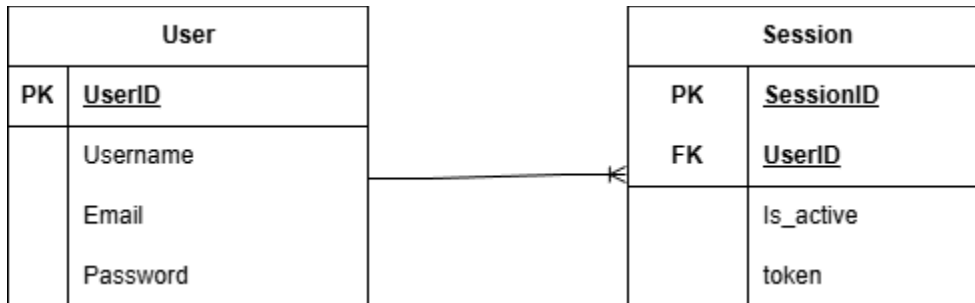


Functional Requirements Specification (FRS):

System: User Registration & Authentication (Web) Tech Stack: Spring Boot, MySQL, ReactJS

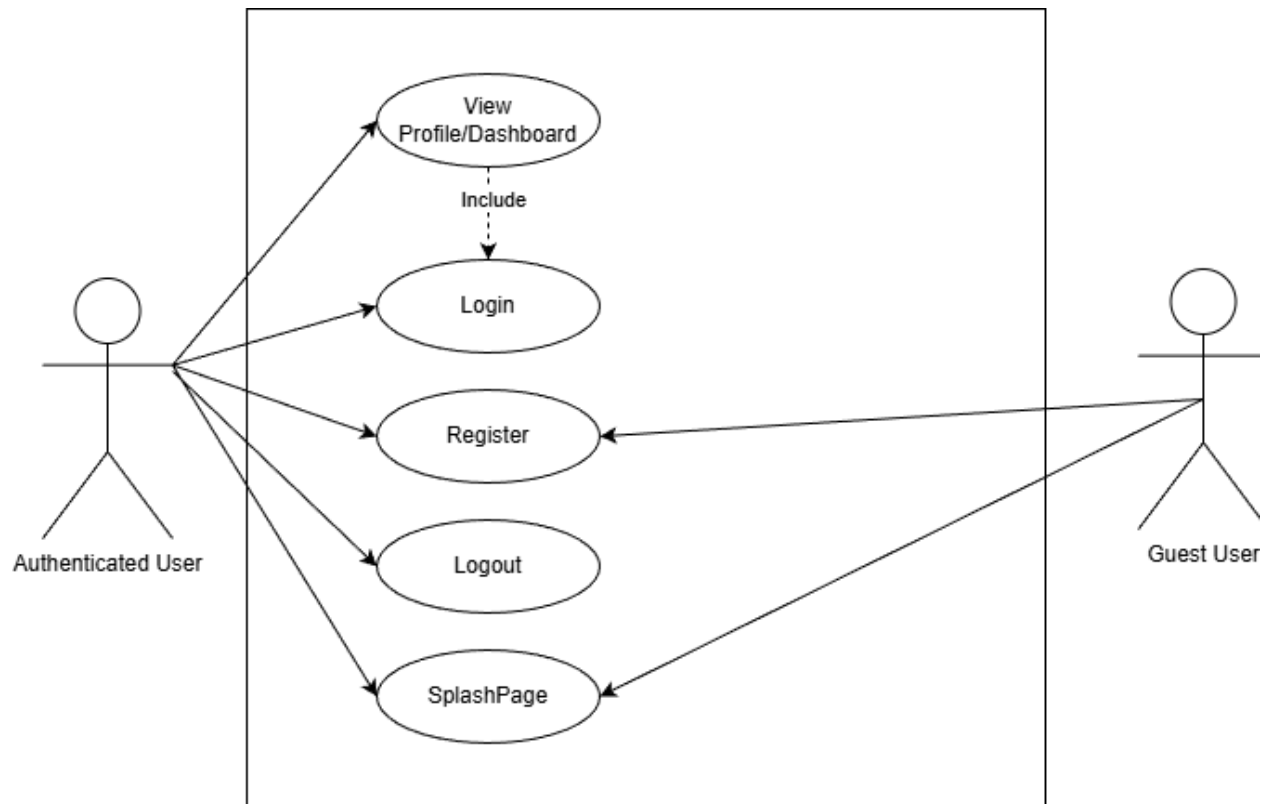
## 1. System Architecture & Design

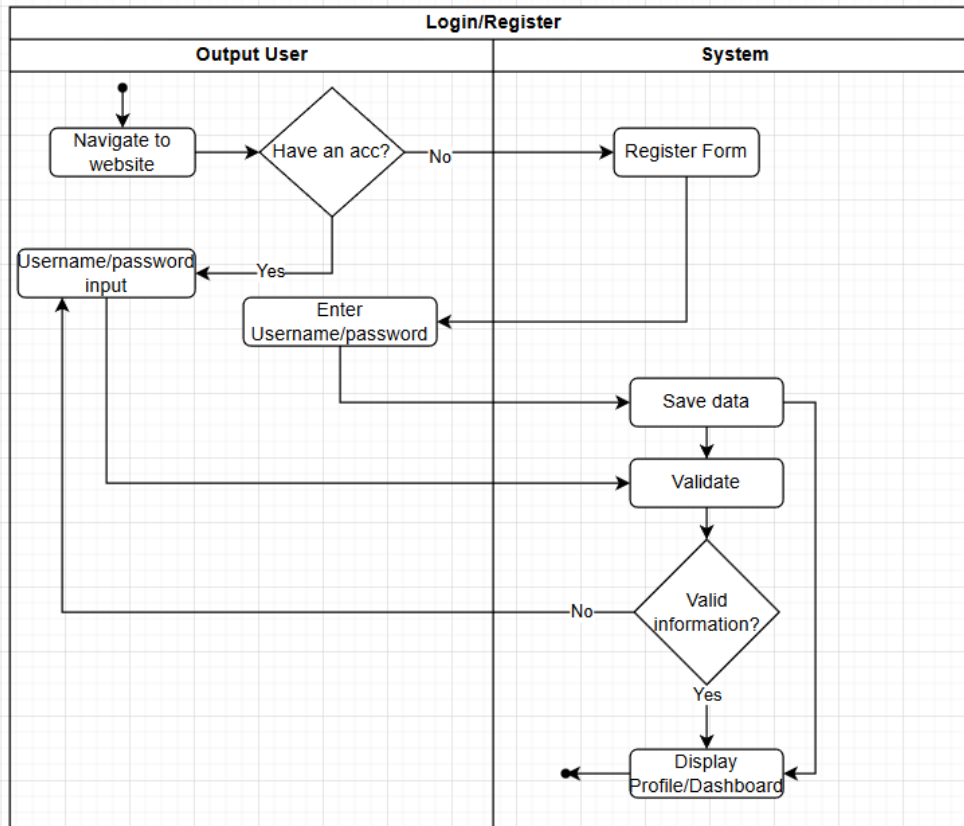
### 1.1 Entity Relationship Diagram (ERD)



### 1.2 UML Class/Sequence Diagrams

(Paste your UML Diagrams from the previous activity here)





## 2. Backend API Specification (Spring Boot)

The backend is built using Spring Boot with Spring Security and BCrypt for password hashing.

POST /api/auth/register: Handles new user creation.

POST /api/auth/login: Authenticates users and returns a session/token.

GET /api/user/me: Fetches the currently logged-in user's profile (Protected).

