### Software Requirements Specification (SRS)

**Project Title:** MobileMart - Mobile Accessories Shopping App

#### 1. Introduction

#### 1.1 Purpose

This document defines the software requirements for MobileMart, a user friendly mobile shopping app for purchasing mobile accessories with secure payment options and fast delivery. It aims to ensure that the development meets user expectations and business goals.

#### 1.2 Scope

MobileMart will offer a feature rich experience for purchasing accessories like phone cases, earphones, and chargers. Key features include smart search, advanced filtering, product comparisons, delivery tracking, return/refund processing, secure payments, and customer support. Feedback from users aged 18–34 in Pakistan has been incorporated.

#### 1.3 Definitions, Acronyms, and Abbreviations

- SRS: Software Requirements Specification
- UI: User Interface
- OTP: OneTime Password
- COD: Cash on Delivery
- FAQ: Frequently Asked Questions

#### 1.40verview

This document includes overall and specific requirements, constraints, UI design, and wireframes based on user survey and business needs.

## 2. Overall Description

#### 2.1 Product Perspective

MobileMart is an independent mobile application that allows users to browse and shop for mobile accessories, designed with native Android and iOS platforms in mind.

#### 2.2 Product Functions

- Multioption login (Email, OTP, Google)
- Smart search
- Product comparison, multiple product images
- Cart and secure checkout
- Payment options (COD, JazzCash, Easypaisa, Bank Transfer)

- Order confirmation and tracking
- Returns and refunds
- Notifications and customer support

#### 2.3 User Classes and Characteristics

- Students (18–24): Prefer easy logins, light mode, reviews, COD
- Professionals (25–34): Prefer refunds, delivery tracking, support

#### 2.4 Operating Environment

- Android 10+
- iOS 13+
- Internet connection

#### 2.5 Design and Implementation Constraints

- Language: English and Urdu
- Payment methods limited to Pakistani services
- Must follow Pakistani ecommerce laws

#### 2.6 User Documentation

- In app tooltips and guidance
- Help center with FAQs
- Support via live chat and phone

#### 2.7 Assumptions and Dependencies

- Stable internet and device availability
- Integration with payment APIs and secure authentication services

# 3. Business Requirements

## **Business Requirements Table**

ID	Business Requirement Title	Description
BR01	Online Sales Platform	Develop a mobile app for users to purchase mobile accessories.

ID	Business Requirement Title	Description	
BR02	Simplified Purchase Process	Easy search, filter, and smooth checkout.	
BR03	Multiple Payment Options	COD, Easypaisa, JazzCash, debit/credit cards.	
BR04	Customer Retention Tools	Wishlist, product recommendations, loyalty offers.	
BR05	Secure User Login	Login/signup via phone number and Google.	
BR06	RealTime Order Tracking	Track orders from confirmation to delivery.	
BR07	Admin Control Panel	Admin dashboard to manage products, orders, and inventory.	
BR08	Mobile Responsiveness	Responsive design for Android screen sizes.	
BR09	Customer Review System	Enable customers to rate and review products.	
BR10	Scalable Architecture	Future growth in users, features, and integrations.	

## **Business Constraints Table**

ID	<b>Business Constraint Title</b>	Description	
BC01	Budget Limit	Build and deploy under PKR 200,000.	
BC02	Time Restriction	Must complete initial version in 12 weeks.	
BC03	Small Development Team	Max 4 members; affects feature complexity.	
BC04	Device and Network Limitations	Target users on budget devices with poor internet.	
BC05	Limited Customer Support	t Use FAQ as main support tool at launch.	
BC06	Logistics Dependency	External courier services used.	
BC07	Legal and Compliance	Must follow local ecommerce and tax laws.	

