American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Ride-sharing, Food service, and Courier service in one platform. (ONE TAP)

A Software Requirement Engineering Project Submitted

By

Semester: Spring_22_23		**Section:**	**Group Number:**
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The project will be Evaluated for the following Course Outcomes

Evaluation Criteria	Total Marks (50)	
Introduction, Format, Submission, Defense	[10 Marks]	
System Overall Description & Functional Requirements	[10 Marks]	
System Quality Attributes and Project Requirements	[10 Marks]	
UML and E-R Diagram with Data Dictionary	[10 Marks]	
UI/UX Prototyping	[10 Marks]	

Software Requirements Specification

for

< Ride-sharing, Food service, and Courier service in one platform. (ONE TAP)>

Version 1.0 approved

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<American International University-Bangladesh >

<14.05.2023 >

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Revision History

Name	Date	Reason for Changes	Version
First draft	01.05.2023	Changed some Functional Requirement	1.0

1. Introduction

1.1 Purpose

The purpose of this SRS project for the Ride Sharing, Food Service, and Courier Service Platforms is to provide a clear and detailed description of the system's requirements and functionalities. The SRS document will serve as a reference guide for the development team to ensure the system is built according to the client's requirements. It will also serve as a guide for testing and maintenance teams to ensure that the system meets the desired quality standards and continues to function optimally throughout its lifecycle. Additionally, the SRS document will provide a clear understanding of the system's functionalities to the stakeholders, including the client, developers, testers, and end-users.

The purpose of developing a ride-sharing, food delivery, and courier service platform is to create a convenient and efficient solution for users to meet their transportation, food delivery, and courier needs on one platform. By combining these three services, the platform can offer a one-stop shop for users to access multiple services without having to switch between different apps or platforms.

The platform aims to simplify the process of accessing these services by providing users with a user-friendly interface that is easy to navigate. The platform will allow users to book a ride, order food, and send or receive packages all in one place. This can save users time and effort, as they will not have to switch between different apps or platforms to access these services.

The platform aims to offer competitive pricing and reliable service to ensure user satisfaction. The ride-sharing service will provide users with affordable and safe transportation, the food service will offer a wide variety of food options from different restaurants, and the courier service will provide users with fast and reliable package delivery.

The purpose of this project is to provide a comprehensive and convenient platform for users to access multiple services, save time, and have a hassle-free experience.

1.2 Document Conventions

- Requirements are identified by a unique identifier in the format of "REQ-X," where X is a unique number.
- Use cases are identified by a unique identifier in the format of "UC-X," where X is a unique number.
- All requirements and use cases are described using a structured format that includes a brief description, input data, processing requirements, output data, and any relevant constraints.
- Non-functional requirements are identified separately and described using a structured format that includes a brief description and any relevant constraints.

- The terms "user" and "administrator" are used to refer to the different types of system users.
- All acronyms are spelled out at their first use in the document, followed by the acronym in parentheses. Subsequent references to the same acronym use the acronym only.
- The document follows a hierarchical structure, with major headings denoted by numbers and subheadings denoted by letters.
- The document is written in plain language and follows a consistent writing style throughout.

1.3 Intended Audience and Reading Suggestions

The intended audience for a software requirements specification (SRS) document includes all stakeholders involved in the development, testing, and deployment of the software. This includes software developers, testers, project managers, business analysts, and clients or customers who will be using the software. Reading the SRS document can be challenging, especially for non-technical stakeholders who may not have a background in software development.

- **Developers and testers**: These stakeholders are directly involved in the development and testing of the software. They should read the SRS document in detail and focus on the functional and non-functional requirements, use cases, and system constraints. They should also refer to any relevant technical documentation or specifications. The team was responsible for testing the system to ensure it meets the desired quality standards.
- **Project managers and business analysts**: These stakeholders are responsible for overseeing the development of the software and ensuring that it meets the client's requirements. They should read the SRS document to gain a high-level understanding of the software's features, capabilities, and limitations. They should focus on the project timeline, budget, and any risks associated with the development process.
- **Clients or customers**: These stakeholders will be using the software, and therefore, they need to have a clear understanding of its features, functionalities, and limitations. They should read the SRS document to gain a comprehensive understanding of how the software will work and what they can expect from it. They should focus on the functional and non-functional requirements, use cases, and any relevant user documentation.
- **Non-technical stakeholders:** These stakeholders may not have a background in software development and may find it challenging to read the SRS document. Therefore, it is important to provide a summary or executive summary of the document that explains the software's purpose, features, and limitations in non-technical terms. This can help non-technical stakeholders understand the software's capabilities and how it will benefit them.
- **Administrators:** The team responsible for managing and maintaining the system.
- **End-users**: The individuals who will be using the system to book ride-sharing services, order food, and schedule courier services.
- **Project Managers:** The individuals responsible for overseeing the development, testing, and deployment of the system.

1.4 References

[1] *Best delivery service in Bangladesh- REDX Delivery Com.bd*. Available at: https://redx.com.bd/ (Accessed: May 13, 2023).

[2] *HungryNaki Hungrynaki.com*. Available at: https://hungrynaki.com/restaurants (Accessed: May 13, 2023).

[3] *OBHAI - Obhai.com*. Available at: https://www.obhai.com/ (Accessed: May 13, 2023).

[4] *Uber.com*. Available at: https://www.uber.com/bd/en/?uclick_id=1032b272-32aa-43ff-9f21-13ec6e3caaee (Accessed: May 13, 2023).

[5] *foodpanda: Food & Groceries delivery service in Bangladesh Com.bd*. Available at: https://www.foodpanda.com.bd/ (Accessed: May 13, 2023).

[6] *Sundarban courier service (pvt.) ltd Sundarbancourierltd.com*. Available at: https://www.sundarbancourierltd.com/ (Accessed: May 13, 2023).

[7] *IEEE Standards Association. (1998). IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications.*

2. Overall Description

2.1 Product Perspective

Product perspective refers to the system's relationship to external entities, including users, hardware, software, and other systems. The Ride Sharing, Food Service, and Courier Service Platform is a mobile application-based system that connects users with ride-sharing, food service, and courier service providers. The system is designed to be user-friendly and accessible from any device with an internet connection, including desktop computers, laptops, tablets, and smartphones.