## 3. Web Interface (ReactJS Screenshots)

### 3.1 User Registration

The screenshot shows a web browser window with the address bar displaying 'localhost:3000/register'. The page has a navigation bar with links for 'Login', 'Register', and 'Dashboard'. The main content area is titled 'Register Page' and contains a registration form with the following fields: 'Username', 'Email', and 'Password'. Below these fields is a 'Register' button. The browser's taskbar at the bottom shows the system clock as 3:48 pm on 06/02/2026, with a weather forecast of 26°C and light rain.

localhost / 127.0.0.1 / user\_auth\_0 x React App x +

localhost:3000/register

Login Register Dashboard

### Register Page

Username  
Email  
Password  
Register

26°C Light rain 3:48 pm 06/02/2026

### 3.2 User Login

The screenshot shows a web browser window with the address bar displaying 'localhost:3000'. The page has a navigation bar with links for 'Login', 'Register', and 'Dashboard'. The main content area is titled 'Login Page' and contains a login form with the following fields: 'Username' and 'Password'. Below these fields is a 'Login' button. The browser's taskbar at the bottom shows the system clock as 8:25 pm on 05/02/2026, with a weather forecast of Very humid.

React App x +

localhost:3000

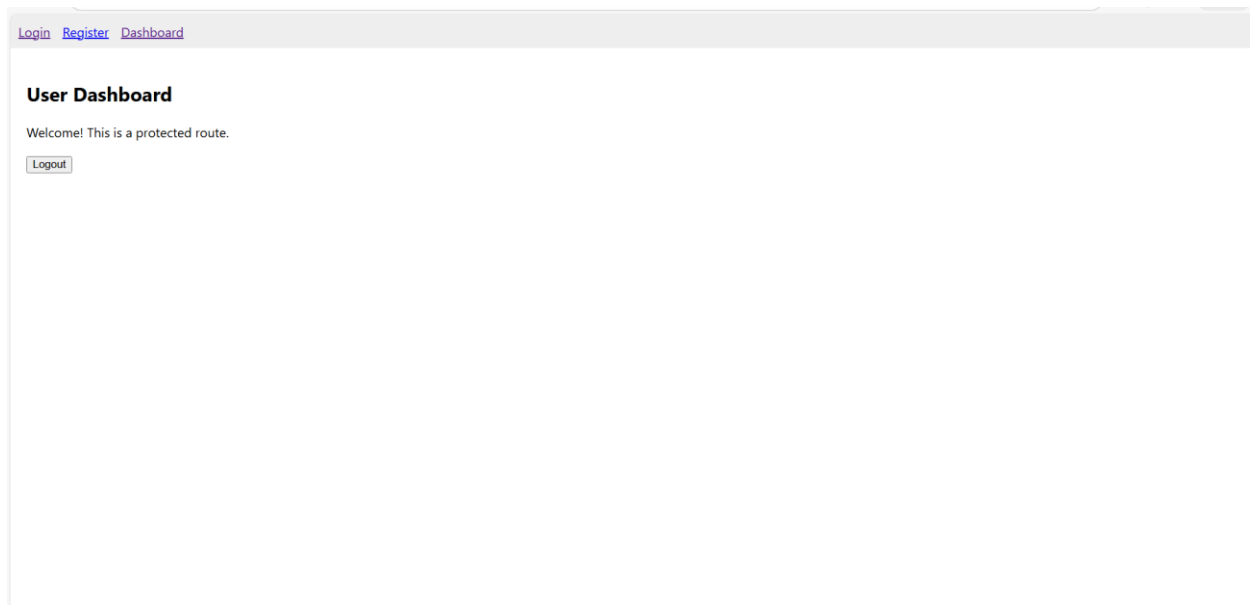
Login Register Dashboard

### Login Page

Username  
Password  
Login

Very humid Now 8:25 pm 05/02/2026

### 3.3 Dashboard



### 3.4 Logout Functionality

## User Dashboard

Welcome! This is a protected route.

Logout