



**CEBU INSTITUTE OF TECHNOLOGY**  
**U N I V E R S I T Y**

# IT342-Section SYSTEMS INTEGRATION AND ARCHITECTURE 1

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## FUNCTIONAL REQUIREMENTS SPECIFICATION (FRS)

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Project Title: Mini App – User Registration & Authentication

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## 1. Introduction

### 1.1. Purpose

The system allows users to register, log in, access their profile/dashboard, and log out. This document is intended for developers and reviewers of the mini app system.

### 1.2. Scope

The app handles user account management including registration, login, dashboard access, and logout. Protected pages are restricted for users who are not logged in. It does not cover advanced features like payment or analytics.

### 1.3. Definitions, Acronyms, and Abbreviations

**User:** A person using the app.

**Dashboard/Profile:** The page where logged-in users can view personal information.

**Session:** Temporary state to track if a user is logged in.

## 2. Overall Description

### 2.1. System Perspective

The system is a standalone mini app designed for mobile or desktop use. It ensures secure access to user-specific data and prevents unauthorized access.

### 2.2. User Classes and Characteristics

**General User:** Can register, log in, view profile/dashboard, and log out. Requires basic tech literacy.

### 2.3. Operating Environment

**Hardware:** Mobile devices or PCs.

**Software:** App runs on standard operating systems (Android, iOS, Windows).

**Tools:** No special tools required beyond a standard web browser or app environment.

### 2.4. Assumptions and Dependencies

Users have internet access for registration and login validation. The system relies on standard device capabilities (storage, display, network).

## 3. System Features and Functional Requirements

Describe each major feature of the system and its functional requirements.

### 3.1. Feature 1:

**Description:** Allows a new user to create an account.

**Functional Requirements:**

- Input and validate user details (username, password, etc.).
- Store user information securely.
- Confirm successful registration or display errors.

### Feature 2: User Login and Logout

**Description:** Allows users to log in to access the dashboard and log out to end the session.

**Functional Requirements:**

- Validate login credentials.
- Grant access to profile/dashboard if correct.
- Terminate session on logout and restrict access to protected pages.

## 4. Non-Functional Requirements

**Performance:** Quick response for login and registration.

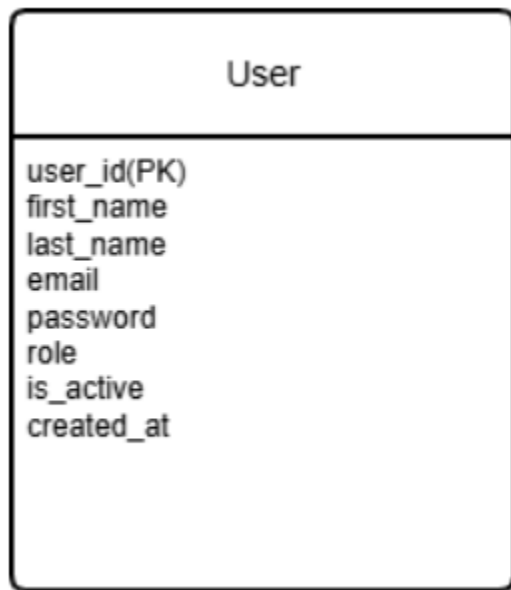
**Security:** Protect user data and sessions.

