❖ Skill Link – Linking Needy to Employment

➢ About

Skill-Link is to provide services to consumers through an user friendly technology-enabled platform. The application aims to simplify the process of finding and booking reliable service providers for various services such as cleaning, home repairs etc. Our goal is to offer a convenient and hassle-free experience to its customers by providing them with a wide range of services at their preferred time and location. The Skill-Link also aims to empower our unskilled local workers by providing employability to them. Overall, our objective is to become the go-to destination for service needs.

➢ Requirements

1. Web application
2. Secure Payment System
3. Services Information Management
4. Service Booking System
5. Workers System
6. Customer Page
7. Book Services Cart
8. Services Search
9. Services Filters By Price
10. Category
11. Privacy Policy
12. Verification

➢ Document:

SRS(System Requirement Specification Document).

ERD(Entity Relationship Diagram)

DFD(Data Flow Diagram)

➢ Title:

System Requirement Specification for Skill Link – Linking Needy to Employment.

➢ Team:

Customers, Service Persons, System Admin.

➢ Objective (Purpose):

The objective of Skill-Link is one of the platform to provide customers with on demand services directly from skilled or unskilled workers on there nearby area. To offer commercial services like plumbing, electrical, carpentry, cleaning, pest-control, painter, decoration services etc.

➢ Scope:

This System allows customers and workers to login, view services, book those in multiple choice format presented randomly, within a specified time limit directly from service providers.

This platform is to make our customers lives more fulfilling to solve their needs in a one click. They want to be the go-to platform helping customers to complete their household needs that are important to their lives. It enables users to find any services like

- plumber
- electrician
- carpenter
- cleaner
- pest-controller
- painter
- decorator

➢ Definitions:

Term	Definition
Database	Collection of all the information monitored by this system
User	Any person logged on the system.
DFD	Data Flow Diagram.
Specification (SRS)	The constraints under which it must operate. For example, this document.
GUI	GUI is the Graphical User Interface.
SQL	It is a structured query Language.

➢ Functional Requirements:

This section contains the detailed requirements. In this section, the users of "Skill-Link" are referred to customer Users of other sections are referred Service Person.

- **GUI**

  a. The software provides a good graphical interface for the user and the administrator so that they can operate on the system, performing the required tasks such as Selecting, updating, paying and viewing the details of the booking details.

  b. It allows user to view quick reports like feedback, punctuality in between particular time.
  c. It provides verification and search consumer right services.
  d. The user interface must be customizable by the administrator.
  e. All the modules provided with the software must fit into this graphical user interface and accomplish to the standard defined.
  f. The design should be simple and all the different interfaces should follow a standard template.
  g. The user interface should be able to interact with the user management module and a part of the interface must be dedicated to the login/logout module.

- **Login Interface:**

  In case the user is, not yet, registered, he can enter the details and register to create his account. Once his account is created, he can 'Login' which asks the user to type his Phone number. If the user entered either Phone number incorrectly then an error message appears.

- **Search:**

  The customer or service provider can enter the type of booking he is looking for and the work he is interested in, then he can search for the required work by entering the required service name.

- **Categories View:**

  Categories view shows the categories of available service provider, time slots and provides ability to the Admin to add/edit or delete category from the list.

1. **Register**

Description: First the user will have to register. There are two different type of users.
The Service Person: The person has to provide details about the name, address, phone number, id.
Customers: The user has to provide details about his/her name of address, phone number, payment details.

1.1.Sign up

Input: Detail about the user as mentioned in the description.
Output: Confirmation of registration status and an user Id and password will be generated to the user.
Processing: All details will be checked and if any error is found then an error message is displayed else an user Id and password will be generated.

1.2.Login

Input: Enter the user id provided.
Output: User will be able to use the features of software.

2. **Manage Service by user.**

2.1. Services.

- **Description:** List of services will be displayed along with date and time and available service person.

2.2: Search

- **Input:** Enter the name of service required.
- **Output:** List of services related to the keyword.