- **Users:** The primary users of the system are individuals who use the platform to book ride-sharing services, order food, and schedule courier services.
- **Ride-sharing service providers**: The system interacts with ride-sharing service providers who offer transportation services to users.
- **Food service providers:** The system interacts with food service providers who offer a variety of food items for users to order.
- **Courier service providers:** The system interacts with courier service providers who offer delivery services for packages and other items.
- **Payment gateways:** The system interacts with payment gateways to process transactions between users and service providers.
- **GPS tracking systems:** The system utilizes GPS tracking systems to track the location of ride-sharing and courier service providers.
- **Mobile devices:** The system is accessible from mobile devices and uses push notifications to provide users with real-time updates about their bookings.

2.2 Product Functions

- **User Registration and Authentication:** The system allows users to create an account and log in to the platform using their email addresses or social media accounts.
- **Ride-Sharing Services:** The system enables users to book ride-sharing services from registered service providers. Users can view available ride-sharing options, select a service provider, and schedule a ride.
- **Food Service:** The system allows users to browse through a list of registered food service providers, view menus, and place an order for delivery.
- **Courier Service:** The system enables users to schedule a courier service for the delivery of packages or other items. Users can specify pickup and delivery locations, and the system will display available service providers based on the pickup and delivery locations.
- **Payment Processing:** The system provides a secure payment gateway that allows users to make payments for services using credit/debit cards, PayPal, or other payment methods.
- **Notifications**: The system sends notifications to users and service providers to confirm bookings, provide real-time updates, and notify users of any changes to their bookings.

- **Rating and Feedback:** The system allows users to rate and provide feedback on service providers based on their experiences.
- **User Profile**: The system provides users with a profile page that allows them to view and manage their account information, including personal details, booking history, and payment information.
- **Service Provider Registration and Management:** The system enables service providers to register their services, manage their profiles, view booking requests, and accept or reject bookings.
- **Admin Panel:** The system provides an admin panel for administrators to manage and monitor the platform, including user and service provider registration, booking management, payment processing, and other administrative functions.
- **Reporting and Analytics:** The system provides reporting and analytics tools that allow administrators to view key performance indicators, such as booking volumes, revenue, and user engagement.

2.3 User Classes and Characteristics

Regular users: These are users who access the platform to book ride-sharing, food service, and courier services.

- They may have different mobility requirements and preferences, such as accessible transportation or specific food preferences.
- They may have different payment preferences, such as credit/debit cards, Bkash, or other payment methods.
- They expect a user-friendly interface that is easy to navigate and provides clear and concise information about available services, prices, and other relevant details.
- They may need to cancel or reschedule bookings and require a simple and efficient process to do so.
- They appreciate real-time updates and notifications about their bookings, including confirmation, pickup, and delivery times.

Service providers: These are ride-sharing, food service, and courier service providers who register their services on the platform.

- They may have different vehicle types, food specialties, or delivery options.
- They expect a user-friendly interface that is easy to navigate and provides clear and concise information about bookings, payment processing, and other relevant details.
- They require efficient and reliable payment processing and appreciate quick payment turnaround times.
- They appreciate real-time updates and notifications about booking requests and confirmations.

Administrators: These are individuals responsible for managing and monitoring the platform.

- They require a comprehensive admin panel that provides detailed information about user and service provider registration, booking management, payment processing, and other administrative functions.
- They require a reporting and analytics dashboard that provides insights into key performance indicators, such as booking volumes, revenue, and user engagement.
- They expect the system to be scalable and adaptable to changing user and market needs.

2.4 Operating Environment

Web Browsers: The system is accessible using web browsers and their supported versions.

- Google Chrome, Version **23**
- Mozilla Firefox, Version **23**,
- Microsoft Edge, Version **23**

Mobile Devices: The system is accessible using mobile devices running on and their supported versions

- Android operating systems. Version 13

2.5 Design and Implementation Constraints

- **Web Server:** The system requires a web server to host the application, handle incoming requests, and serve dynamic web pages.
- **Database Server**: The system requires a database server to store user and service provider registration information, booking details, payment processing data, and other system-related information.
- **Programming Language**: The system is built using programming languages such as Java, JavaScript, PHP, HTML, and CSS.
- **Third-party Services:** The system requires integration with third-party services such as payment gateways, map and location services, and messaging services.
- **Internet Connectivity**: The system requires a reliable internet connection to ensure smooth and uninterrupted access to the platform.

2.6 User Documentation

- **App Installation Guide:** A guide on how to install the mobile application on Android and iOS devices.
- **Getting Started Guide:** A step-by-step guide on how to register, create an account, and log in to the platform
- **User Registration:** The user should use all the valid documentation for registration. As like email, phone number, etc.
- **User Login:** The user should use a valid username and password that one has used in the registration form.
- **User Dashboard:** A guide on how to navigate the user dashboard, view available services, and book services
- **Profile Settings:** Users can edit the profile setting details such as profile details change, wallet method change, Offer and voucher check, etc.
- **Service Provider Dashboard:** A guide on how to navigate the service provider dashboard, manage services, and view bookings.
- **Ride selections:** The user can select sources to destination and then choose a vehicle, at the end determines an economical transport.
- **Food Order:** The user can select a restaurant and select their favorite dish, at the end who will deliver good service in less time, the user will select those service providers.
- **Courier service: T**he user can select sources to destination and select item tne to select item weight, at the end who will deliver good service in less time, the user will select those service providers.
- **Payment Processing:** A guide on how to make payments, view payment history, and manage payment options.
- **Ratings and Reviews:** A guide on how to rate and review service providers and view service provider ratings and reviews.
- **Help and Support:** A guide on how to access help and support services, including FAQs, live chat, and customer support.

- **Troubleshooting Guide:** A guide on how to troubleshoot common issues that users may encounter while using the system.

3. System Requirements

3.1 Functional Requirements (System Features)

1. User Registration:

- When users will fill up the registration form they should give only valid information.
- They have to give their correct email address, phone number, and NID card.
- Their information will be verified later.

Priority Level: High
Precondition: user must install the mobile app

2. Login

- User login into the system with a username and password according to registration.
- The login information will be cross-checked against database records.
- If the login is successful, the user account's home page is displayed.
- If the username and/or password are entered incorrectly then the system will produce a random verification code and send it to the user's email address.