# 4. Specific Requirements

# 4.1 Functional Requirements

IID	Functional Requirement Title	Description	Priority	Dependency
FR1	MultiMethod Sign Up	Users can sign up via Email, OTP, or Google	High	None

ID	Functional Requirement Title	Description	Priority	Dependency
FR2	Persistent User Sessions	lUser sessions persist after login		FR1
FR3	Password Reset	Password reset functionality	Mediu m	FR1
FR4	Light Mode Support	Enable Light mode UI	High	None
FR5	Smart Search	Smart search with autosuggestions	High	None
FR6	Product Filtering	Filter products by brand, price, and rating	High	FR5
FR7	Stock Availability	Show realtime stock availability	High	FR6
FR8	Product Comparison	Compare selected products	Mediu m	FR6
FR9	Media Rich Product Display	Show multiple images/videos for each product		FR7
FR10	User Reviews	Display user reviews and ratings	High	FR9
FR11	Shopping Cart	Shopping cart for item management	High	FR7
FR12	Payment Integration	Support COD, JazzCash, Easypaisa, and bank transfer		FR11
FR13	Order Confirmation	Display order confirmation with invoice	High	FR12
FR14	Delivery Scheduling	Allow users to choose delivery time	High	FR13
FR15	RealTime Delivery Tracking	Provide real time delivery tracking		FR14
FR16	Return/Refund Requests	Users can request returns or refunds	High	FR13
FR17	Easy Refund Process	Process refunds quickly with few steps	High	FR16
FR18	Refund Tracking	Users can track refund status	Mediu m	FR16
FR19	Notification Preferences	User can set notification frequency	Mediu m	FR19

ID	Functional Requirement Title	Description	Priority	Dependency
FR20	Customer Support Access	Provide support via live chat and phone	High	FR1
FR21	FAQ Access	Access to inapp FAQs/help section	Mediu m	None

# 4.2 Non-Functional Requirements

ID	Non-Functional Requirement Title	Description	Priority	Dependency
NFR1	Scalability	Handle 1000+ concurrent users	High	None
NFR2	Performance	Actions complete within 2 seconds	High	None
NFR3	Security	Encrypt user data including payment info	High	FR1, FR12
NFR4	Data Privacy	No selling/sharing of personal data	High	None
NFR5	Device Compatibility	UI supports various mobile screen sizes	Mediu m	None

# 5. External Interface Requirements

#### 5.1 User Interfaces

- Light mode UI with bottom navigation (Home, WishList, Cart, Account)
- Product page with images, price, comparison, reviews
- Checkout flow: select payment and delivery options

#### 5.2 Hardware Interfaces

Camera access (optional, for QR or scan features in future)

#### **5.3 Software Interfaces**

- MySQL (auth, notification)
- Google SignIn (Optional)
- JazzCash/Easypaisa APIs

#### 5.4 Communication Interfaces

- > HTTPS secure data transmission
- Push notifications via Firebase/OneSignal

# 6. Wireframes

#### 6.1 Home Screen

- > Top: Search bar
- Mid: Categories (Cases, Earphones, Chargers in future)

- > Banner: Sales/Discount
- > Section: Recommended/Trending items

#### 6.2 Product Page

- Image carousel
- Product title, specs, brand, price
- > Add to cart, compare button
- > Star ratings, review section

#### 6.3 Cart Screen

- List of selected products
- Quantity adjustment, remove item
- > Total amount, proceed to checkout

#### 6.4 Checkout Page

- > Delivery address, delivery time slot
- Choose payment method
- Confirm order button

#### 6.5 Login/Signup

- Email + password field
- Google login

#### 6.6 Support Center

- Live chat button
- > Phone call support
- > FAQs link

## 7. Stakeholders

Stakeholder	Role/Responsibility	
End Users	Use the app to buy mobile accessories.	
App Owner	Defines features, goals, and business rules.	
Developers	Build and test the application features.	
UI/UX Designers	Design user friendly and responsive interface.	
QA Testers	Ensure the system is functional and bug free.	

Stakeholder	Role/Responsibility
Payment Partners	Facilitate secure financial transactions.
Delivery Partners	Provide shipping and logistics for ordered items.

## 8. User Stories & Acceptance Criteria

#### User Story 1

As a **user**, I want to sign up using my phone number, email, or Google, so that I can log in easily.

#### **Acceptance Criteria:**

Given a new user opens the app, When they choose a login option and provide valid credentials, Then the system should register or log them in securely.

#### **User Story 2**

As a user, I want to search for accessories easily so I can find what I need quickly. **Acceptance Criteria:** 

Given the user enters a keyword in the search bar, When they start typing,

Then the system should show autosuggestions and relevant results.

