CEBU INSTITUTE OF TECHNOLOGY
UNIVERSITY

IT342-Section
SYSTEMS INTEGRATION AND ARCHITECTURE 1

FUNCTIONAL REQUIREMENTS SPECIFICATION (FRS)

Project Title: Lost & Found

Prepared By: John Carlo C. Escalante

Date of Submission: 1/31/2026

Version: 2

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1. Introduction

1.1. Purpose

The purpose of the Lost & Found Hub system is to provide a centralized platform for reporting, viewing, and claiming lost or found items within the campus. This document defines the functional and non-functional requirements of the system for developers, instructors, and stakeholders.

1.2. Scope

Lost & Found Hub is a campus-based application accessible via web and mobile devices. The system allows users to register, log in, submit lost or found item reports, and send claim requests. The system does not handle payments, deliveries, or external third-party services.

1.3. Definitions, Acronyms, and Abbreviations

- **FRS** – Functional Requirements Specification
- **User** – Registered student or staff member
- **Admin** – Authorized personnel managing reports and claims
- **Claim Request** – A request submitted by a user to retrieve a found item
- **Dashboard** – Main interface displayed after successful login

2. Overall Description

2.1. System Perspective

The system is a standalone campus application that can be accessed through web browsers and mobile devices. It uses a centralized database to store user accounts, item reports, and claim transactions.

2.2. User Classes and Characteristics

- **Student Users**
  - Basic knowledge of smartphones and computers
  - Can register, log in, post reports, and submit claims

- **Admin Users**
  - Responsible for monitoring and validating reports
  - Can approve or reject claim requests
  - Has higher-level system access

2.3. Operating Environment

- Web browsers (Chrome, Edge, Firefox, Safari)
- Android and/or iOS mobile devices
- Application server environment
- Database management system (e.g., MySQL or similar)
- Internet or local network connectivity

2.4. Assumptions and Dependencies

- Users have valid campus credentials or identification.

- Users have access to internet or campus network.
- The database server is properly maintained.
- Admins regularly monitor claim requests.

3. System Features and Functional Requirements

3.1. Feature 1: User Account Management

Description:

This feature allows users to create accounts, authenticate securely, manage their profiles, and log out of the system.

Functional Requirements:

- The system shall allow new users to register by providing required personal information.
- The system shall validate login credentials before granting access.
- The system shall allow users to update profile information.
- The system shall allow users to securely log out from active sessions.
- The system shall restrict dashboard access to authenticated users only.

3.2. Feature 2: Lost and Found Item Management

Description:

This feature allows users to report lost or found items and submit claim requests for found items.

Functional Requirements:

- The system shall allow users to submit a lost item report including item details, date, and location.
- The system shall allow users to submit a found item report including item details and optional image.
- The system shall display active lost and found reports on the dashboard.
- The system shall allow users to submit a claim request for a found item.
- The system shall notify admin of new claim requests.
- The system shall allow admin to approve or reject claim requests.
- The system shall update item status once claimed successfully.

4. Non-Functional Requirements

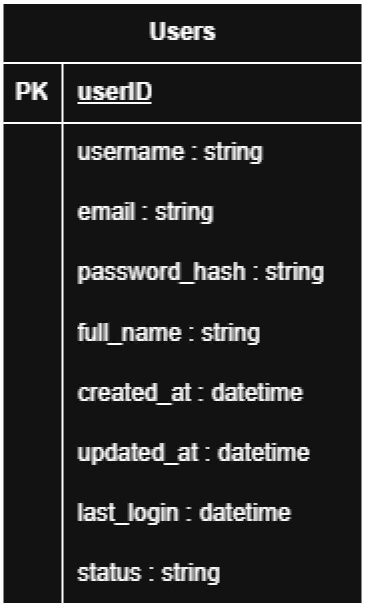
- **Performance:** The system shall respond to user actions within 3 seconds under normal conditions.
- **Security:** User passwords shall be encrypted. Unauthorized access to user data shall be prevented.
- **Usability:** The interface shall be simple, responsive, and consistent across web and mobile platforms.
- **Reliability:** The system shall be available at least 95% of the time excluding maintenance.
- **Scalability:** The system shall support increasing numbers of users without major performance issues.