Priority Level: High
Precondition: The user has a valid username and password.

3. User Profile Management:

- The system should allow users to manage their profile information, including their name, contact information, and payment details.
- They can also update their information, like name, password, profile picture, mobile number, etc.
- The user can update their payment method and product shift address.

Priority Level: Medium
Precondition: The user must have a system account.

4. Service Search:

- The system should allow users to search for available services based on their location, service type, and price range.
- Users can find their best option in the system by using a filter.
- There will be an option where users can find discounts. like food products, trip services, and courier services.

Priority Level: Medium
Precondition: Regular users find things an option or offer.

5. Booking Management:

- The system should allow users to book services and manage their bookings.
- The system should include viewing booking details, canceling bookings, and rescheduling bookings.

Priority Level: High
Precondition: Regular users find things an option or offer.

6. Payment Processing:

- The system will allow users to make payments for all the services booked.
- Users will also be able to view payment history and manage payment options.
- User can change their payment details at any time.

Priority Level: High
Precondition: Regular users find things an option or offer.

7. Ratings and Reviews:

- The system should allow users to rate and review service providers.
- The service providers will be able to view and respond to ratings and reviews.
- The system can identify whether their review is valid or not.

Priority Level: low
Precondition: The user must use our service first.

8. Analytics and Reporting:

- The system should provide analytics and reporting capabilities to track user activity.
- The system can also provide service provider activity, payment history, and other key performance indicators.

Priority Level: Medium
Precondition: Not applicable

3.2 Non-Functional/Quality Requirements

- **Performance -** The platform should be able to handle a high volume of user traffic without experiencing performance issues or downtime. Response times for all user interactions, such as booking a ride or ordering food, should be fast and consistent.

Priority Level: Medium
Precondition: N/A

- **Availability -** The platform should be available 24/7, with minimal downtime for maintenance or updates. Service interruptions should be kept to a minimum, and users should be given advance notice of any scheduled maintenance windows.

Priority Level: High
Precondition: N/A

- **Scalability -** The platform should be designed to scale easily to accommodate increased user traffic and service providers. This includes the ability to add more servers, expand storage capacity, and handle additional requests without sacrificing performance.

Priority Level: Medium
Precondition: N/A

- **Security -** The platform should be designed to ensure the privacy and security of user data and transactions. This includes using encryption to protect sensitive data, implementing secure payment processing systems, and following industry-standard security best practices.

Priority Level: High
Precondition: N/A

- **Reliability -** The platform should be reliable and free of bugs and errors that could affect user experience. Any issues or errors should be resolved quickly and efficiently, with minimal impact on users.

Priority Level: High
Precondition: N/A

- **Usability -** The platform should be easy to use, with a simple and intuitive interface that allows users to quickly and easily find the services they need. The platform should also be accessible to users with disabilities, and should be designed to support multiple languages and cultural norms.

Priority Level: High
Precondition: N/A

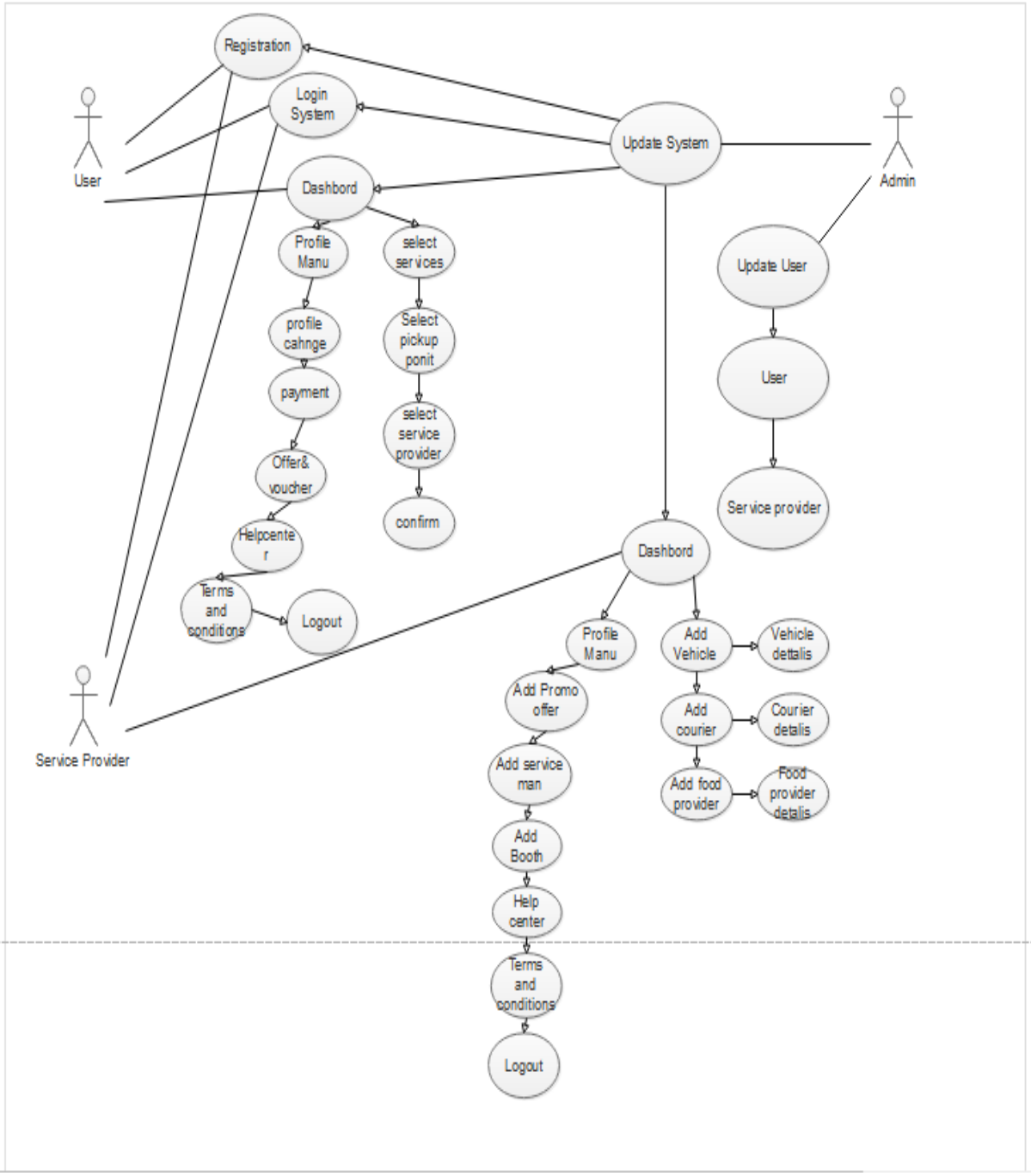
3.3 Project Requirements

There are some project requirement:

- **Document:** We have collected some paper and source, from which we take some idea for our project.
- **Budget:** We need a Budget of approximate 1000$.
- **User data:** User information have been given priority to build up this SRS Document.
- **Ui Design:** Here we are use Ui design software. (Pencil software).
- **Payment Gateway:** All the major payment gateway system has been added in this SRS Project.

4. Design and Interface Requirements

4.1 UML Diagrams

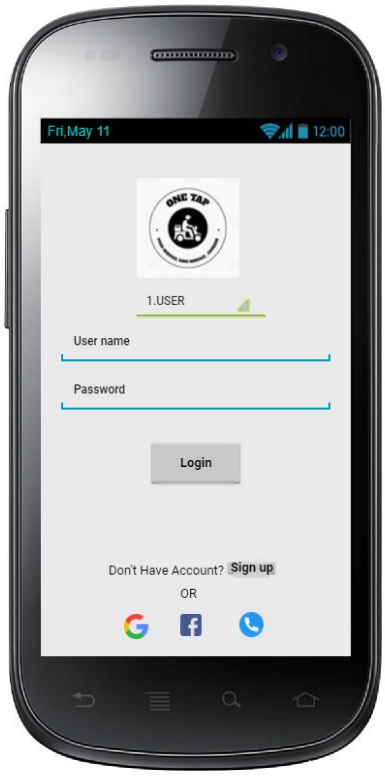


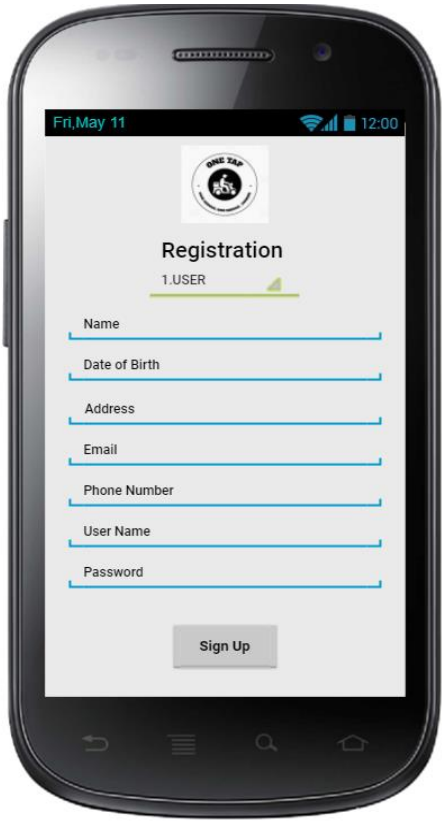
4.2 Data Dictionary

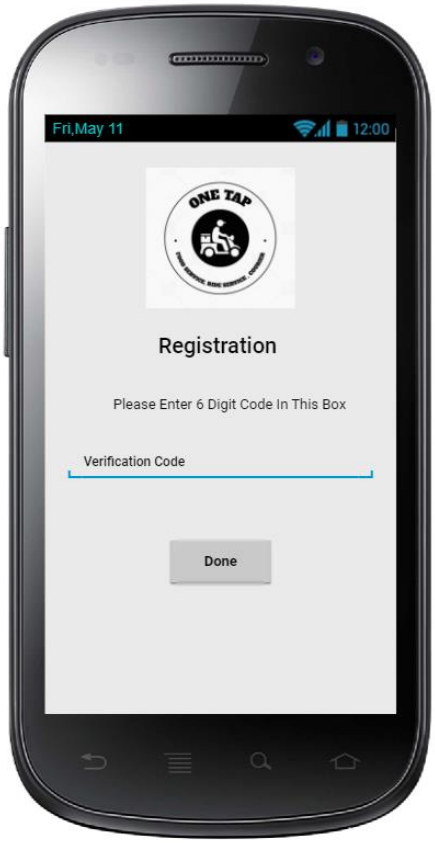
Entity	Attribute	Type/Size	Validation	Key
User	Name	Text(50)	Required	
User	Date of Birth	Date(10)	Valid Date	
User	Address	Text(50)	Required	
User	Email	Varchar(50)	Required	
User	Phone Number	Int(15)	0-100	
User	User Name	Varchar(20)	Required	Primary
User	Password	Vachar(10)	Required	
Service provider	Name	Text(50)	Required	
Service provider	Company Type	Vachar(10)	Required	
Service provider	Company Name	Text(50)	Required	
Service provider	Company HO Address	Text(50)	Required	
Service provider	Phone Number	Int(15)	0-100	
Service provider	Email	Varchar(50)	Required	
Service provider	Company Id	Varchar(20)	Required	Primary
Service provider	Password	Varchar(10)	Required	

4.3 UI/UX Design Specification

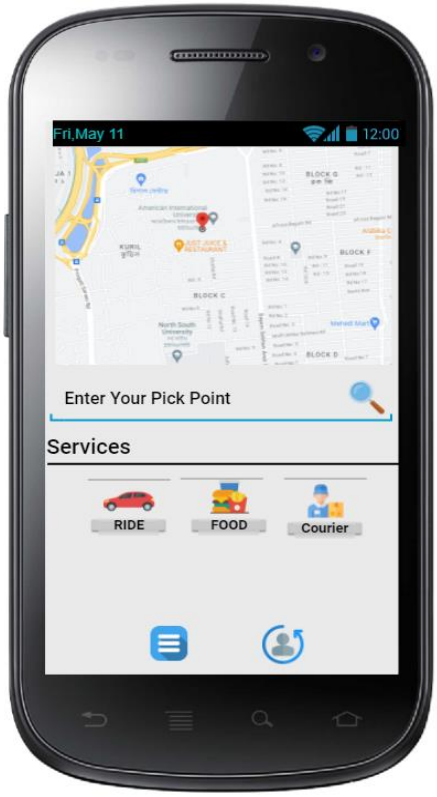
Here We have used (Pencil Software) for Ui design.

