Project Report

On

E-commerce Bot

In partial fulfillment for the award of the degree Of

BACHELOR OF COMPUTER APPLICATION

[B.C.A]

Year 2022-2023

SUBMITTED BY: **GUIDED BY:**

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BCA-6th SEMESTER Submitted

to:

SHRI SHAMBHUBHAI V. PATEL COLLEGE OF

COMPUTER SCIENCE & BUSINESS

MANAGEMENT

Affiliated to

Veer Narmad South Gujarat University

Acknowledgement

I would like to thank my teacher Prof. Hardik Gangadwala for helping me with this project. He allowed me to work on this project. Along with that, I would also want to thank to sir who helped me in finalizing this project within a limited time frame. Without them, I would not have been able to complete this project.

We feel our luck really favors us a lot because we have Prof. Hardik Gangadwala as our project guide .we must thanks him for his advices & suggestions and making all resources available for us during this project.

At last, I would like to extend my heartfelt thanks to those who were involved in this project directly or indirectly to complete this project, because without their help this project would not have been successful.

Jemil Mangukiya

Shri Shambhubhai V. Patel College of Computer Science & Business Management

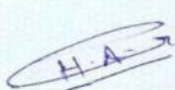Near I.C.Gandhi School, Sumul Dairy Road, Surat. (Gujarat) India.

CERTIFICATE

This is to certify that the project entitled ___E-Commerce Bot___

has been carried out by Mr./Ms. ___MANGUKIYA JEMIL NAGJIBHAI___

_____ of Bachelor of Computer Application, Semester VI
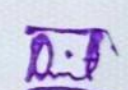
Exam No. ___1931___

towards fulfillment of the course, for the Academic Year 2022-23.

Mentor/Guide
Date: 17-04-2023

I/C. Principal
Date:

PROJECT OF B.C.A.	
Academic Year:	2022 - 23
Approved by:	
	Examiners

INDEX

1.Introduction

E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, businesstoconsumer, consumer-to-consumer or consumer-to-business.

E-commerce shops have become part of our daily lives. Technological advancement has made it possible for people to sit in the convenience

of their homes and still shop online without going to a physical shop. World have also joined the trend of e-commerce business, so this project is meant to design an eCommerce online shop so that the people from across all over the world will be able to purchase their goods and services online.

As the fastest-growing facet of the Internet and other information technologies, EC offers functionality and new ways of doing business that no company can afford to ignore. The basis for moving to electronic commerce is a belief that electronic markets have the potential to be more efficient in developing new information-based goods and services and finding global customers and trading partners to conduct business. Electronic commerce via the Internet or the next generation Internet Protocol, IPv6, will change business institutions, operations, and products or services as we know them today, just as the telephone, TV, fax, and e-mail changed the way businesses and consumers communicate.

The Web is one of the most revolutionary technologies that change the business environment and has a dramatic impact on the future of electronic commerce (EC). The future of EC will accelerate the shift of the power toward the consumer, which will lead to fundamental changes in the way companies relate to their customers and compete with one another. The immense popularity of the Internet in recent years has been fuelled largely by the prospect of performing business online. More and more companies set up their corporate LANs by Intranet, and apply Extranet and Internet to work collaboratively with their customers, suppliers, and partners. The Internet can bring down physical barriers to commerce, almost immediately giving even the smallest business access to untapped markets around the world. At the same time, consumers can conduct business and make purchases from companies previously unavailable to them. Furthermore, companies can place marketing material on Internet servers ranging

from simple advertising to comprehensive virtual brochures. In today's global marketplace, fast reliable information is a necessity for most companies to attain some kind of competitive advantage. For instance, companies can create a virtual marketplace in which to sell their products. This virtual market is untapped and could reach millions of users on the Internet 24 hours a day.

2.Requirement gathering

- **Find some similar app to get brief idea about app from play store**
- **Learn about firebase database**
- **App reference from various application – website**

1. Project Profile

- **Project name** : **E – commerce application**
- **Front end** : **Dart**
- **Back end** : **Firebase database**
- **Guide** : **prof Hardik Gangadwala**
- **Operating system** : **android Os**
- **Developed by** : **Jemil Mangukiya ,**

- **Submitted to** : **Shri Shambhubhai V patel college of cs and bm , Surat**

2. System environment

Hardware used :

Microprocessor	Intel(R) Core(TM) i5-10210U CPU @ 1.60GHz 2.11 GHz
RAM	8 GB
Hard disk	1 TB HDD , 256 SSD

Software used :

software	Android studio
Operating system	Windows 11
App os	Android
database	Firebase

3.Objective
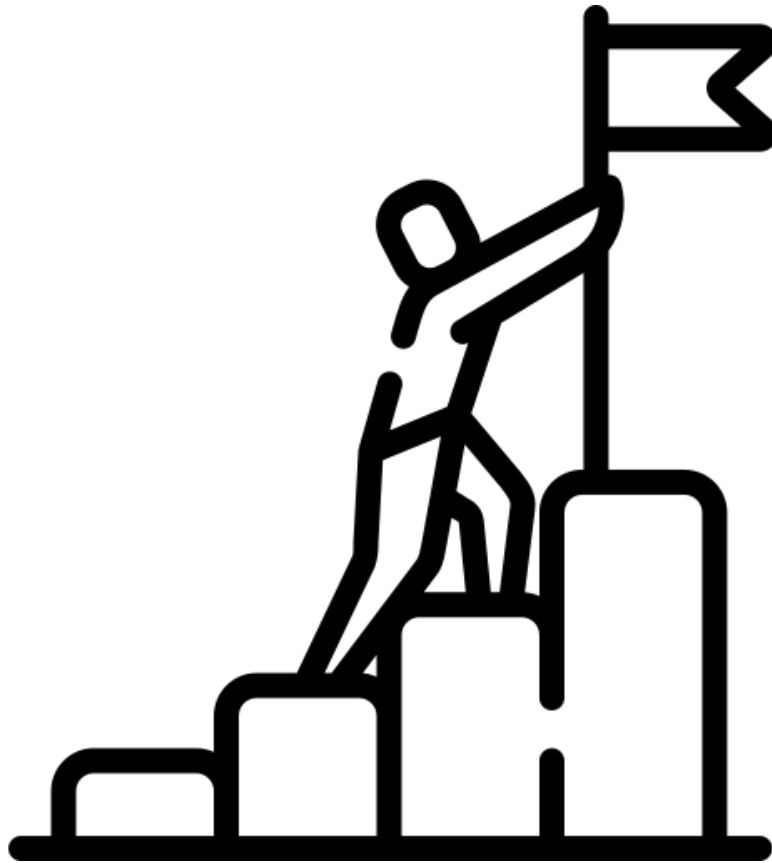
This project is all about selling the product online to customer and provide various facilities to admin

Now the Indian government has announced selling all the products online while it was not legal to do so. So with the help of this project I want to provide so many discounts to the customers, people will get up to 70% discounts on all the bag products that they buy from the local shop at the market retail price.

The only thing to be done from the customer end is to install the mobile app and order using our mobile app; we will deliver at their door steps.

For the design of the app, I am using the android studio using which I give to my app design and as well as functionality. The app will consist of many widgets with the help of several layout methods to layout the components of the android app. For the

back-end, I am using Google-firebase which will store the information about our products and the user on the internet.

With this project idea, I have learned so many things in the field of computers and how e-commerce websites work online. And I believe that it is important to do so because there are so many companies out there in India who sail the products at the price of gold and they are taking so much money out of our national. So this will be good to implement this project idea.

4.technology used

Flutter

In general, creating a mobile application is a very complex and challenging task. There are many frameworks available, which provide excellent features to develop mobile applications. For developing mobile apps, Android provides a native framework based on Java and Kotlin language, while iOS provides a framework based on ObjectiveC/Swift language. Thus, we need two different languages and frameworks to develop applications for both OS. Today, to overcome form this complexity, there are several frameworks have introduced that support both OS along with desktop apps. These types of the framework are known as **cross-platform** development tools.

The cross-platform development framework has the ability to write one code and can deploy on the various platform (Android, iOS, and Desktop). It saves a lot of time and development efforts of developers. There are several tools available for cross-platform development, including web-based tools, such as Ionic from Drifty Co. in 2013, Phonegap from Adobe, Xamarin from Microsoft, and React Native form Facebook. Each of these frameworks has varying degrees of success in the mobile industry. In recent, a new framework has introduced in the cross-platform development family named **Flutter** developed from Google.

Flutter is a UI toolkit for creating fast, beautiful, natively compiled applications for mobile, web, and desktop with one programing language and single codebase. It is free and open-source. It was initially

developed from **Google** and now manages by an **ECMA** standard. Flutter apps use Dart programming language for creating an app. The **dart programming** shares several same features as other programming languages, such as Kotlin and Swift, and can be transcompiled into JavaScript code.

Flutter is mainly optimized for 2D mobile apps that can run on both Android and iOS platforms. We can also use it to build full-featured apps, including camera, storage, geolocation, network, third-party SDKs, and more.

Features of Flutter

Flutter gives easy and simple methods to start building beautiful mobile and desktop apps with a rich set of material design and widgets. Here, we are going to discuss its main features for developing the mobile framework.
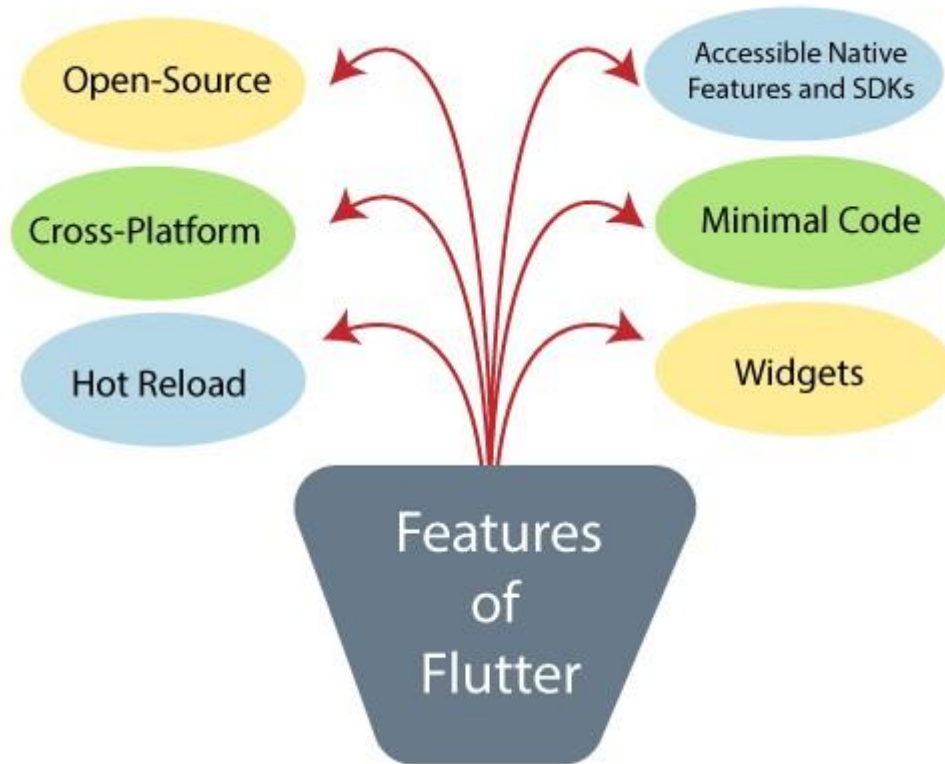
Open-Source Flutter is a free and open-source framework for developing mobile applications.

Cross-platform

This feature allows Flutter to write the code once, maintain, and can run on different platforms. It saves the time, effort, and money of the developers.

Hot Reload

Whenever the developer makes changes in the code, then these changes can be seen instantaneously with Hot Reload. It means the changes immediately visible in the app itself. It is a very handy feature, which allows the developer to fix the bugs instantly.

Accessible Native Features and SDKs

This feature allows the app development process easy and delightful through Flutter's native code, third-party integration, and platform APIs. Thus, we can easily access the SDKs on both platforms.

Minimal code

Flutter app is developed by Dart programming language, which uses JIT and AOT compilation to improve the overall start-up time, functioning and accelerates the performance. JIT enhances the development system and refreshes the UI without putting extra effort into building a new one.

Widgets

The Flutter framework offers widgets, which are capable of developing customizable specific designs. Most importantly, Flutter has two sets of widgets: Material Design and Cupertino widgets that help to provide a glitch-free experience on all platforms.

Advantages
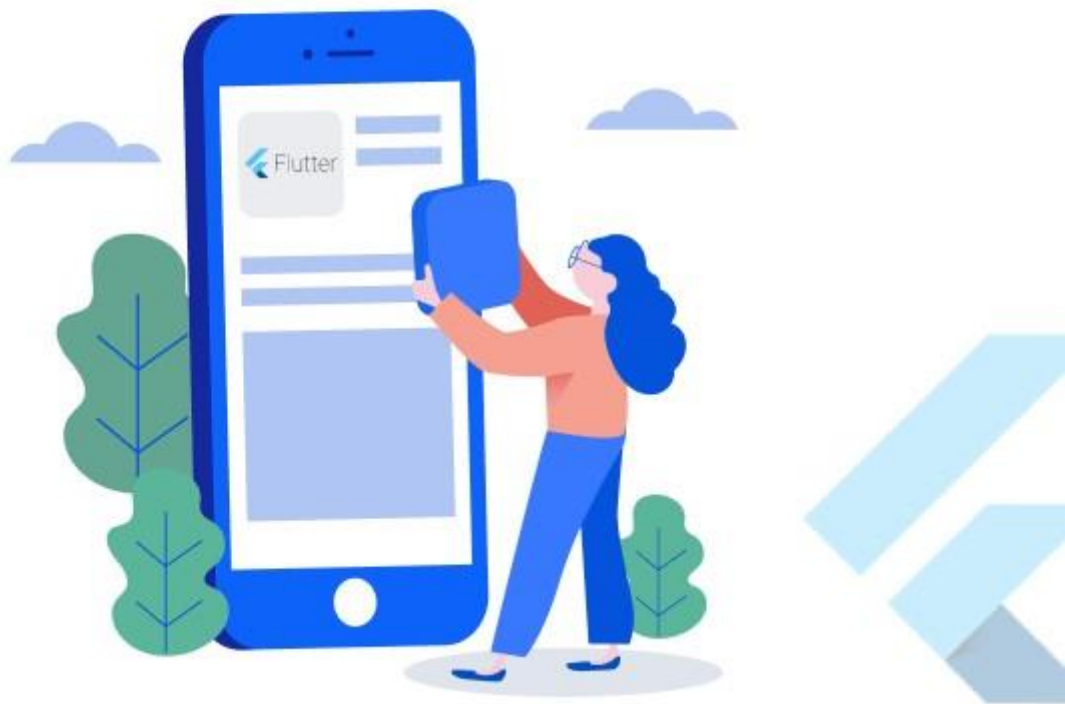
○ It makes the app development process extremely fast because of the hot-reload feature. This feature allows us to change or update the code are reflected as soon as the alterations are made. ○ It provides the smoother and seamless scrolling experiences of using the app without much hangs or cuts, which makes running applications faster in comparison to other mobile app development frameworks. ○ Flutter reduces the time and efforts of testing. As we know, flutter apps are cross-platform so that testers do not always need to run the same set of tests on different platforms for the same app.

- It has an excellent user interface because it uses a design-centric widget, high-development tools, advanced APIs, and many more features.
- It is similar to a reactive framework where the developers do not need to update the UI content manually. ○ It is suitable for MVP (Minimum Viable Product) apps because of its speedy development process and cross-platform nature.

Disadvantages

○ The Flutter is a comparatively new language that needs continuous integration support through the maintenance of scripts. ○ It provides very limited access to SDK libraries. It means a developer does not have a lot of functionalities to create a mobile application. Such types of functionalities need to be developed by the Flutter developer themselves. ○ The Flutter apps do not support the browser. It only supports Android and iOS platforms. ○ It uses Dart programming for coding, so a developer needs to learn new technologies. However, it is easy to learn for developers.
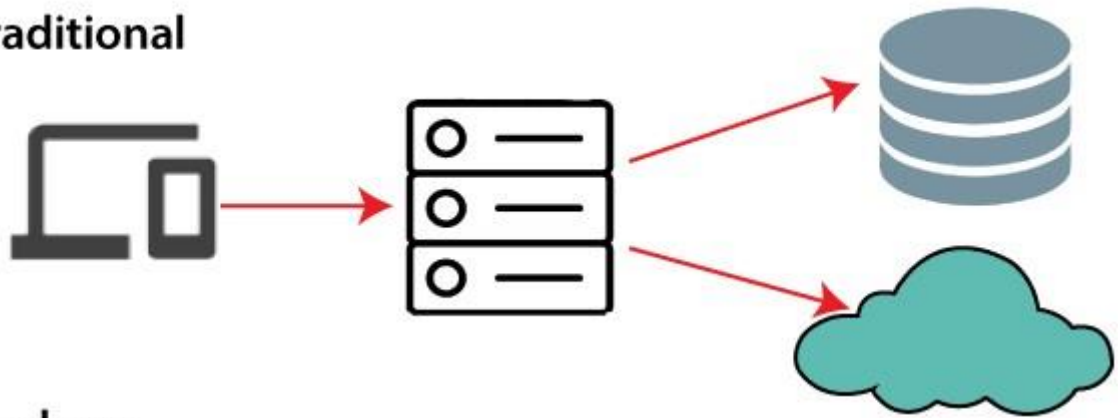
Firebase

In the era of rapid prototyping, we can get bright ideas, but sometimes they are not applicable if they take too much work. Often, the back-end is the limiting factor - many considerations never apply to server-side coding due to lack of knowledge or time.