#### **User Story 3**

As a user, I want to compare products sidebyside so I can choose the best one. **Acceptance Criteria:** 

Given multiple products are selected, When the compare button is tapped, Then a comparison table should appear showing key specs.

#### User Story 4

As a user, I want to receive order confirmations and tracking updates so I stay informed. **Acceptance Criteria:** 

Given a successful order, When the order is placed, Then the app should display confirmation and tracking info.

#### **User Story 5**

As a user, I want to request a refund if a product is defective so I don't lose my money. **Acceptance Criteria:** 

Given the user initiates a return request, When the return reason and details are submitted,

Then the system should initiate the refund process and show progress.

#### User Story 6

As an admin, I want to manage inventory and view sales reports so I can run the business efficiently.

#### **Acceptance Criteria:**

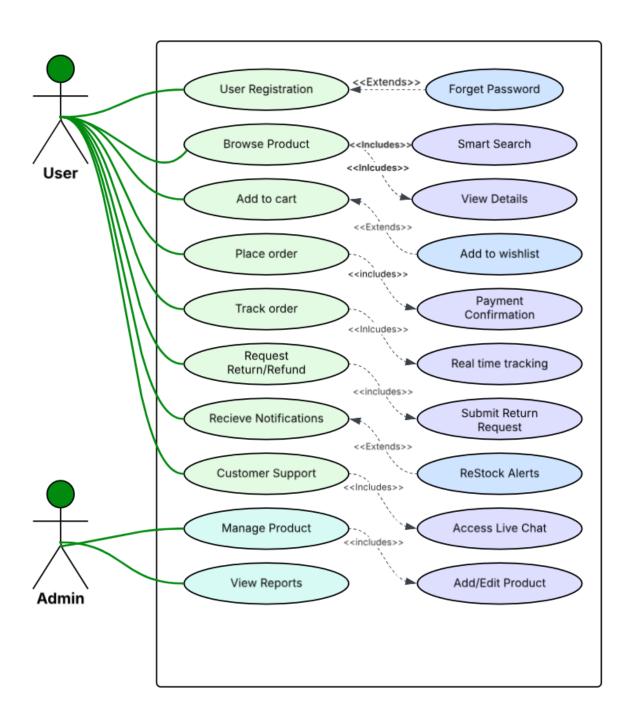
Given the admin logs into the dashboard, When they access products or reports, Then they should be able to add/edit items and see sales stats.

# 9. UML Diagrams

# 9.1 Use Case Diagram

## Use Case Diagram – Actors

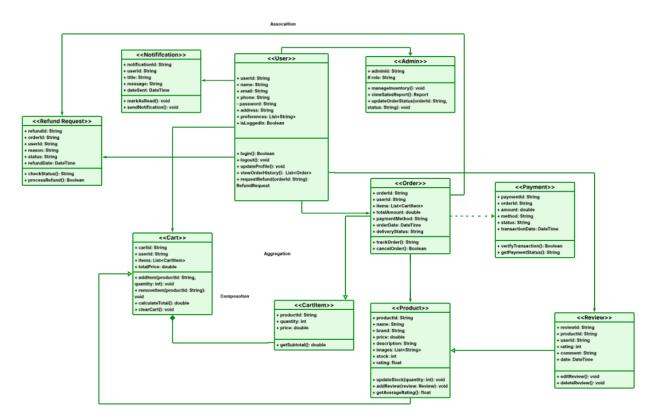
Actor	Role/Description	
User (Customer)	The primary user who browses products, places orders, requests returns, and makes payments.	
Admin	Manages product listings, inventory, orders, refunds, and user accounts.	
Delivery Partner	Responsible for delivering products and updating delivery status.	
Payment Gateway	Processes transactions via Easypaisa, JazzCash, COD, or bank transfer.	
Support Agent	Responds to live chat or phone support inquiries.	
System	Handles authentication, notifications, session management, and backend processing.	