- **Data Integrity:** The system shall prevent duplicate or invalid claim submissions

5. System Models (Diagrams)

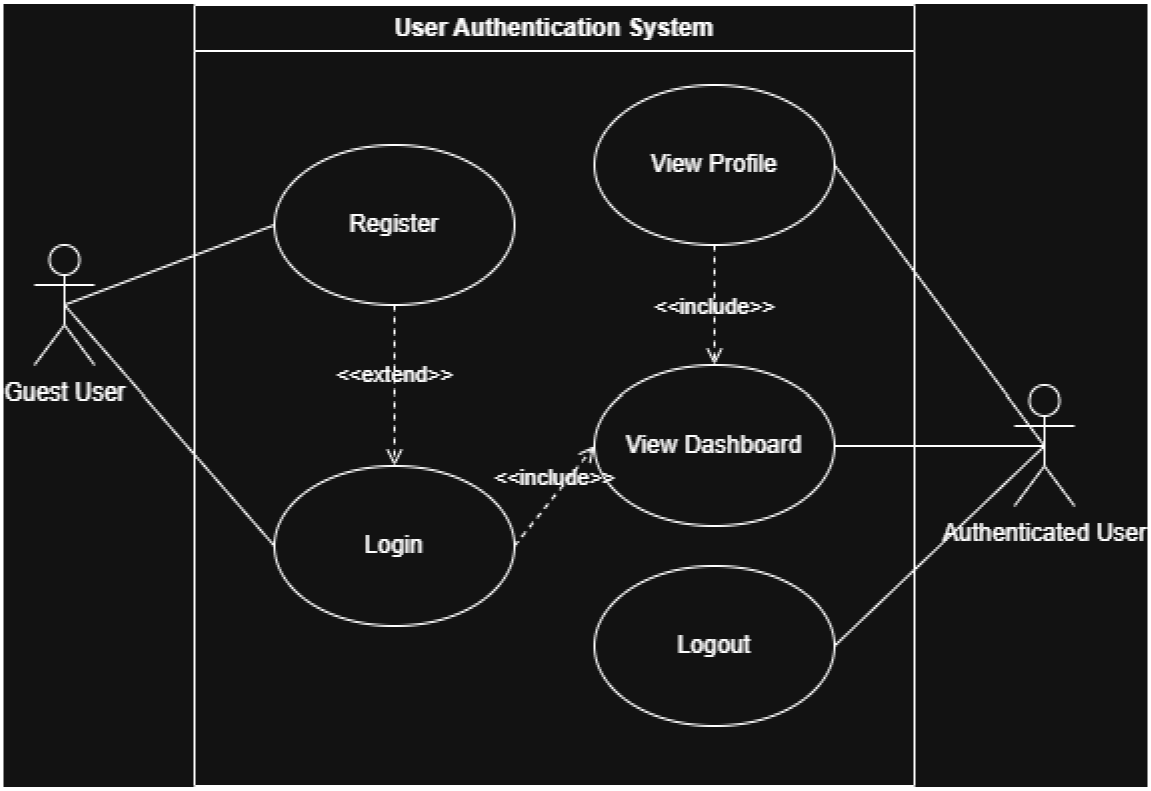
Insert the necessary diagrams for the system:

5.1. ERD

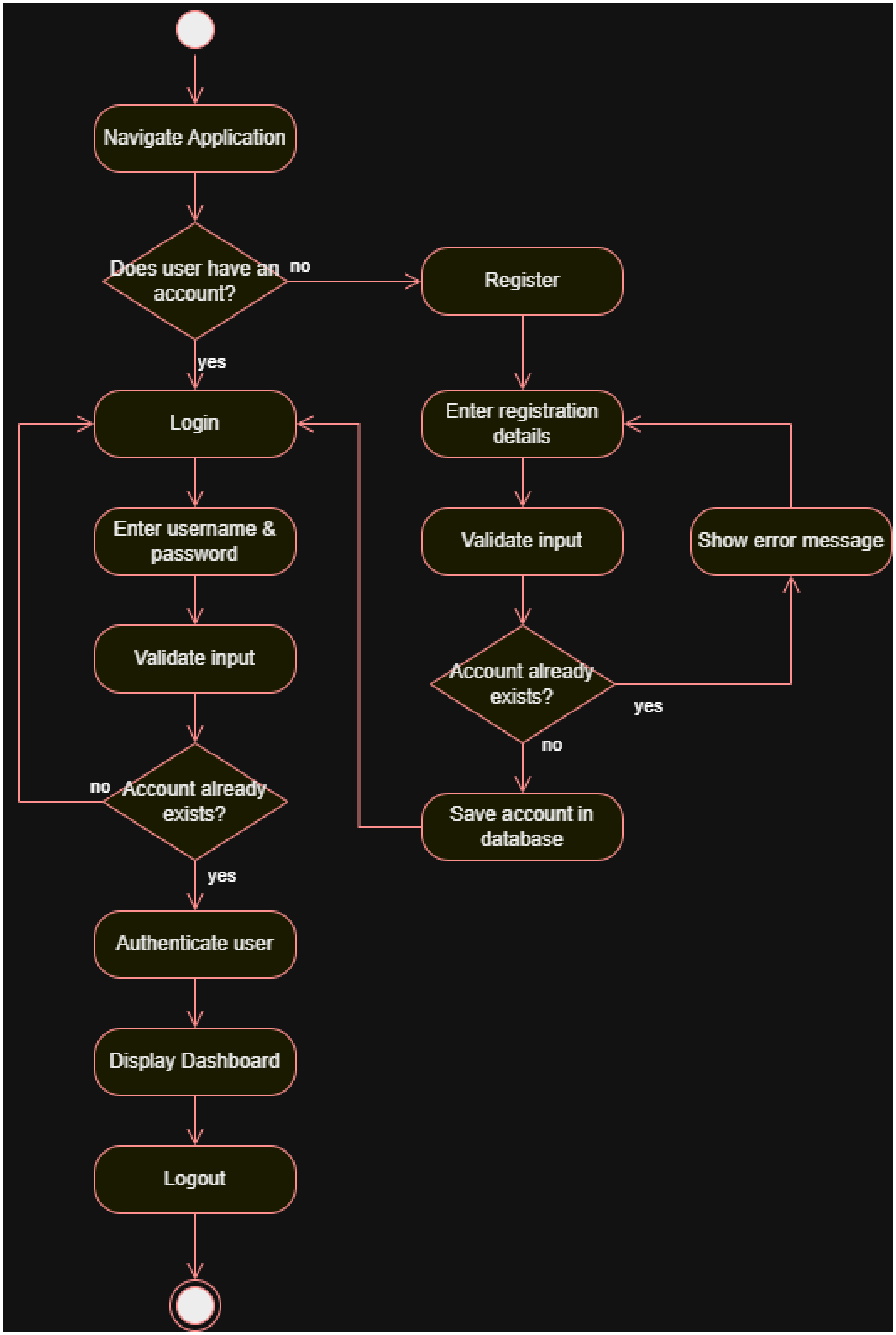


Users	
PK	userID
	username : string
	email : string
	password_hash : string
	full_name : string
	created_at : datetime
	updated_at : datetime
	last_login : datetime
	status : string