Firebase is a Backend-as-a-Service(BaaS) which started as a YC11 startup. It grew up into a next-generation app-development platform on Google Cloud Platform. Firebase (a NoSQLjSON database) is a realtime database that allows storing a list of objects in the form of a tree. We can synchronize data between different devices.

Google Firebase is Google-backed application development software which allows developers to develop **Android, IOS,** and **Web apps**. For reporting and fixing app crashes, tracking analytics, creating marketing and product experiments, firebase provides several tools.

Traditional

Firebase

Client apps
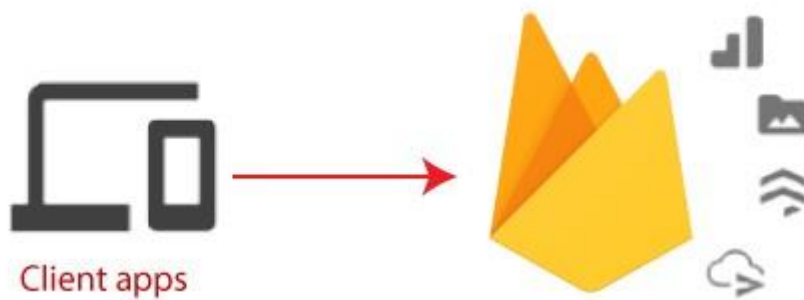
Firebase has three main services, i.e., a real-time database, user authentication, and hosting. We can use these services with the help of the Firebase iOS SDK to create apps without writing any server code.

DEVELOP

Realtime Database

Authentication

Cloud Messaging

Storage

Hosting

Test Lab

Crash Reporting

Analytics

GROW

Notifications

Remote Config

App Indexing

Dynamic Links

Invites

AdWords

EARN

AdMod
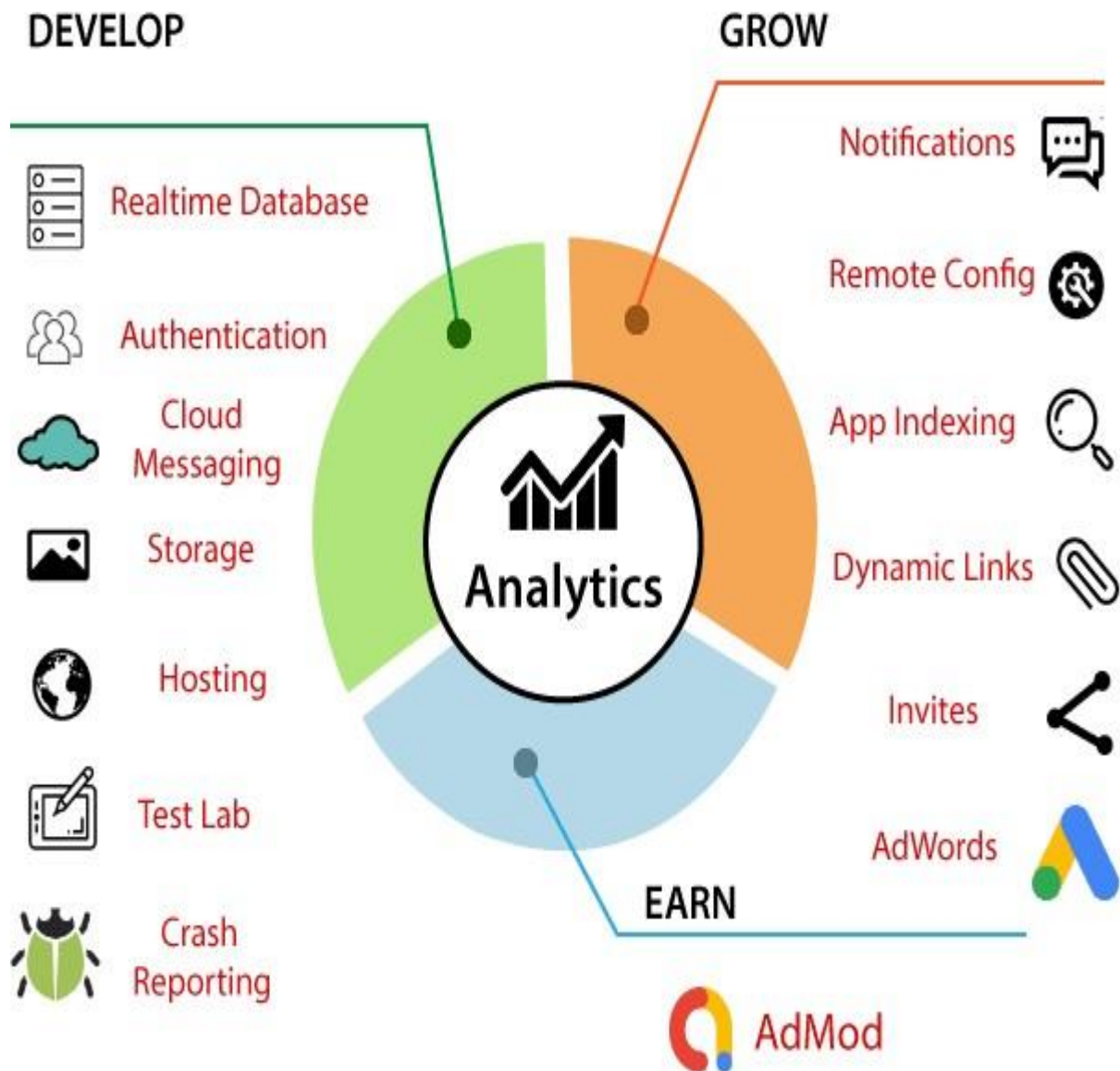
o Firebase is a real-time database. o It has massive storage size potential. o Firebase is serverless. o It is highly secure.

o It is the most advanced hosted BaaS solution. o It has minimal setup. o It provides three-way data binding via angular fire.

o It provides simple serialization of app state. o We can easily access data, files, auth, and more.

o There is no server infrastructure required to power apps with data. o It has JSON storage, which means no barrier between data and objects.

o   Firebase is not widely used, or battle-tested for enterprises. o It has very limited querying and indexing. o It provides no aggregation. o It has no map-reduce functionality. o It cannot query or list users or stored files.

Features of Firebase

Firebase has several features that make this platform essential. These features include unlimited reporting, cloud messaging, authentication and hosting, etc. Let's take a look at these features to understand how these features make Firebase essential
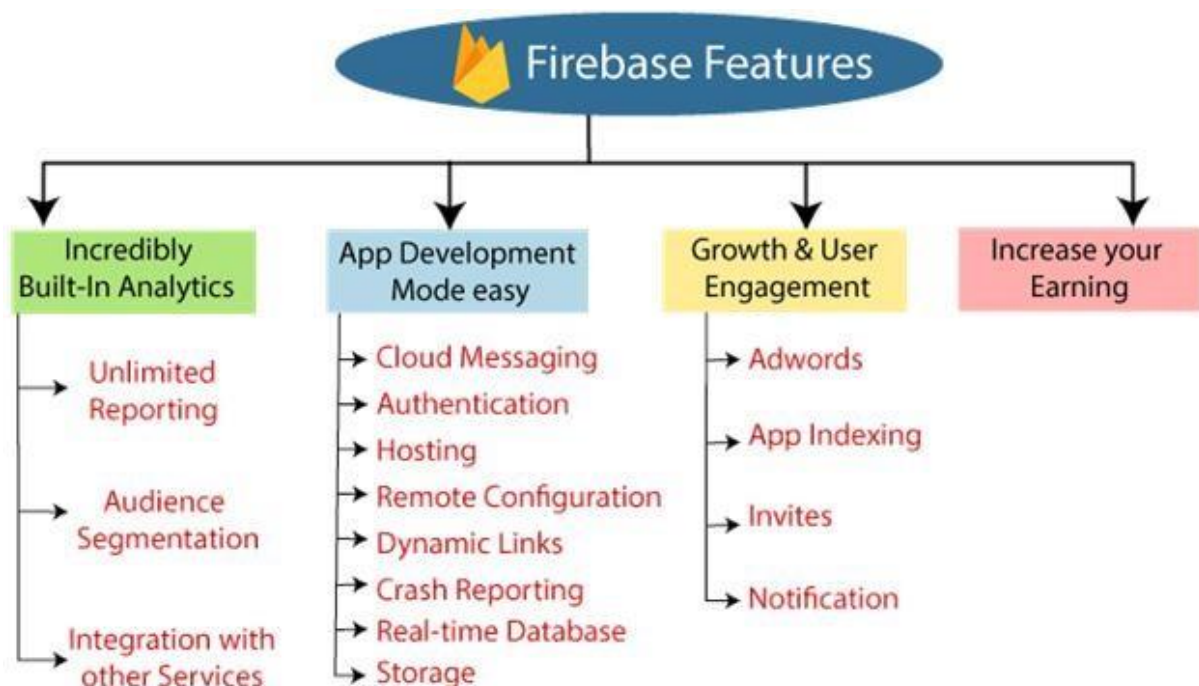
❼ Incredibly Built-In Analytics

The analytics dashboard is one of the best features of Firebase, which is equipped with. It is free and can report 500 event types, each with 25 attributes. The dashboard is top-notch for observing user behavior and

measuring various user characteristics. Ultimately it helps us to understand how people use our app so that we can better optimize it in the future.

Unlimited Reporting

It allows for reporting of 500 distinct events.

Audience Segmentation

We can identify custom audiences in the Firebase console based on device data, custom events, or user properties. After that, we can use these audiences that we specified with other Firebase attributes when targeting new features or notifications. **Integration with Other Services**

We can integrate Firebase with other services that can utilize our business apps such as Big Query, Firebase Notifications, Firebase Remote Configuration, Firebase CrashReporting, and Google Tag Manager.

❼App Development Made Easy

With Firebase, we can focus our time and attention on developing the best possible applications for our business. The operation and internal functions are very solid. They have taken care of the Firebase Interface. We can spend more time in developing high-quality apps that users want to use.

There are the following features which we can develop:

Cloud Messaging

Firebase allows us to deliver and receive messages in a more reliable way across platforms.

Authentication

Firebase has little friction with acclaimed authentication.

Test Lab

Test in the lab instead on your users. **Hosting**

Firebase delivers web content faster.

Remote Configuration

It allows us to customize our app on the go.

Dynamic Links

Dynamic Links are smart URLs which dynamically change behavior for providing the best experience across different platforms. These links allow app users to take directly to the content of their interest after installing the app - no matter whether they are completely new or lifetime customers.

Crash Reporting

It keeps our app stable.

Real-time Database

It can store and sync app data in real-time.

Storage

We can easily store the file in the database.

❼Growth and User Engagement

One of the most important aspects of application development is being able to develop and engage with users over time. Firebase has a lot of built-in features, which ensures that it is exactly what we do. With the platform leading to commercial apps, it is really at the center of what makes Firebase so great.

Here are some user interaction aspects which make development a piece of cake:

AdWords

Linking AdWords is very easy, and with it, we can segment and define our user base using Firebase Analytics. Also, it is easy to improve our targeting in marketing advertising campaigns. Some other benefits include conversion tracking, cross-network, attribution networks, and LTV (Calculating Customer Lifetime Value).

App Indexing

With app indexing, we can work on aspects like re-engaging with our app, especially by surfing the in-app content within Google search results. It will also help in ranking our application in Google search results.

Invites

It is a perfect tool for referrals and sharing. Get the help of our users to develop our app easily via email or SMS, allowing their existing users to share our app or in-app content. If we use this feature in combination with promotions, then we can also work towards acquiring new customers and retaining our existing customers.

Notifications

We can manage information campaigns very easily, including the ability to set and schedule messages to engage users at the right time of day. These notifications are completely free. These are unlimited for both iOS and Android. There is only one dashboard to worry about, and if we integrate with Firebase Analytics, we can use various user segmentation features.

❼Increase Your Earnings

Of course, the thing about having an app or any other business strategy is that we can increase our earnings. With the feature of AdMob, we can monetize our app, considering the best possible experience for our users. Showing real-time ads to millions of Google advertisers, choosing a format which suits our app, and working with over 40 top

ads networks using AdMob Mediation, we can make app development well worth it, while speaking silently.

4.1 system components

Following Are TheFeatures Of The System Components :

1.New Member Registration

This Component Used To Register New Member In The Website Database. Using This Interface Website Can Introduce New Member To Website As Well As Member Can Modify His/Her Detail To The Database.

2. Purchase Products

Registered Customers Can View All Details Of The Products And Also They Purchase The Products With Amount Of Quantity. They Want Online With The Discount Which Is Offered By The Vendor.

3.Check Out And Shipping

Customer Can Purchase The Product That He/She Wants And Also Ship That Products To The Specified Address Online And He/She Also Specify Billing Address. If They Want Pay The Bill At The Another Place So Only They Want To Specify Only That Address.

❼admin

1.Manage Members

This Component Used For Manage Members Of The Website So That Keep Track Of Members. Admin Has Fully Rights For Remove Members And Also For Seeing The Members Personal Information.

2. Manage Categories

This Component Used For Manage Categories Of The Products So That Entry Of The Product And All Management Should Be Easily Done By The Admin.

3.Manage Sub Categories

This Component Used For Manage Sub Categories Of The Categories For Further Management Of The Categories Wise Nested Data.

4.Manage Color

This Component Used For Manage Color Of The Products So That Entry Of The Product And All Management Should Be Easily Done By The Admin.

 5.Manage Products

This Component Used For Manage All The Products Along With Their Description, Discount, Quantity, Price And Picture Management.

6.Manage Product Images

This Component Used For Manage Images Of The Products So That Entry Of The Product Images And All Management Should Be Easily Done By The Admin.

7.Manage Review

This Component Used For Manage Review Of The Products So That Entry Of The Review Is Active/Deactive And All Management Should Be Easily Done By The Admin.

❼User

This Component Used For application-User To View Information Of The Products And It Has Right For Registration So That It Can Be Become A Member Of The application So That It Can Use And Facility Other Options Of The application.

Drawbacks of system

Their Existing System Was Limited Only For Saree And So That They Want To Introduces New Things In Their Existing System. They Have Limitation In Existing System That No Other New Supplier Can Add Product To The Site But Now They Manages Supplier To Introduce New Products.

They Have Limited Categories Of The Products.

4.2 Feasibility Study

1.Technical Feasibility

This application Does Require That Much Of Higher & Advanced Technology. It Requires Database Interaction And It Also Requires To Be Accessed Via application. This Can Be Easily Done. Also These Should Be A Facility Of Online Shopping And Also Shipping For The Particular Products On Line. We Are Sending All The Products Information With The All Products Attributes So The Members Can Have Reliable Navigation And Make Proper Decision For Purchase Products. It Must Be Developed Within The Three Months Of Period Excluding The Time Period For The Testing , Validation And Verification. Thus It Seems That The Project Is Technically Feasible To Do.

2. Economical Feasibility

In This Project, We Will Require To Have A Internet Connection For use application. Such At The Developer End It Needs The Good Server With High Capacity Of RAM And CPU Processors So Can It Can Handle Lots Of Members At Time Online Communications, But As It Will Be needed Some extra cost for purchasing merchant id for creating payment system.

3.operational Feasibility

The New System Can Be Beneficial Only If It Satisfies The Organization Requirements, In Such A Way That Resource Utilization And Optimum Outcome Is Justified. A New System Should Not Only Be Robust But Should Also Be Able To Work Simultaneously With Other Systems. Operational Feasibility Means That New System Should Not Affect Any Existing System During The Development Phase Or Even In The Implementation Phase. Following Are Some Points Underlying The Operational Feasibility Of The System- As The Development Proceeded Many Doubts Got Cleared Out. Our Project Guide – Bipin jadav Guided Us To Take Proper Care And Check For The Operational Feasibility Of The System. Efforts Were Made To Optimize The Human Efforts In Data Collection, Storage, Retrieval, Security And Presentation. The Proposed System Made Best Efforts In Achieving Necessary Function And Performance, As Required By The User And Keeping In Mind Some Infrastructure Constraints.