**Usability:** Simple interface, easy for users to navigate.

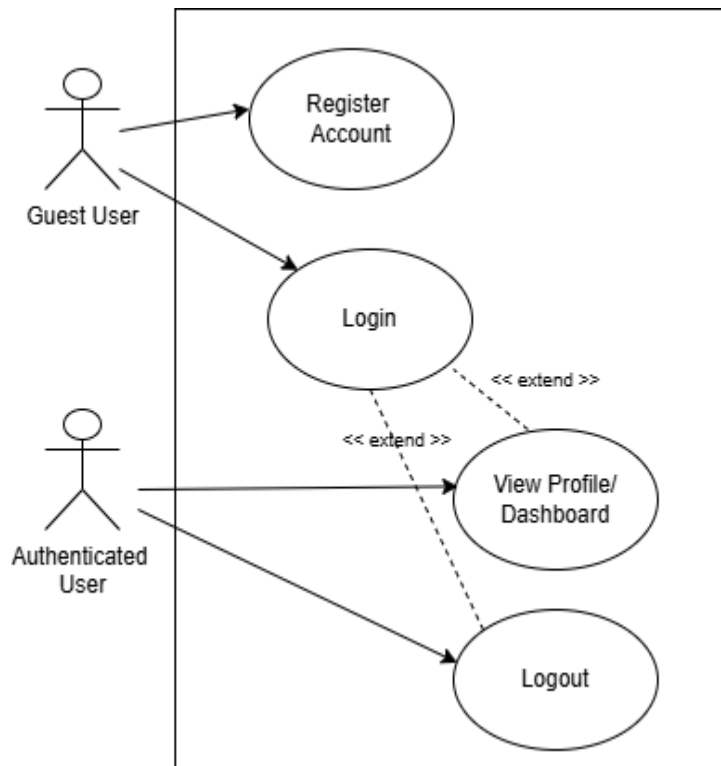
**Reliability:** System should handle multiple users and maintain session integrity.

