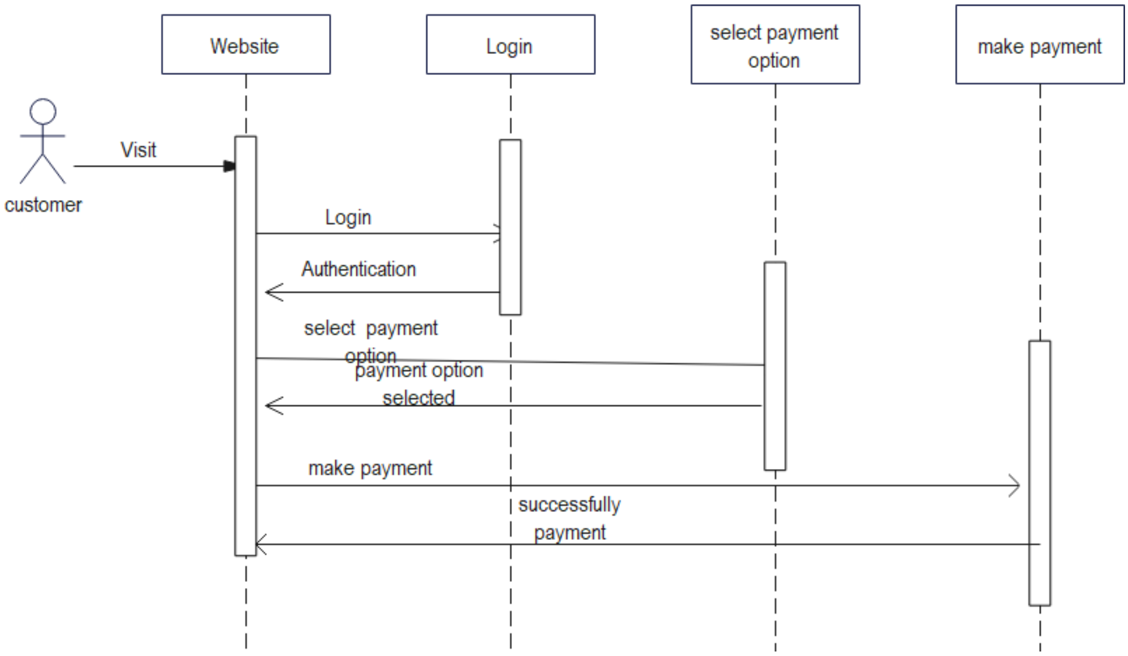
- **Product Module**



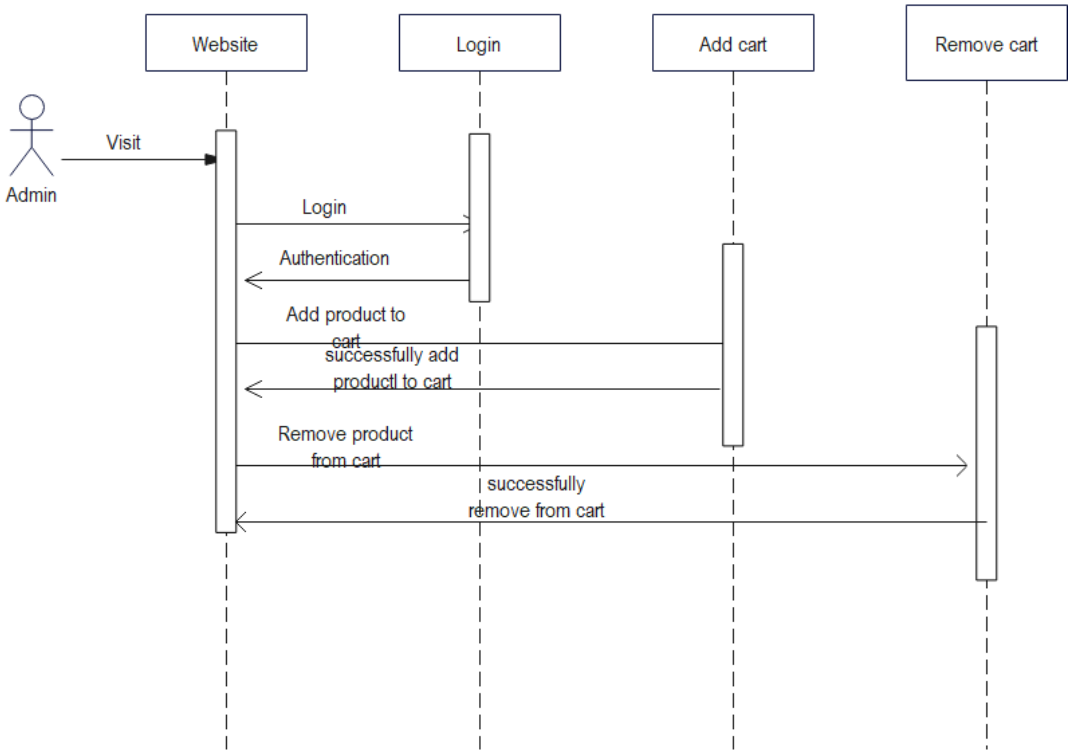
- **Order Module**



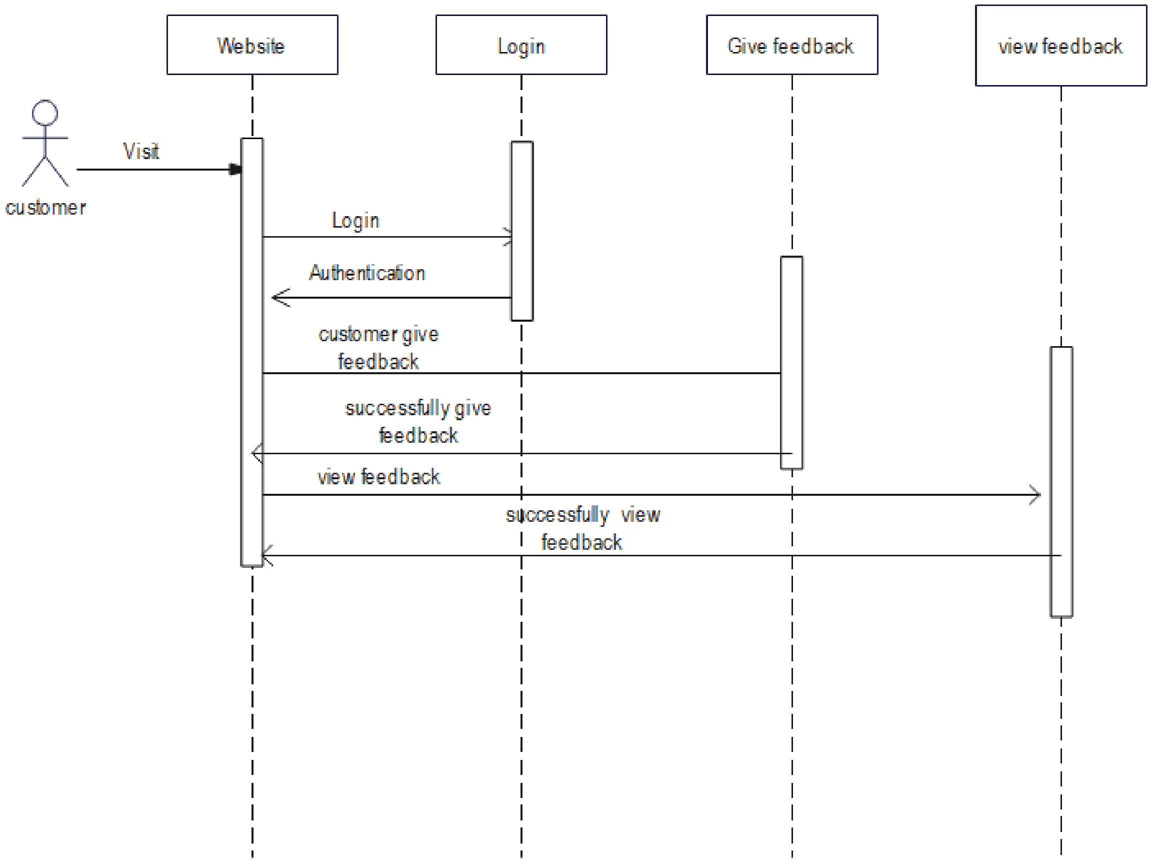
- **Payment Module**



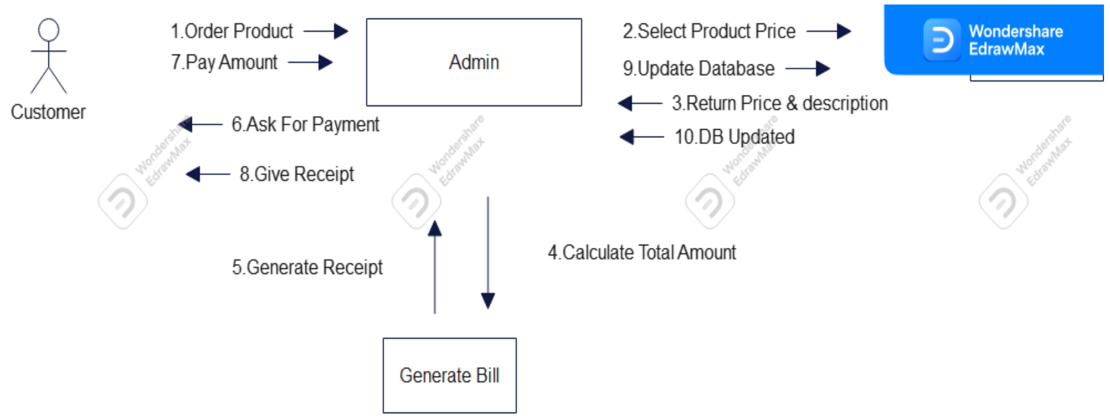
- **Cart Module**


Website
Login
Add cart
Remove cart
Admin
Visit
Login
Authentication
Add product to cart
successfully add productl to cart
Remove product from cart
successfully remove from cart

- **Feedback & Review**



3.6. Collaboration Diagram



3.7. Table Structure

- **Product Table**

Sr. No.	Name	Data type	Size	Key
1.	Product ID	Integer	100	Primary Key
2.	Product name	Varchar	100	Not Null
3.	Description	Varchar	150	Not Null
4.	Category	Varchar	50	Not Null
5.	Price	Integer	50	Not Null
6.	Max Price	Integer	50	Not Null
7.	Quantity	Integer	50	Not Null
8.	Brand Name	Varchar	100	Not Null
9.	Product Detail	Varchar	250	Not Null

- **Payment Table**

Sr. No.	**Name**	**Data type**	**Size**	**Key**
1	Payment ID	Integer	100	Primary Key
2	Product name	Varchar	100	Not Null
3	Description	Varchar	150	Not Null
4	Category	Varchar	50	Not Null
5	Price	Integer	50	Not Null
6	Transaction ID	Integer	50	Not Null
7	Quantity	Integer	50	Not Null
8	Transaction Mode	Varchar	100	Not Null

- **Customer Table**

Sr. No.	**Name**	**Data type**	**Size**	**Key**
1	Customer ID	Integer	100	Primary Key
2	Customer Name	Varchar	150	Not Null
3	Mobile Number	Integer	50	Not Null
4	Email Id	Varchar	50	Not Null
5	Address	Varchar	50	Not Null
6	Gender	Varchar	50	Not Null
7	ID Proof	Varchar	100	Not Null
8	Photo	Image	250	Not Null

- **Feedback Table**

Sr. No.	**Name**	**Data type**	**Size**	**Key**
1	Feedback ID	Integer	100	Primary Key
2	Feedback Description	Varchar	150	Not Null
3	Product Info	Varchar	50	Not Null
4	Customer ID	Integer	50	Not Null
5	Product ID	Integer	50	Not Null

- **Cart Table**

Sr. No.	**Name**	**Data type**	**Size**	**Key**
1	Cart ID	Integer	100	Primary Key
2	Customer ID	Integer	150	Not Null
3	Product ID	Varchar	50	Not Null
4	Product Info	Varchar	50	Not Null
5	Quantity	Integer	50	Not Null

- **Order Placed Table**

Sr. No.	Name	Data type	Size	Key
1	Order ID	Integer	100	Primary Key
2	Customer ID	Integer	150	Not Null
3	Customer Name	Varchar	50	Not Null
4	Product Info	Varchar	50	Not Null
5	Quantity	Integer	50	Not Null
6	Ordered Date	Date	50	Not Null
7	Amount	Integer	100	Not Null

CHAPTER 4

USER MANUAL

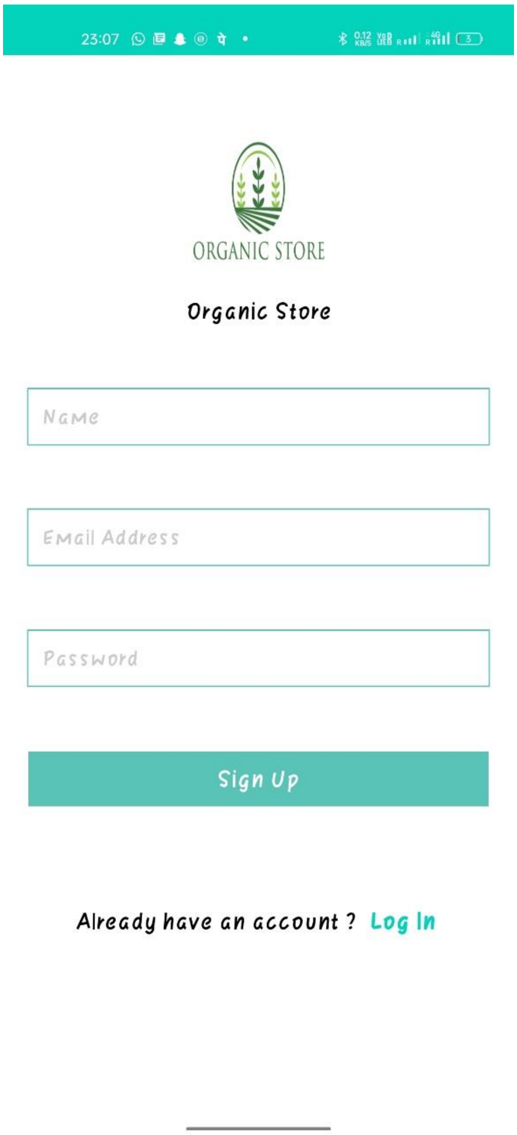
4.1. User Manual

- **Introduction:**
  - Welcome message and brief overview of the e-commerce Android application.
  - Purpose and benefits of using the application.
  - System requirements and compatibility information.
- **Getting Started:**
  - Downloading and installing the application from the app store.
  - Creating a user account and logging in.
  - Explaining the user interface and main components of the application.
- **User Registration and Account Management:**
  - Step-by-step instructions on creating a new user account.
  - Explaining the account verification process.
  - Managing account settings, including profile information, preferences, and notifications.
- **Browsing and Searching Products:**
  - Navigating through product categories and subcategories.
  - Using the search functionality to find specific products.
  - Applying filters and sorting options for product discovery.
- **Product Details and Selection:**
  - Accessing and viewing detailed information about a product.
  - Adding products to the shopping cart
  - Selecting product variations (e.g., size, color) if applicable.
- **Shopping Cart Management:**
  - Adding, updating, or removing items from the shopping cart.