5.Proposed system

5.1 Scope

❼   **Main aim of the system**

Application Provides A Way For Online Shopping By Viewing Different Products And Online Shopping Allows Consumers To Shop At The Convenience Of Their Own Home, And To Save Traveling Time To Retail Stores And Spend Their Time On Other Important Tasks And Hobbies.

Scope of system

1. Application Can Able To Manage The Members And Also Their Cart Details Of A Products Online.

2. application Can Able To Provide The Best Security Level To The Members Of The Site For Authenticate Members Online.

3. application Is Able To Introduce New Schemes That Can Be Attract Customer For Purchasing The Products.

4. Consumers Are Freed From The Pressure To Buy From The Vendors And Can Spend More Time To Make Wise Purchase Decisions.

5. application Is Also Good At The Security Level Means That The WebUser Or Other Unauthorized Web User Will Not Be Able To Get All Details Of The Members.

6. Application Gives The Best Way For The Registration Of New user.

7. Members And Join The Portal.

Expected Advantages

ADVANTAGE

❼High Security

There Is High Security Mechanism Provided By The Proposed System. No Unauthorized Person Can Make Change In The Data Those Are Stored In Application. Only Authorized Person Can Change & Also Can Make Login.

❼Less Time Required

In Our Application, All The Processes Are Carried Out By Mobile So Obviously. It Will Require Time Than Traditional Inventory System And In That Sense, It Will Require Less Time To Complete Transactions And Can Process Data Very Fast.

❼High Amount Of Accuracy

In Our Application System There Are Less Amount Of Human Activities Are Involved In That Case It Will Have Less Effect In Our Accounts. The Application Will Perform All Calculation And Manipulation Automatically; In That Case The Data That We Receive Will Be Accurate And Much More Reliable Than The Data That Generated Previously.

❼Easy To Use

E-commerce Is Accessible Round The Clock. You Can Buy Whatever You Want Even At 3 A.M. In The Morning. You Can Choose From A Wider Variety Of Things Available For You To Shop Which May Not Be Available In The Local Brick And Mortar Stores. You Also Have The Benefit To Do All From The Comfort Of Your Own Home. When You Buy From Online Store You Have The Comfort To Take Your Time While Checking For The Things Of Your Choice, This Will Lead You To A Simple And Quick Way To Perform Price Comparison Unlike The Dissatisfied And Hurried Shopping You Do In The Local Stores.

6.1 Data Dictionary

1. Authentication :

	Primary / Not null	length	Datatype
Uid	Primary key	25	varchar
Email id	Not null	20	varchar
Password	Not null	10	varchar

Table 6..1 Authentication table

2. User :

	Primary key / Not null	length	Datatype
Uid	Primary key	20	int
Account type	Not null	20	varchar
Address	Not null	20	varchar
City	Not null	20	varchar
Country	Not null	20	varchar
Email	Not null	20	varchar
Latitude	Not null	20	varchar
Longitude	Not null	20	varchar
Name	Not null	20	varchar
Phone	Not null	20	varchar
Profile image	Not null	20	varchar
State	Not null	20	varchar
timeStamp	Not null	20	varchar

Table 6.2 user table

3. Items :

	Primary key / not null	length	Datatype
Pid	Primary key	10	int
Name	Not null	20	Varchar
Cost	Not null	20	int
Price	Not null	20	Int

	Primary key / Not null	length	Datatype
Quantity	Not null	20	int

Table 6.3 items table

4. <u>Products :</u>

	Primary key / Not null	length	Datatype
Product id	Primary key	20	Int
Category	Not null	20	Varchar
Description	Not null	100	Varchar
Icon	Not null	20	Varchar
Price	Not null	20	Varchar
Title	Not null	20	Varchar
Discount Price	Not null	20	Varchar
Quantity	Not null	20	Varchar

Table 6.4 Products table

5. <u>Orders :</u>

	Primary key / Not null	length	Datatype
Product id	Primary key	20	Int
Category	Not null	20	Varchar
Description	Not null	100	Varchar
Icon	Not null	20	Varchar
Price	Not null	20	Varchar
Title	Not null	20	Varchar

7.Detail planning

7.1 System Flow Chart
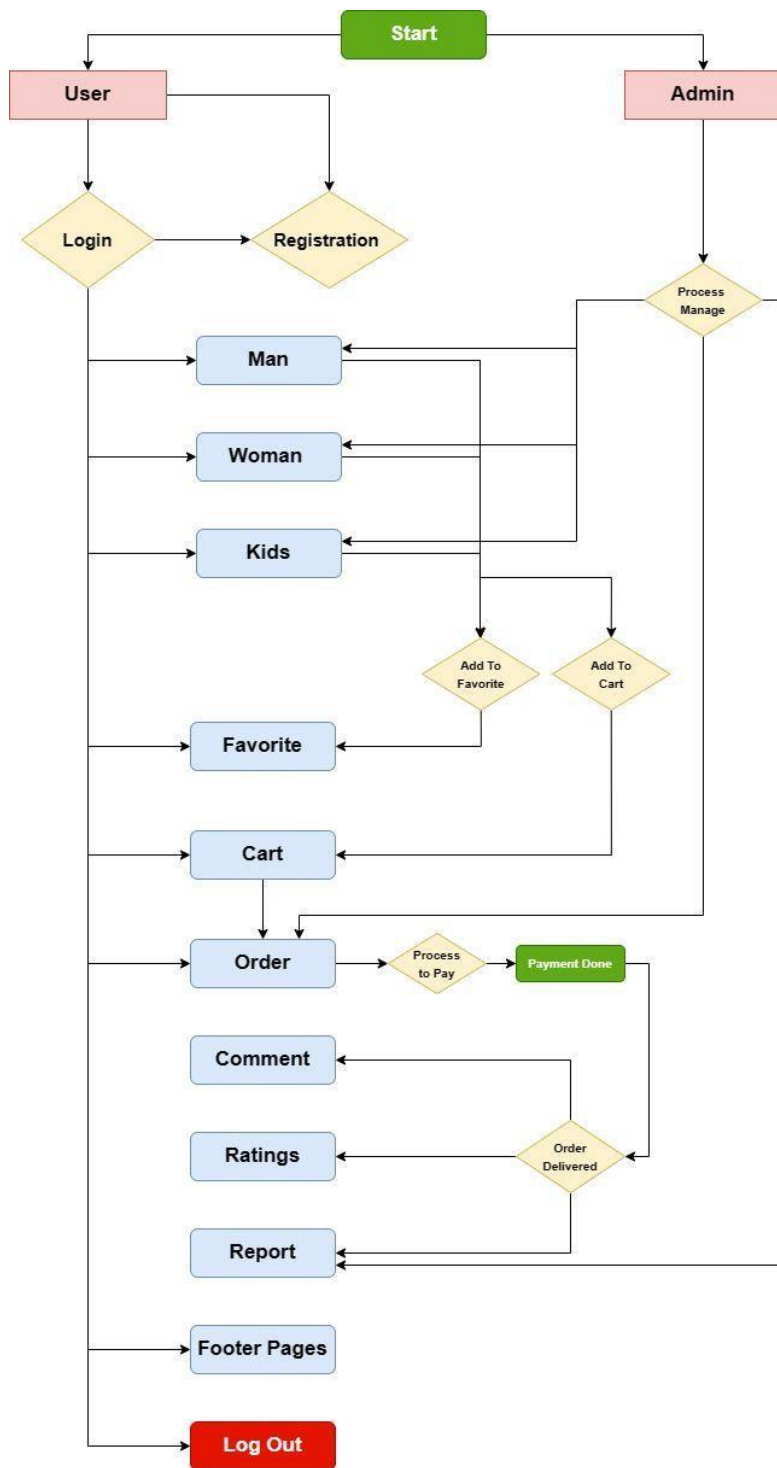
7.2 DFD

The Data Flow Diagrams Are An Intuitive Way Of Showing How Data Is Processed By A System. The Symbols Used In The DFD For This Project Are Shown Bellow.
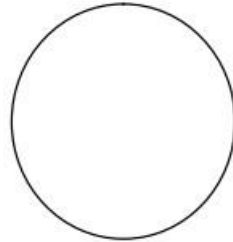
Data Flow :

Following Symbol Is Used To Show Data Flow. The Data Flow Is Packet Of Data

Processes :

People, Procedures Or Devices That Use Or Produce Data.

Source

Or Destination Of Data :

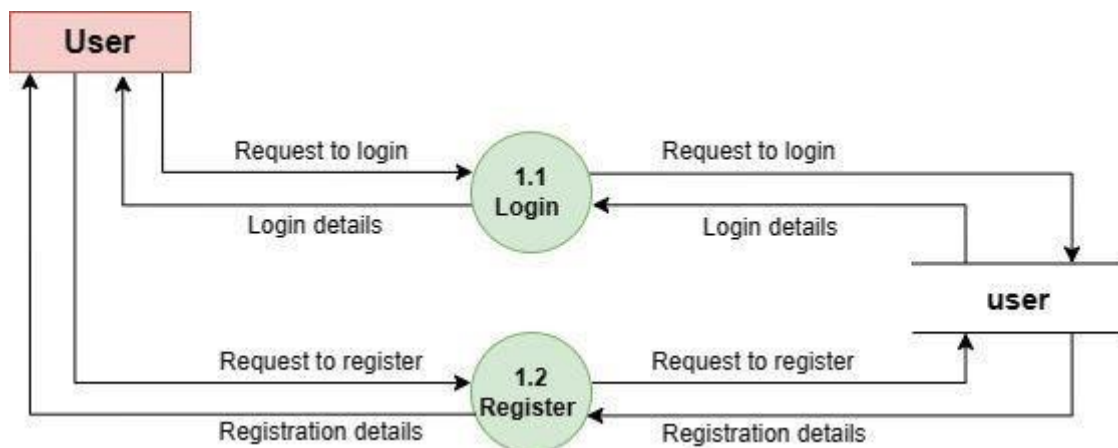These Are The Entities, Which Interact With The System From Outside Its Boundaries.

Data Storage :
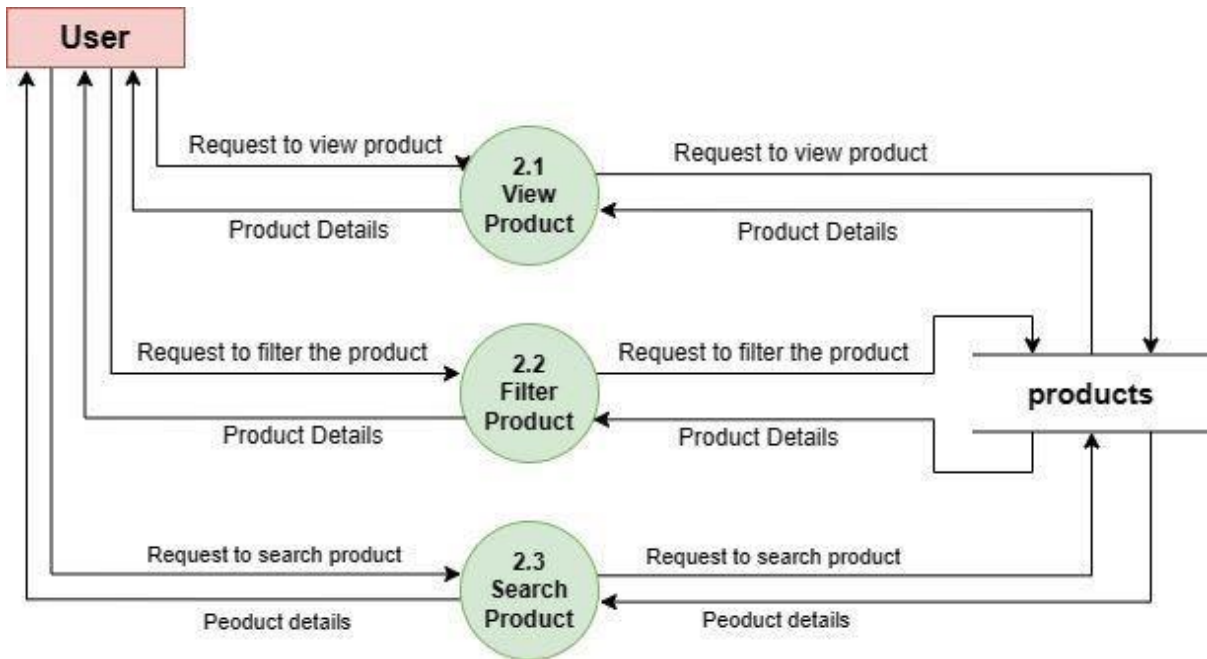
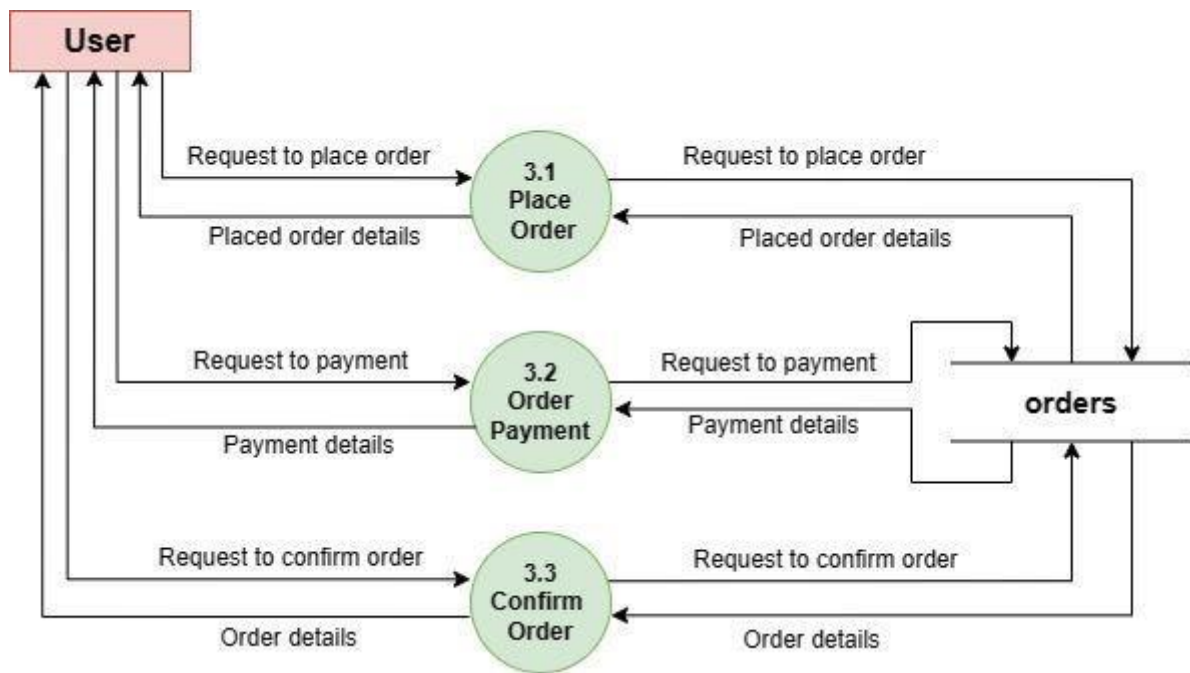Here Data Are Stored Or Referenced Process In The System.