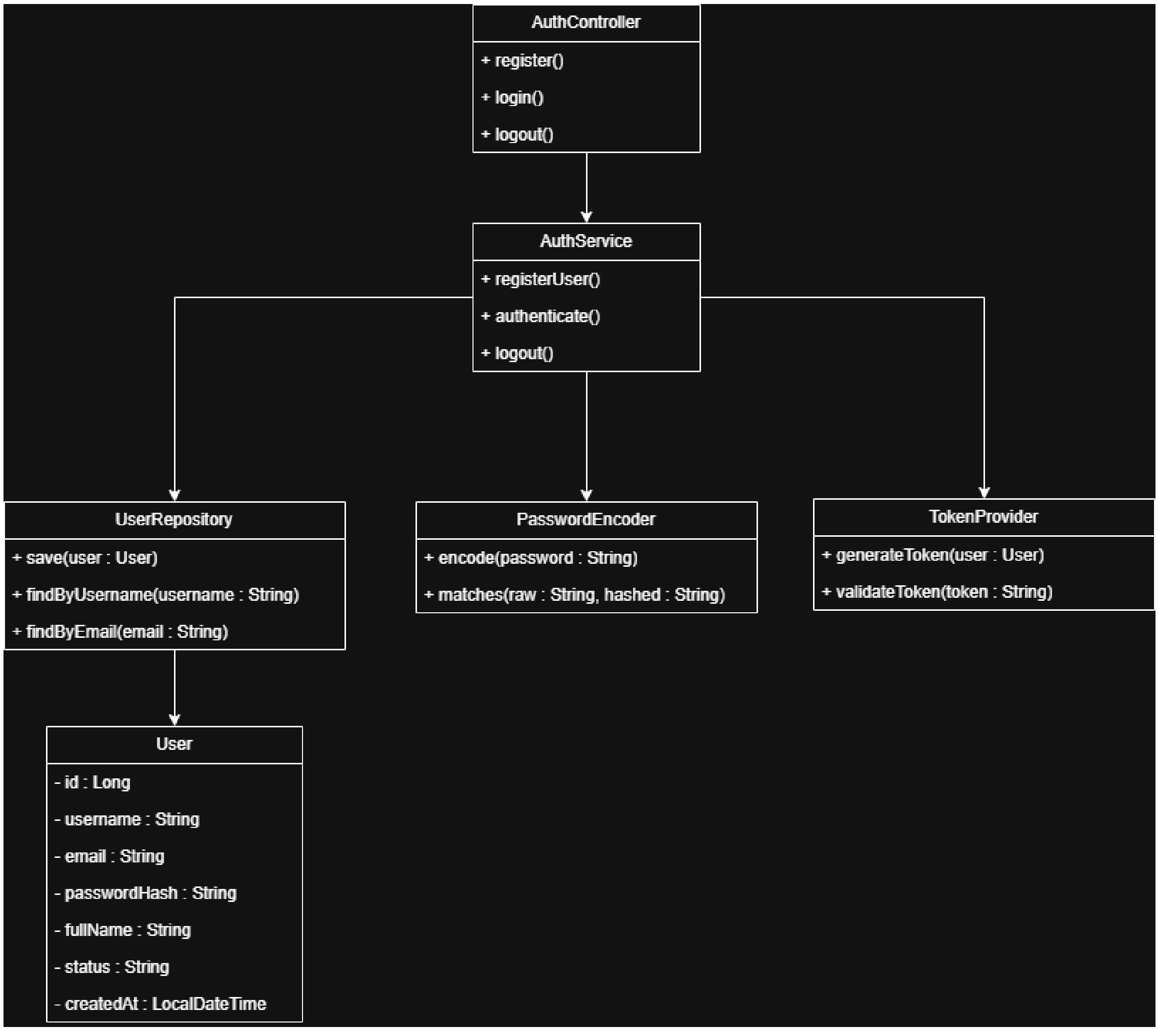
5.2. Use Case Diagram