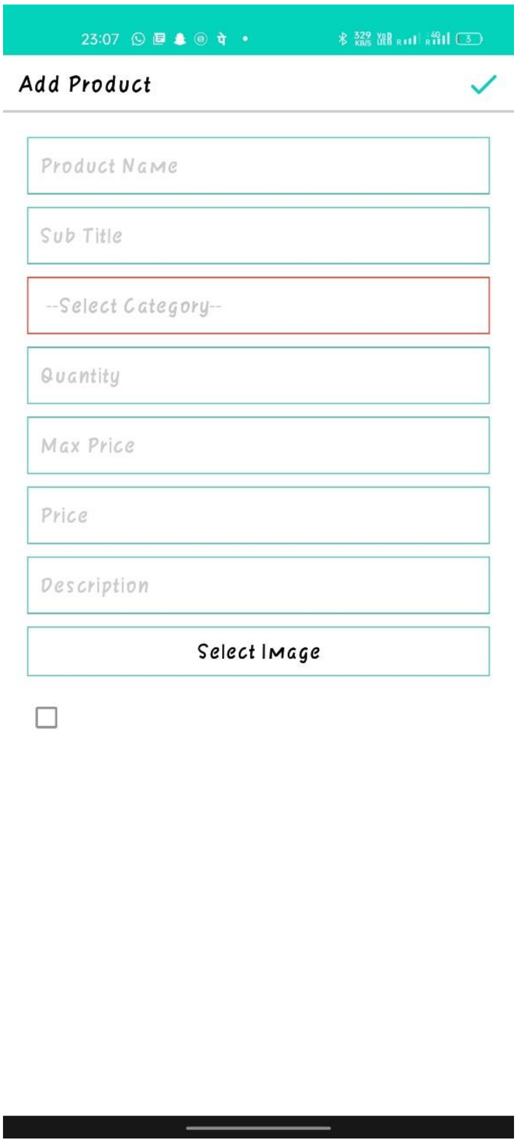
  - Calculating the subtotal, total cost, and applying discounts.
  - Saving the cart for later or proceeding to checkout.
- **Checkout and Payment:**
  - Walking users through the checkout process step by step.
  - Entering shipping and billing information.
  - Selecting a payment method and completing the transaction securely.
- **Order Tracking and History:**.
  - Accessing order history and details.
- **User Reviews:**
  - Explaining how to leave reviews and ratings for products.
  - Reading and sorting product reviews.
  - Reporting inappropriate content or feedback.

4.2. Forms/Report

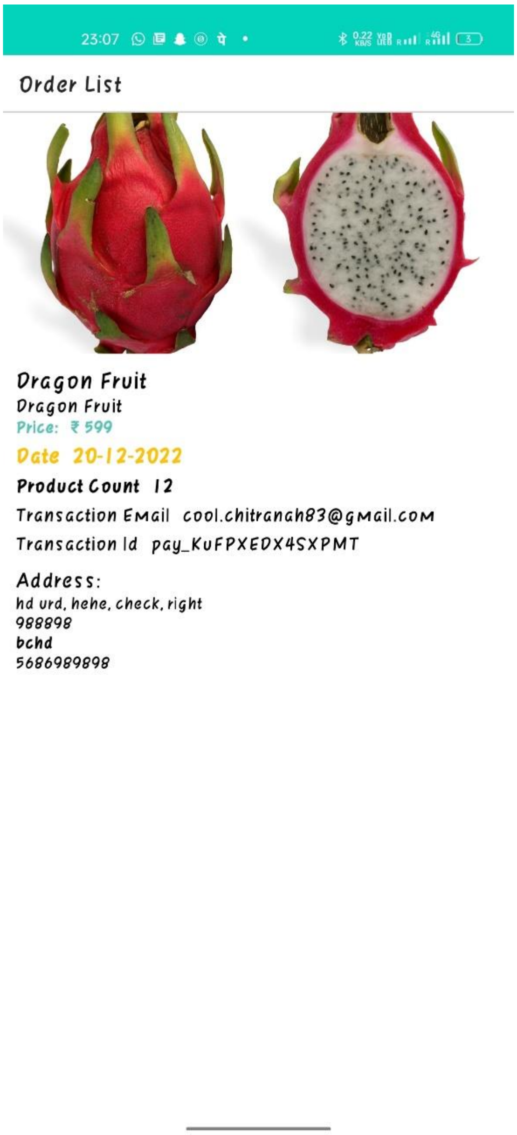
- **User Registration Form:**
    - Allows new users to provide necessary information to create an account, such as name, email, password, and contact details.



- **Product Submission Form:**
  - Enables administrators to enter product details, including name, description, price, images, and other relevant attributes.



- **Order Placement Form:**
  - Collects user information (shipping address, payment method, etc.) for processing and fulfilling an order



Order List

Dragon Fruit
Dragon Fruit
Price: ₹ 599

Date 20-12-2022

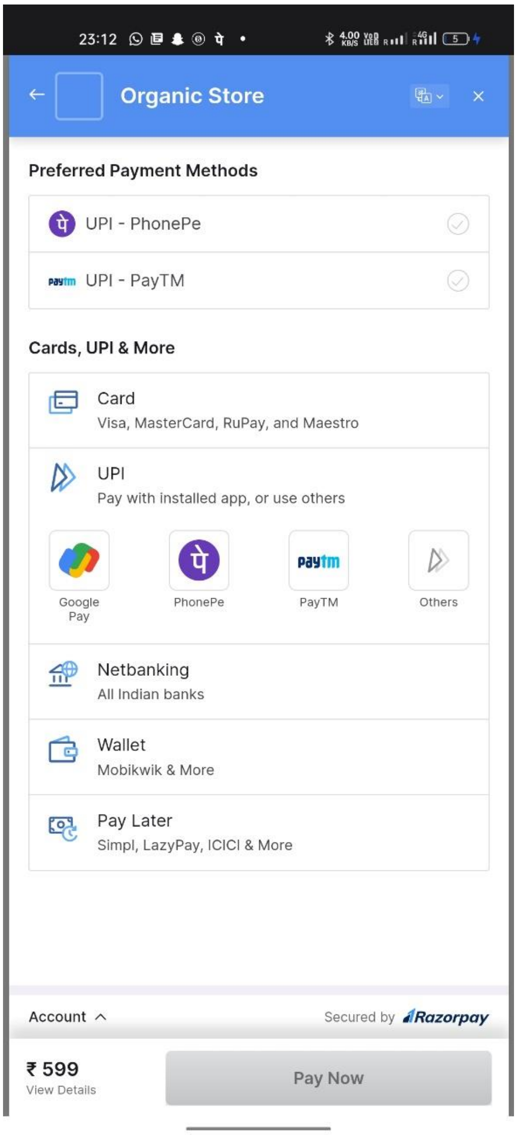
Product Count 12

Transaction Email cool.chitranah83@gmail.com

Transaction Id pay_KuFPXEDX4SXPMT

Address:
hd urd, hehe, check, right
988898
bchd
5686989898

- **Payment Form:**
  - Captures payment details, including credit card information or other payment methods, for secure and smooth transactions.



23:12

Organic Store

Preferred Payment Methods

UPI - PhonePe

UPI - PayTM

Cards, UPI & More

Card
Visa, MasterCard, RuPay, and Maestro

UPI
Pay with installed app, or use others

Google Pay | PhonePe | PayTM | Others

Netbanking
All Indian banks

Wallet
Mobikwik & More

Pay Later
Simpl, LazyPay, ICICI & More

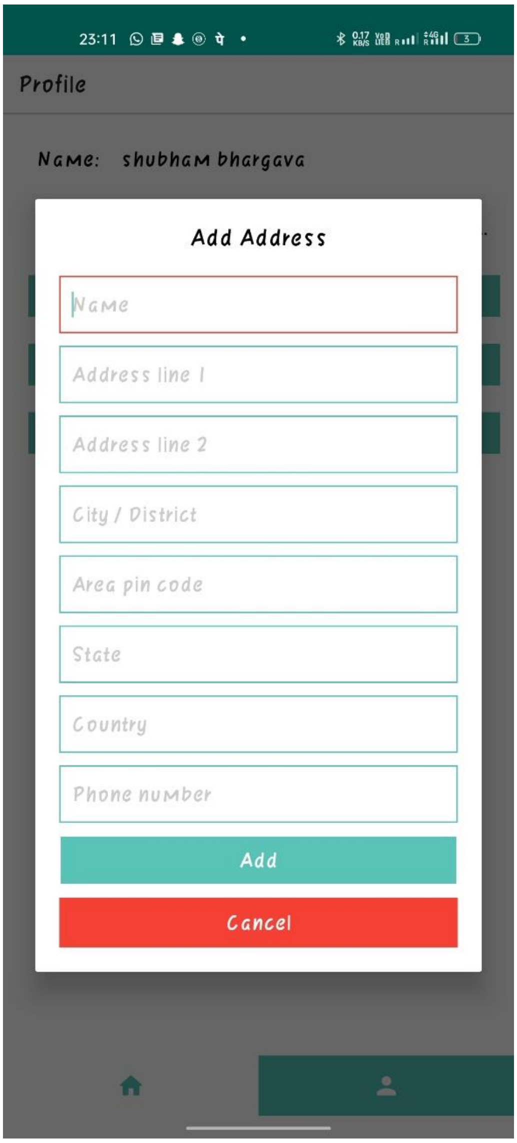
Account

Secured by Razorpay

₹ 599
View Details

Pay Now

- **Address Form:**
  - Allows users to submit address or participate in order placement to gather insights and improve the application or services.



Name: shubham bhargava

4.3. Test Procedures

- **White Box Testing:**

In this technique, the close examination of the logical parts through the software are tested bycases that exercise species sets of conditions or loops. all logical parts of the software checked once. errors that can be corrected using this technique are typographical errors, logicalexpressions which should be executed once may be getting executed more than once and errorresulting by using wrong controls and loops. When the box testing tests all the independent part within a module a logical decision on their true and the false side are exercised, all loops and bounds within their operational bounds were exercised and internal data structure to ensuretheir validity were exercised once.

- **Black Box Testing:**

This method enables the software engineer to device sets of input techniques that fully exerciseall functional requirements for a program. black box testing tests the input, the output and the external data. it checks whether the input data is correct and whether we are getting the desiredoutput.

- **Alpha Testing:**

Acceptance testing is also sometimes called alpha testing. Be spoke systems are developed fora single customer. The alpha testing proceeds until the system developer and the customer agree that the provided system is an acceptable implementation of the system requirements.

- **Beta Testing:**

On the other hand, when a system is to be marked as a software product, another process calledbeta testing is often conducted. During beta testing, a system is delivered among a number of potential users who agree to use it. The customers then report problems to the developers. Thisprovides the product for real use and detects errors which may not have been anticipated by thesystem developers.

- **Unit Testing:**

Each module is considered independently. it focuses on each unit of software as implementedin the source code. it is white box testing.

- **Integration Testing:**

Integration testing aims at constructing the program structure while at the same constructing tests to uncover errors associated with interfacing the modules. modules are integrated by usingthe top-down approach.

- **Validation Testing:**

Validation testing was performed to ensure that all the functional and performance requirements are met.

- **System Testing:**

It is executing programs to check logical changes made in it with intention of finding errors. asystem is tested for online response, volume of transaction, recovery from failure etc. System testing is done to ensure that the system satisfies all the user requirements.

4.4. Test Cases

TC. No	Test Description	Test Steps	Test data	Priority	Expected Result	Actual Result	Status
1	Verify login for correct Credentials	1.Enter Username and Enter Password valid 2.Click on OK button	Username – ****, Password – Raju	P1	Login should be done successfully if username and password are correct	Login Successful	Pass
2	Verify username field	1.Enter username 2.Click on ok button	Username-Raju	P2	Username should accept characters	username is not characters	Fail
3	Verify password field	Enter password 2.Click on ok button	Password-Raju	P2	Password should accept characters	Password is not characters	Fail
4	Verify the login page, when the username and password both are blank.	1.Click on login button.	NA		Login should not be done successfully if username and password are blank	Login is not done successful y if username and password are blank.	Pass
5	Verify if the data in password field is not visible		NA	P1	Data in password field is not visible	Data in password field is not visible	pass
6	Verify the time taken to login with a valid	1. Enter valid username and password.	Username-Raju Password-Raju	P2	Home page should be open in few second after login with a	Home page is to be open in few	pass

	username and password.	2.Click on login button			valid username and password	second after login with a valid username and password.	