7.2.1 Context level

7.2.2 Level 1 User side

7.2.3 level 1 user side

7.2.4 level 2 user side
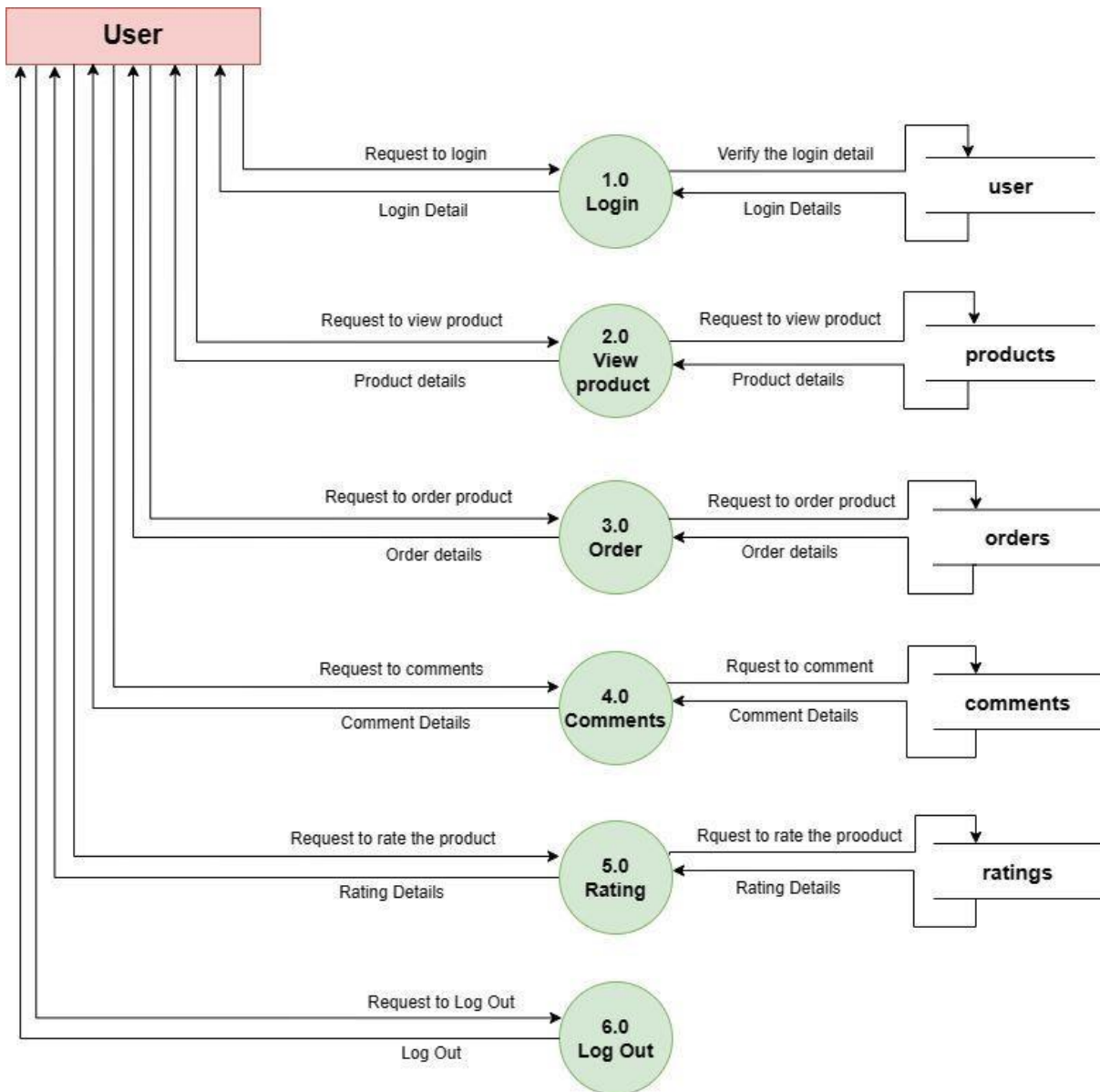
7.2.5 Context level
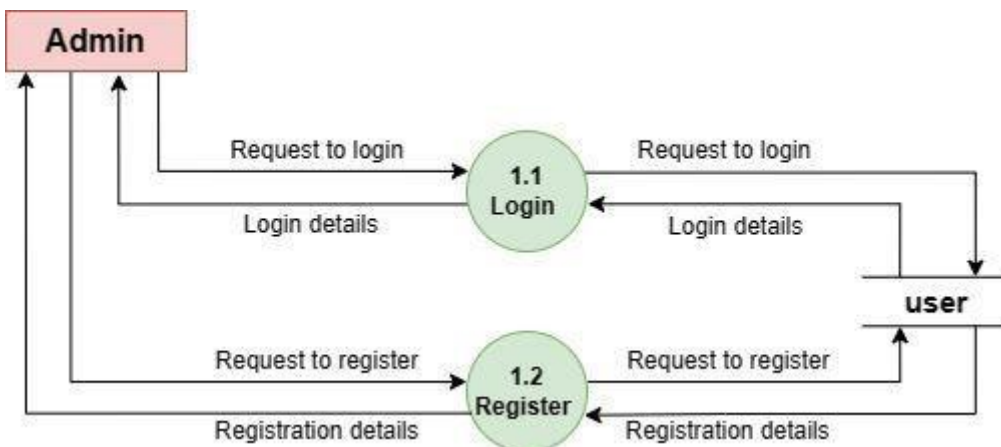
7.2.6 level 1 admin side

7.2.7 level 1

Admin

Request to add sub-category
4.1 Add Sub-Category
Request to add Sub-category
Add sub-category details
Add sub-category details

Request to update sub-category
4.2 Update Sub-Category
Request to update sub-category
Update sub-Category Details
Update sub-Category Details

Request to delete sub-category
4.3 Delete Sub-Category
Request to delete sub-category
Delete sub-Category details
Delete sub-Category details

categories

Admin

Request to fresh order
5.1 Fresh Order
Request to fresh order
Fresh order details
Fresh order details

Request to change order status
5.2 Update Status
Request to change order status
Order status details
Order status details

Request to cancel order
5.3 Cancel Order
Request to cancel order
Order canceled details
Order canceled details

orders

7.2.8 level 2

Admin

Request to Login	**1.0 Login**	Request to Login
Login Confirmation		Login Confirmation

user

Manage Products	**2.0 Product**	Request to manage products
Products Detail		Product Detail

products

Manage Category	**3.0 Category**	Request to manage Category
Category Detail		Category Detail

genres

Manage Sub-Category	**4.0 Sub-Category**	Request to manage Sub-category
Sub-Category Detail		Sub-category Detail

categories

Manage Orders	**5.0 Order**	Request to manage Order
Order Detail		Order Detail

orders

Manage Home page carousel Images	**6.0 Homepage Images**	Request to manage Home Page carousel Images
Home Page carousel Images Detail		Home Page carousel Images Detail

carouselitems

Manage home page mini images	**7.0 Mini Images**	Manage home page mini images
Home page mini images details		Home page mini images details

miniimages

Manage Log Out	**8.0 Log Out**	
Log Out		

7.3 ER diagram

8.Design

8.1 Login table

8.2 image table

8.3 category table

https://topecommerce-fab5d-default-rtdb.firebaseio.com/

▾— Female

  ▾— Dress

    — subcgName: "Dress"

    — subcgimage: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/category%2FDress?alt=media&token=77d59005-3f0e-

▾— Kids

  ▾— Baby Overalls

    — subcgName: "Baby Overalls"

    — subcgimage: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/category%2FBaby%20Overalls?alt=media&token=6eef048f

▾— Male

  ▾— Shirt

    — subcgName: "Shirt"

    — subcgimage: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/category%2FShirt?alt=media&token=db66b2d0-484d-4

8.4 order table

▼ — Products
  ▼ — -NSGhQuQzV3p5MXPbHIJ
    — Color: "Black"
    — Pname: "Shirt"
    — Price: 2000
    — ProductId: "-NSGbWfORhywwyDiorBR"
    — Quantity: 1
    — Size: "S"
    — images: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/Products%2FMale%2FShirt%2FShirt55?alt=media&t
  — ShippingAddress: "198 , sareeta sic, surat, gujarat 123456, India"

— Status: "Accepted"
— Total: 2000
— TotalProducts: 1
— TrackNo: "1000739307"
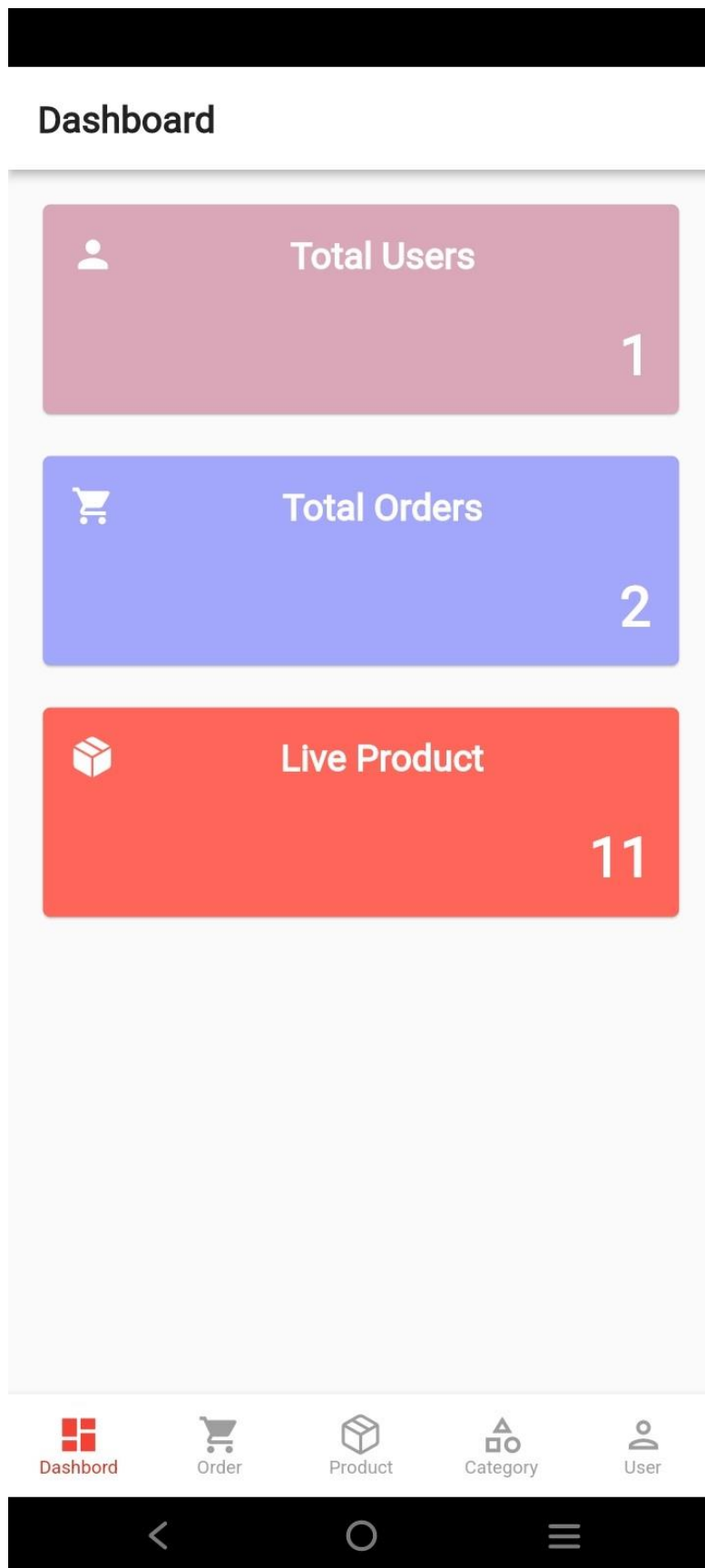— UserId: "YdorGJVwNVOGOE3uXedWkYhJ9go1"

8.5 product table

- ▼ — Products
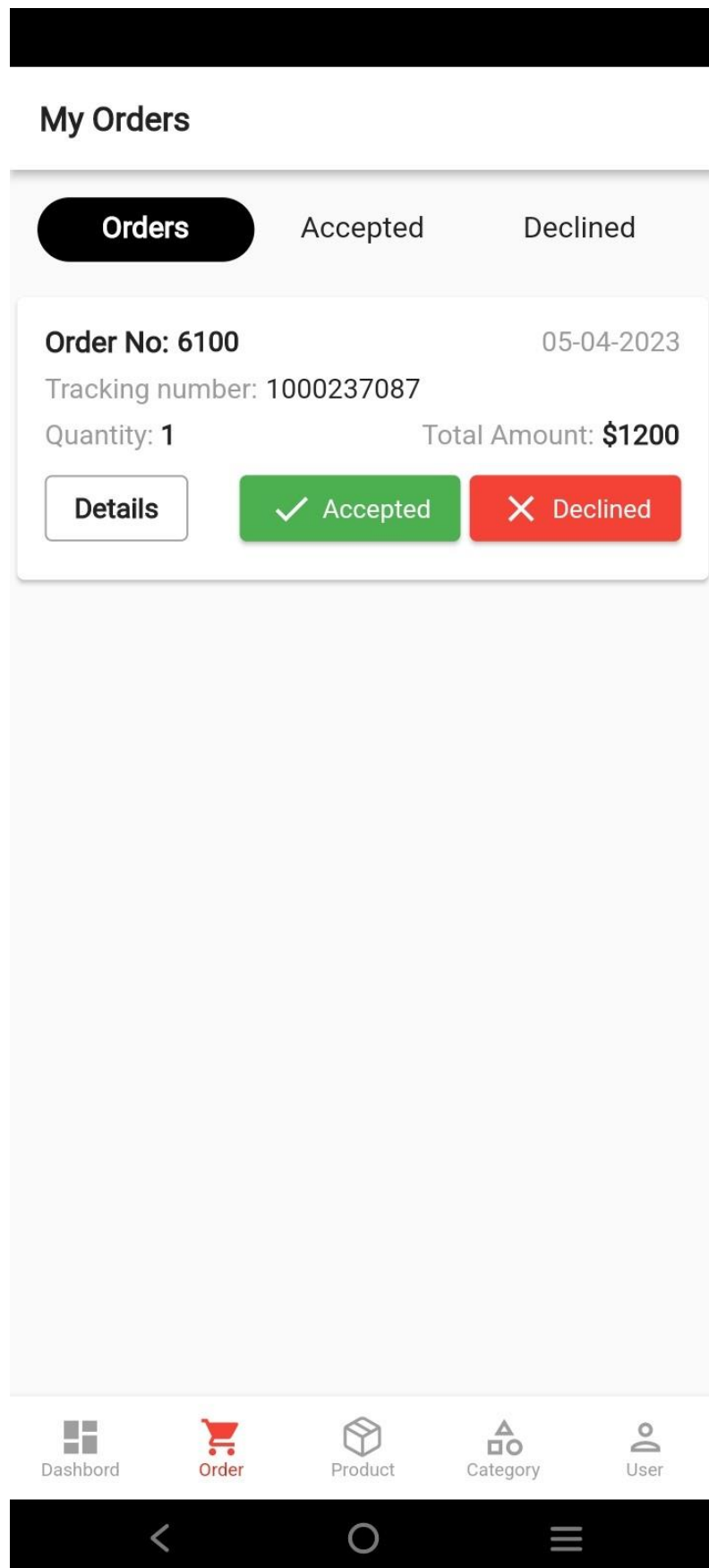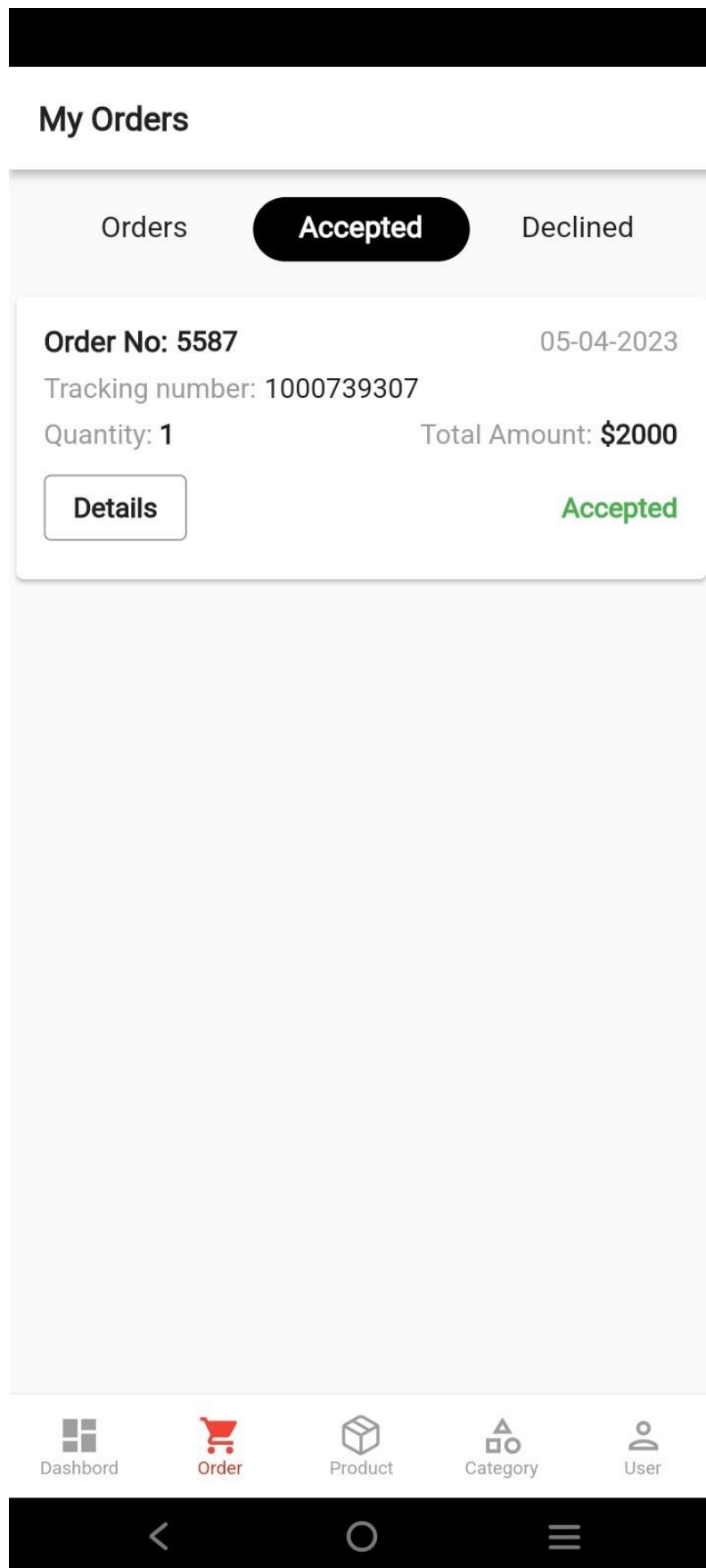 - ▼ — -NSGTdlvzX4TWBnnWUGV
    - — Brand: "Mettal"
    - — Color: true
    - — Date: "2023-04-05 18:29:19.257795"
    - — Description: "Full Payjama "
    - — DisPrice: 650
    - — Gender: "Kids"
    - — ID: "-NSGTdlvzX4TWBnnWUGV"
    - — Pname: "Boy Payjama Set"
    - — Price: 600
- — Size: true
- — Type: "Baby Overalls"
- ▼ — images
  - — 0: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/Products%2FKids%2FBaby%20Overalls%2FBoy%20Payjama%2
  - — 1: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/Products%2FKids%2FBaby%20Overalls%2FBoy%20Payjama%2
  - — 2: "https://firebasestorage.googleapis.com/v0/b/topecommerce-fab5d.appspot.com/o/Products%2FKids%2FBaby%20Overalls%2FBoy%20Payjama%2