## 5. System Models (Diagrams)

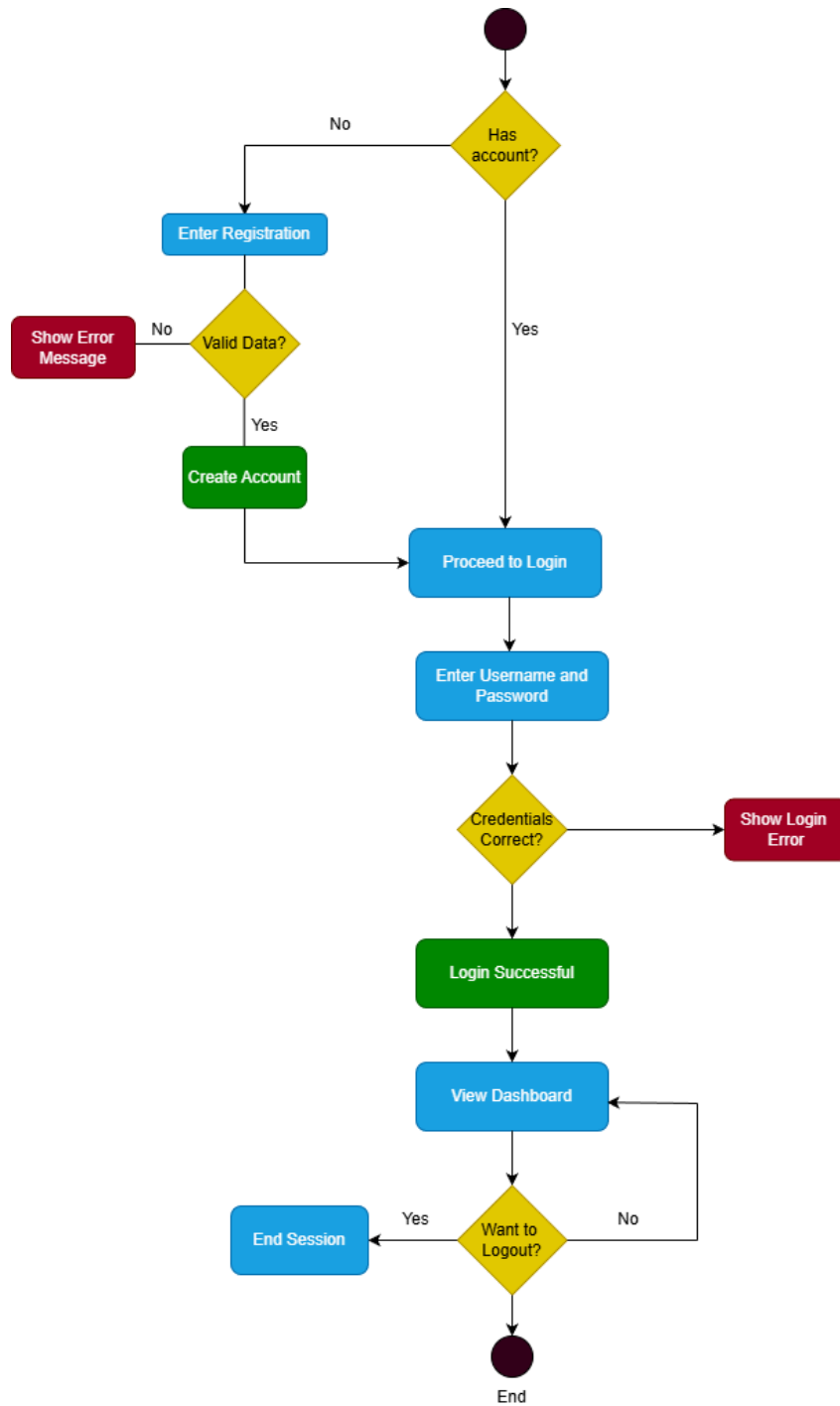
### 5.1. ERD



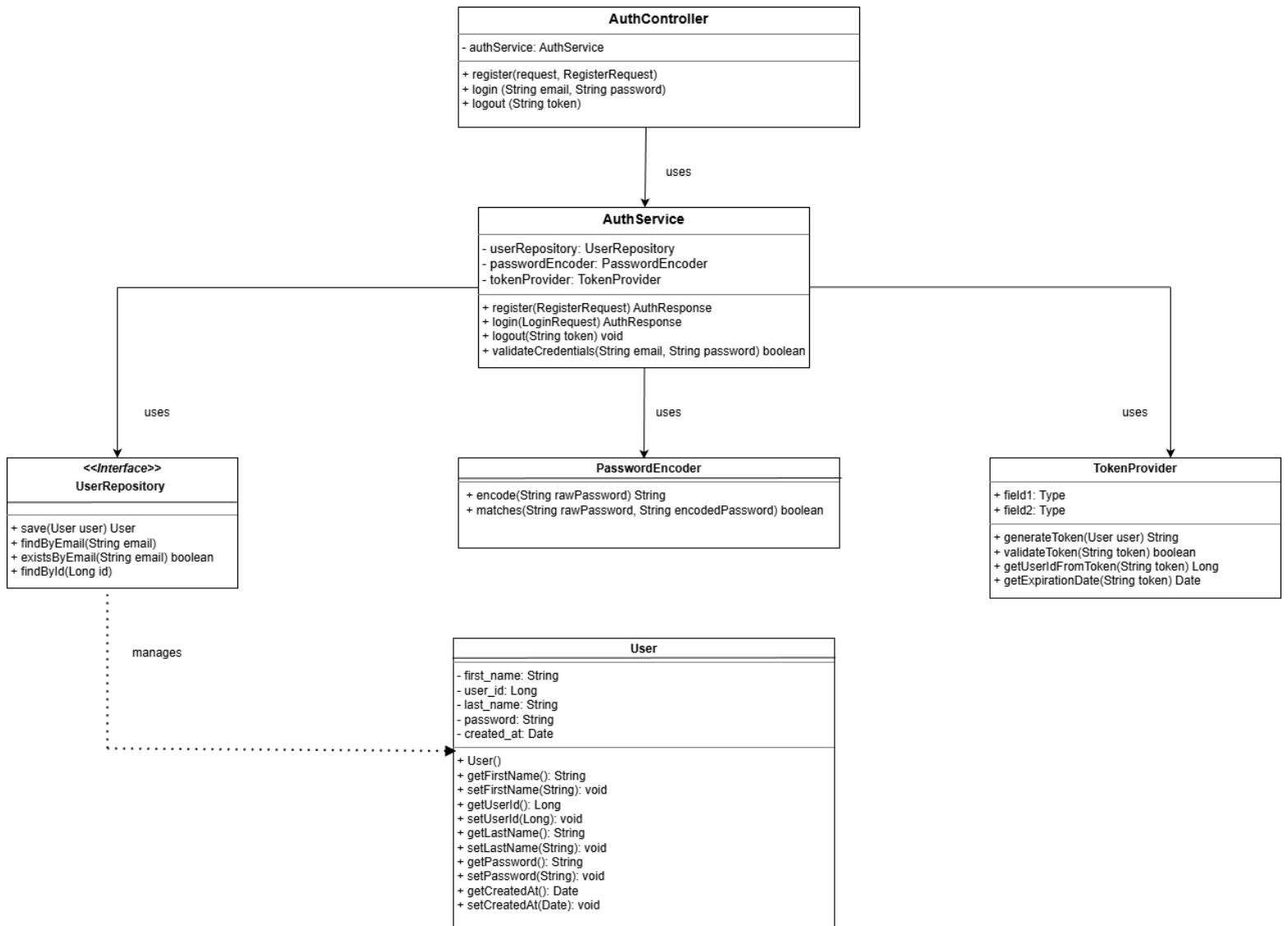
### 5.2. Use Case Diagram



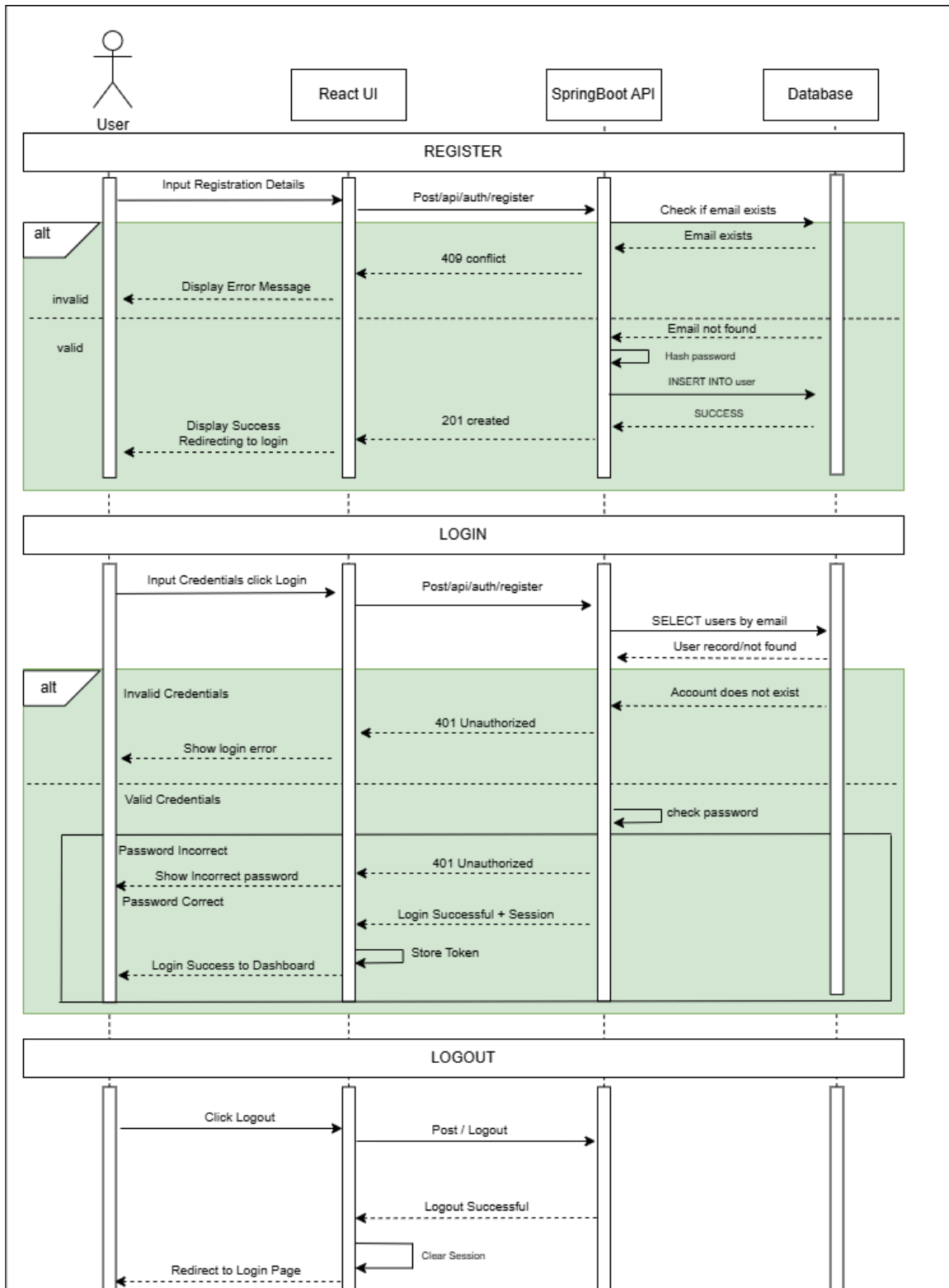
### 5.3. Activity Diagram



## 5.4. Class Diagram



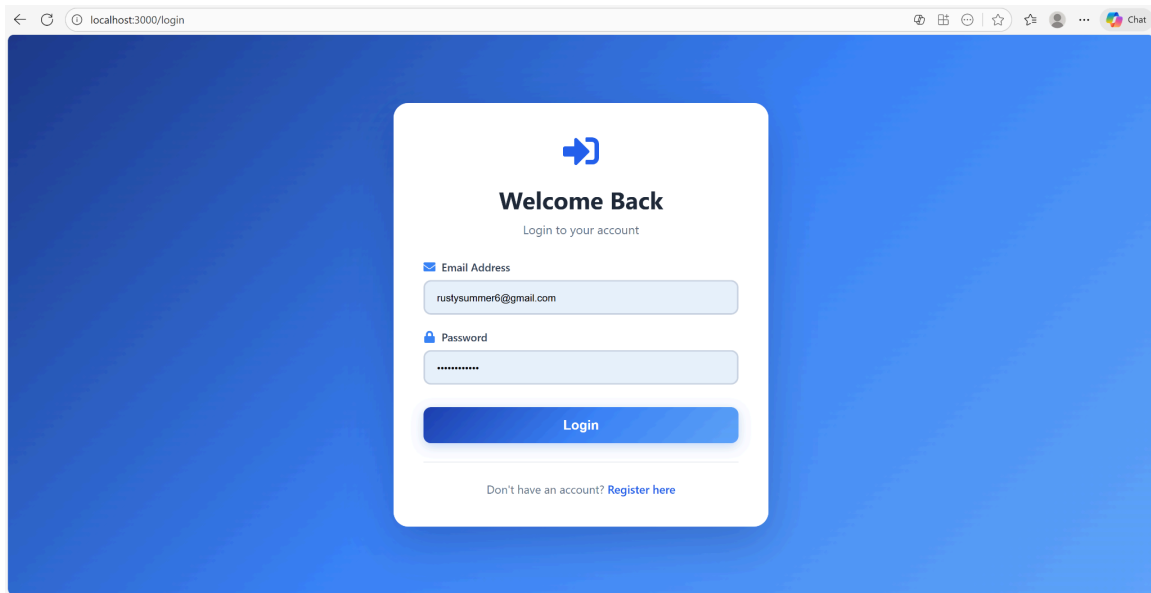
## 5.5. Sequence Diagram



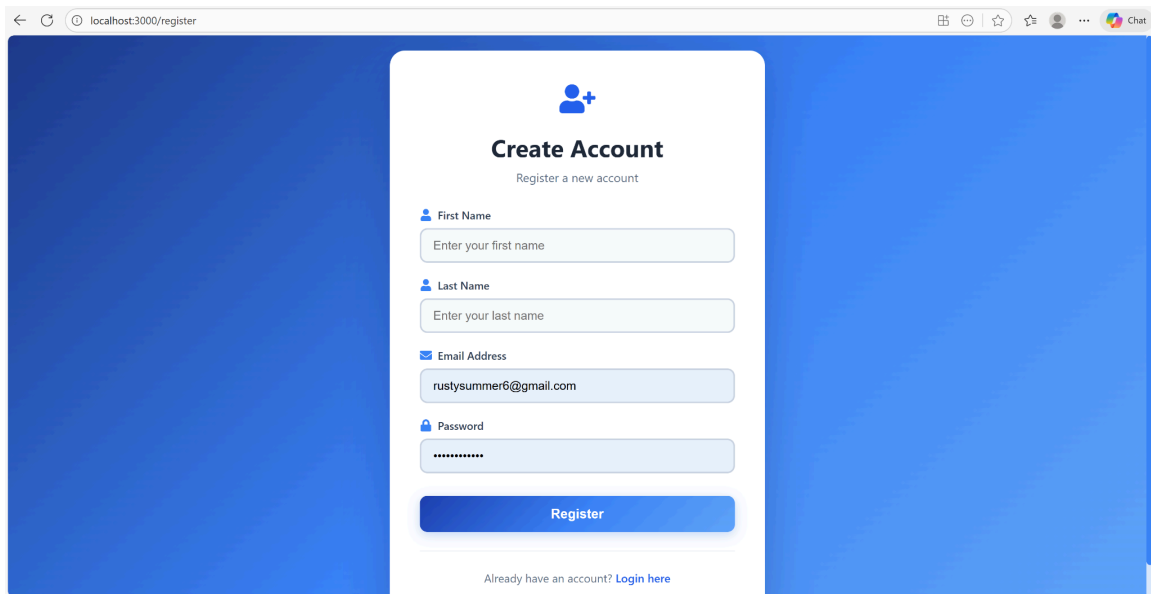