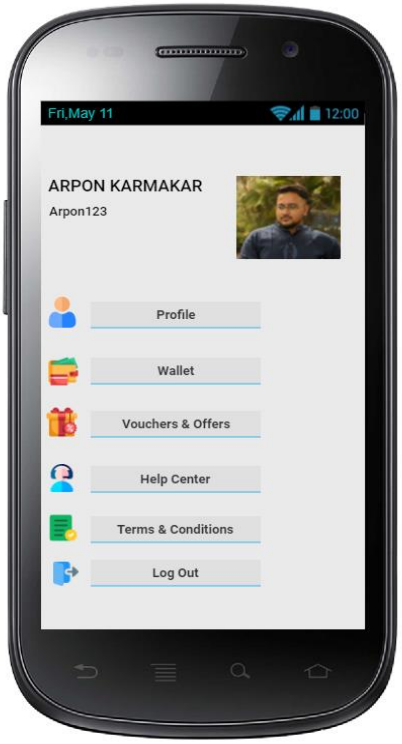


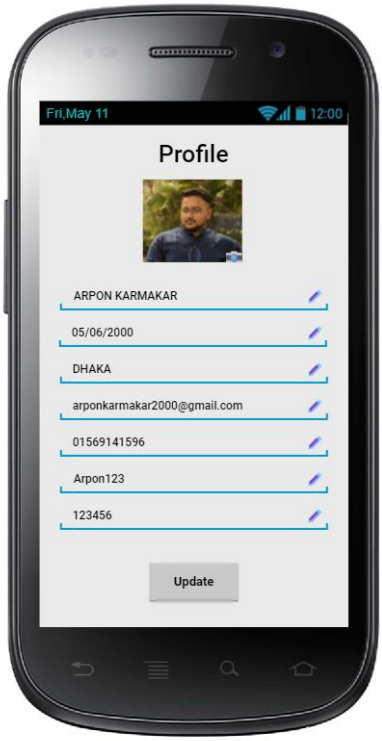

Fri,May 11
12:00
Registration
1.USER
Name
Date of Birth
Address
Email
Phone Number
User Name
Password
Sign Up

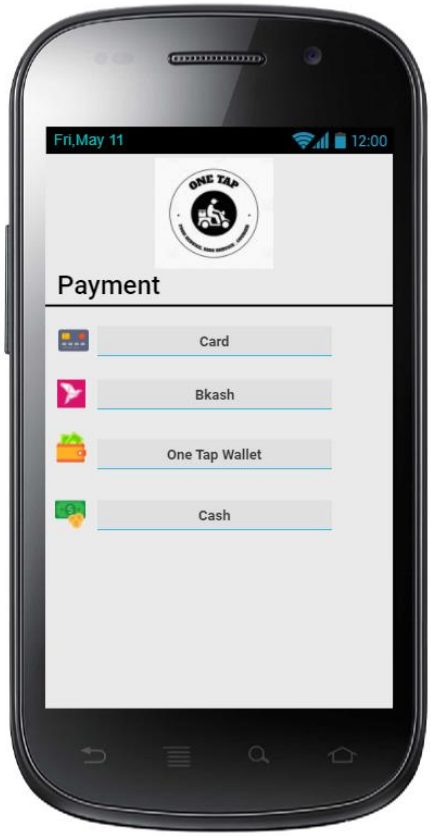

Fri,May 11
12:00
Registration
Please Enter 6 Digit Code In This Box
Verification Code
Done

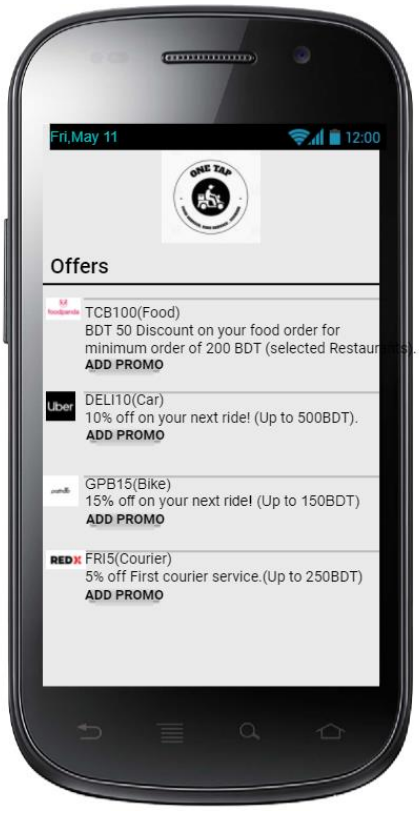

Fri,May 11
12:00
1.USER
Arpon123
123456
Go

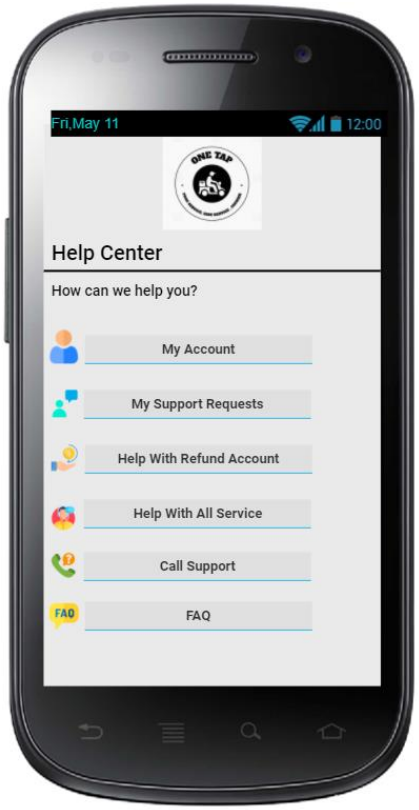

Fri,May 11
12:00
Enter Your Pick Point
Services
RIDE
FOOD
Courier


Fri,May 11
12:00
ARPON KARMAKAR
Arpon123
Profile
Wallet
Vouchers & Offers
Help Center
Terms & Conditions
Log Out