8.6 User table

```
▼ ─ User
    ▼ ─ YdorGJVwNVOGOE3uXedWkYhJ9go1
        ▼ ─ AddToCart
            ▶ ─  -NSHQtdvQRL8ZdyYPzHW   +  🗑
            ▶ ─  -NSHQwZpN0q_xMlakDWD
            ▶ ─  -NSHQy9bYgD0kbSt0RN1
          ─ Email: "gonikhil8@gmail.com"

    ▼ ─ FullAddress
        ▼ ─  -NSGhPMoX1QaDHBSNg9N
              ─ Address: "198 , sareeta sic"
              ─ AddressID: "-NSGhPMoX1QaDHBSNg9N"
              ─ City: "surat"
              ─ Country: "India"
              ─ FullName: "nik"
              ─ State: "gujarat"
              ─ ZipCode: "123456"  🗑
```

.7 Admin dashboard

Dashboard

Total Users

1

Total Orders

2

Live Product

11

Dashbord   Order   Product   Category   User

8

8.8 Admin order detail page

My Orders

| Orders | Accepted | Declined |

Order No: 6100   05-04-2023
Tracking number: **1000237087**
Quantity: **1**   Total Amount: **$1200**

Details   ✓ Accepted   ✕ Declined

Dashbord   Order   Product   Category   User

.8.1 order accept page

My Orders

Orders	Accepted	Declined

Order No: 5587   05-04-2023

Tracking number: 1000739307

Quantity: **1**   Total Amount: **$2000**

Details   **Accepted**

Dashbord   Order   Product   Category   User

8

.8.2 order decline page
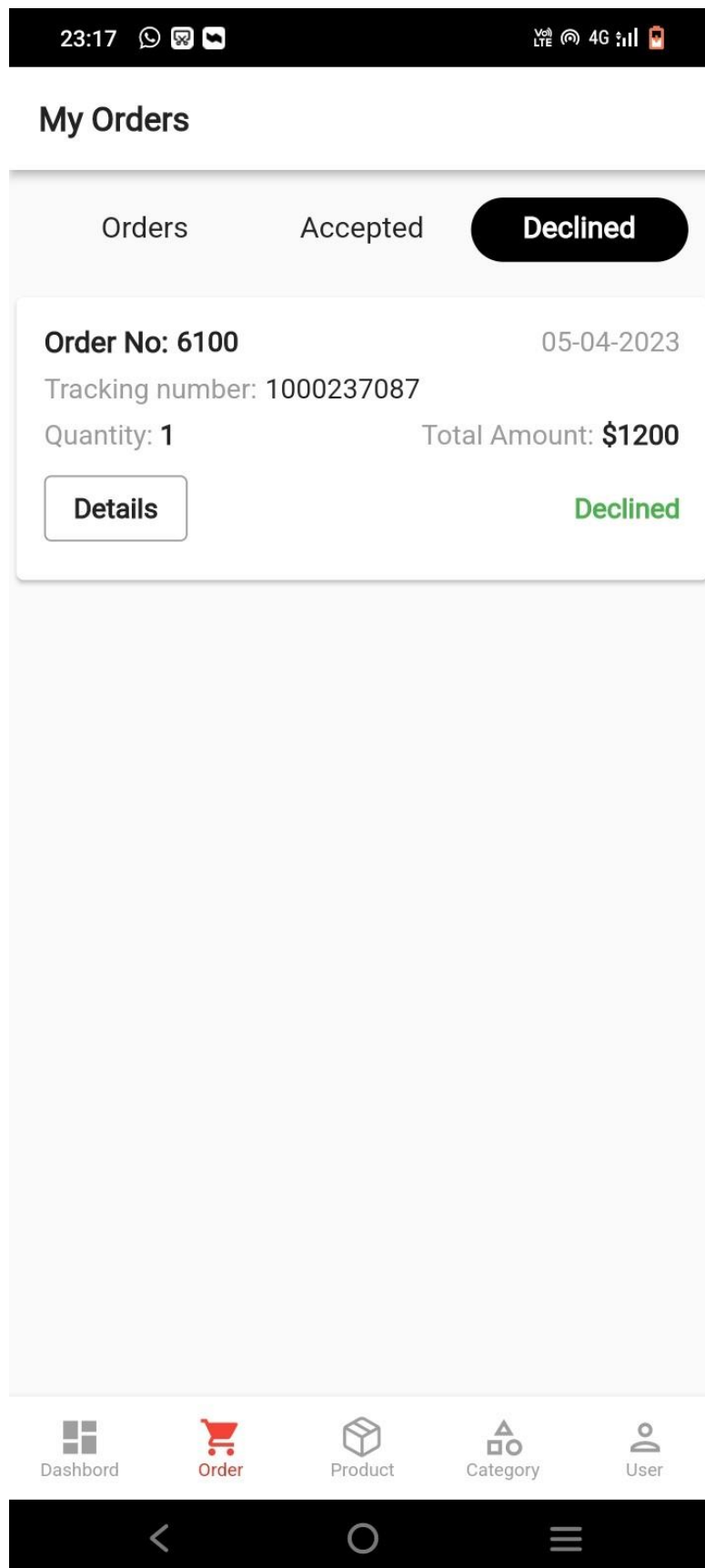
.9 category page

Categories

Male	Female	Kids

Shirt 🗑

Dashbord Order Product **Category** User

8

Categories

Male	**Female**	Kids

Dress 🗑

➕

Dashbord	Order	Product	**Category**	User

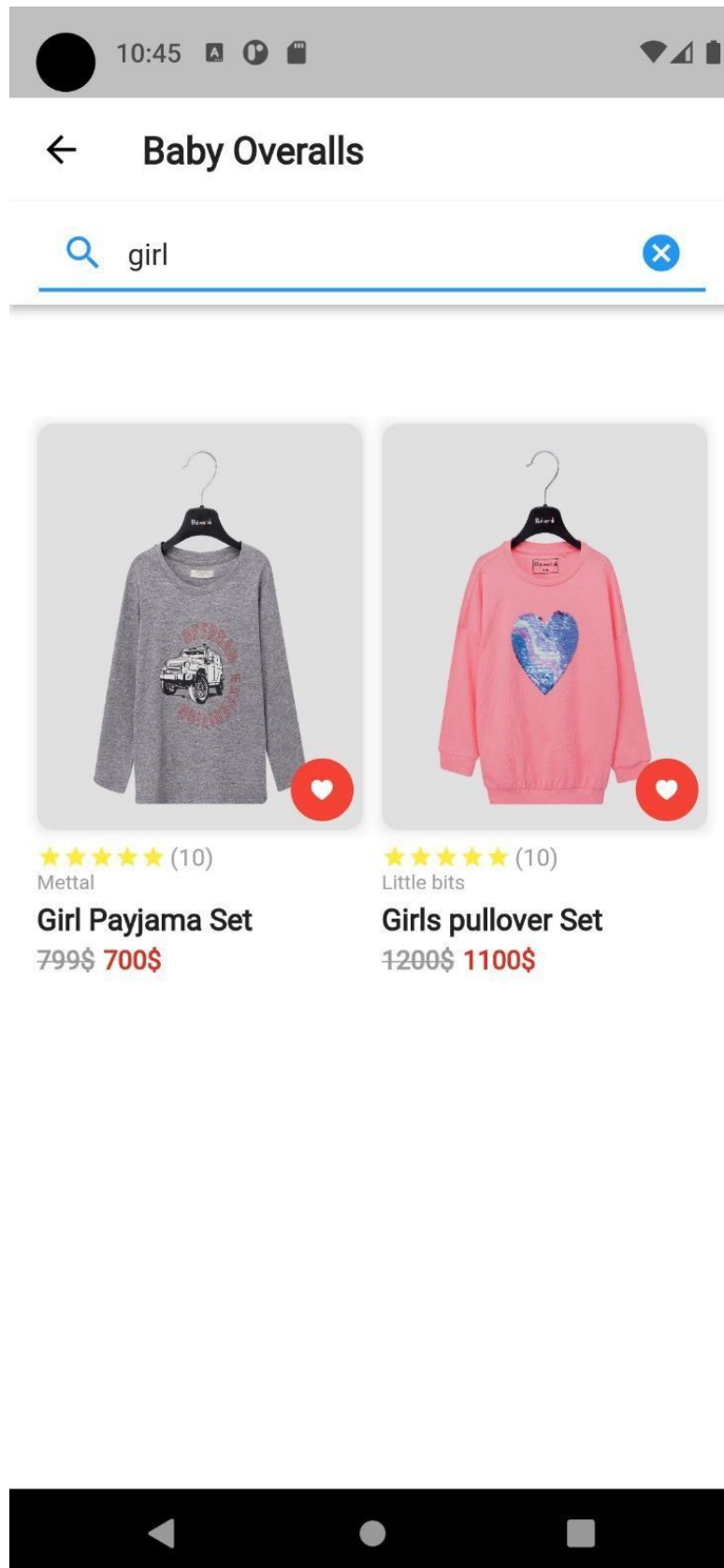.10 product page

8
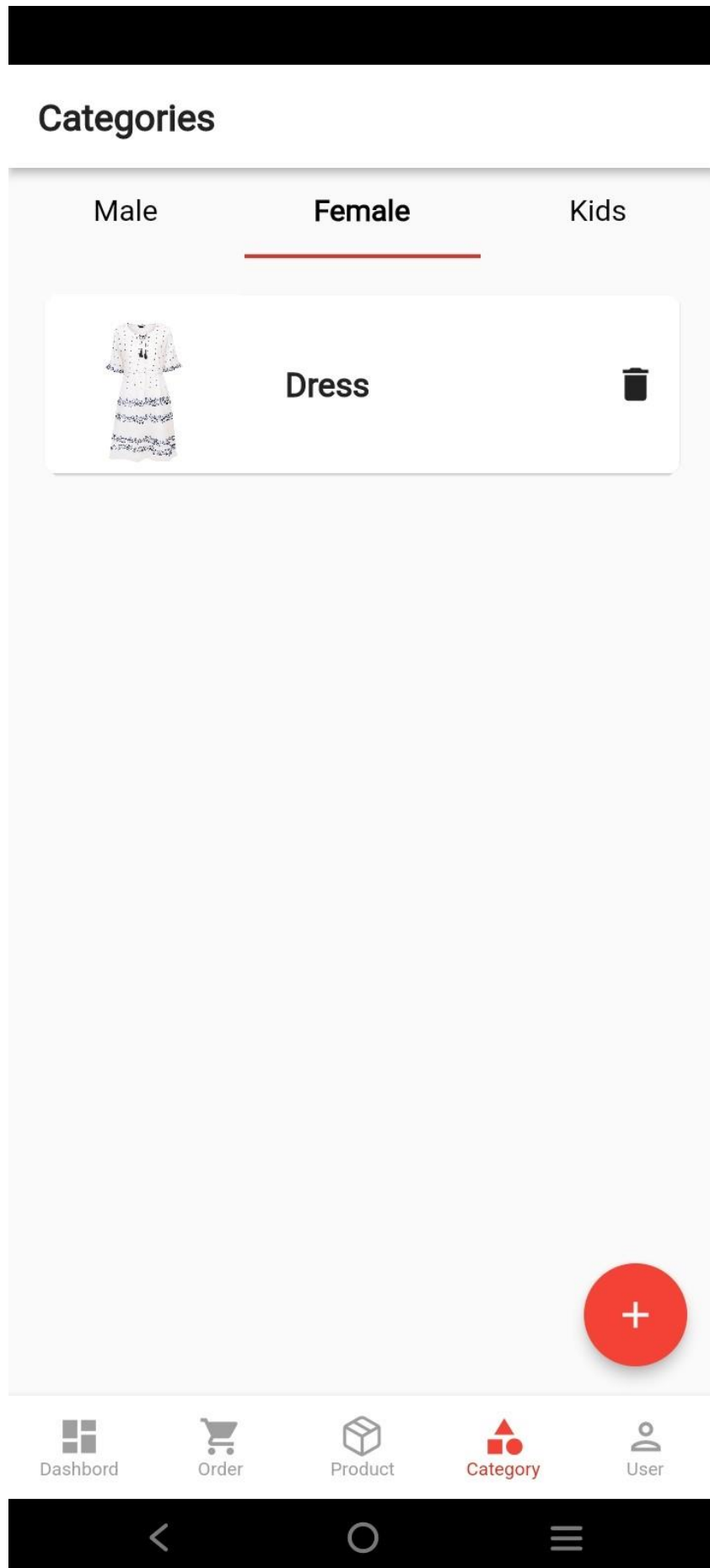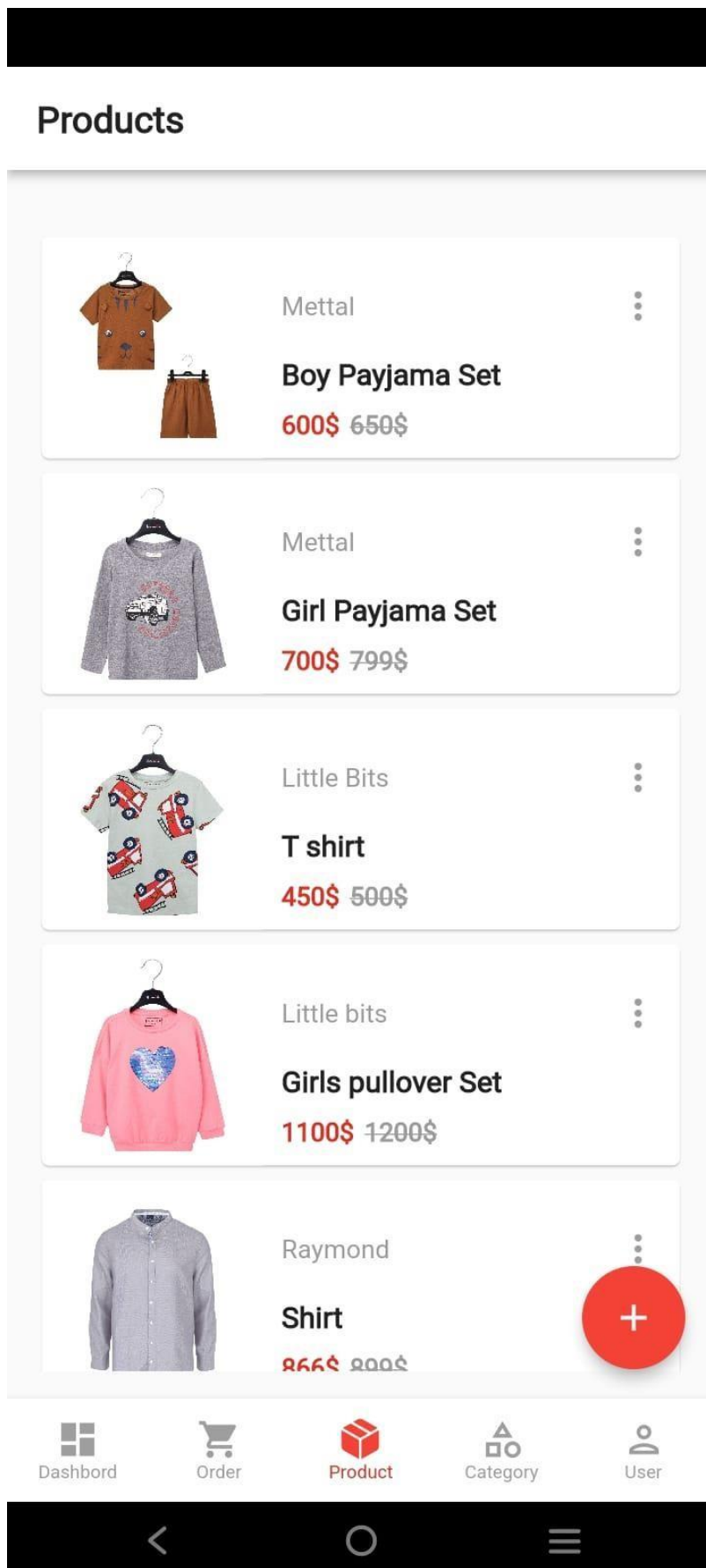
8.11 User home page