- **Registration Form**

TC. No	Test Description	Test Steps	Test data	Priority	Expected Result	Actual Result	Status
1.	Verify Registration for Correct Credentials	1. Enter Username, email address and passwords 2. Click on Submit Button	Username: Raju Email: raju@gmail.com password: raju@123	P1	Registration should be done successfully if all the validation are correct	Registration Successful	Pass
2.	Verify Username	1. Enter Username 2. Click on Submit Button	Username: Raju	P2	Username should have characters	Registration Successful	Pass
3.	Verify Email	1. Enter email address 2. Click on Submit Button	Email: raju@gmail.com	P2	Email should have characters	Registration Successful	Pass
4.	Verify Password	1. Enter passwords 2. Click on Submit Button	password: Raju@123	P2	Password should have characters	Registration Successful	Pass
5.	Verify if password is visible or not	1. Click on submit button	NA	P1	Data in password field are not visible	Data in password field are not visible	Pass

- **Feedback Form**

TC. No	**Test Description**	**Test Steps**	**Test data**	**Priority**	**Expected Result**	**Actual Result**	**Status**
1.	Verify Feedback for Correct Credentials	1. Enter Name, Mobile, City, State, Pin Code and Descriptions 2. Click on Submit Button	Name: *** Mobile: ** City: **** State: *** Pin code: * Description: ***	P1	Feedback should be done successfully if all the validation are correct	Feedback Submit Successful	Pass
2.	Verify name	1. Enter name 2. Click on Submit Button	Name: Ashish	P2	name should have characters	Feedback Submit Successful	Pass
3.	Verify Mobile	1. Enter Mobile Number 2. Click on Submit Button	Mobile: **********	P2	Mobile should have integers	Feedback Submit Successful	Pass
4.	Verify City	1. Enter City name 2. Click on Submit Button	City: Pune	P2	City should have characters	Feedback Submit Successful	Pass
5.	Verify State	1. Enter State name 2. Click on Submit Button	State: Maharashtra	P2	State should have characters	Feedback Submit Successful	Pass
6.	Verify Pin code	1. Enter Pin Code 2. Click on Submit Button	Pin Code: ******	P2	Pin Code should have integers	Feedback Submit Successful	Pass
7.	Verify Description	1. Enter Description 2. Click on Submit Button	Description: ****************	P2	Description should have characters	Feedback Submit Successful	Pass

- **Address form**

TC. No	**Test Description**	**Test Steps**	**Test data**	**Priority**	**Expected Result**	**Actual Result**	**Status**
1.	Verify Address for Correct Credentials	1. Enter Name, Mobile, City, State, Pin Code and Locality 2. Click on Submit Button	Name: *** Mobile: ** City: **** State: *** Pin code: * Locality: ***	P1	Address should be done successfully if all the validation are correct	Address Submit Successful	Pass
2.	Verify name	1. Enter name 2. Click on Submit Button	Name: Ashish	P2	name should have characters	Address Submit Successful	Pass
3.	Verify Mobile	1. Enter Mobile Number 2. Click on Submit Button	Mobile: **********	P2	Mobile should have integers	Address Submit Successful	Pass
4.	Verify City	1. Enter City name 2. Click on Submit Button	City: Pune	P2	City should have characters	Address Submit Successful	Pass
5.	Verify State	1. Enter State name 2. Click on Submit Button	State: Maharashtra	P2	State should have characters	Address Submit Successful	Pass
6.	Verify Pin code	1. Enter Pin Code 2. Click on Submit Button	Pin Code: ******	P2	Pin Code should have integers	Address Submit Successful	Pass
7.	Verify Locality	1. Enter Locality 2. Click on Submit Button	Locality: ****************	P2	Locality should have characters	Address Submit Successful	Pass

4.5. Implementation

- **Technical Design**

This activity builds upon specifications produced during new system design, adding detailed technical specifications and documentation.

- **6.1.2. Test Specifications and Planning**

This activity prepares detailed test specifications for individual modules and programs, job streams, subsystems, and for the system.

- **Programming and Testing**

This activity encompasses actual development, writing, and testing of program units or modules.

- **User Training**

This activity encompasses writing user procedure manuals, preparation of user training materials, conducting training programs, and testing procedures.

- **Acceptance Test**

A final procedural review to demonstrate a system and secure user approval before a system becomes operational.

- **Installation Phase**

In this phase the new Computerized system is installed, the conversion to new procedures is fully implemented, and the potential of the new system is explored.

- **System Installation**

The process of starting the actual use of a system and training user personnel in its operation.

- **Review Phase**

This phase evaluates the successes and failures during a systems development project, and to measure the results of a new Computerized Transsystemic in terms of benefits and savings projected at the start of the project.

- **Development Recap**

A review of a project immediately after completion to find successes and potential problems in future work.

- **Post-Implementation Review**

A review, conducted after a new system has been in operation for some time, to evaluate actualsystem performance against original expectations and projections for cost-benefit improvements. Also identifies maintenance projects to enhance or improve the system.

CHAPTER 5

Drawbacks and Limitations

E-commerce Android applications have become increasingly popular and convenient for both businesses and consumers. However, like any technology, they also have certain drawbacks and limitations. Here are some common drawbacks and limitations of e-commerce Android applications:

- Limited User Experience: While e-commerce apps strive to provide a seamless user experience, they may still lack the tactile and sensory aspects of traditional shopping. Users cannot physically examine products, try them on, or experience their quality firsthand, which may affect their purchasing decisions.
- Device and Network Dependency: E-commerce apps rely on smartphones or tablets and require a stable internet connection to function properly. Users without access to compatible devices or reliable internet may face limitations in utilizing the app effectively.
- Security Concerns: Security is a significant concern in e-commerce applications. Users need to provide personal and financial information for transactions, which makes them potential targets for hackers and data breaches. App developers must implement robust security measures to protect user data and prevent unauthorized access.

- Technical Issues: E-commerce apps may encounter technical glitches, such as crashes, slow performance, or compatibility problems with specific devices or operating systems. These issues can frustrate users and affect their overall experience, potentially leading to loss of sales or customer dissatisfaction.
- Lack of Personalized Assistance: Unlike physical stores where sales representatives can provide personalized assistance and recommendations based on individual needs, e-commerce apps generally rely on algorithms and automated systems. Although recommendation engines try to tailor suggestions, they may not always capture the nuances of user preferences accurately.
- Product Information Limitations: While e-commerce apps provide product descriptions, images, and customer reviews, they may not always provide a comprehensive view of the product. Users may miss out on certain details, such as texture, weight, or exact dimensions, which could be crucial factors in their purchasing decisions.
- Shipping and Returns: E-commerce apps rely on efficient logistics and shipping services to deliver products to customers. Delays, damaged goods, or difficulties in returning products can negatively impact the customer experience. Managing the logistics effectively and providing a smooth return process is essential for customer satisfaction.
- Lack of Social Interaction: Shopping is often seen as a social activity, and physical stores offer opportunities for social interaction and immediate feedback from sales associates. E-commerce apps lack the social aspect, which may diminish the overall shopping experience for some users.

- International Trade and Regulations: E-commerce apps operating across borders may face challenges related to international trade regulations, customs duties, taxes, and shipping complexities.

CHAPTER 6

Proposed Enhancements

Here are some proposed enhancements that could be considered for an e-commerce Android application:

1. Enhanced User Personalization:
   - Implement personalized product recommendations based on user preferences, browsing history, and purchase behaviour.
   - Provide personalized offers, discounts, or promotions tailored to each user's interests and past activities.
   - Allow users to customize their shopping experience by saving favourite categories, brands, or specific product preferences.
2. Social Media Integration:
   - Enable users to share products or their shopping experiences on popular social media platforms, promoting viral marketing and user-generated content.
   - Integrate social media login options, allowing users to sign up or log in using their social media accounts for a streamlined experience.
   - Incorporate social media feeds or reviews from influencers or industry experts to enhance trust and credibility.
3. Augmented Reality (AR) and Virtual Try-On:

- Integrate AR technology to allow users to virtually try on products such as apparel, accessories, or cosmetics.
- Enable users to visualize how products would look in their physical environment using AR overlays or 3D models.
- Improve the accuracy and realism of product images by utilizing AR capabilities to provide a more immersive shopping experience.

4. Voice Search and Voice-Activated Shopping:

- Implement voice search functionality, allowing users to search for products or perform actions using voice commands.
- Enable voice-activated shopping, allowing users to add items to the cart, proceed to checkout, or place orders through voice interactions.
- Integrate with voice assistants (e.g., Google Assistant, Amazon Alexa) for seamless voice control and assistance within the application.

5. Real-Time Inventory Updates:

- Implement a robust inventory management system that provides real-time updates on product availability and stock levels.
- Notify users when a product is low in stock or out of stock, offering alternative products or the option to receive notifications when the product is back in stock.
- Sync inventory data across multiple channels (e.g., website, mobile app) to ensure consistency and accurate product availability information.

6. One-Click Reordering and Subscription Services:

- Provide a one-click reordering option for users to quickly repurchase items they have previously bought.
- Implement subscription services for products that users frequently

purchase, offering automated recurring orders and convenient payment processing.

7. Multiple Payment Options and Mobile Wallet Integration:

- Expand the range of payment options available to users, including credit/debit cards, mobile wallets (e.g., Apple Pay, Google Pay), and digital payment platforms (e.g., PayPal).
- Enable seamless integration with popular mobile wallets, allowing users to complete transactions quickly and securely using their preferred payment method.

8. Order Tracking and Delivery Notifications:

- Enhance the order tracking functionality, providing real-time updates on the status and progress of orders.
- Send proactive delivery notifications to users, informing them about estimated delivery times, tracking numbers, and any delivery updates or delays.

9. Gamification and Loyalty Programs:

- Implement gamification elements, such as badges, rewards, or points systems, to encourage user engagement and incentivize repeat purchases.
- Create a loyalty program where users earn points or exclusive benefits based on their purchase history or engagement with the application.

10. Multi-Language and Localization Support:

- Offer support for multiple languages, allowing users to select their preferred language for the application interface and product information.
- Implement localization features, including localized currency, date formats, and measurement units, to cater to users from different regions.

CHAPTER 7

Conclusion

In conclusion, an e-commerce Android application offers numerous advantages, such as convenience, accessibility, and a wide range of product options, to both businesses and users. Throughout this discussion, we explored various aspects related to e-commerce Android applications, including drawbacks and limitations, the need for such systems, system scope, proposed system features, feasibility study, and potential enhancements.

E-commerce Android applications have the potential to revolutionize the way businesses operate and users engage in online shopping. However, it is crucial to carefully consider the limitations and challenges associated with these applications, such as security risks, platform compatibility, and user experience on mobile devices.

A thorough feasibility study is essential to assess the viability and potential success of an e-commerce Android application. This study includes evaluating technical feasibility, economic feasibility, and operational feasibility to determine if the proposed system is worth pursuing.

The scope of an e-commerce Android application encompasses various modules, including user registration and authentication, product catalog, shopping cart, checkout and payment, order management, user reviews and ratings, and customer support. Each module plays a crucial role in providing a seamless and satisfying shopping experience for users.

To enhance the functionality and user experience of an e-commerce Android application, several proposed enhancements were discussed. These enhancements include personalized recommendations, social media integration, augmented reality, voice search, real-time inventory updates, and loyalty programs, among others. Incorporating these enhancements can lead to increased user engagement, improved conversion rates, and customer loyalty.

Overall, e-commerce Android applications have the potential to drive business growth and cater to the evolving needs of online shoppers. By addressing limitations, conducting a comprehensive feasibility study, defining system objectives, and implementing relevant enhancements, businesses can create a robust and user-friendly e-commerce application that provides a seamless and enjoyable shopping experience for customers.