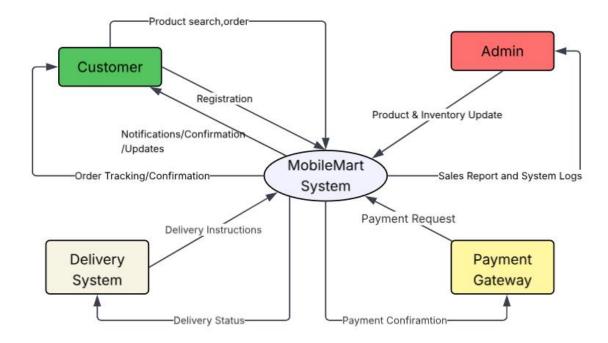
## Use Case Table (Any two use cases)

UC ID	Title	Description	Precondition	Main Flow	Alternative Flow
IUC1	Purchase Flow	_	User is logged in.	Proceeds to checkout →6	If no products found: Show "no results". If payment fails: Show retry. If product is out of stock: Notify and remove from cart.
IUC2	Product Management		Admin is logged in and authorized.	dashboard →2. Navigates to product section →3. Adds/updates/deletes products →4. Views sales	If there are missing fields: Show error. Cannot delete in use product: Notify admin. If there is no data in report: Show "no records found".

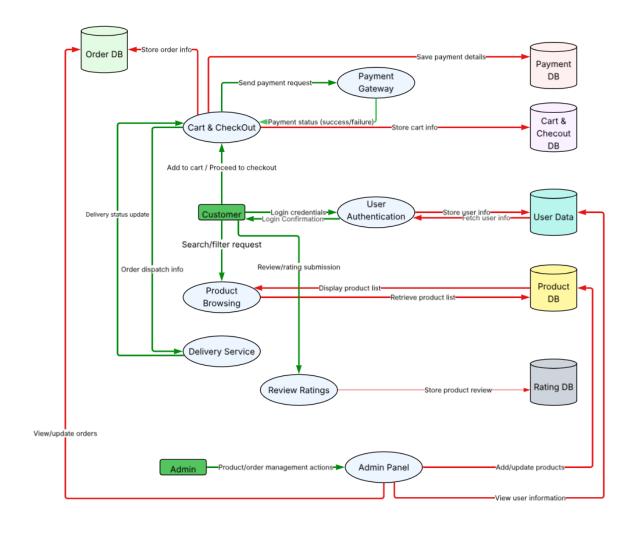
# 9.2 Class Diagram



#### 9.3 DFD Level 0:



#### 9.3 DFD Level 1:





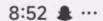
# **MobileMart**



Easy Shopping, Fast Delivery

Login

Sign Up





# **MobileMart**

Easy Shopping, Fast Delivery

Enter your email

Enter your password

# Login

Forget Password? Sign up here



# Join MobileMart

Figure 10.3

Easy Shopping, Fast Delivery

Full name	۵
Email address	
Enter your password	Ø
Confirm password	Ø

# Sign Up

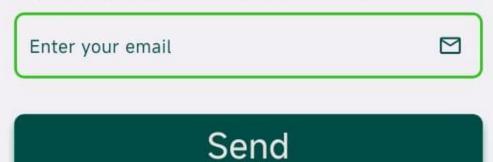
Already Registered? Login here



# **MobileMart**

Easy Shopping, Fast Delivery

Enter your email address below – we'll send you a onetime password (OTP) to verify your identity.





# **MobileMart**

Easy Shopping, Fast Delivery

Please enter the OTP sent to your email address.

