**SOFTWARE DESIGN DOCUMENT (SDD) FOR LOGIN, SIGNUP & PROFILE VIEWING SYSTEM**

**1. Introduction**

* The Login, Signup & Profile Viewing System is designed to provide users with secure authentication, registration, and profile viewing functionalities within an Android application.

**2. Purpose**

* The purpose of this document is to outline the design of the system, including its architecture, components, and functionalities.

**3. System Overview**

* The system consists of three main components:
  1. **Login Activity**: Allows existing users to authenticate by providing their credentials.
  2. **Signup Activity**: Allows new users to register by providing their username, email, and password.
  3. **Profile Activity**: Displays the user's profile information after successful login, including username, email, and last login time.

**4. System Architecture**

* The system follows a client-server architecture where the Android application acts as the client and interacts with the SQLite database on the device for user authentication and registration.

**5. Login Activity**

* Displays a login form with fields for email and password.
* Validates user input and authenticates users against the stored credentials in the SQLite database.
* Navigates to the Profile Activity upon successful login.

**6. Signup Activity**

* Provides a registration form with fields for username, email, password, and confirm password.
* Validates user input and adds new users to the SQLite database upon successful registration.
* Navigates back to the Login Activity after successful registration.

**7. Profile Activity**

* Retrieves the user's session data (username and email) stored using SharedPreferences upon login.
* Displays the user's profile information, including username and email.
* Optionally, retrieves and displays the last login time if available.

**8. Data Storage**

* User credentials (username, email, and password) are stored securely in the SQLite database on the device.
* Session data (username, email) is stored using SharedPreferences to maintain

**9. Conclusion**

* The Login, Signup & Profile Viewing System provides a secure and user-friendly authentication, registration, and profile viewing experience for users within the Android application.