8.12 Category page of user
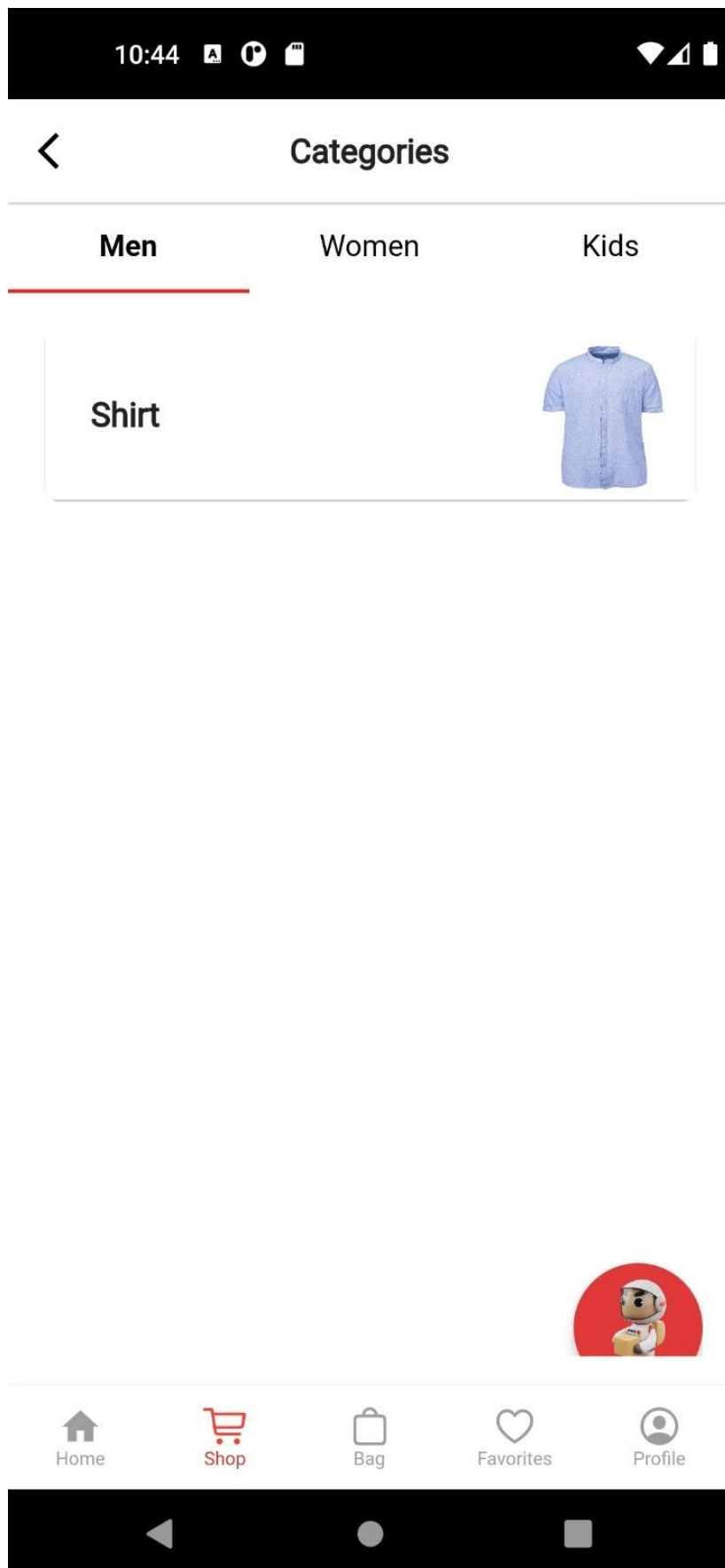
8.13 particular category page
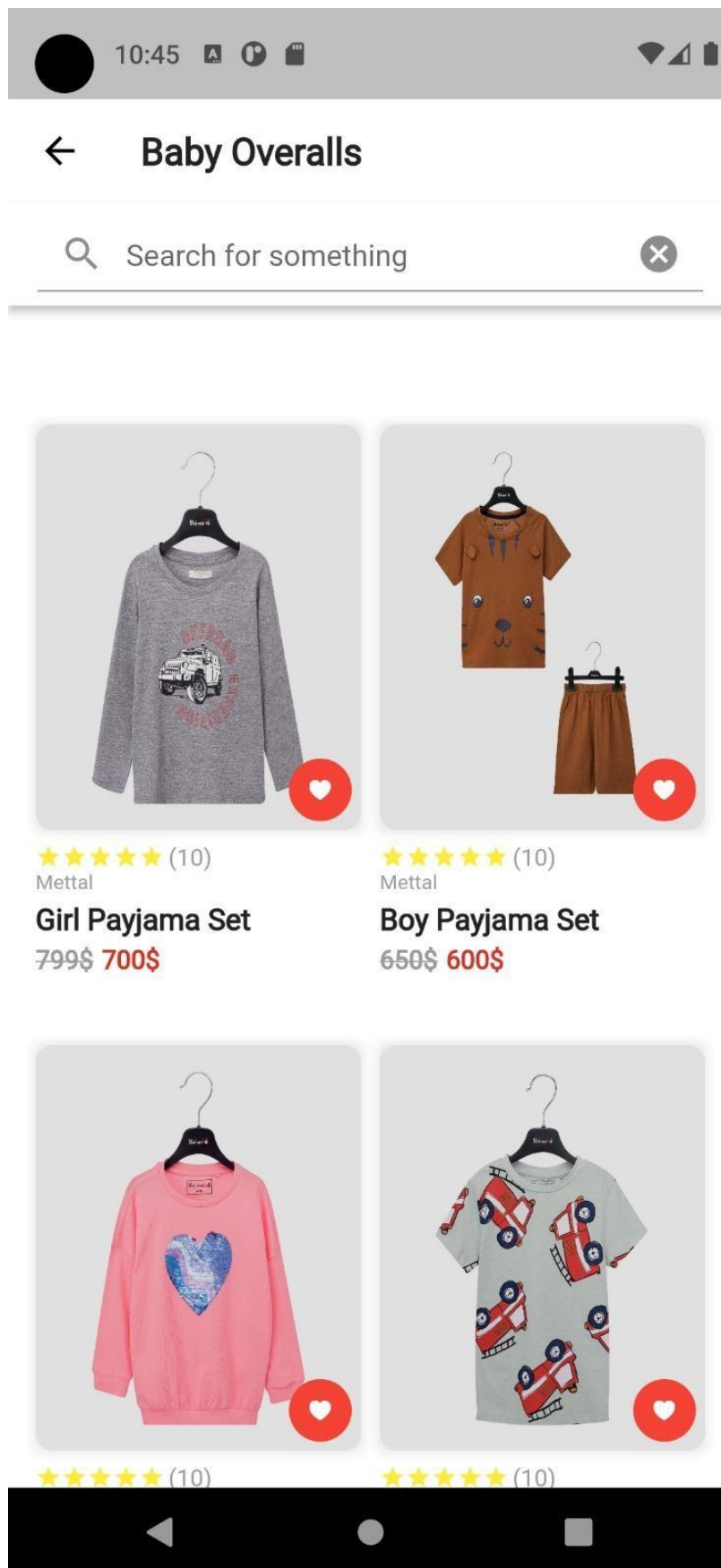
8.14 filter page
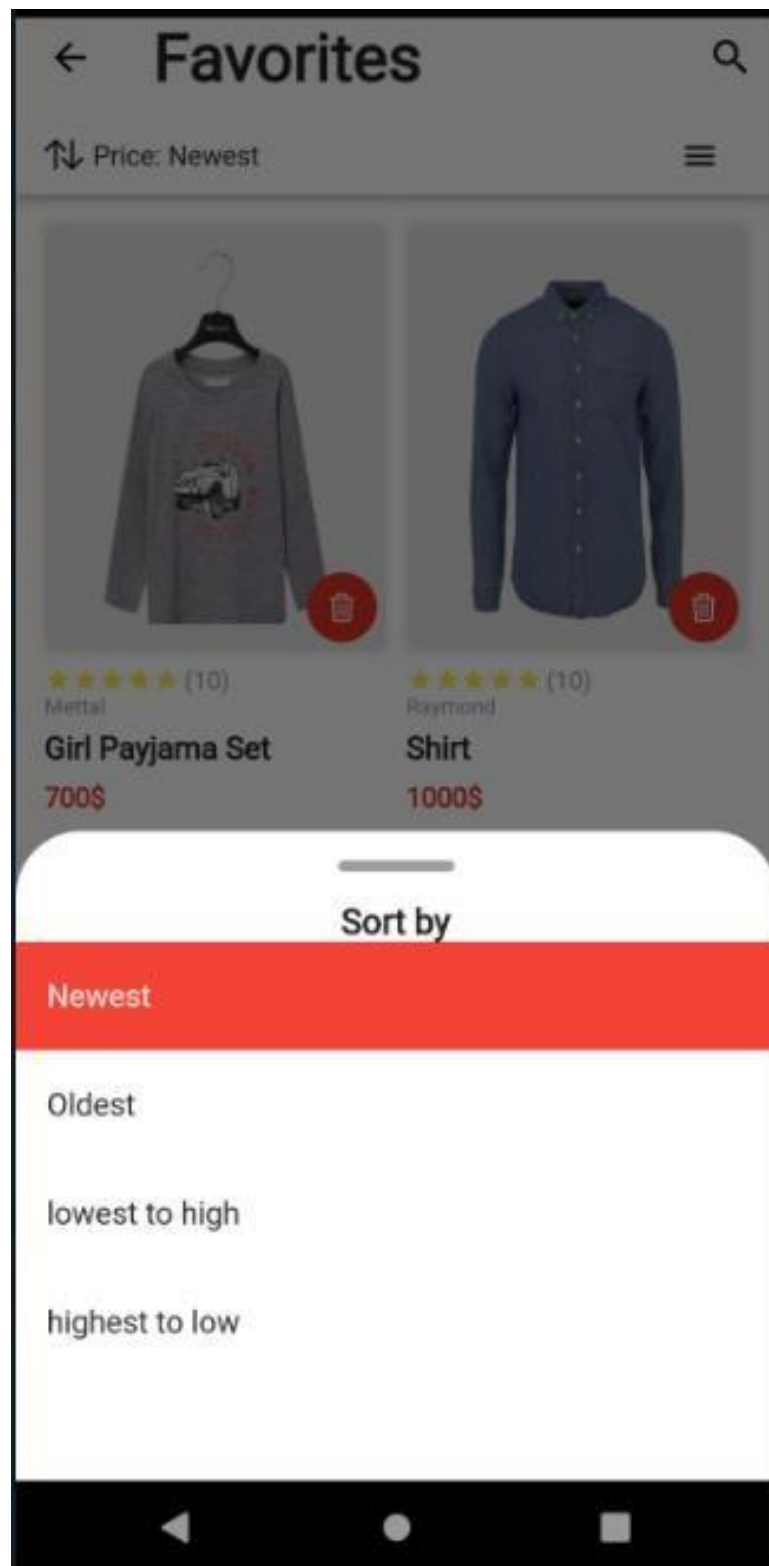
8.15 categorywise search page

8.16 forget password page

Forgot password

Email

Send Request

Settings

Personal Information

nik

gonikhil8@gmail.com

Password   Change
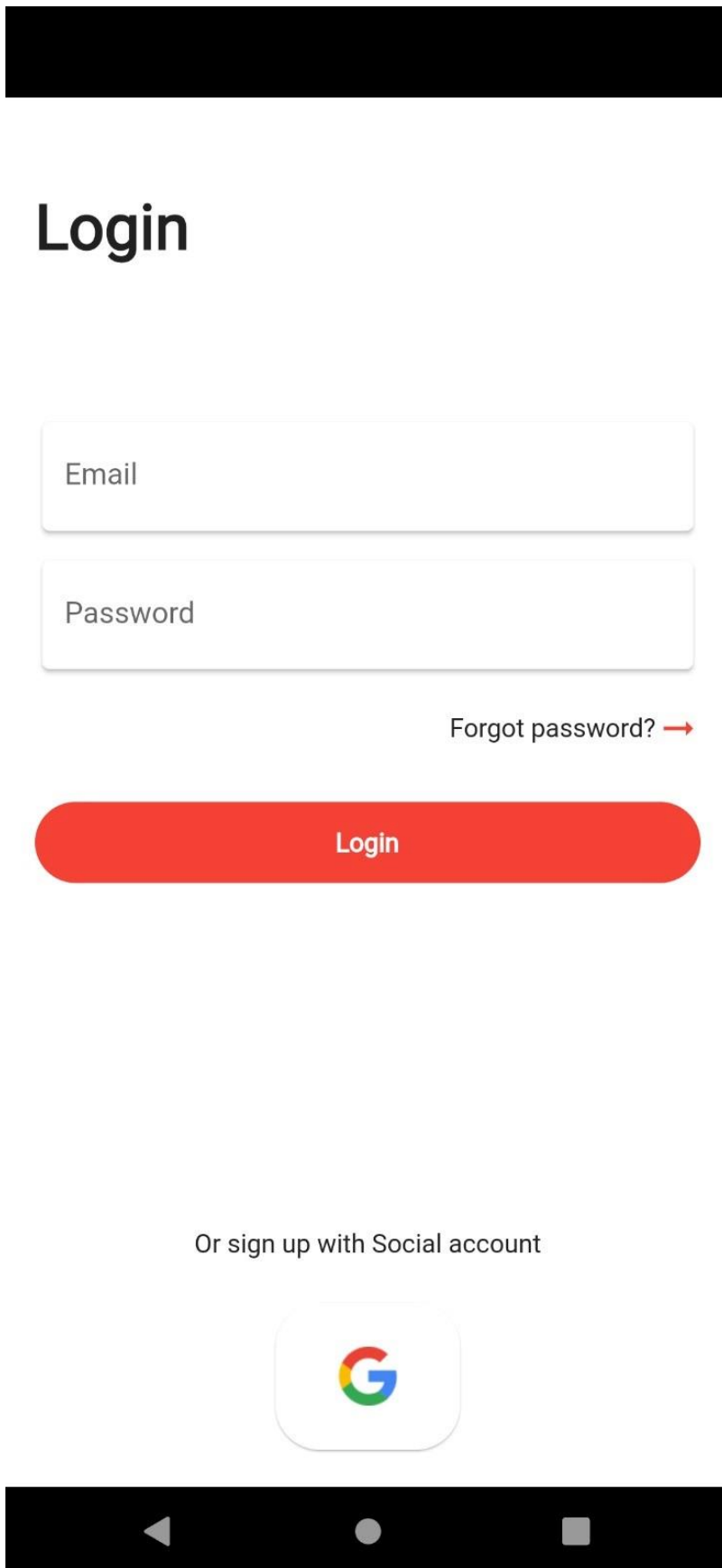
Password

Password Change

Old Password

Forgot password?