Enter Otp here



Verify

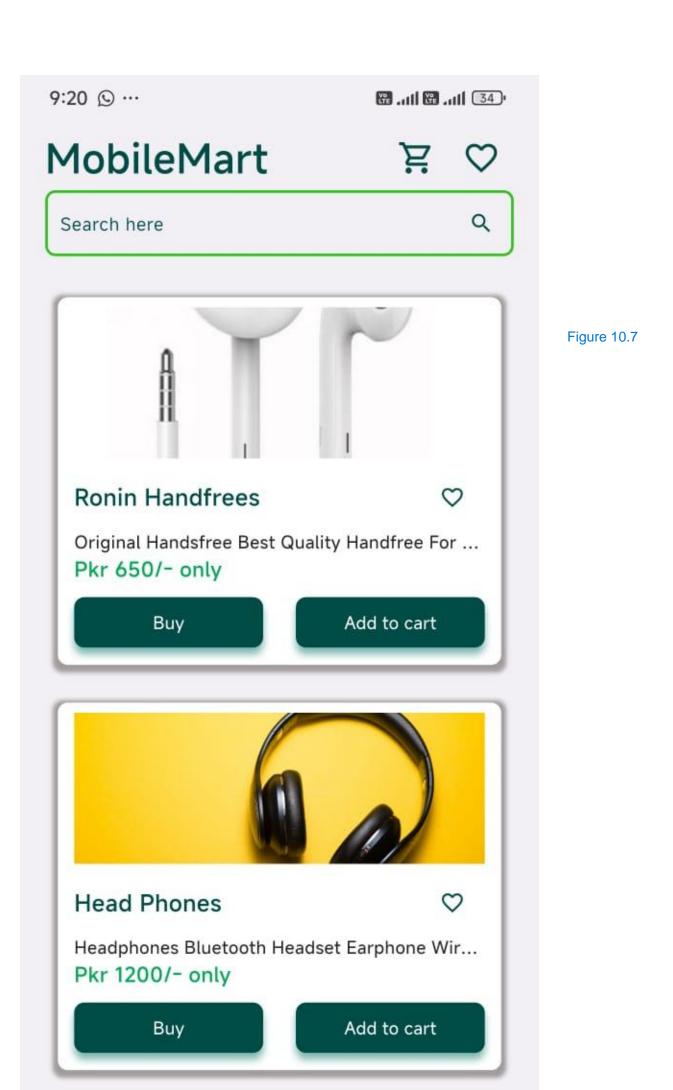


# **MobileMart**

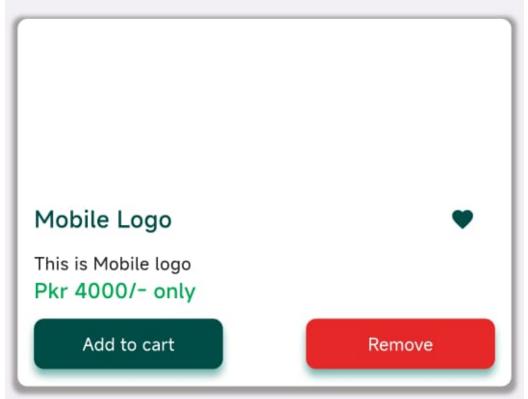
Figure 10.6

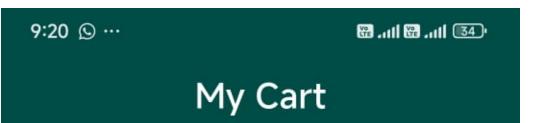
Easy Shopping, Fast Delivery

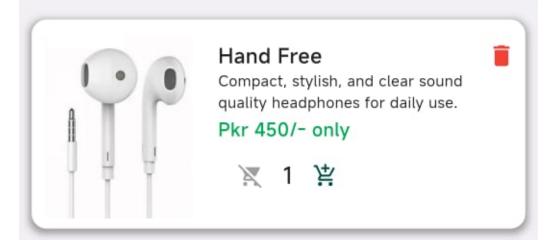
Enter your password	<b>©</b>
Confirm Password	0
Save	









