# SRS REPORT

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# Mobile application and development

**Assignment no 1**

### 1) Introduction

#### Purpose

This document defines the requirements for the SkillSwap mobile application. The primary purpose of this application is to create a peer-to-peer skill exchange network where users can offer their skills and learn new ones from others without the need for monetary transactions. The application will serve as a platform to facilitate the discovery, exchange, and management of skill-based sessions between users.

#### Scope

The following functionalities are in scope for the initial version of the SkillSwap application:

* User Profiles: Creation and management of user profiles with personal information and skill listings.
* Skill Listings: Functionality for users to post and search for available skills.
* Booking System: A system to allow users to book and schedule skill exchange sessions.
* Ratings and Reviews: A mechanism for users to rate and review each other after a session.

The following functionalities are out of scope for the initial version:

* In-app payments or any form of monetary transactions.
* In-app communication features like video calling or instant messaging.

# User Roles

Learner: A user who seeks to learn a skill from another user.

Tutor: A user who offers a skill to teach others.

Student (General User): Can act as both Learner and Tutor depending on the context.

Admin: Responsible for monitoring the system, removing inappropriate content, and maintaining platform integrity

# User Stories

As a learner, I want to view skill offers so that I can choose what I want to learn.

As a learner, I want to see tutor details so that I know who is offering the skill.

As a tutor, I want to create a new skill offer so that I can share my knowledge with others.

As a student, I want to navigate between different screens easily so that I can use all app features.

As a user I want to log in securely so that I can access my profile and offers.

# Functional Requirements

The system shall allow users to log in using predefined credentials (Email:rayyan@gmail.com, Password: 12345).

The system shall display an error message if incorrect credentials are entered.

The system shall allow the user to view a Home screen with a list of skill offers.

The system shall allow the user to create a new skill offer (title and description).

The system shall add new skill offers to the Home list dynamically.

The system shall allow the user to view detailed information about each skill offer.

The system shall allow the user to navigate to a Profile screen to view user information.

The system shall allow navigation between Login, Home, Create Post, Offer Detail, and Profile screens.

# Non-Functional Requirements

The application should have a simple and user-friendly interface.

The UI should be responsive and compact so that all functionalities are visible without scrolling.

The application should load screens in under 2 seconds on a standard device.

The system should be reliable, with minimal crashes during navigation.

The application should be secure, restricting login to correct credentials only.

The application should be lightweight and optimized for mobile devices.

# Database Schema

|  |  |  |
| --- | --- | --- |
| Collection Name | Fields | Description |
| Users | id, email, password, name, bio, skills | Stores user account details, profile, and skills. |
| Offers | id, title, description, createdBy, createdAt | Stores skill offers created by users. |
| Sessions | id, userId, tutorId, learnerId, scheduledTime, status | Manages booking details between tutor and learner. |
| Reviews | id, fromUser, toUser, rating, comment, createdAt | Stores feedback and ratings given by users. |