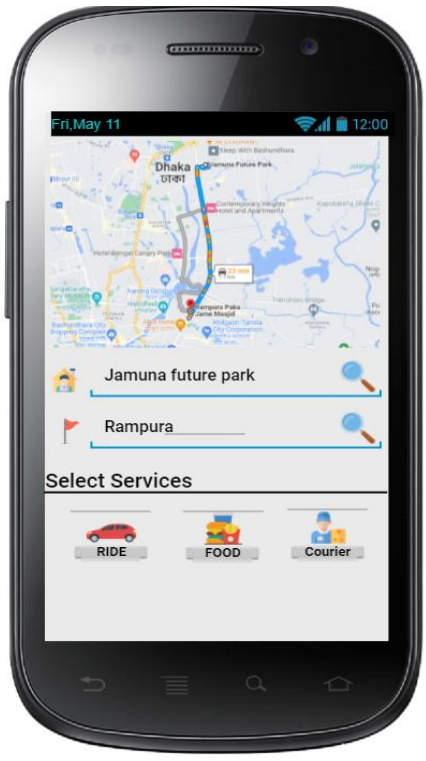

Fri,May 11
12:00
Profile
ARPON KARMAKAR
05/06/2000
DHAKA
arponkarmakar2000@gmail.com
01569141596
Arpon123
123456
Update

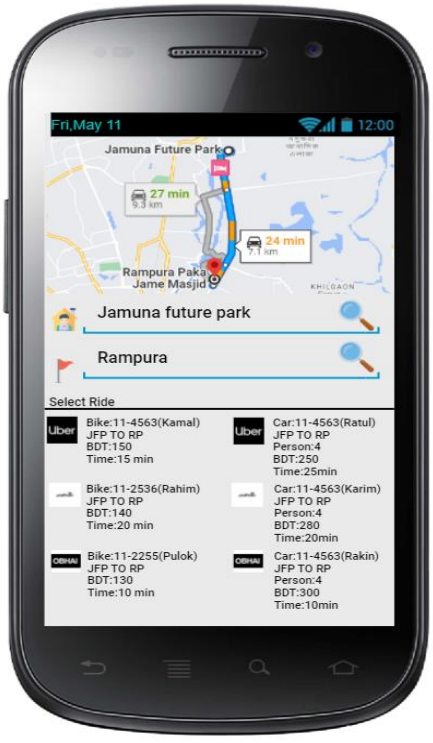

Fri,May 11
12:00
ONE TAP
Payment
Card
Bkash
One Tap Wallet
Cash

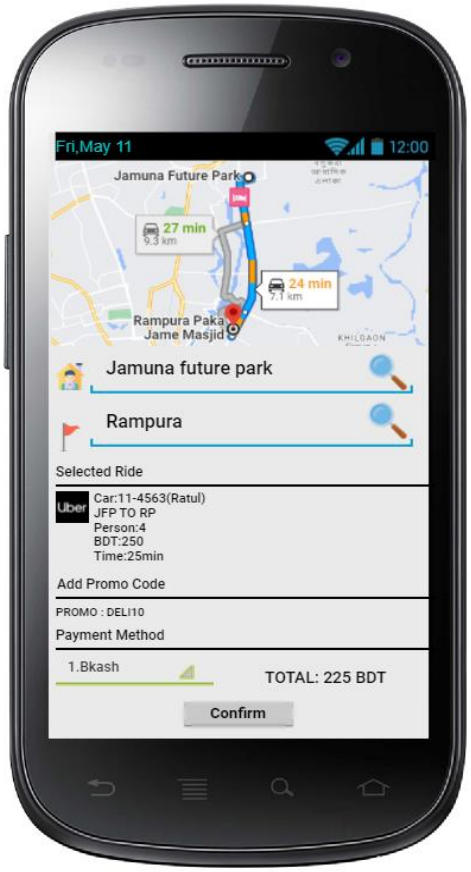

Fri,May 11
12:00
ONE TAP
Offers
TCB100(Food)
BDT 50 Discount on your food order for
minimum order of 200 BDT (selected Restaur
ADD PROMO
DELI10(Car)
10% off on your next ride! (Up to 500BDT).
ADD PROMO
GPB15(Bike)
15% off on your next ride! (Up to 150BDT)
ADD PROMO
FRI5(Courier)
5% off First courier service.(Up to 250BDT)
ADD PROMO

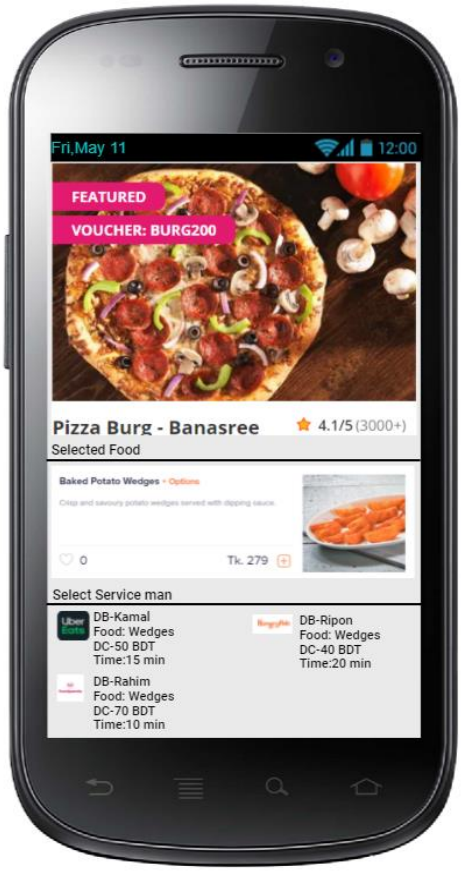

Fri,May 11
12:00
Help Center
How can we help you?
My Account
My Support Requests
Help With Refund Account
Help With All Service
Call Support
FAQ