New Password
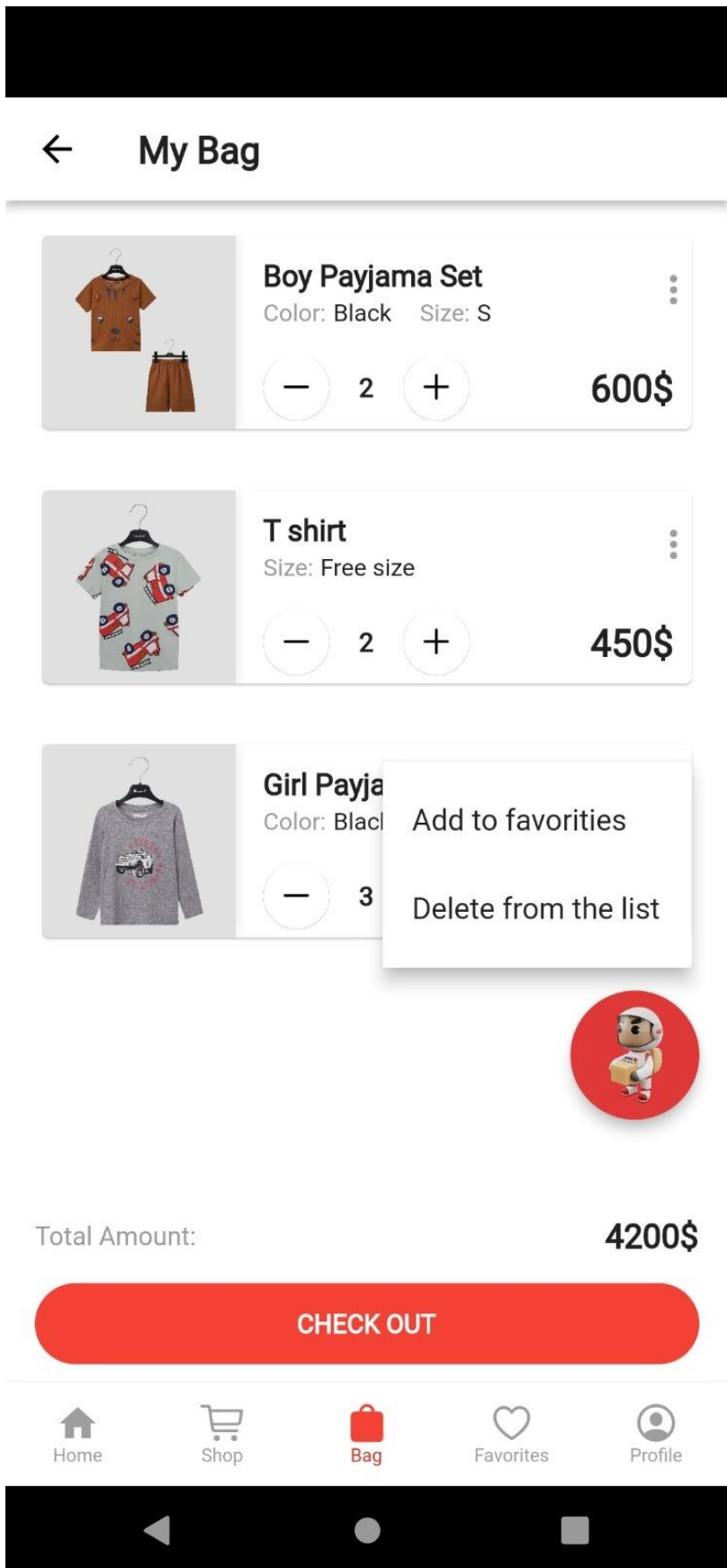
Repeat New Password

SAVE PASSWORD

8.17 Login page

8.18 add to cart page

8.19 check out page

← My Bag

Boy Payjama Set
Color: Black   Size: S
⋮

− 2 +   600$

T shirt
Size: Free size
⋮

− 2 +   450$

Girl Payja
Color: Blacl

Add to favorities

Delete from the list

− 3

Total Amount: 4200$

CHECK OUT

🏠 Home   🛒 Shop   🛍 Bag   ♡ Favorites   ⊙ Profile

8.20 favorite page
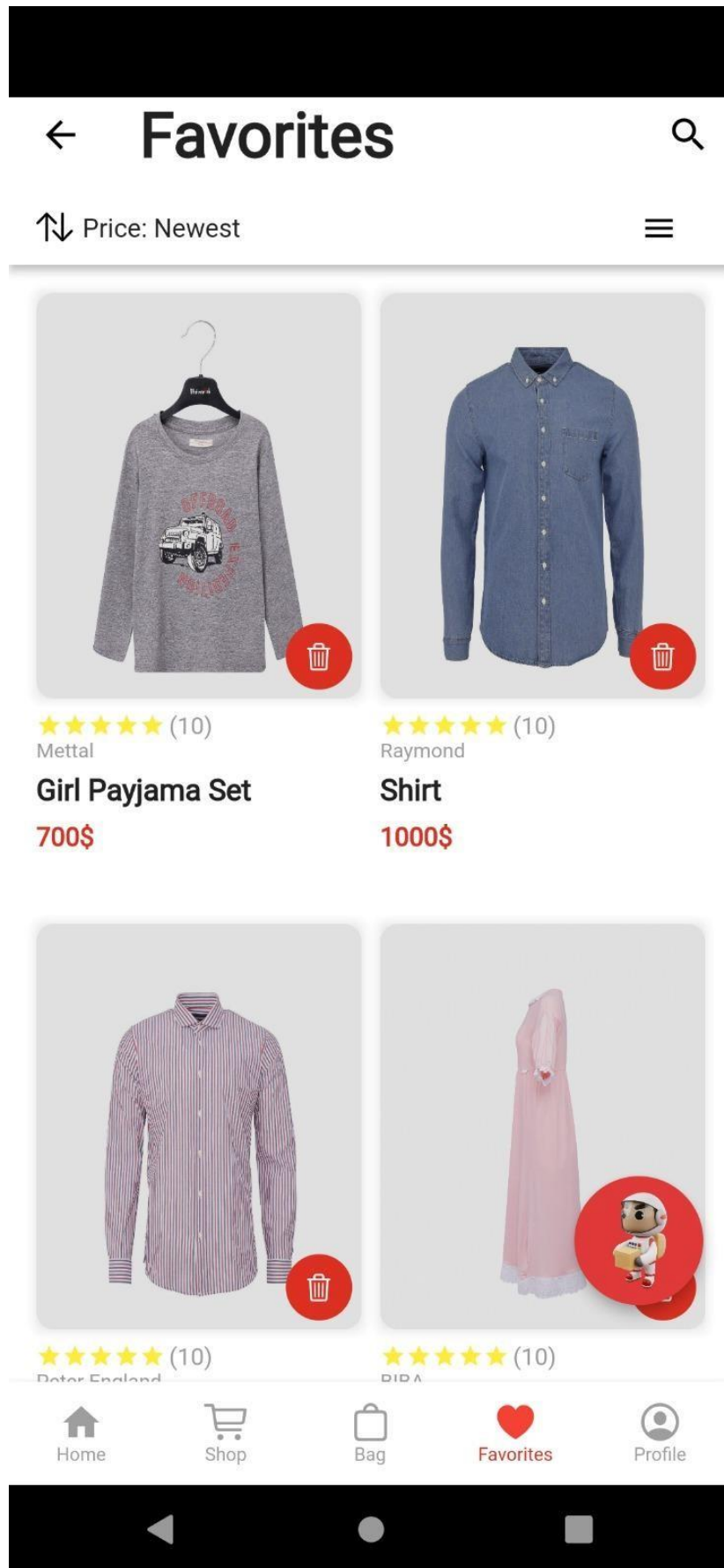
8.21 transaction fail page

Address   Payment   Place order
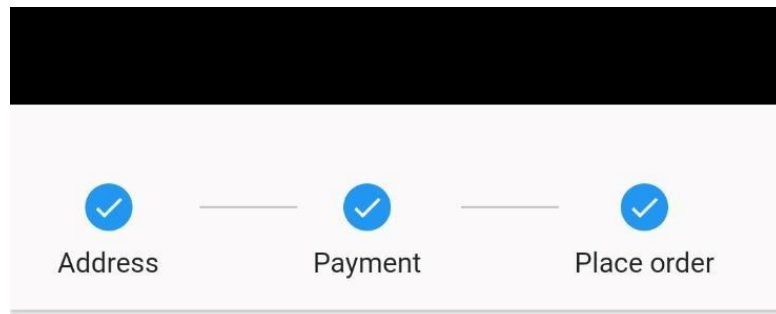
Failed!

Your transaction has failed due to some
technical error!

Try Again

2
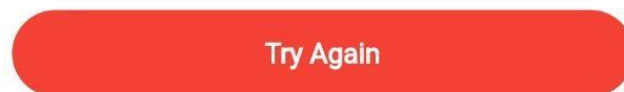
8.22 address page

jemil

Address

Zip Code (Postal Code)

Select Country

Select State

Select City

SAVE ADDRESS
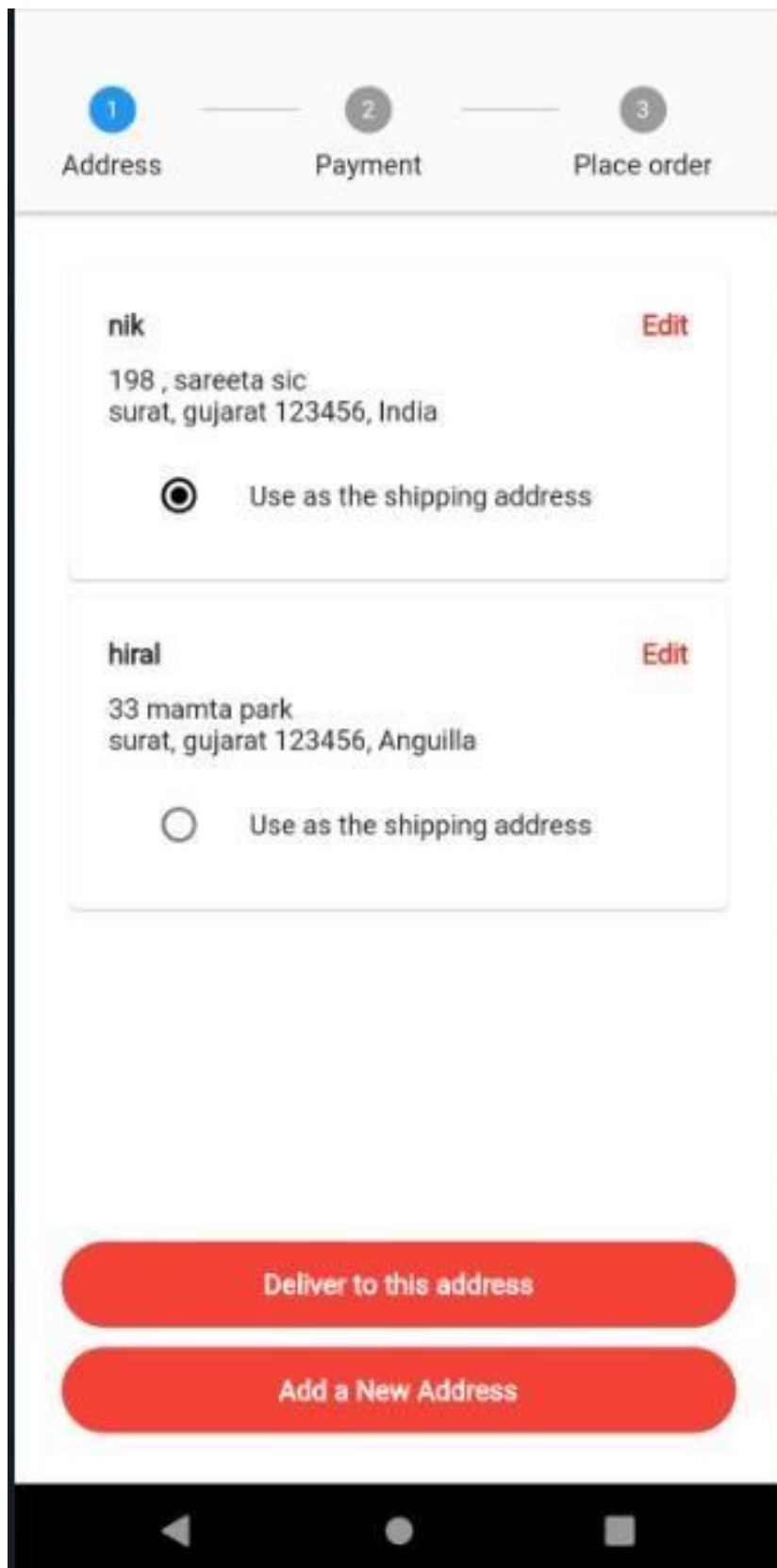
8.23 payment page
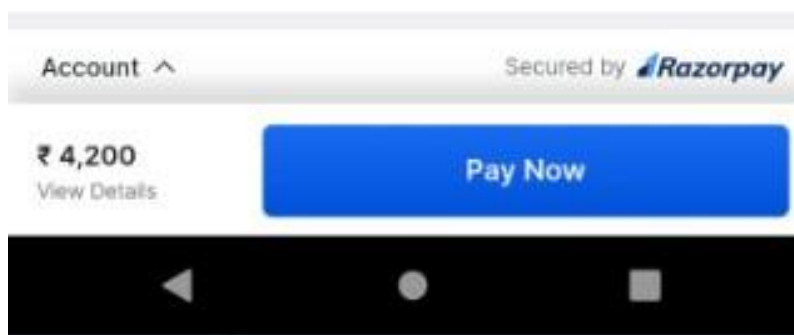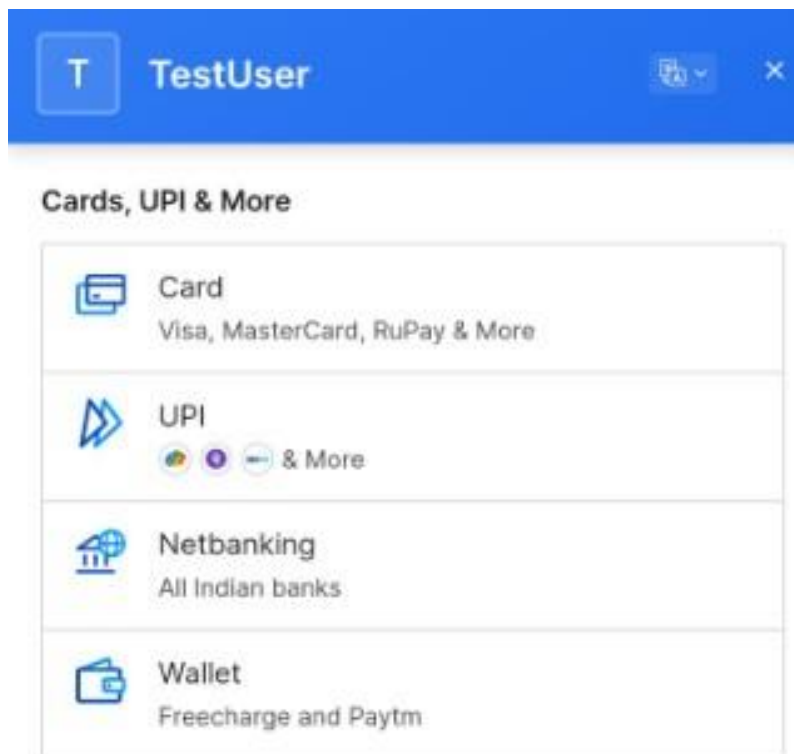
Address — Payment — Place order
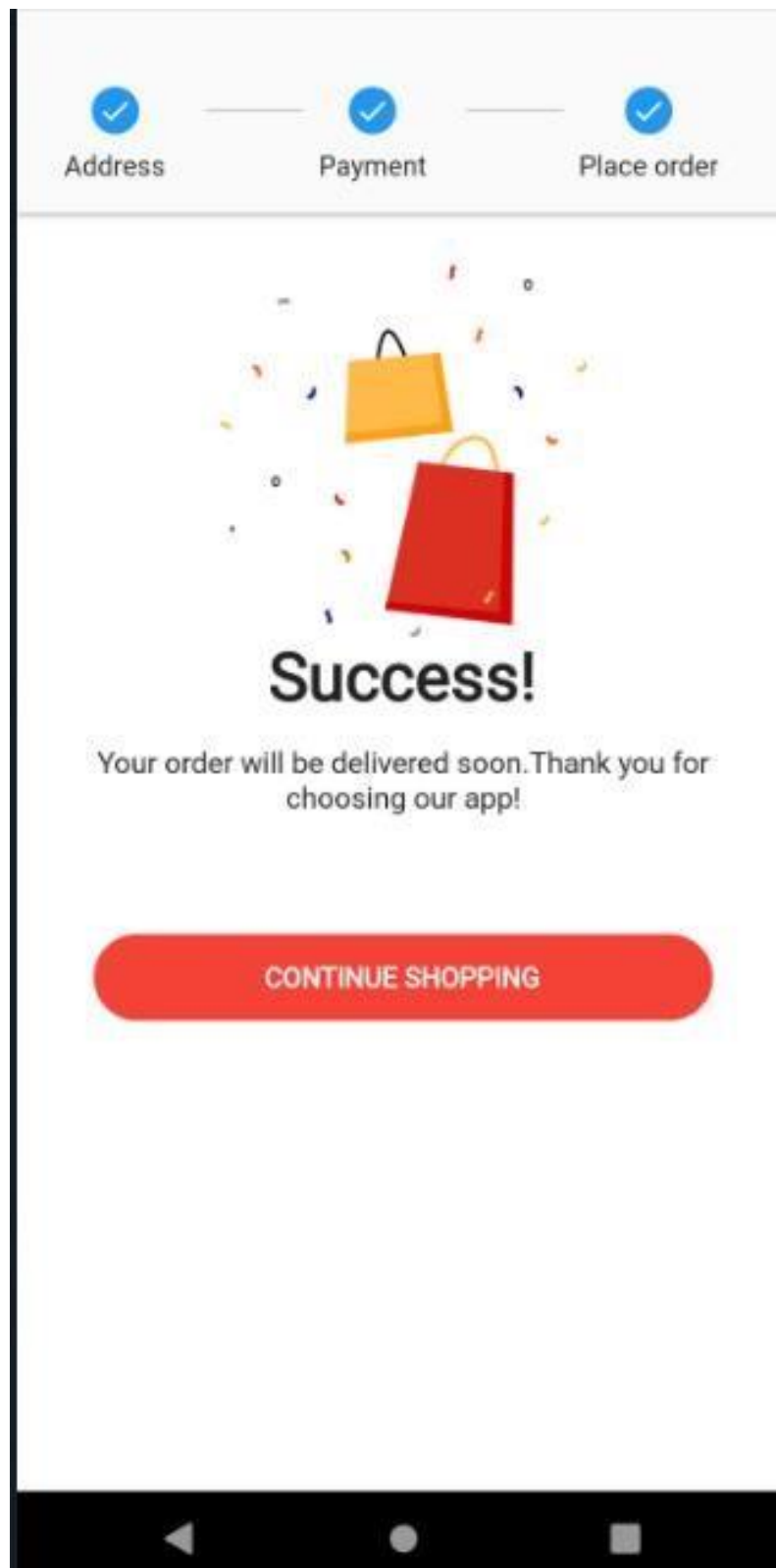
○ Cash on Delivery