2.3: Services

- **State:** displays the services user wants to book.
- **Input:** book the required service that the user wants.
- **Output:** confirmation for booking and apology for failure in issue.
- **Processing:** if the selected booking is available then confirmed booking will be issued else error will be displayed.

2.4: Re-Booking

- **State:** Booking is issued and is about to reach the date.
- **Input:** Select the booking to be renewed.
- **Output:** confirmation message.
- **Processing:** If the issued booking is already reserved then the error message will be displayed otherwise the booking will be confirmed.

2.5: Reserve booking

- **Input:** Enter the details of the booking.
- **Output:** Booking successfully reserved.
- **Description:** If a booking is issued by someone then the user can reserve it, so that later the user can issue it.

3. Manage booking by Service Person

3.1: Update details of bookings

3.1.1: Add bookings

Input: Enter the details of the bookings such as: name, phone number, address and the time.
Output: confirmation of the requested service.

3.1.2: Cancellation of Service

Input: scheduled booking is cancelled.
Output: Advance payment is kept as fine.

3.2: Performance Requirements

Response Time

As soon as the user books a service, he/she is contacted back within an hour.

Throughput
The number of transactions is directly dependent on the number of users, the users may be the Service person also the people who use the Application for checking-out bookings, and checking online availability.

Capacity
The system is capable of handling more than 50 users at a time.

Resource Utilization

The resources are modified according the user requirements and also according to the services requested by the users.

3.3: Logical Database Requirements

The software should be able to keep a check on the user history like what kind of bookings he/she has done. It should be able to reflect those suggestions, the next time user login to the application. This will surely be helpful to the user as he/she can easily choose their preferred services.

3.4: Standards Compliance

All the user's entries will be stored in the admin's database so the admin can easily keep a check on the all the entries of different user's, hence this will make our software more efficient and compatible. A specific money is also needed to achieve such effectiveness in the software. Small meetings will also be scheduled between the developer team and the client.

➢ Non-Functional Requirement:

Non-Functional Requirement such as those for performance, security, modifiability, reliability, portability and usability have a significant influence on the software architecture of a system. Architects need to understand their designs in terms of quality attributes. For example, they need to understand whether they will achieve deadlines in real time systems, what kind of modifications are supported by their design and how the system will respond in the event of a failure. There are large and thriving attribute communities that study various quality attributes but they each have their own language and sets of concepts.

1. Reliability

To apply engineering knowledge and specialist techniques to prevent or to reduce the likelihood or frequency of failures of the system.

There will be a team to identify and correct the causes of failures that do occur despite the efforts to prevent them and to determine ways of coping with failures that do occur, if their causes have not been corrected, to apply methods for estimating the likely reliability of new designs, and for analyzing reliability data.

The reason for the priority emphasis is that it is by far the most effective way of working, in terms of minimizing costs and generating reliable products.

The primary skills that are required, therefore, are the ability to understand and anticipate

the possible causes of failures, and knowledge of how to prevent them. It is also necessary to have knowledge of the methods that can be used for analyzing designs and data.

2. Availability

System or the website is available at online platforms and is also available as an android application.

3. Security

The system is a public website; therefore, all the content will be available for the users.

4. Maintainability

There will be no maintained requirement for the software. The database is provided by the end user and therefore is maintained by this user.

5. Accessibility:

only registered users will be login to the application. Admin team can dismiss a student if found ineligible due to any actions. Customers responses are handled by the system admin. Admin will be able to view daily, weekly, monthly, annual performance through a customized dashboard. Service person will be able to see their reviews.

6. Durability:

System will retain exam portal and responses after the exam. If student looses internet connection they can join again. System will maintain student information. Student will be able to mark, unmark questions anytime during the exam. System will implement backup and recovery for retaining student data, exam operation data and business data over time.

7. Efficiency:

Maximum number of service person will view the response, and access the portal with same response time. System will be able to manage all request-response with isolation.