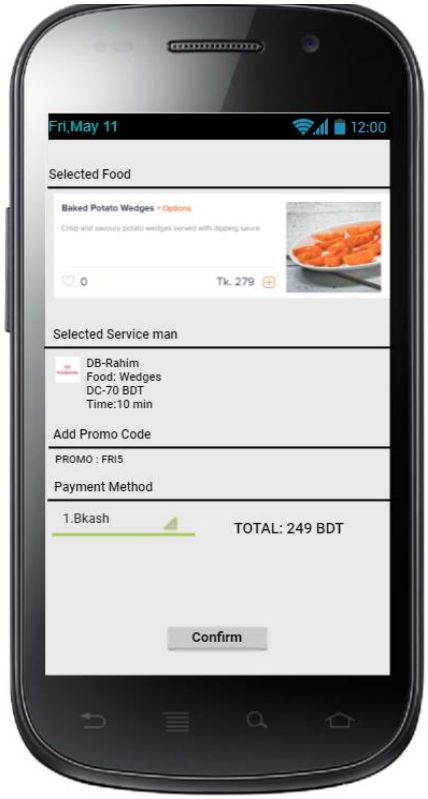

Fri,May 11
12:00
Terms & Conditions
Please note that the following Terms and Conditions govern the use of the ride sharing, food service, and courier services provided through our platform. By using our platform, you agree to abide by these terms. Please read them carefully before accessing or using our services.
1.Acceptance of Terms and Conditions
By accessing or using our platform, you acknowledge that you have read, understood, and agree to be bound by these Terms and Condition
If you do not agree with any part of these terms, please refrain from using our services.
2.Account Creation and Security
To access certain features of our platform, you may need to create an account. You are responsible for maintaining the confidentiality of your account information and for all activities that occur under your account. You agree to provide accurate and up-to-date information during the account registration process.
3.Cancellations and Refunds
Cancellation policies and refund options may vary for each service. It is your responsibility to review and understand the cancellation and refund policies associated with the specific service you are using. We reserve the right to charge cancellation fees in certain circumstanc
4.Service Provider Relationship
Our platform connects users seeking ride sharing, food delivery, or courier services with independent service providers. We do not provide these services directly, and the contract for services is between you and the service provider. We are not responsible for the actions or omissions of the service providers.

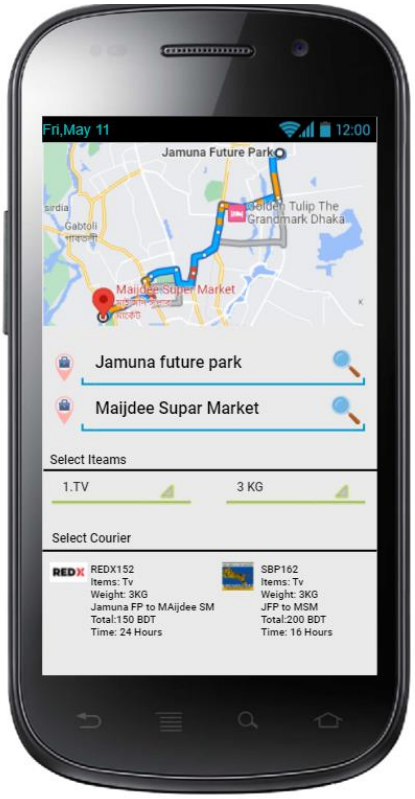

Fri,May 11
12:00
Dhaka
Jamuna future park
Rampura
Select Services
RIDE
FOOD
Courier

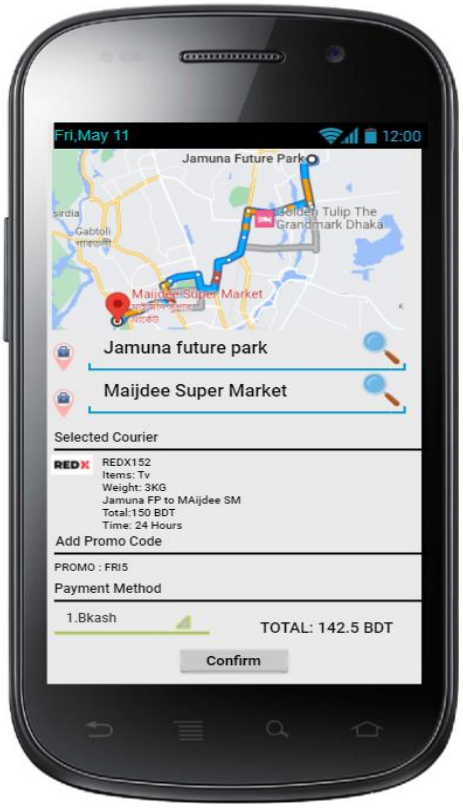

Fri,May 11
12:00
Jamuna Future Park
27 min
9.3 km
24 min
7.1 km
Rampura Paka Jame Masjid
Jamuna future park
Rampura
Select Ride
Bike:11-4563(Kamal)
JFP TO RP
BDT:150
Time:15 min
Car:11-4563(Ratul)
JFP TO RP
Person:4
BDT:250
Time:25min
Bike:11-2536(Rahim)
JFP TO RP
BDT:140
Time:20 min
Car:11-4563(Karim)
JFP TO RP
Person:4
BDT:280
Time:20min
Bike:11-2255(Pulok)
JFP TO RP
BDT:130
Time:10 min
Car:11-4563(Rakin)
JFP TO RP
Person:4
BDT:300
Time:10min


Fri,May 11
12:00
Jamuna Future Park
27 min
9.3 km
24 min
7.1 km
Rampura Paka
Jame Masjid
Jamuna future park
Rampura
Selected Ride
Car:11-4563(Ratul)
JFP TO RP
Person:4
BDT:250
Time:25min
Add Promo Code
PROMO : DELI10
Payment Method
1.Bkash
TOTAL: 225 BDT
Confirm