CHAPTER 8

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- https://chat.openai.com/?model=text-davinci-002-render-sha
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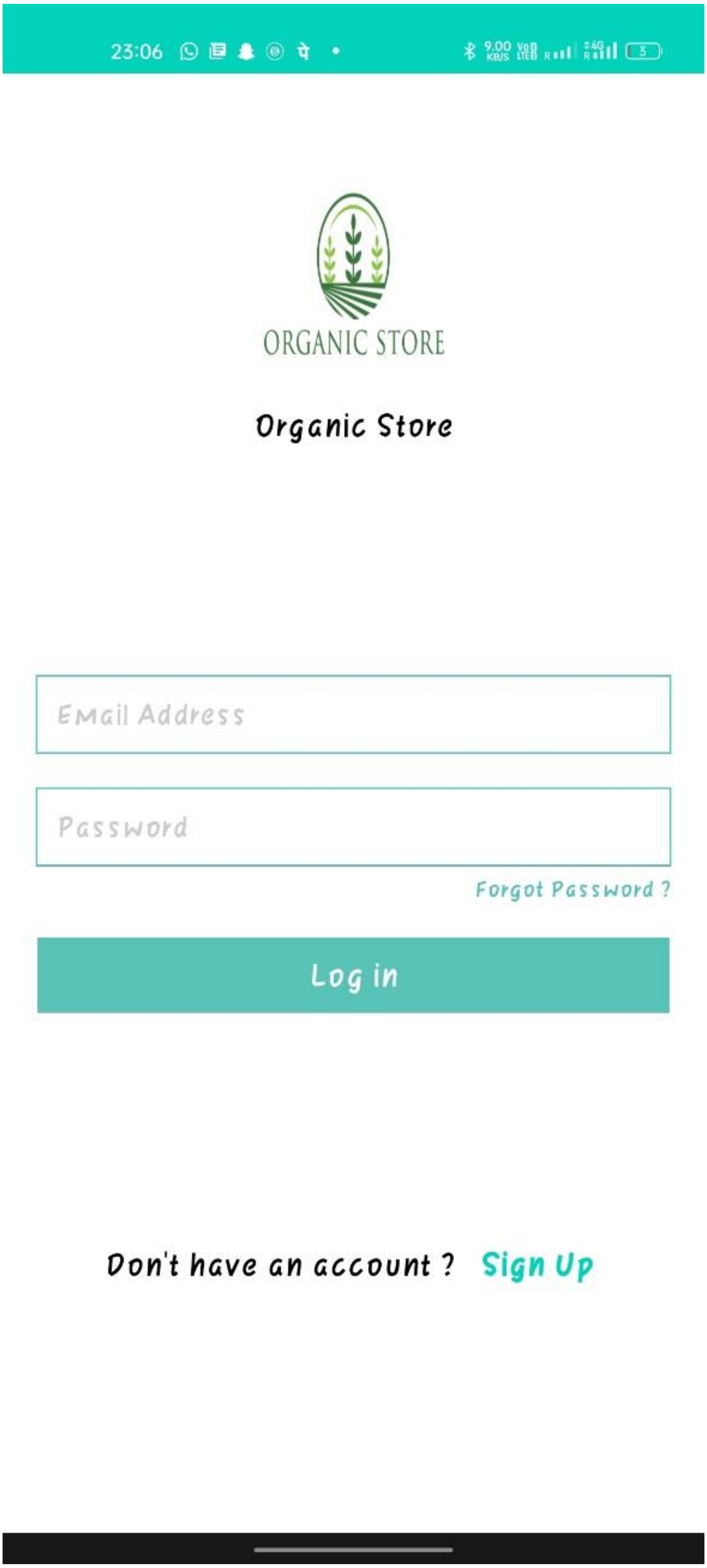
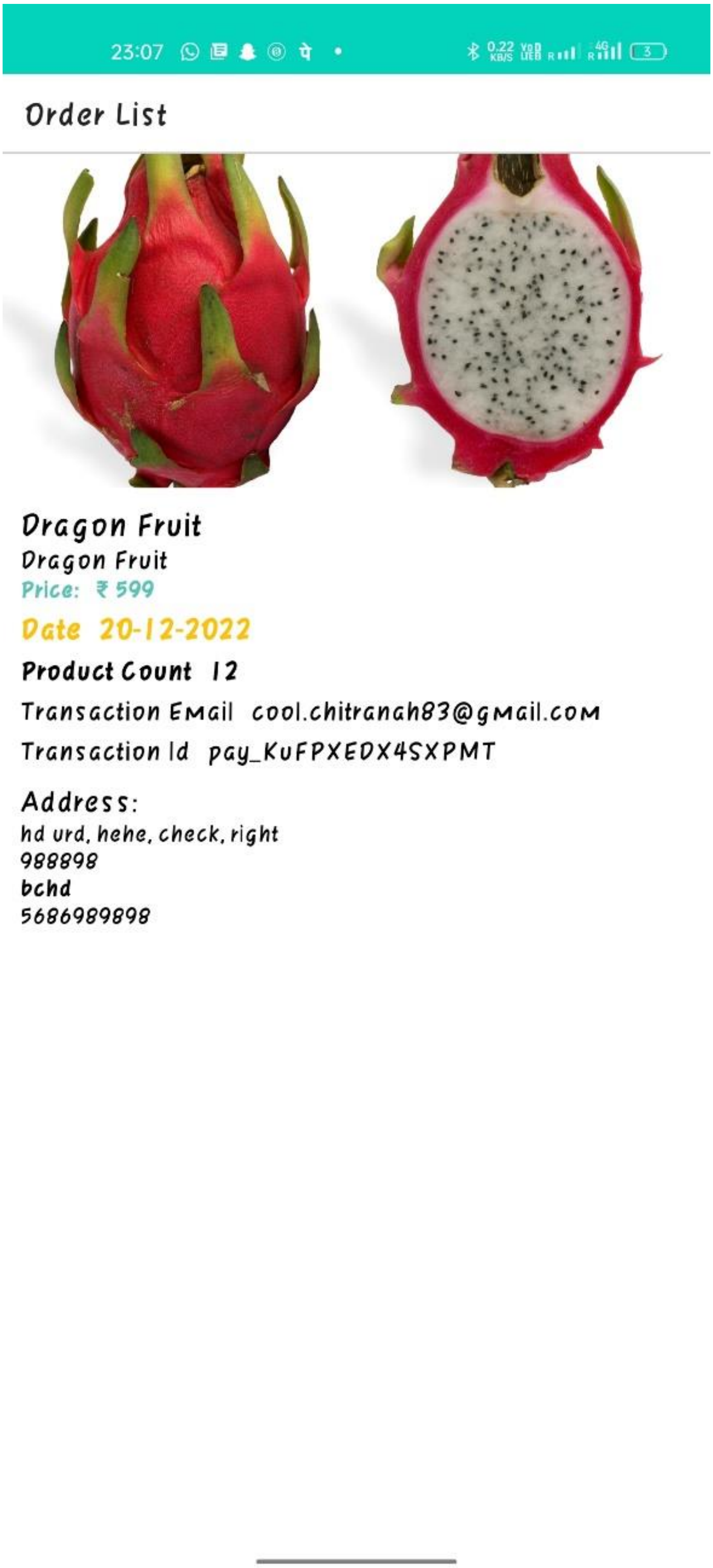
- https://abhiandroid.com/sourcecode/ecommerce
- https://www.ijraset.com/research-paper/e-commerce-android-application-and-e-commerce-website-development

CHAPTER 9

ANNEXURE


23:06
ORGANIC STORE
Organic Store
Email Address
Password
Forgot Password ?
Log in
Don't have an account ? Sign Up

23:06
62.0 KB/S
ORGANIC STORE



Order List

Dragon Fruit

Dragon Fruit

Price: ₹ 599

Date 20-12-2022

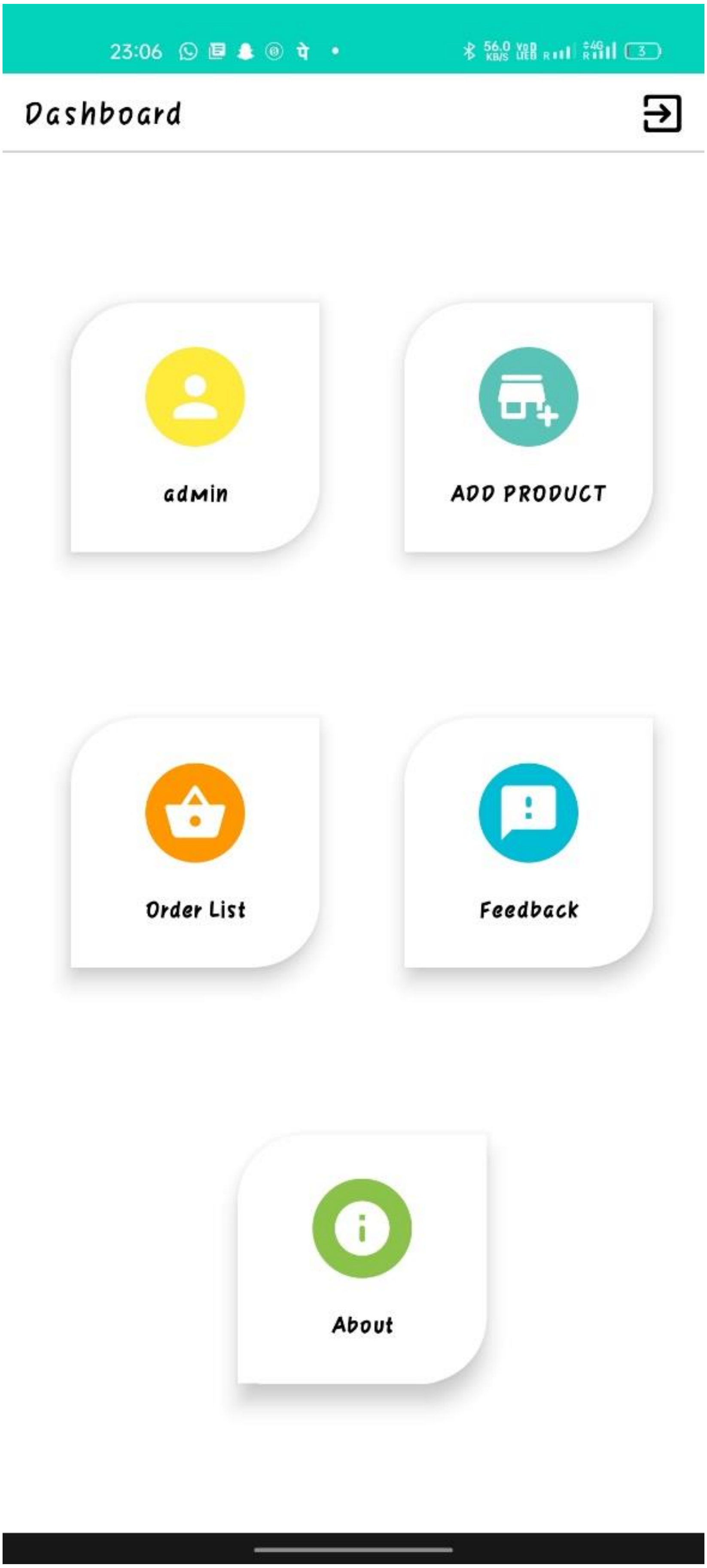
Product Count 12

Transaction Email cool.chitranah83@gmail.com

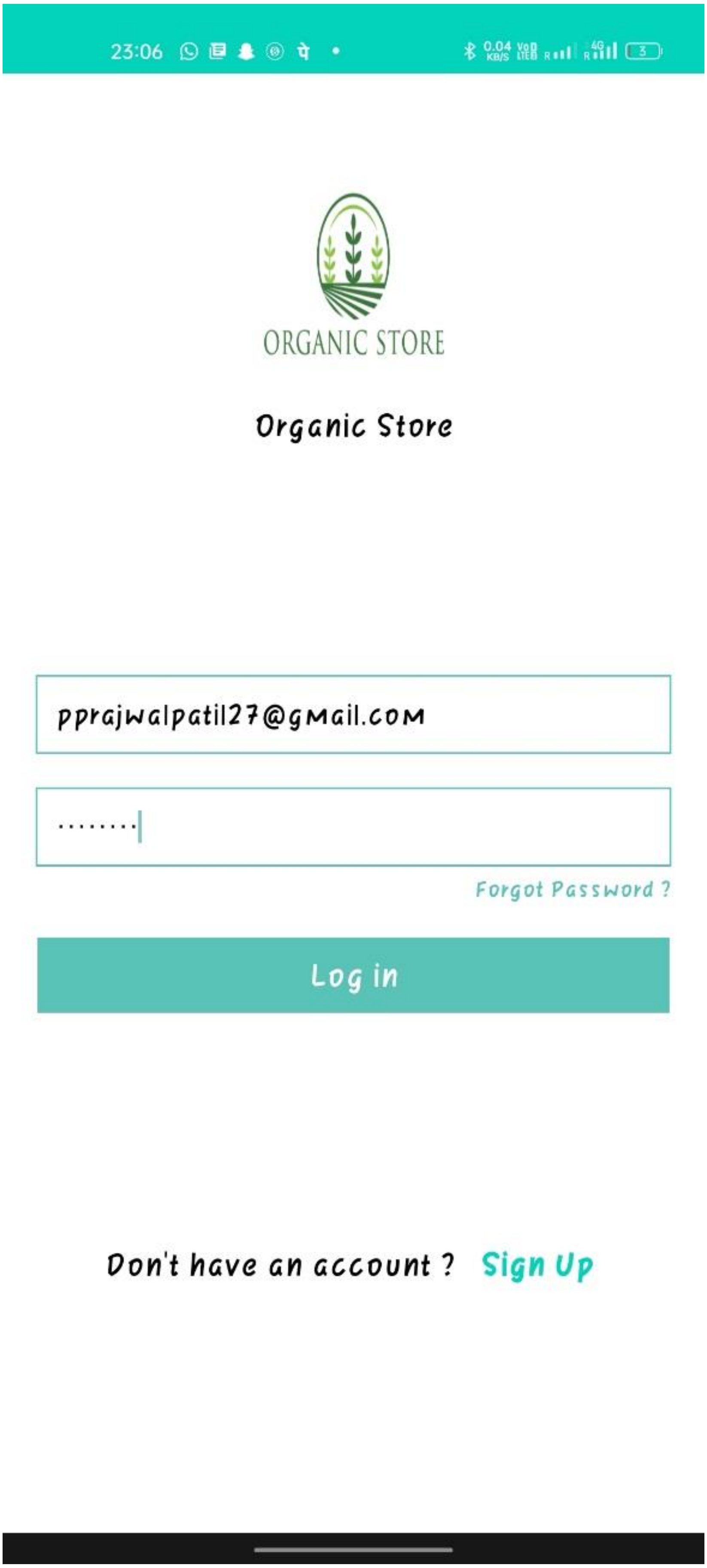
Transaction Id pay_KuFPXEDX4SXPMT

Address:

hd urd, hehe, check, right
988898
bchd
5686989898



23:06
Dashboard
admin
ADD PRODUCT
Order List
Feedback
About

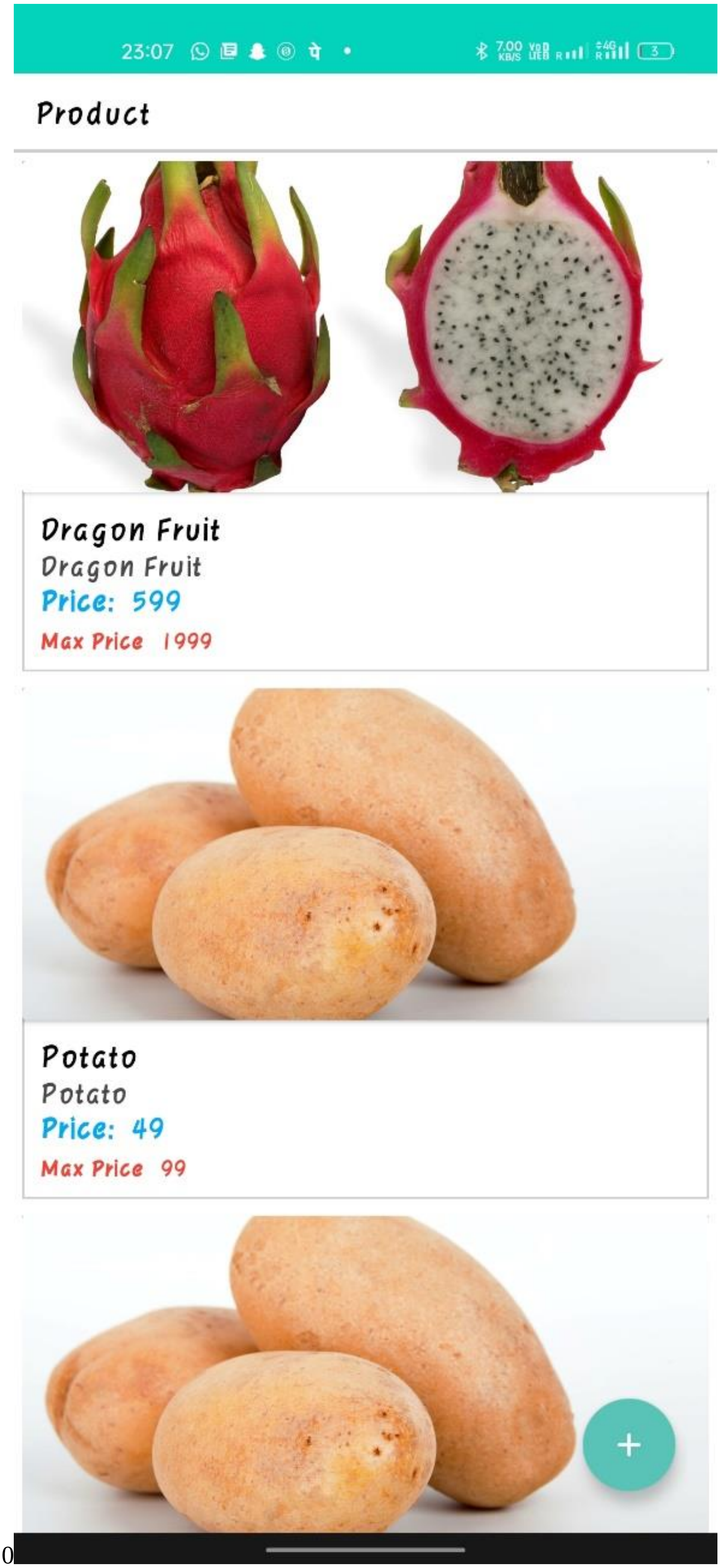


Organic Store

pprajwalpatil27@gmail.com

....