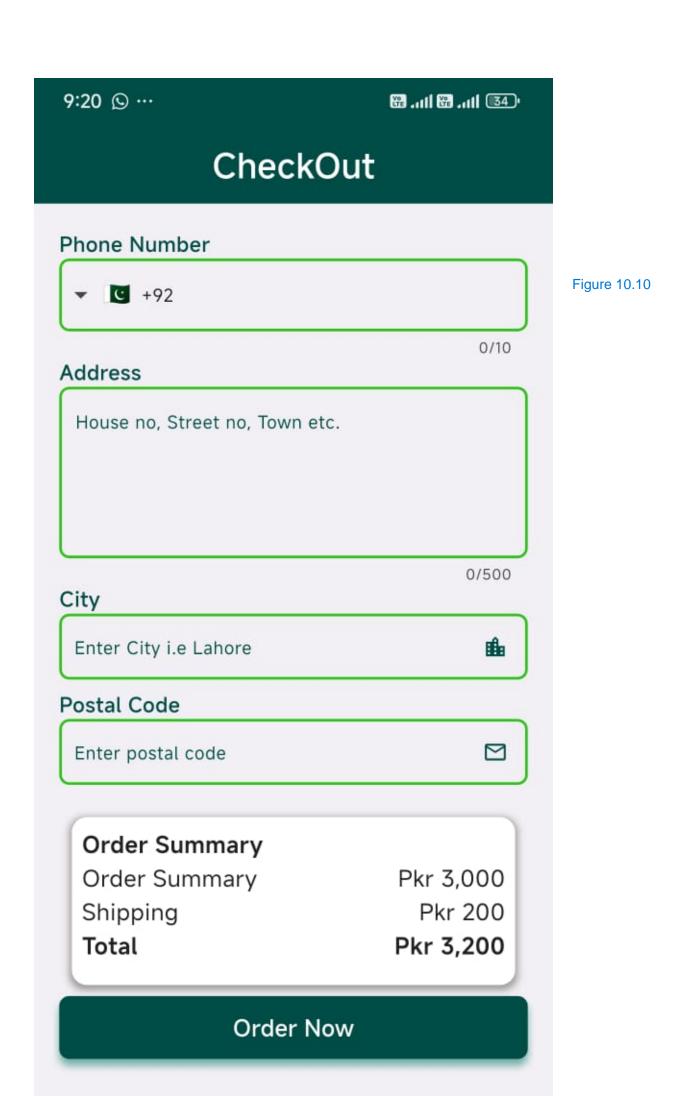


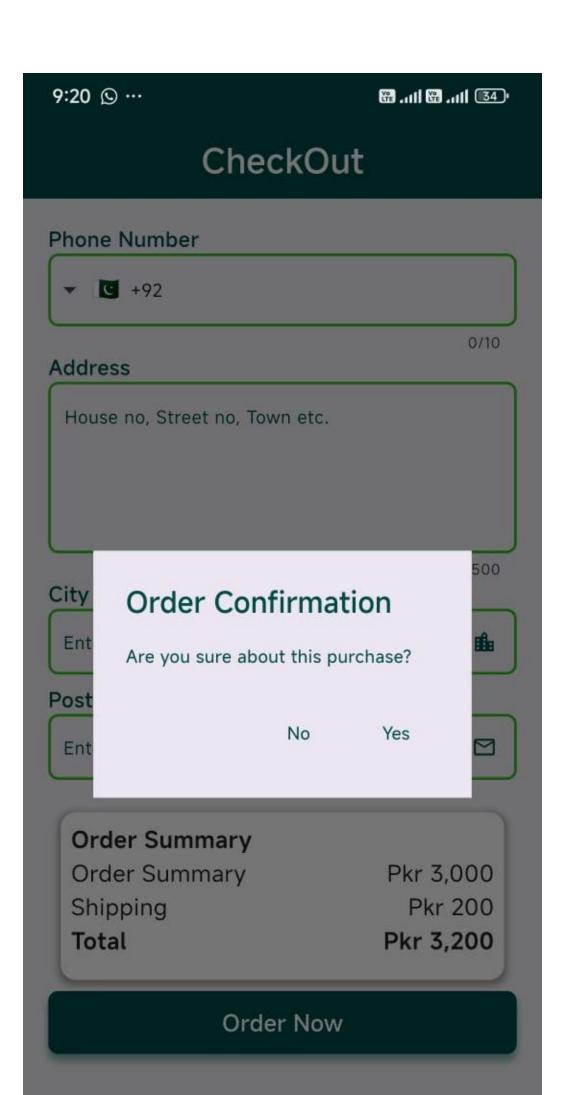
# **Order Summary**

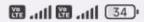
Order Summary Shipping **Total**  Pkr 3,000 Pkr 200

Pkr 3,200

# Proceed to checkout







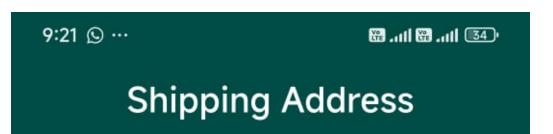


Your order has been placed.