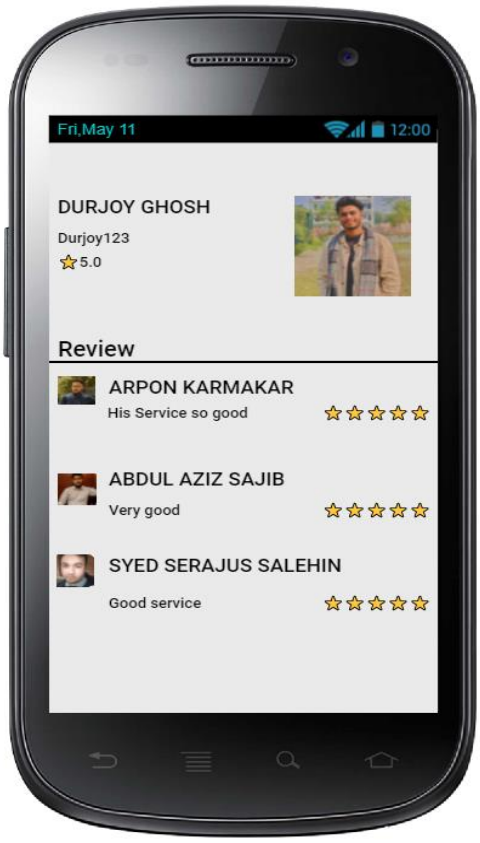

Fri,May 11
12:00
FEATURED
VOUCHER: BURG200
Pizza Burg - Banasree
4.1/5 (3000+)
Selected Food
Baked Potato Wedges
Tk. 279
Select Service man
DB-Kamal
Food: Wedges
DC-50 BDT
Time:15 min
DB-Ripon
Food: Wedges
DC-40 BDT
Time:20 min
DB-Rahim
Food: Wedges
DC-70 BDT
Time:10 min

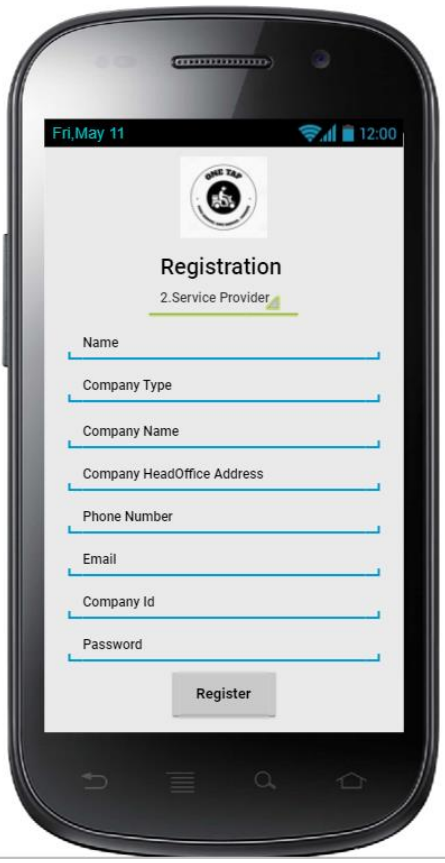

Fri,May 11
12:00
Selected Food
Baked Potato Wedges
Tk. 279
Selected Service man
DB-Rahim
Food: Wedges
DC-70 BDT
Time:10 min
Add Promo Code
PROMO : FRI5
Payment Method
1.Bkash
TOTAL: 249 BDT
Confirm

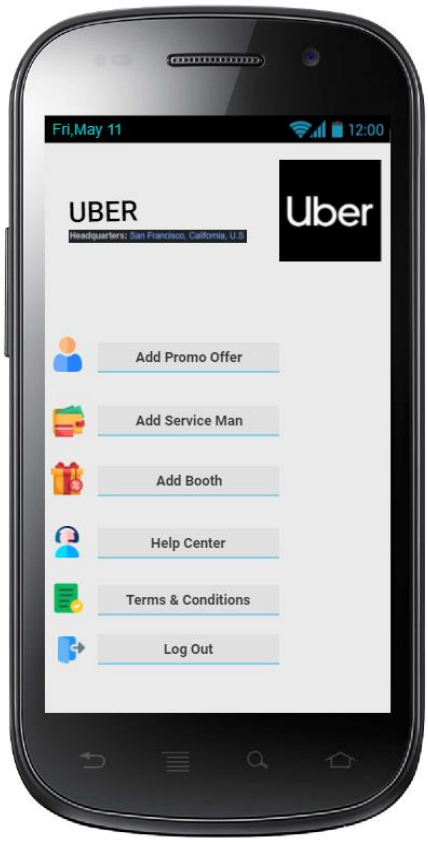

Fri,May 11
12:00
Jamuna Future Park
Maijdee Supar Market
Jamuna future park
Maijdee Supar Market
Select Iteams
1.TV
3 KG
Select Courier
REDX152
Items: Tv
Weight: 3KG
Jamuna FP to MAijdee SM
Total:150 BDT
Time: 24 Hours
SBP162
Items: Tv
Weight: 3KG
JFP to MSM
Total:200 BDT
Time: 16 Hours


Fri,May 11
12:00
Jamuna Future Park
Golden Tulip The Grandmark Dhaka
Maijdee Super Market
Jamuna future park
Maijdee Super Market
Selected Courier
REDX
REDX152
Items: Tv
Weight: 3KG
Jamuna FP to MAijdee SM
Total:150 BDT
Time: 24 Hours
Add Promo Code
PROMO : FRI5
Payment Method
1.Bkash
TOTAL: 142.5 BDT
Confirm


Fri,May 11
12:00
Activity
Past Activity
16.03.2023
Megpai Resturant
1.Grill 2.Nan Ruti 3.Coke(250ml)
Total: 350 BDT
05.04.2023
Uber
Car: 11-4536 (Kabir khan)
Rampura to Jamuna Future Park
Total: 300 BDT
13.04.2023
Bike: 15-8965 (Sakib Khan)
Kuril to Uttara Sector 1
Total: 150 BDT
25.04.2023
REDX
Sony (Basundhara City)
One Samsung Tv
Basundhara City to Nadda
Total:110 BDT


Fri,May 11
12:00
DURJOY GHOSH
Durjoy123
5.0
Review
ARPON KARMAKAR
His Service so good
ABDUL AZIZ SAJIB
Very good
SYED SERAJUS SALEHIN
Good service


Fri,May 11
12:00
Registration
2.Service Provider
Name
Company Type
Company Name
Company HeadOffice Address
Phone Number
Email
Company Id
Password
Register


Fri,May 11
12:00
UBER
Uber
Add Promo Offer
Add Service Man
Add Booth
Help Center
Terms & Conditions
Log Out