Don't have an account ? Sign Up

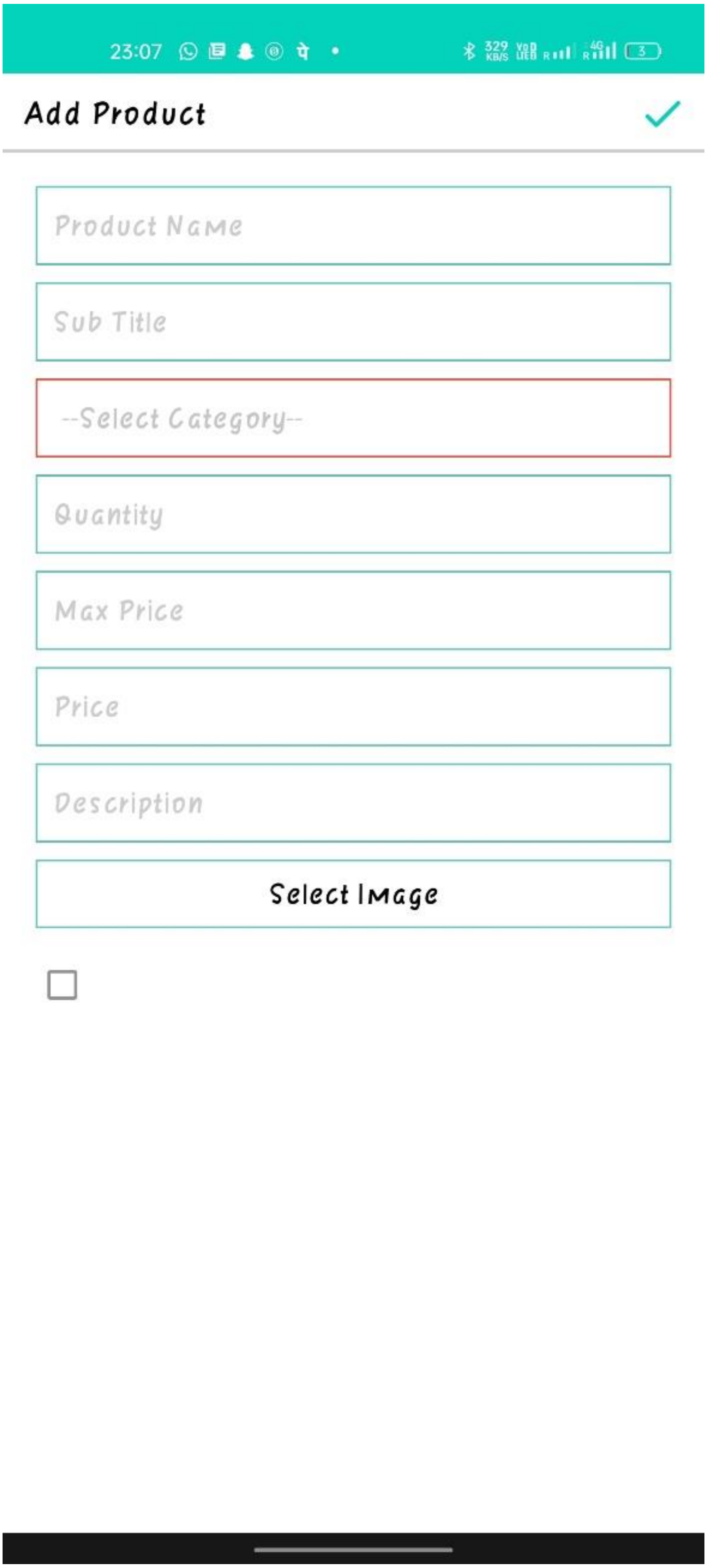


Product

Dragon Fruit
Dragon Fruit
Price: 599
Max Price 1999

Potato
Potato
Price: 49
Max Price 99

0



23:07

Add Product ✓

Product Name

Sub Title

--Select Category--

Quantity

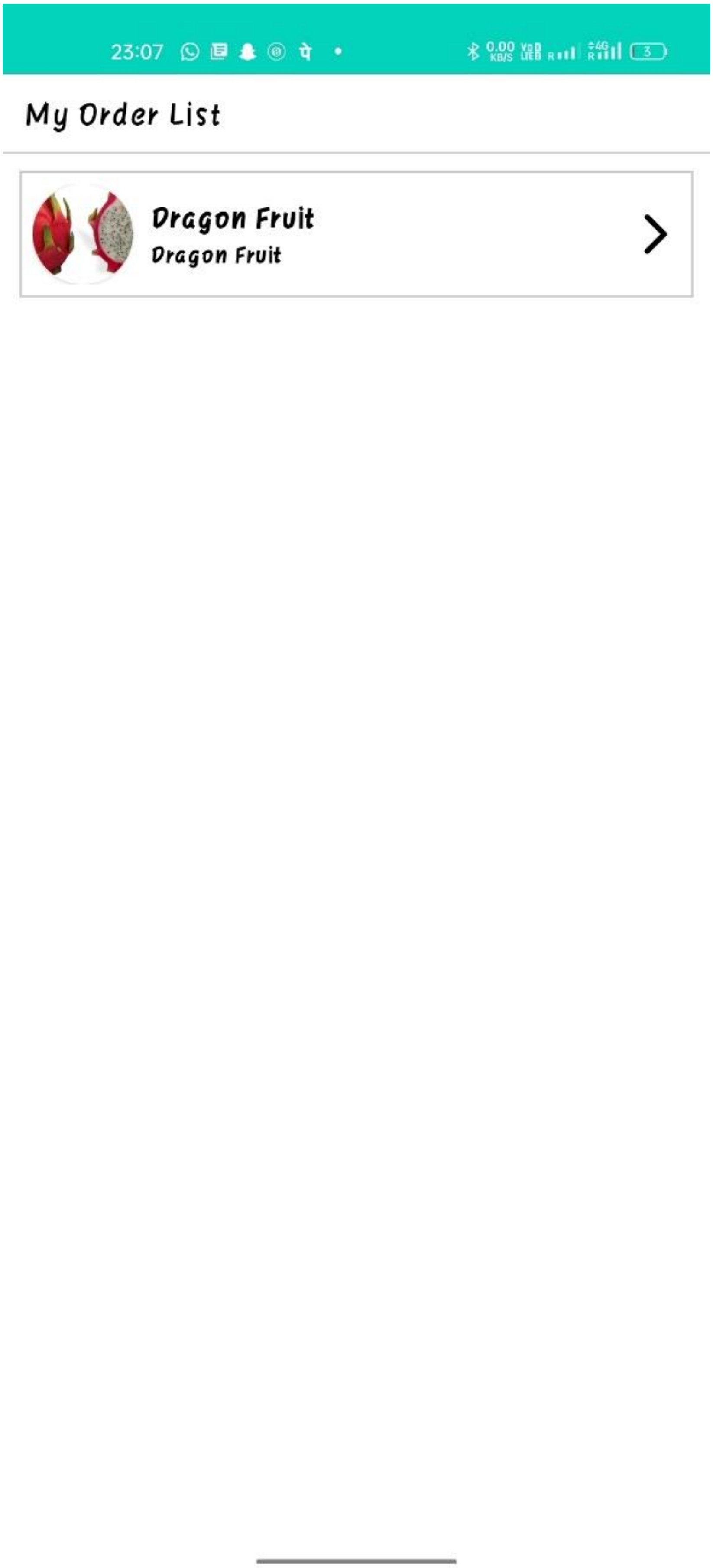
Max Price

Price

Description

Select Image

□

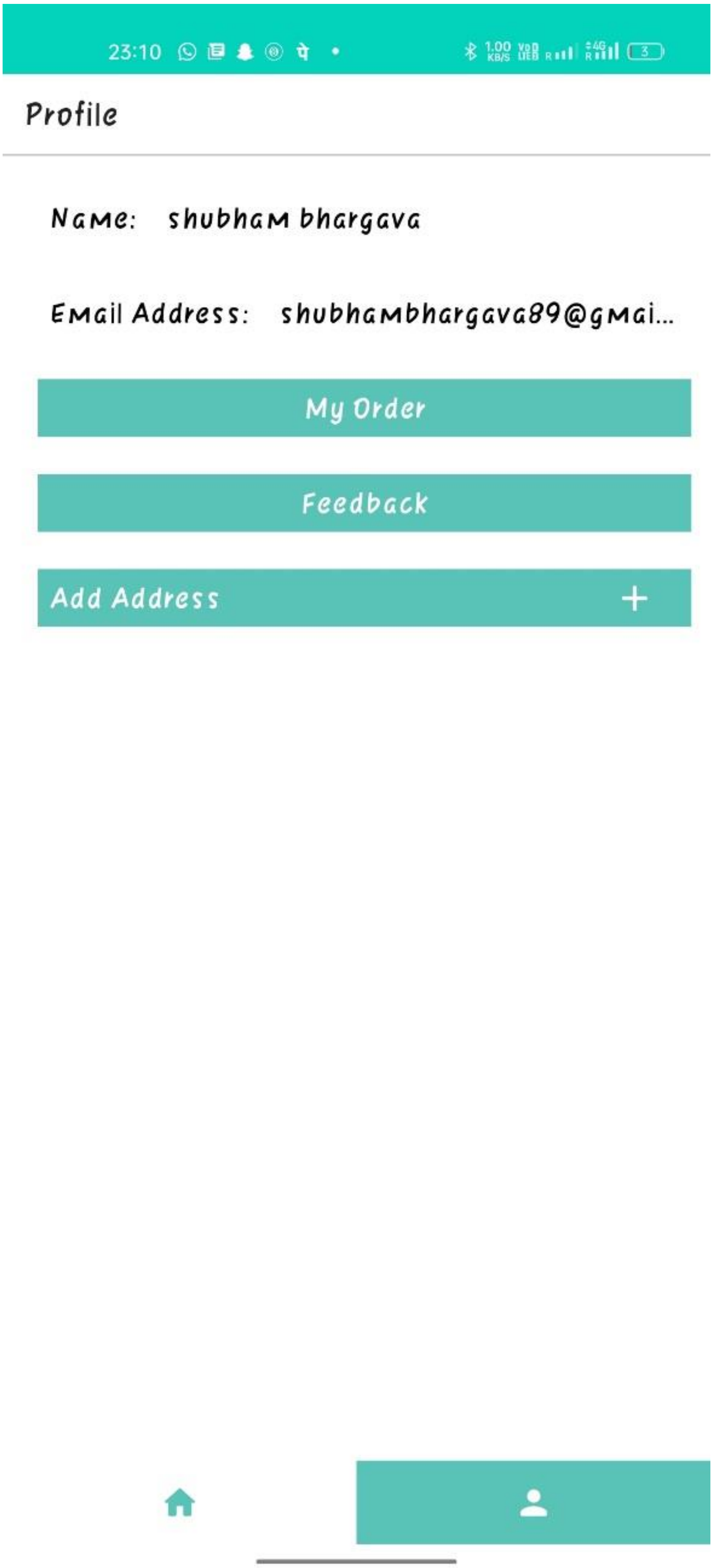


23:07

My Order List

Dragon Fruit

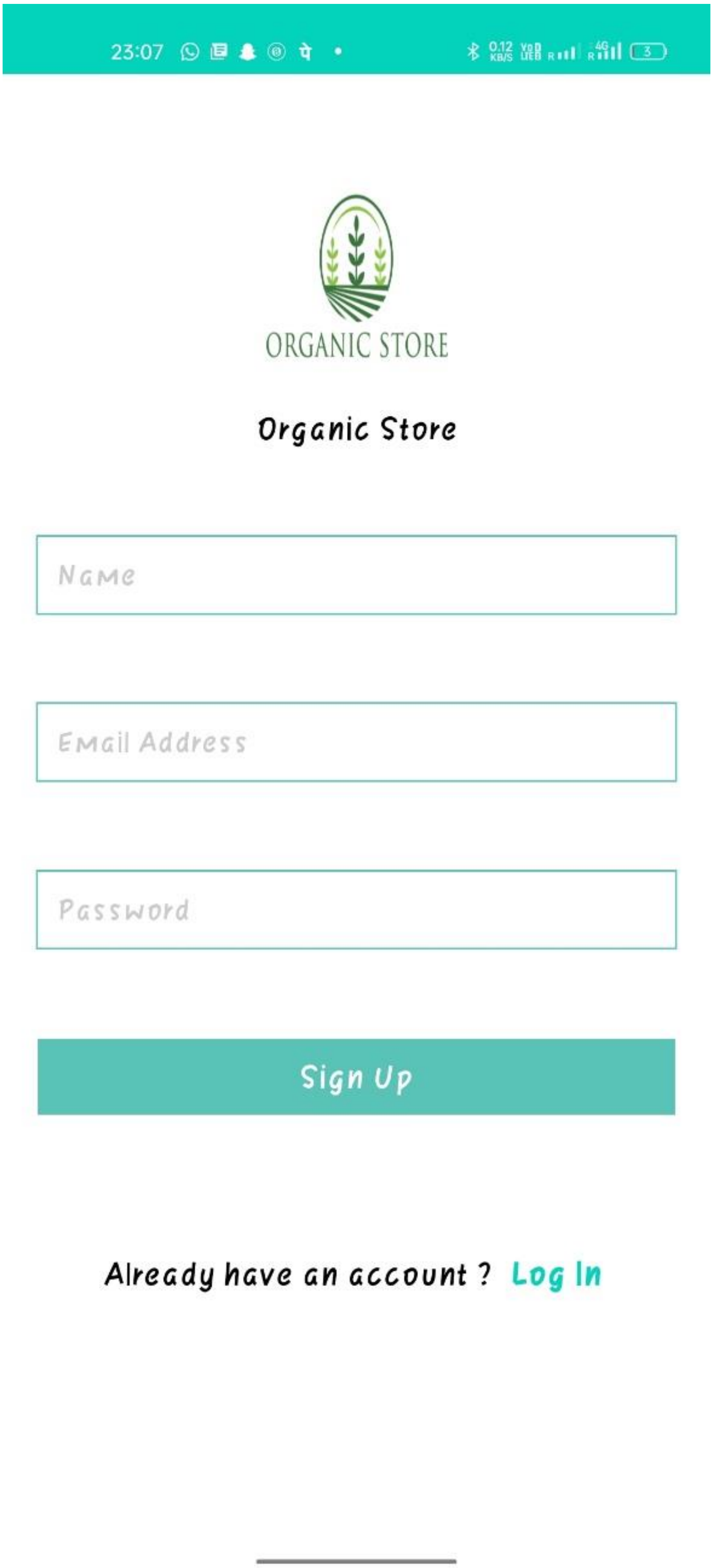
Dragon Fruit



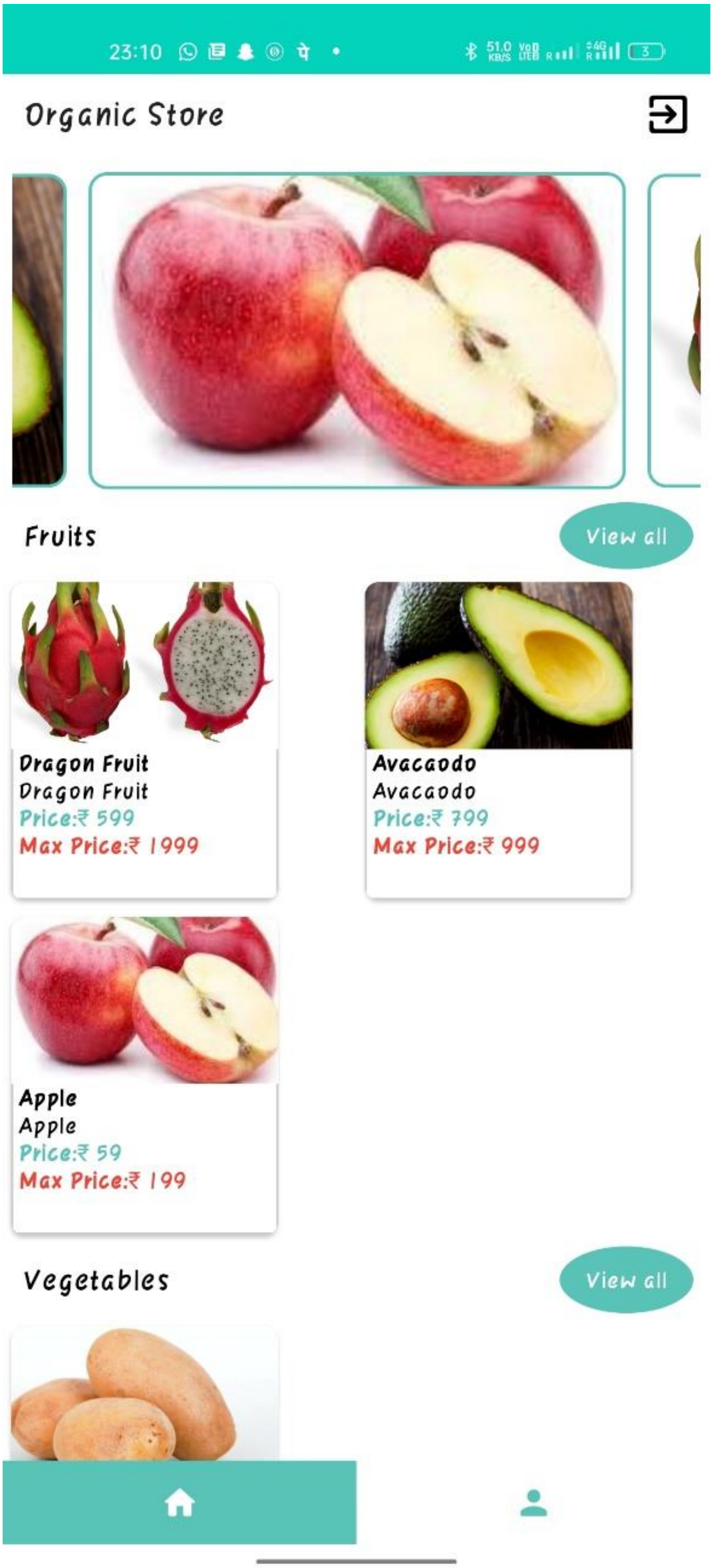
Profile

Name: shubham bhargava

Email Address: shubhambhargava89@gmai...



Already have an account ? Log In



Organic Store

Fruits

View all

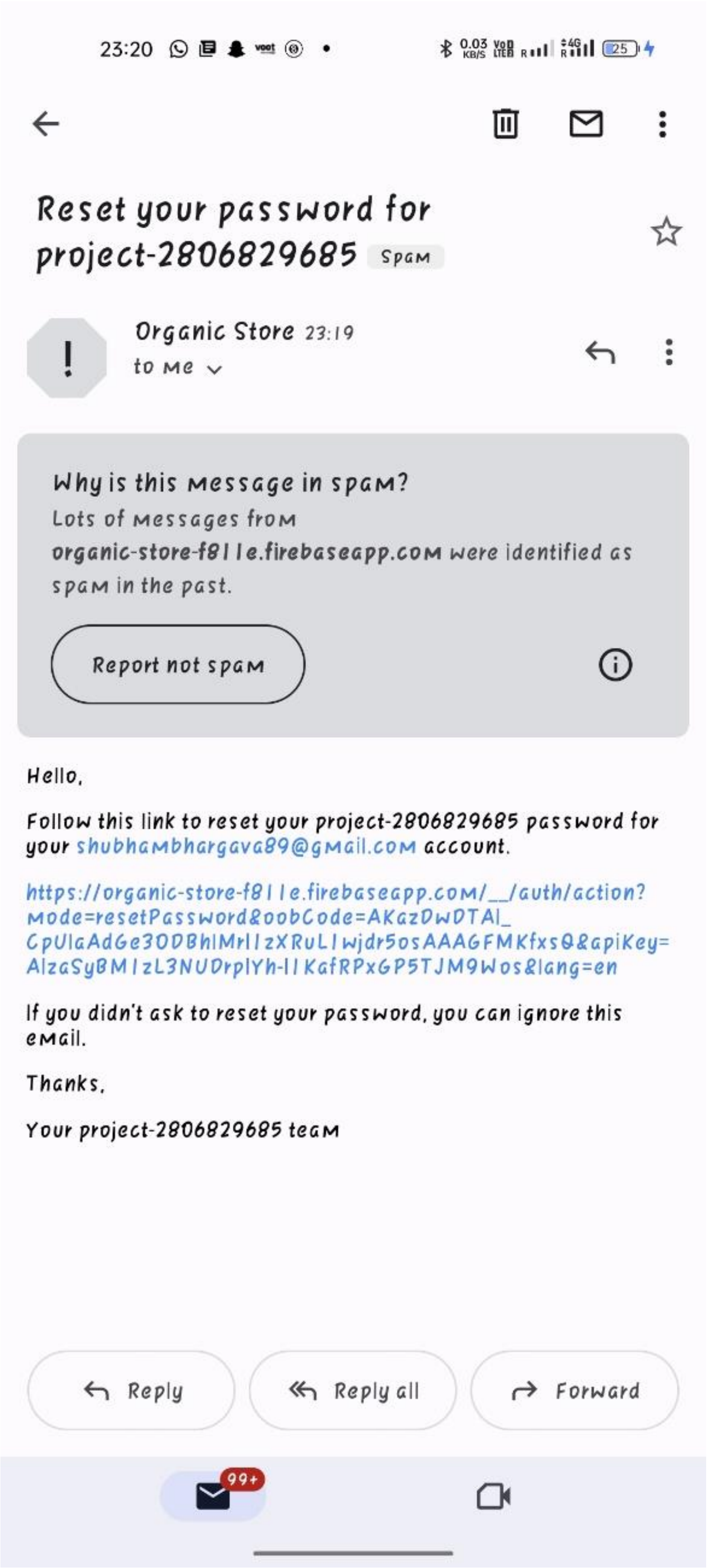
Dragon Fruit
Dragon Fruit
Price:₹ 599
Max Price:₹ 1999

Avacaodo
Avacaodo
Price:₹ 799
Max Price:₹ 999

Apple
Apple
Price:₹ 59
Max Price:₹ 199

Vegetables

View all



Reset your password for project-2806829685

Organic Store 23:19

to me

Why is this message in spam?

Lots of messages from **organic-store-f811e.firebaseapp.com** were identified as spam in the past.