◉ Online Payment

Continue

8.24 payment success page

8.25 profile page

My profile

jemil
jemil8742@gmail.com

My orders >

Shipping addresses >

Settings >

Home   Shop   Bag   Favorites   Profile

8.26 My order page
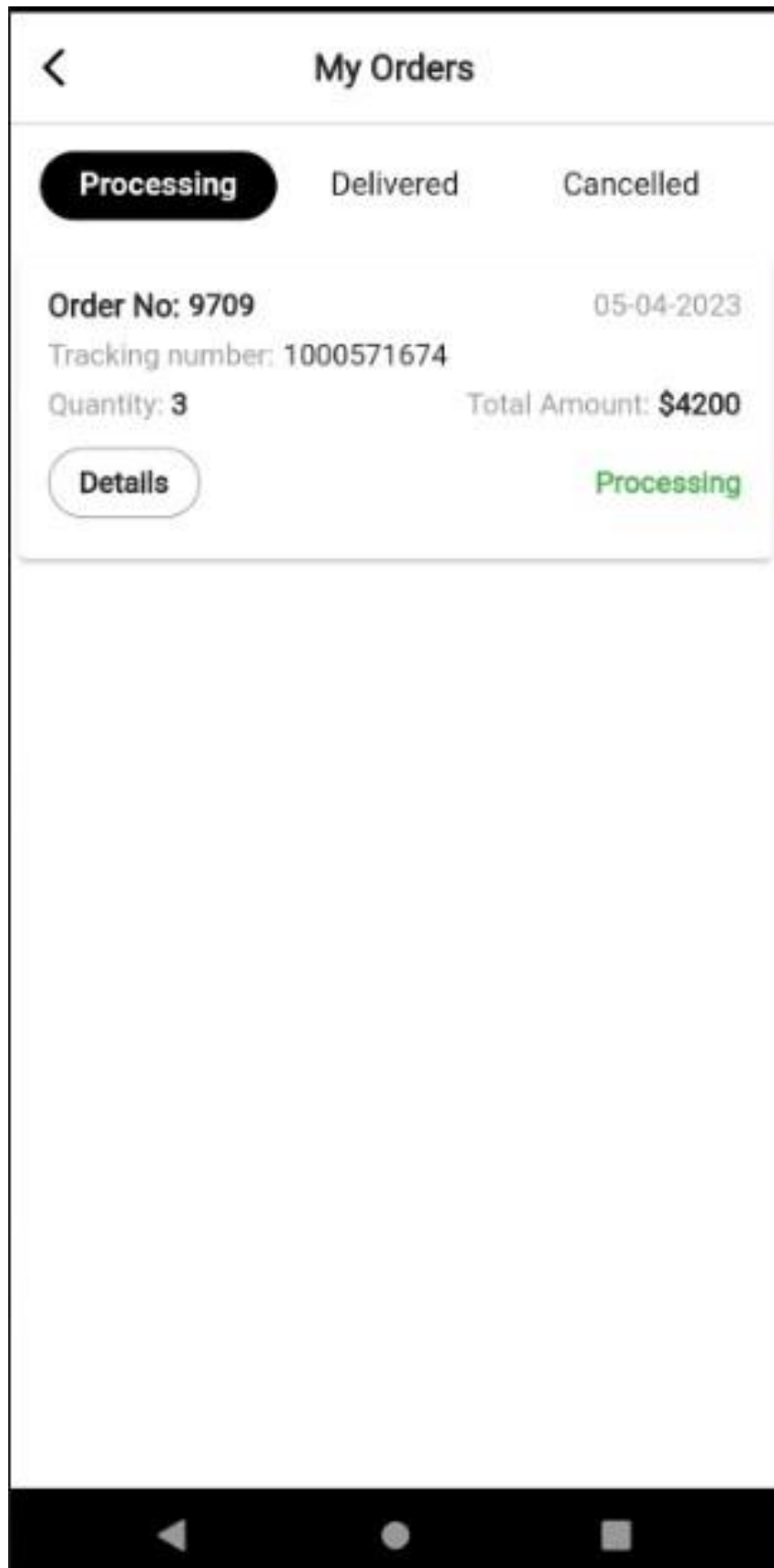
8.27 setting page

8.28 order detail page

Order Details

Order No: 9709   05-04-2023
Tracking number: 1000571674
3 item   Processing

Girl Payjama Set
Color: Black   Size: S
Units: 3   700$

Boy Payjama Set
Color: Black   Size: S
Units: 2   600$

T shirt
Size: Free Size
Units: 2   450$

Order information

Shipping Address: 33 mamta park, surat, gujarat 123456,
                                                      Anguilla
Payment method: Online Payment
Delivery method: FedEx, 3 days
Discount: 10%, Personal promo code
Total Amount: 4200$

8.29 chat support by E commerce bot
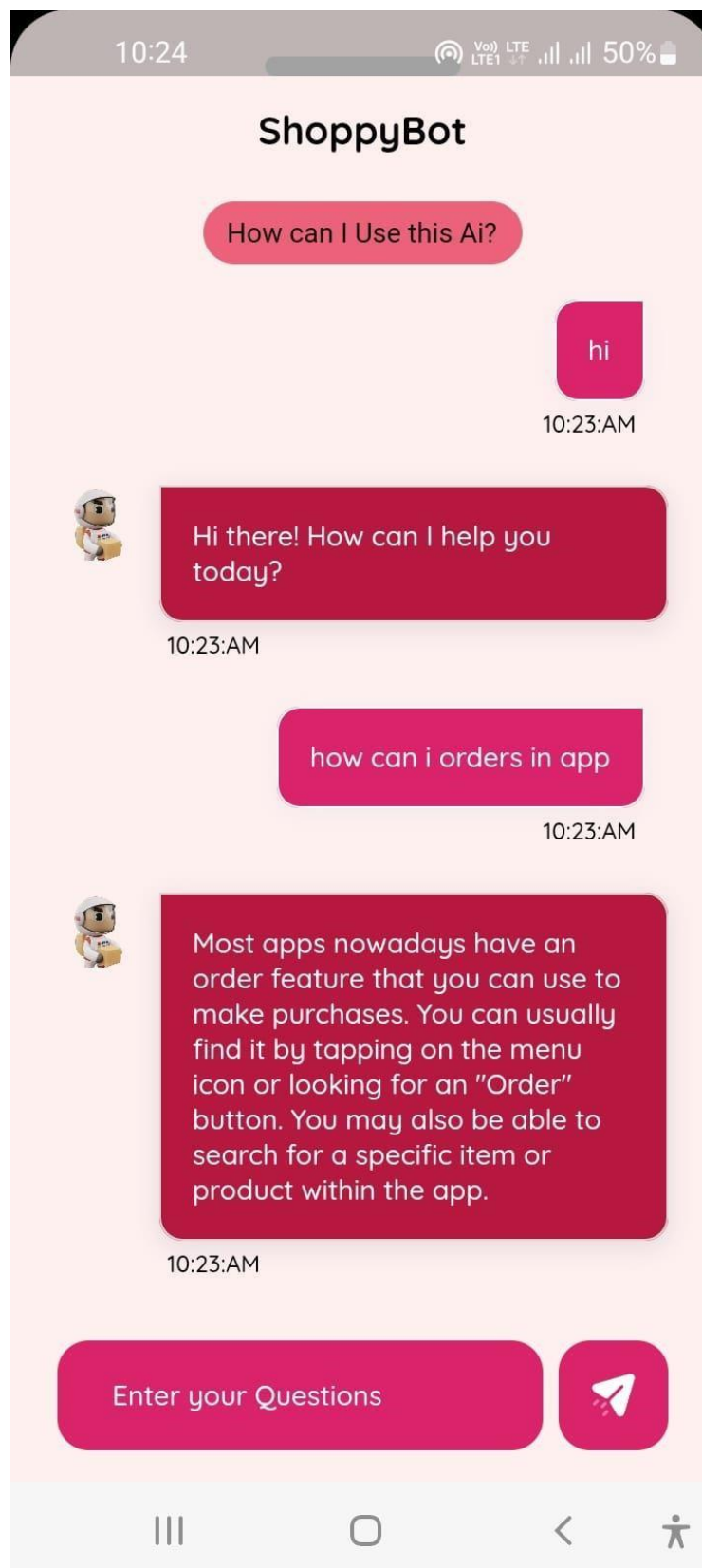
9.Testing

9.1. Software Testing

Software testing is critical element of software quality assurances and represents the ultimate review of speciation, design and coding. It is an important phase. It involves user testes the developed system and changes are made according to the needs. Testing is a process of executing a program with the intent of finding an error. A Successful test is one that uncovers an as yet undiscovered error. Testing demonstrate that software functions appear to be working according to specification that performance requirements appear to be working appear to have been met.

✞ Program Testing:

A program represents the logical elements of a system. For a program to run satisfactorily, it must compile and test data correctly and tie in properly with other programs. It is the responsibility of a programmer to have an error free program. At the time of testing the system, there exist two types of errors that should be checked.
These errors are

Syntax error
Logic error

A syntax error is a program statement that violates one or more rules of the language in which it is written. An improperly defined field dimension or omitted key words are common syntax errors. These errors are shown through error messages generated by the Computer.
A logic error, on the other hand, deals with incorrect data fields out of range items, and invalid combinations. Since the logical errors are not detected by compile, the programmer must examine the output carefully to detect them.
When program is tested, the actual output is compared with the expected output. When there is a discrepancy, the sequence of the instructions, must be traced to determine the problem. Breaking the program down into self-contained portion, each of which can be checked at certain key points, facilitates the process.

✞ Code Testing:

The code testing examines the logic of the program. To follow this testing we have developed test cases that result in every instruction in the program or modules; that every path is specific combination of conditions that is handled by the program.

However, code testing dose not define the failure of the system. As well as this testing does not determine that whether the system meets its specification nor does it determines whether all aspects are implemented.

✞ Specification Testing:

To perform specification testing, we have to examine the specificationdefines that the system should do and how it should do under

various conditions. Then test cases are developed for each conditions or combinations of conditions. So we can determine whether the system performs according to its specification requirement.

✝ **Unit Testing:**

Unit testing forces first on modules, independently of one another to locate the errors in coding and logic that contained within that another module alone.

✝ **Storage Testing:**

We have to specify capacity for the system when it is designed and constructed. Capacity measure in terms of the number of records than the disk will handle or file cab contain.

✝ **Performance Test:**

When we are developing a design, their concerns are more on reports, inputs and processing sequence than on performance time.
Preformation time testing is conducted prior to implementation to determine how long it takes to receive a response to an inquiry.

9.2. Unit Testing

In unit testing Module is tested separately and the programmer simultaneously along with the coding of the module performs it.

In unit testing the analyst tests the programs making up a system. For this reason, unit testing is sometime called program testing. Unit testing gives stress on modules independently of one another, to find errors. This helps the tester in detecting errors in coding and logic that are contained within that module alone. The errors resulting from the interaction between modules are initially avoided.

Unit testing can be performed from the bottom up, Starting with smallest and lowestlevel modules and proceeding one at a time., for each module in Bottom-up testing a short program is used to execute the module and provides the needed data, so that the module is asked to perform the way it will when embedded within the larger system.

9.3 System Testing

The system testing tests the software and other system elements as a whole. It verifies that all elements mesh properly and that overall system. Function and performance is achieved.

After completing the integration testing successfully. All the sub system is combining to gather to form a whole system in then tested using test data.

This test data is manually processed and then its result is compare with those of the system change where done according to the user requirements and correct them.

To completely test the system, we required to make some test-case, which help us in test our system that provid2 expected result in each and every condition. - System testing is designed to uncover weaknesses that were not found in earlier tests.

This includes forced system failure and validation of total system, as its user in the operational environment will implement it.

Under this testing, generally we take low volumes of transactions based on live data. This volume is increased until the maximum level for each transaction type is related. The total system is also tested for recovery and fall back after various major failures to ensure that no data are lost during the emergency.

✝ **Test Completion**

White-box test coverage are met.

Rate of error discovery reduced the target value.   Measured reliability of the system achieves its target value.

9.4 Test case

No.	FIELD	TEXT DATA	VALID/INVALID	TEST RESULT
(User)				
1.	Photo	Empty	Invalid	Add Photo
		Selected	Valid	-
2.	Full Name	Empty	Invalid	Enter Full name
		Athens	Valid	-
3.	Phone	Empty	Invalid	Enter Phone
		7654432678	Valid	-
4.	Country	Empty	Invalid	Select Country
		India	Valid	-
5.	State	Empty	Invalid	Select State
		Gujarat	Valid	-
6.	City	Empty	Invalid	Select City
		Surat	Valid	-
7.	Address	Empty	Invalid	Enter Address
			Valid	-
8.	Email	Empty	Invalid	Enter Email

		Athens1122@gmail.com	Valid	-
9.	Password	Empty	Invalid	Enter Password
		ujas@@	Valid	-
10.	Confirm Password	Empty	Invalid	Enter Confirm Password
		ujas@@	Valid	-
(Seller)				
1.	Photo	Empty	Invalid	Add Photo
		Selected	Valid	-
2.	Full Name	Empty	Invalid	Enter Full name
		punagam	Valid	-
3.	Shop Name	Empty	Invalid	Enter shop name
		E commerce	Valid	-
4.	Phone	Empty	Invalid	Enter Phone
		1234567890	Valid	-
5.	Delivery fee	Empty	Invalid	Enter Delivery fee
		50	Valid	-
6.	Country	Empty	Invalid	Select Country

		India	Valid	-
7.	State	Empty	Invalid	Select State
		Gujarat	Valid	-
8.	City	Empty	Invalid	Select City
		Surat	Valid	-
9.	Address	Empty	Invalid	Enter Address
		10,Balkrishna society ,punagam surat	Valid	-
10.	Email	Empty	Invalid	Enter
		jem@gmail.com	Valid	-
11.	Password	Empty	Invalid	Enter
		jemil1112	Valid	-
12.	Confirm Password	Empty	Invalid	Enter
		nikhil1112	Valid	-

Table 9.4.1 Test case

10. References

❼Online Shopping site in India: Shop Online for Mobiles, Books, Watches, Shoes and More - Amazon.in

❼Online Shopping Site for Mobiles, Electronics, Furniture, Grocery, Lifestyle, Books & More. Best Offers! (flipkart.com)

❼Online Shopping for Women, Men, Kids – Clothing, Footwear | AJIO

❼Online Shopping for Women, Men, Kids Fashion & Lifestyle - Myntra

❼https://www.figma.com/