1.1 Software Requirement Specification

1.1.1 Introduction

1) Purpose

The purpose of this document is to provide a thorough overview of the mobile application 'online service booking platform'. It explains the system's features, operations, user interface, and user privileges.

2) Scope

This system offers a platform that connects the service provider and the service receiver. The system provides an easy-to-use user interface and an advanced filter module that makes it quick and easy for the user to find the best service possible.

3) Intended Audience

The primary audience for this document is software developers, testers, and project managers who will use it as a reference during the production of this system. The document also includes a summary of the system's features, including its hardware, software, and interfaces. It is advised that users carefully read the section on interface and function.

1.1.2 Overall Description

1) Product Perspective

An online service booking system is developed to provide a platform where users can offer and receive the best service possible. This application primarily focuses on a service provider by giving a service provider an employment and a platform to promote their service. Additionally, it helps to establish communication between service provider and recipient.

2) Product Features

This application provides its customers with a variety of functions. Each user is given access to a variety of particular capabilities, such as a service provider's ability to control the availability of their service, a service recipient's ability to browse service providers using filters, and an administrator's ability to authenticate and verify users. There are additional feature sets that have been created for the advantage of both users, including online payment methods, notifications, ratings and feedback, and many more.

3) User classes and characteristics

'Book My Service' is designed to provide and receive services. It targets towards two main age group, the first one is working population i.e., 18-60 and the second age group is 26 and above who are busy in their occupation or cannot perform home chores. The most privileged user role in this app is admin. An admin has access to all functions of the system and can also allow or remove users. Another user role is service provider. A service provider can make their profile with all necessary details, accept bookings, make their availability schedule. Similarly, service receivers can view the service provider profiles, book them and cancel the bookings.

4) Operating environment

This application is design4)ed to run on mobile devices. It is planned to be launched in android only. The admin site will be a web application, therefore, Windows, MacOS like popular OS will be able to run the site.

5) Design and implementation constraints

This application's development is broken down into four main phases: designing, frontend, backend, and database development. The app's user interface (UI) will be created with Figma, a web-based UI design platform. The Dart programming language

and Flutter will be used to create the front end. Similarly, the backend of the project will be created using the Python programming language and Django Framework. We'll make use of PostgreSQL as our database.

1.1.3 System Features

1. **Registration:**

   Description:

   The users are presented with a registration form, into which they must enter their legitimate credentials in order to sign up as users of this application.

   Functional Requirement:

   Req – 1: Before registering, the user is presented with two choices.

   Req – 2: The first option is for normal users/ service receivers and the second option is for service providers.

   Req – 3: To proceed with the registration process, the user must select one of the two options.

   Req – 4: The system must verify whether the user submitted a blank form or not.

   Req – 5: The given credential's validity must be verified by the system.

   Req – 6: The system must notify the user whether or not the registration process was successful.

2. **Login:**

   Description:

   The users are presented with a login form, into which they must enter their credentials to login into the application.

   Functional Requirement:

   Req – 1: The user is presented with a login form.

   Req – 2: The system must verify whether the user submitted a blank form or not.

Req – 3: The system must utilize the provided email to validate the user's existence.

Req – 4: The system must verify the given password.

Req – 5: If the user is not registered or if the provided email or password is invalid, then the system must display an error message.

Req – 6: The system must log in to the user in accordance with their user type if the supplied credentials are valid.

3. **Service Providers Profile listing:**

Description:

The system shows a list of service providers whose profiles can be browsed by users to view their details.

Functional Requirement:

Req – 1: The user can view a list of service providers thanks to the system.

Req – 2: Users can look through the list of service providers.

Req – 3: The profiles of the service providers are available for users to view.

4. **Book service:**

Description:

The system allows the registered users to book the available service.

Functional Requirement:

Req – 1: The system should show the user all of the available service providers.

Req – 2: When a user clicks on a service provider, the system takes the user to the profile of that service provider, where a button to book the service is available.

Req – 3: The user must click the "book now" button to begin the booking procedure.

Req – 4: When a user clicks the "book now" button, they are taken to a booking screen where they must provide information on their booking, including the date, time, and hour.

Req – 5: The system analyzes the service provider's schedule when the user enters their booking information, and if the service provider is already booked, the system will notify the user.

Req – 6: The system will display the cost, time, and date of the booking on the confirmation page if the chosen service provider is not already booked.

Req – 7: The system provides users with two payment options: cash on delivery and online payment.

Req – 8: In order to finish the booking, the user must select one of the two options.

Req – 9: The user is forwarded to the transaction procedure if they choose the online payment option.

Req – 10: If the transaction is successful, the system will confirm the booking and display the message "booking successfully."