Hello,

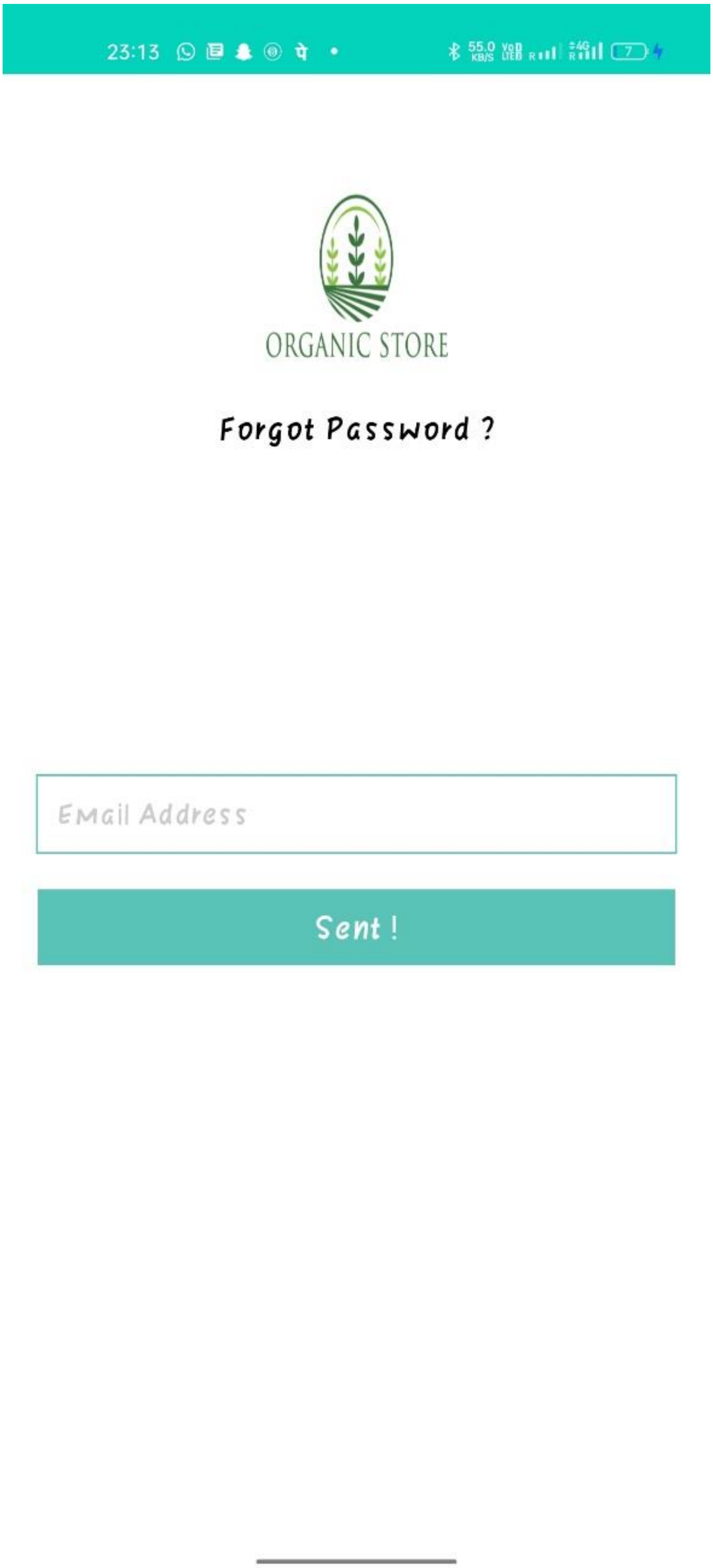
Follow this link to reset your project-2806829685 password for your shubhambhargava89@gmail.com account.

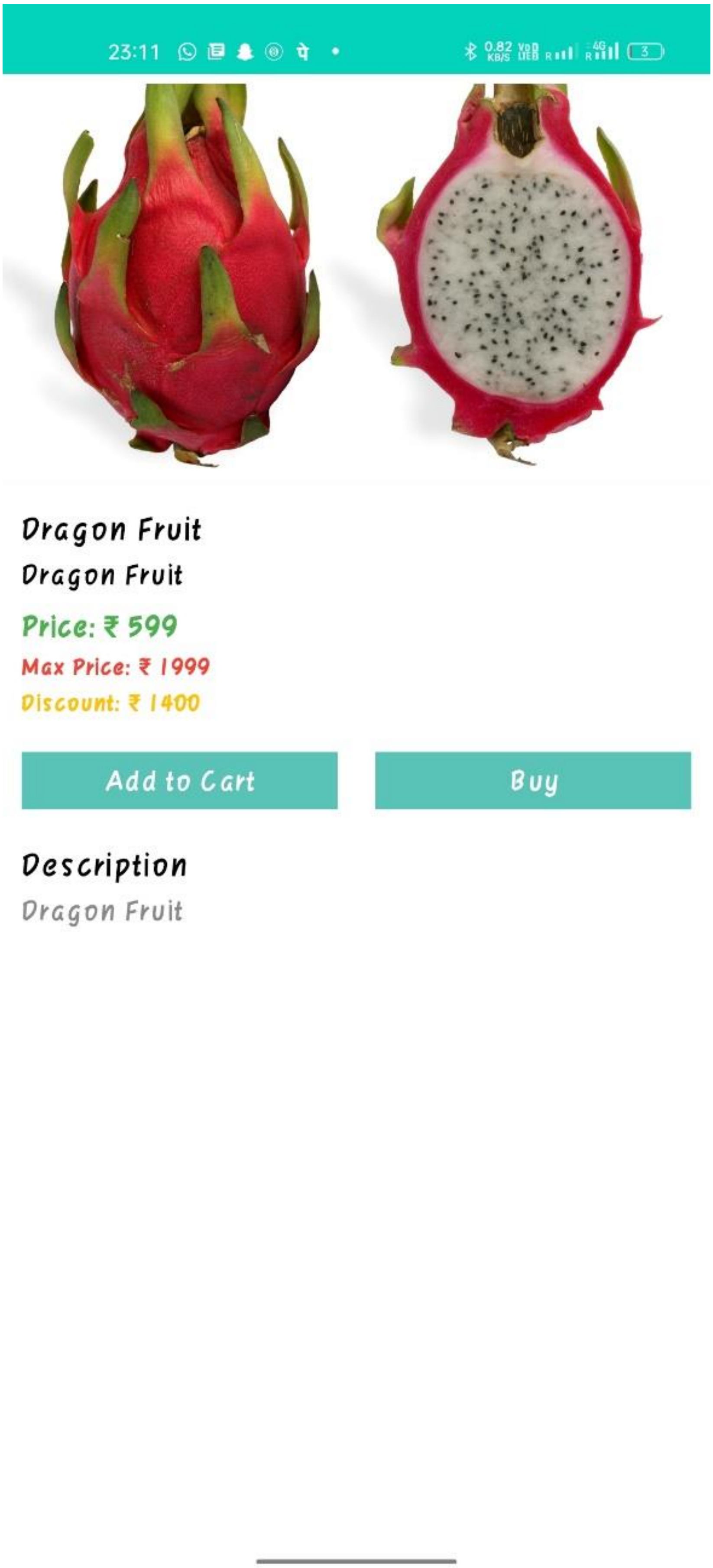
https://organic-store-f811e.firebaseapp.com/__/auth/action?mode=resetPassword&oobCode=AKazDwDTAI_CpUIaAdGe3ODBhIMrI1zXRuL1wjdr5osAAAGFMKfxsQ&apiKey=AIzaSyBM1zL3NUDrpIYh-I1KafRPxGP5TJM9Wos&lang=en

If you didn't ask to reset your password, you can ignore this email.

Thanks,

Your project-2806829685 team


23:13
ORGANIC STORE
Forgot Password ?
EMail Address
Sent !



Dragon Fruit

Dragon Fruit

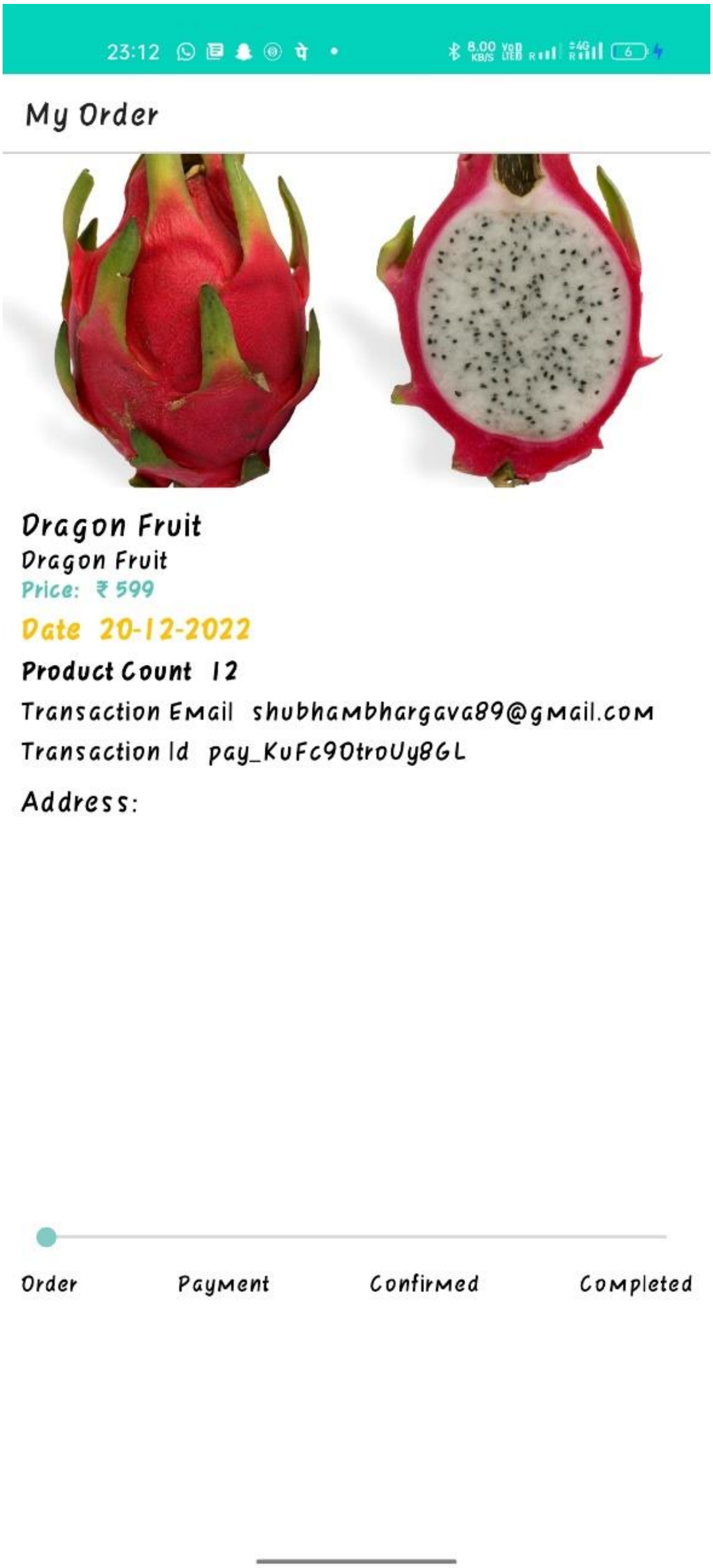
Price: ₹ 599

Max Price: ₹ 1999

Discount: ₹ 1400

Description

Dragon Fruit



My Order

Dragon Fruit

Dragon Fruit

Price: ₹ 599

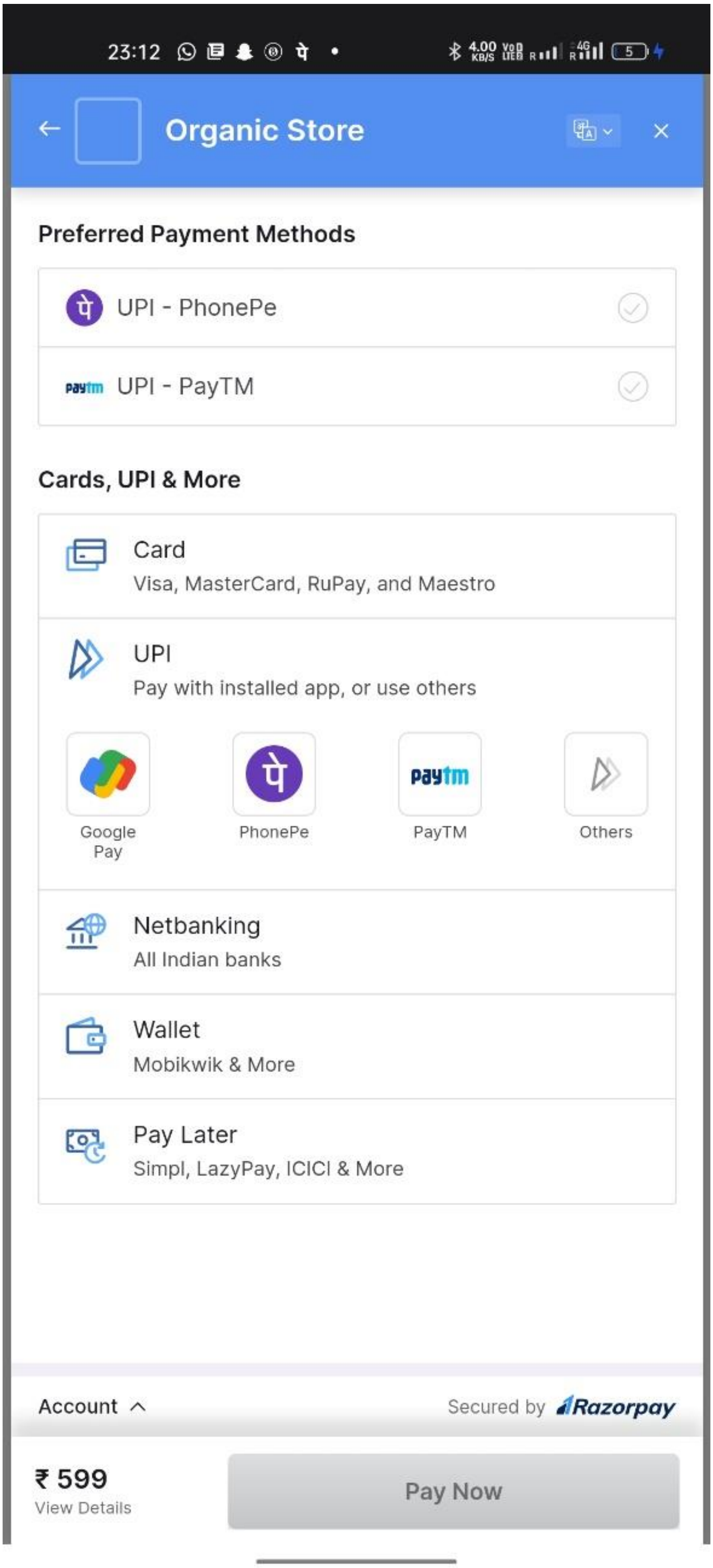
Date 20-12-2022

Product Count 12

Transaction Email shubhambhargava89@gmail.com

Transaction Id pay_KuFc90troUy8GL

Address:



Preferred Payment Methods

UPI - PhonePe

UPI - PayTM

Cards, UPI & More

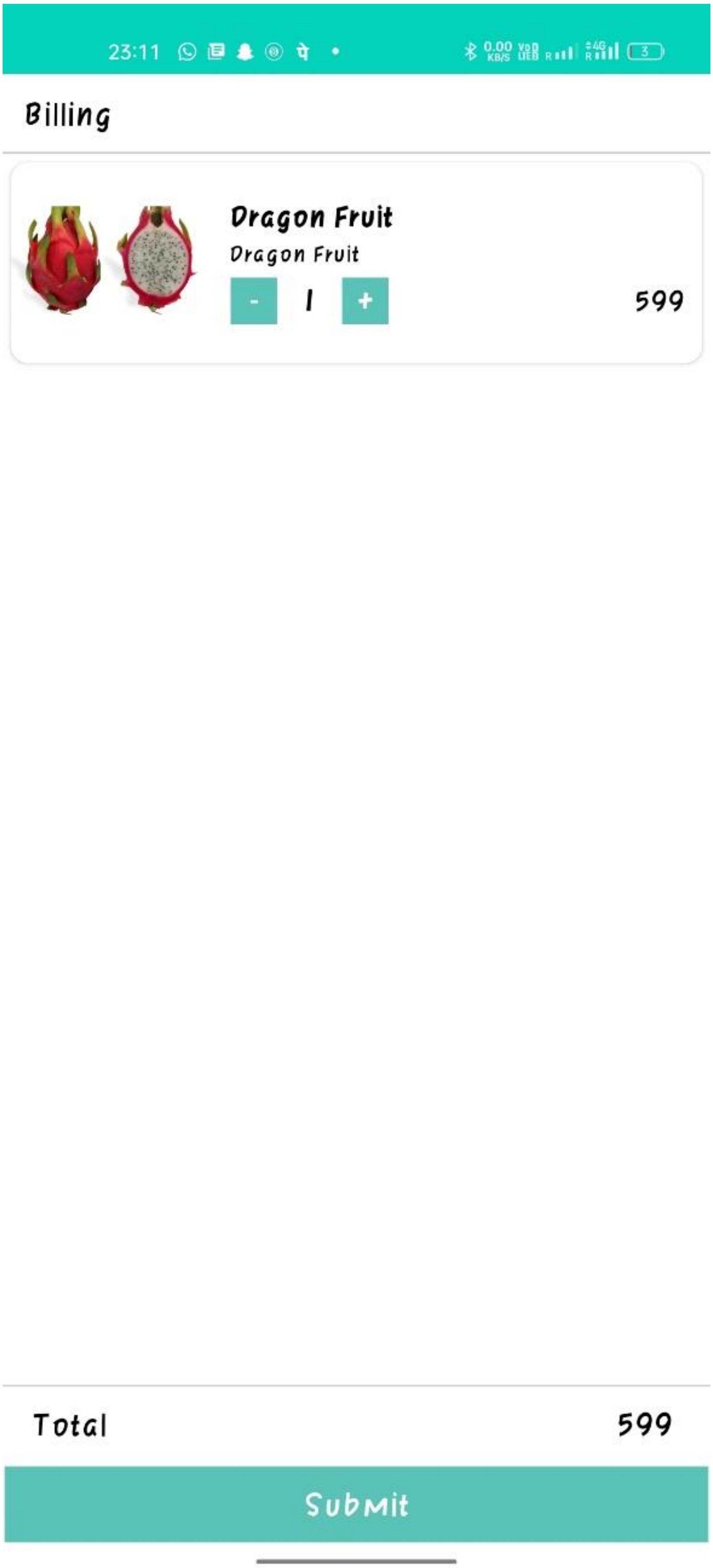
Card
Visa, MasterCard, RuPay, and Maestro

UPI
Pay with installed app, or use others

Netbanking
All Indian banks

Wallet
Mobikwik & More

Pay Later
Simpl, LazyPay, ICICI & More



23:11

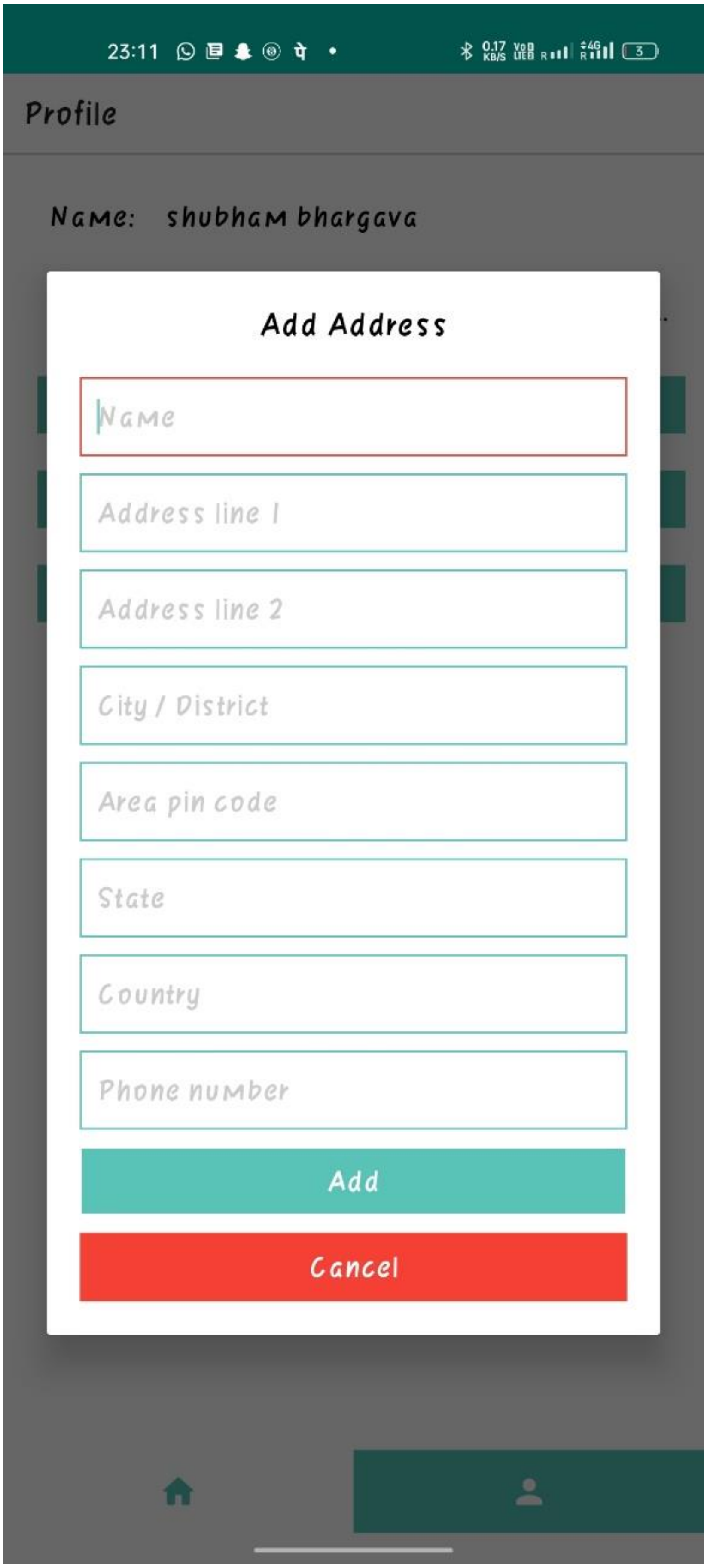
Billing

Dragon Fruit

Dragon Fruit

599

Total 599



Name: shubham bhargava

SAMPLE CODE

AdminMainActivity.java

```
package com.organicstore.activities.admin;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.view.View;

import android.widget.TextView;

import com.organicstore.R;

import com.organicstore.activities.AboutActivity;

import com.organicstore.authentications.LoginActivity;

import com.organicstore.databinding.ActivityAdminMainBinding;

import com.organicstore.preferences.Preferences;

import com.organicstore.utils.Constants;

import com.google.firebase.auth.FirebaseAuth;

import com.google.firebase.firestore.FirebaseFirestore;


import java.util.Objects;

public class AdminMainActivity extends AppCompatActivity {

    ActivityAdminMainBinding binding;

    View person_profile_view,

person_about_view,person_feedback_complete_view,

            person_add_product_view, person_orders_list_view;
    TextView textUsername;
    FirebaseAuth auth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        binding = ActivityAdminMainBinding.inflate(getLayoutInflater());
        setContentView(binding.getRoot());
        Constants.permissions(AdminMainActivity.this, AdminMainActivity.this);
        auth = FirebaseAuth.getInstance();
        init();
        setListeners();
        FirebaseFirestore.getInstance()
                .collection(Constants.ALL_USER_DB)
                .document(Constants.USER_DB)
                .collection(Constants.USER_ADMIN)

.document(Objects.requireNonNull(FirebaseAuth.getInstance().getUid()))
                .get()
                .addOnCompleteListener(task -> {
                    if (task.isSuccessful()){
//                        String username = ;
                        textUsername.setText(task.getResult().getString("type"));
                    }
                });
    }
    private void init(){
        person_profile_view = findViewById(R.id.person_profile_view);
        person_about_view = findViewById(R.id.person_about_view);
        person_feedback_complete_view =
findViewById(R.id.person_feedback_complete_view);
        person_add_product_view =
findViewById(R.id.person_add_product_view);
        person_orders_list_view = findViewById(R.id.person_orders_list_view);
        textUsername = findViewById(R.id.textUsername);
    }
    @Override
    public void onRequestPermissionsResult(int requestCode, @NonNull String[]
permissions, @NonNull int[] grantResults) {
        if (requestCode == Constants.REQUEST_PERMISSIONS &&
grantResults.length > 0){
            if (grantResults[0] == PackageManager.PERMISSION_GRANTED){
                Constants.setMessage(Constants.PERMISSION_GRANTED,this);
            }else if (grantResults[1] ==
PackageManager.PERMISSION_GRANTED){
                Constants.setMessage(Constants.PERMISSION_GRANTED,this);
            }else if (grantResults[2] ==
PackageManager.PERMISSION_GRANTED){
                Constants.setMessage(Constants.PERMISSION_GRANTED,this);
            }else if (grantResults[3] ==
PackageManager.PERMISSION_GRANTED){
```

```
                Constants.setMessage(Constants.PERMISSION_GRANTED,this);
            }else {
                Constants.setMessage(Constants.PERMISSION_DENIED,this);
            }
        }
        super.onRequestPermissionsResult(requestCode, permissions, grantResults);
    }
private void setListeners(){
        person_profile_view.setOnClickListener(v -> startActivity(new
Intent(getApplicationContext(),ProfileActivity.class)));
        person_add_product_view.setOnClickListener(v -> startActivity(new
Intent(getApplicationContext(),ProductViewActivity.class)));
        person_orders_list_view.setOnClickListener(v -> startActivity(new
Intent(getApplicationContext(),OrderViewActivity.class)));
        person_feedback_complete_view.setOnClickListener(v -> startActivity(new
Intent(getApplicationContext(), FeedbackViewActivity.class)));
        person_about_view.setOnClickListener(v -> startActivity(new
Intent(getApplicationContext(), AboutActivity.class)));
        binding.imageExit.setOnClickListener(v -> {
            auth.signOut();
            new Preferences(this).dataClear();
            startActivity(new Intent(getApplicationContext(), LoginActivity.class)
                    .addFlags(Intent.FLAG_ACTIVITY_NEW_TASK |
Intent.FLAG_ACTIVITY_CLEAR_TASK));
            finish();
        });
    }
}
```

Activity_customer_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/white"
    tools:context=".activities.customer.CustomerMainActivity">

    <FrameLayout
        android:id="@+id/frameLayout"
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:contentDescription="@string/app_name"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toTopOf="@id/viewBottomToolbar"/>

    <View
        android:id="@+id/viewBottomToolbar"
        android:layout_width="0dp"
        android:layout_height="50dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"/>

    <View
        android:id="@+id/viewBottomHomeToolbar"
        android:layout_width="0dp"
        android:layout_height="50dp"
        android:background="@color/purple_500"
        app:layout_constraintStart_toStartOf="@id/viewBottomToolbar"
        app:layout_constraintEnd_toStartOf="@id/viewBottomProfileToolbar"
        app:layout_constraintBottom_toBottomOf="@id/viewBottomToolbar"
        app:layout_constraintTop_toTopOf="@id/viewBottomToolbar"/>

    <ImageView
        android:id="@+id/image_home"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/ic_home_white"
        android:contentDescription="@string/app_name"
        app:layout_constraintStart_toStartOf="@id/viewBottomHomeToolbar"
        app:layout_constraintEnd_toEndOf="@id/viewBottomHomeToolbar"
        app:layout_constraintTop_toTopOf="@id/viewBottomHomeToolbar"
```

```
app:layout_constraintBottom_toBottomOf="@id/viewBottomHomeToolbar"/>

    <View
        android:id="@+id/viewBottomProfileToolbar"
        android:layout_width="0dp"
        android:layout_height="0dp"
        app:layout_constraintStart_toEndOf="@id/viewBottomHomeToolbar"
        app:layout_constraintEnd_toEndOf="@id/viewBottomToolbar"
        app:layout_constraintTop_toTopOf="@id/viewBottomToolbar"
        app:layout_constraintBottom_toBottomOf="@id/viewBottomToolbar"/>

    <ImageView
        android:id="@+id/image_profile"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/ic_person_purple"
        android:contentDescription="@string/app_name"
        app:layout_constraintStart_toStartOf="@id/viewBottomProfileToolbar"
        app:layout_constraintEnd_toEndOf="@id/viewBottomProfileToolbar"
        app:layout_constraintTop_toTopOf="@id/viewBottomProfileToolbar"

app:layout_constraintBottom_toBottomOf="@id/viewBottomProfileToolbar"/>

</androidx.constraintlayout.widget.ConstraintLayout>
```