## 6. Appendices

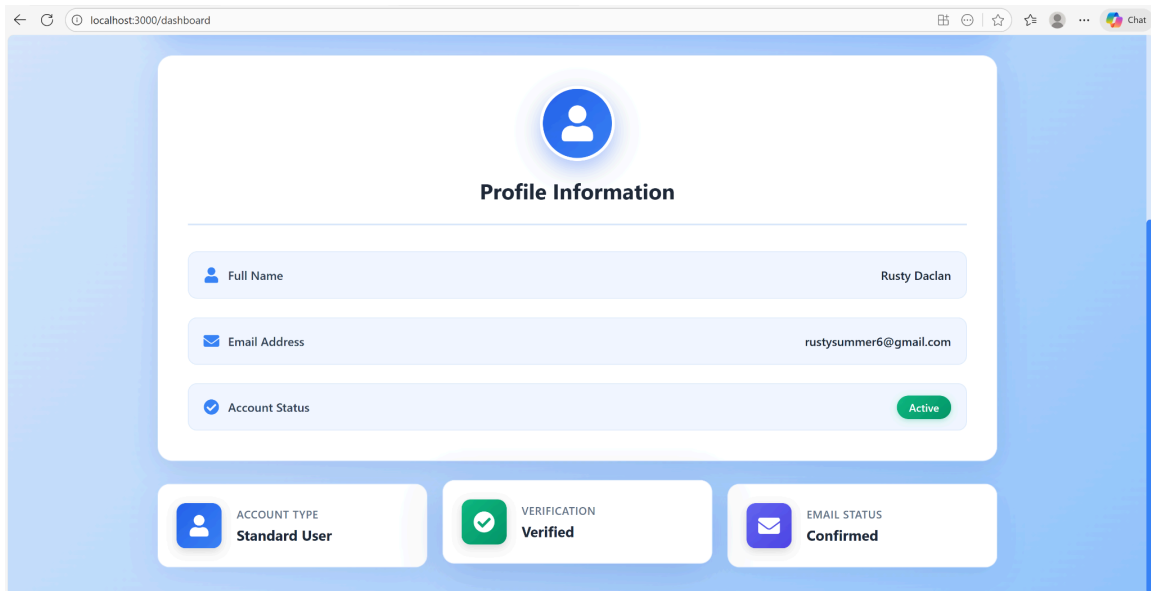
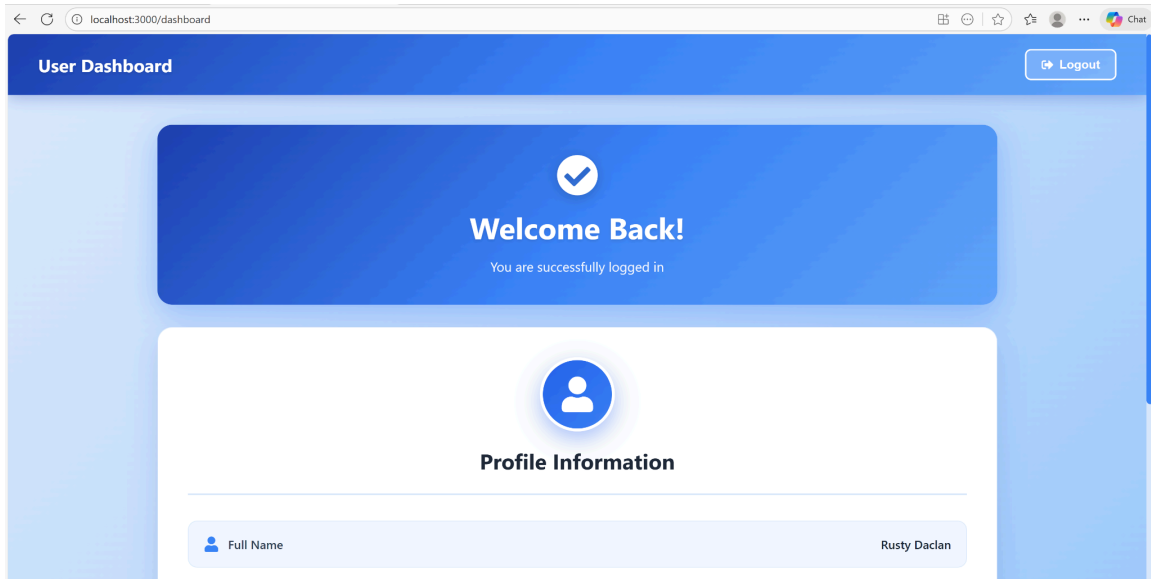
**Tools used:** Draw.io, Spring Boot, React, MySQL



A screenshot of a web browser displaying the login page at localhost:3000/login. The page has a blue gradient background. In the center is a white card with a blue double-right arrow icon at the top. Below the icon, the text 'Welcome Back' is displayed in bold, followed by 'Login to your account' in a smaller font. There are two input fields: 'Email Address' with the value 'rustysummer6@gmail.com' and 'Password' with masked characters. A blue 'Login' button is below the fields. At the bottom of the card, it says 'Don't have an account? [Register here](#)'.



A screenshot of a web browser displaying the registration page at localhost:3000/register. The page has a blue gradient background. In the center is a white card with a blue user icon and a plus sign at the top. Below the icon, the text 'Create Account' is displayed in bold, followed by 'Register a new account' in a smaller font. There are four input fields: 'First Name' (placeholder: 'Enter your first name'), 'Last Name' (placeholder: 'Enter your last name'), 'Email Address' (value: 'rustysummer6@gmail.com'), and 'Password' (masked characters). A blue 'Register' button is below the fields. At the bottom of the card, it says 'Already have an account? [Login here](#)'.



### References:

<https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-activity-diagram/>

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