Req – 11: The system analyzes the service provider's schedule when the user enters their booking information, and if the service provider is already booked, the system will notify the user.

Req – 12: The system will display the cost, time, and date of the booking on the confirmation page if the chosen service provider is not already booked.

Req – 13: The system provides users with two payment options: cash on delivery and online payment.

Req – 14: The user is forwarded to the transaction procedure if they choose the online payment option.

Req – 15: If the transaction is successful, the system will confirm the booking and display the message "booking successfully."

5. **Notifications and alerts:**

   Description:

The system notifies users of their booking status and ongoing activity in the application via notifications.

Functional Requirement:

Req – 1: The system offers a page where user can view all of your notifications.

Req – 2: The user receives notification from the system when their reservation is confirmed.

Req – 3: If the service provider is being booked, the system will notify them.

Req – 4: If any of their bookings are canceled, the system sends a notification to the service providers.

6. **Rating and feedbacks:**

Description:

The system enables the user to rate and comment on the performance of the service provider.

Functional Requirement:

Req – 1: After each service is finished, the system gives users a form.

Req – 2: The feedback form is optional, so users are free to skip it.

Req – 3: The system rates the service provider based on user ratings and comments.

Req – 4: The service providers are able to see the reviews and comments.

7. **Browse Professionals using Filter:**

Description:

Users can browse service providers using the system's various filter options, including pricing, rating, and specialty.

Functional Requirement:

Req – 1: The system shows users the profile of the service provider.

Req – 2: Users are free to browse and view the profiles of service providers.

Req – 3: To help the user find the best service, the system offers a filtering option.

Req – 4: The list can be narrowed down by the user depending on cost, specialty, and rating.

8. **Online payment:**

Description:

The system enables users to make payments for services via online transactions.

Functional Requirement:

Req – 1: Users have two payment choices available to them: cash on delivery and online payment.

Req – 2: When a user chooses the online payment option, the E-sewa interface is opened.

Req – 3: To complete the transaction, users must complete the transaction form.

Req – 4: The system will validate the transaction form before moving forward with the transaction.

Req – 5: If the transaction is successful, the system will inform the user.

9. **Manage Availability:**

Description:

The system provides flexibility to service providers to choose the start and end times of their service.

Functional Requirement:

Req – 1: The system offers a button to change the service provider's availability status.

Req – 2: The service providers can toggle the availability status on or off according to their schedule.

10. **Schedule service:**

Description:

The system allows users to book a service in advance.

Functional Requirement:

Req – 1: The system offers the ability to pre-book a service while making a booking.

Req – 2: The user is also required to make the payment when making the booking in advance.

Req – 3: Only half of the payment will be refunded if the user cancels the reservation after it has been confirmed.

11. Manage and verify service provider:

Description:

The system allows the admin to manage and verify service providers based on their credentials.

Functional Requirement:

Req – 1: The system gives the administrator access to a dashboard where they may carry out important tasks.

Req – 2: An administrator can add, modify, and delete users.

Req – 3: During the registration process, the system enables the administrator to confirm the service provider.

Req – 4: The system notifies the service provider when the administrator approves the registration.

12. Edit profile:

Description:

The system allows the users to build and edit their profile.

Functional Requirement:

Req – 1: The system takes the user to their profile details when they click the profile button.

Req – 2: Users of the system can modify their passwords.

Req – 3: The system enables users to modify other data, like email, name, phone number, and bio.

1.1.4 External Interface Requirements

1) User Interfaces

To ensure that everyone can utilize the application to its maximum potential, it should have a user-friendly user interface (UI). The user interface (UI) has a big impact on how a user interacts with the system, thus it's important to choose objects, colors, text fonts, and other design elements very carefully.

2) Hardware Interfaces

The application is created for end users including service providers, service receivers, and administrators. All the users except the admin are required to have an android device with android 6 or above to use this application. The admin must have a laptop or a desktop to use the admin site. Users must have an internet connection in order to use this online application. Apart from a laptop and an android phone, no additional hardware is required.

3) Software Interfaces

The application will be created using integrated development environments and common code editors. The majority of the coding for the system's user interface will be done in Visual Studio Code.

1.1.5 Non-Functional Requirements

1) Security Requirement

Data breaches and unauthorized access of any kind should be prevented on the system. To access media like images and use cookies, it needs to get the user's consent. Only reading access to personal data is permitted for the administrator and the system (except passwords). Users only have read access to other users' data and are only permitted to write to their data.

2) Performance requirements

The system must handle user bookings and online transactions, hence it must have a high transmission rate. Although it might not require extremely high performance, it must be scalable in order to accommodate numerous bookings and transactions at once.