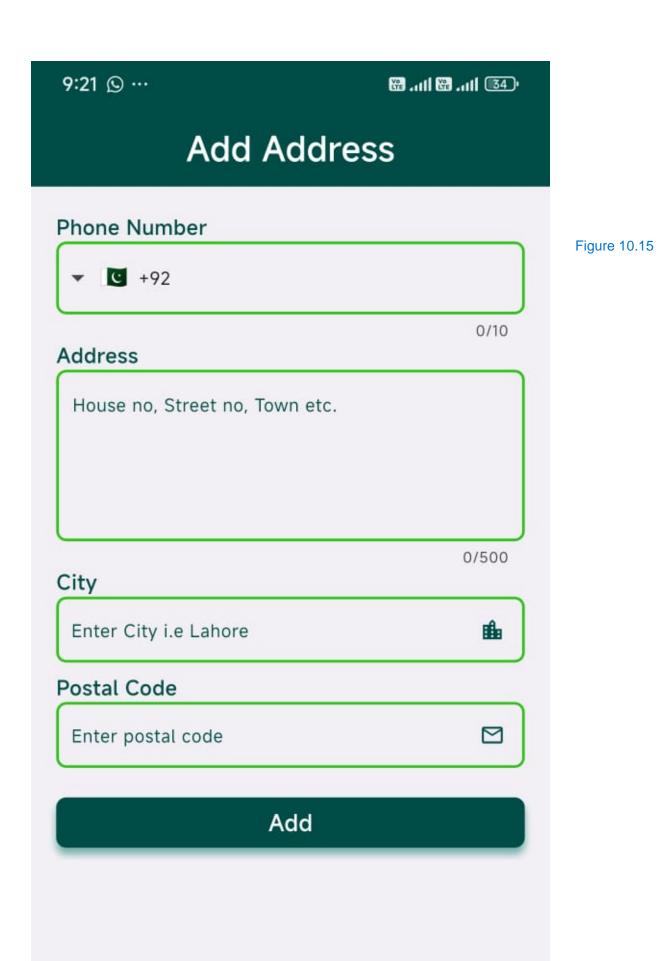
Back to home

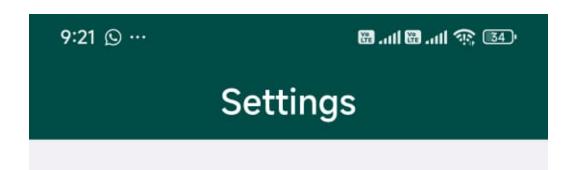
# 9:20 © ··· My Account

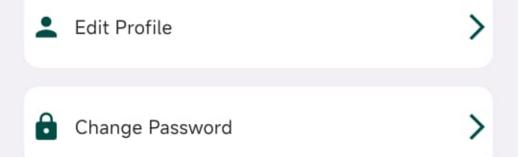


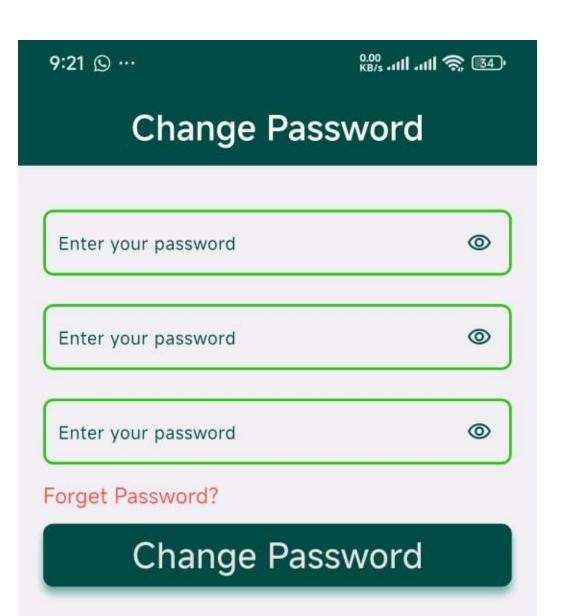


# **Add Address**













# Help & Support

Write A Query here

0/1000

Submit