5.3. Activity Diagram

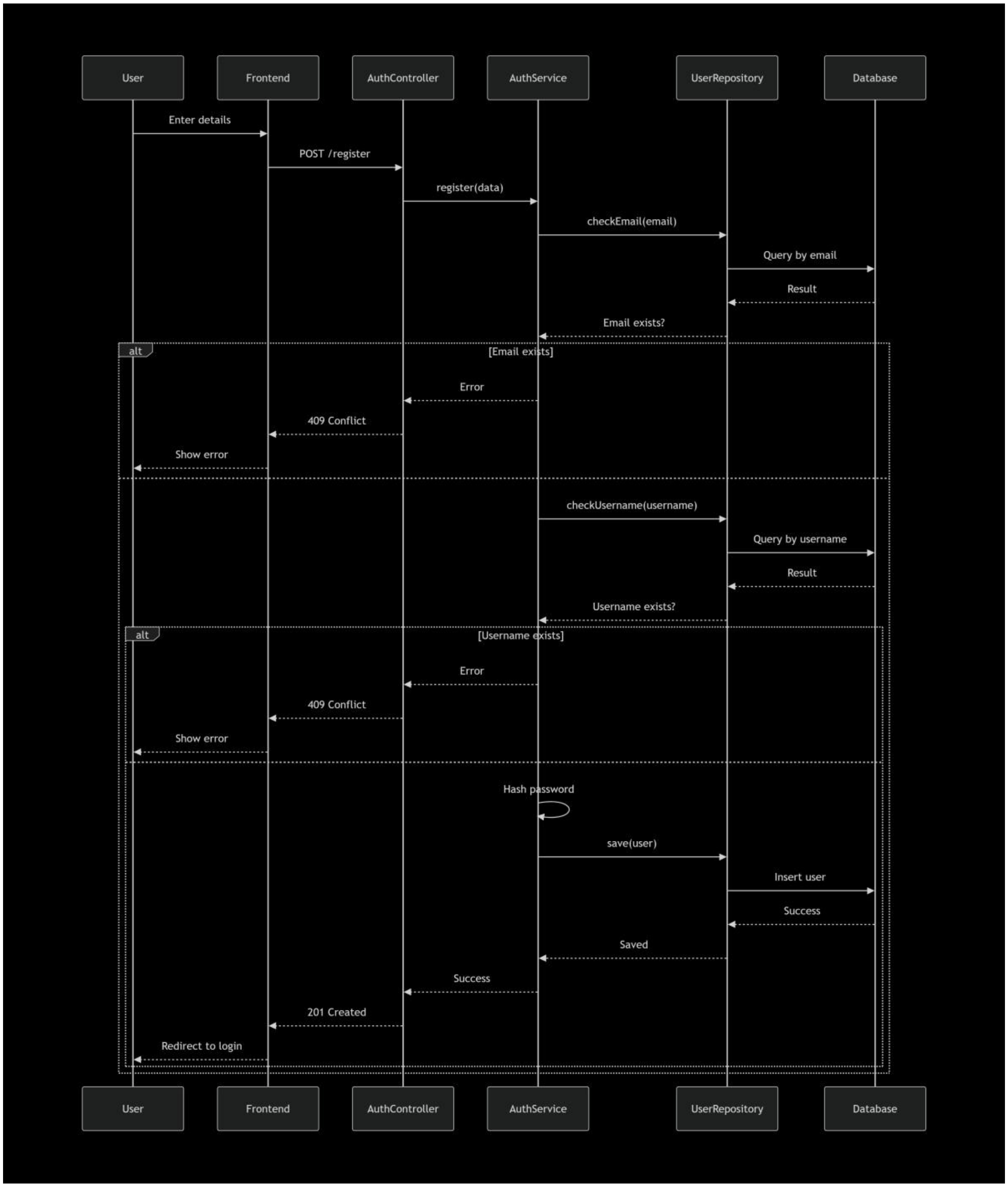


5.4. Class Diagram

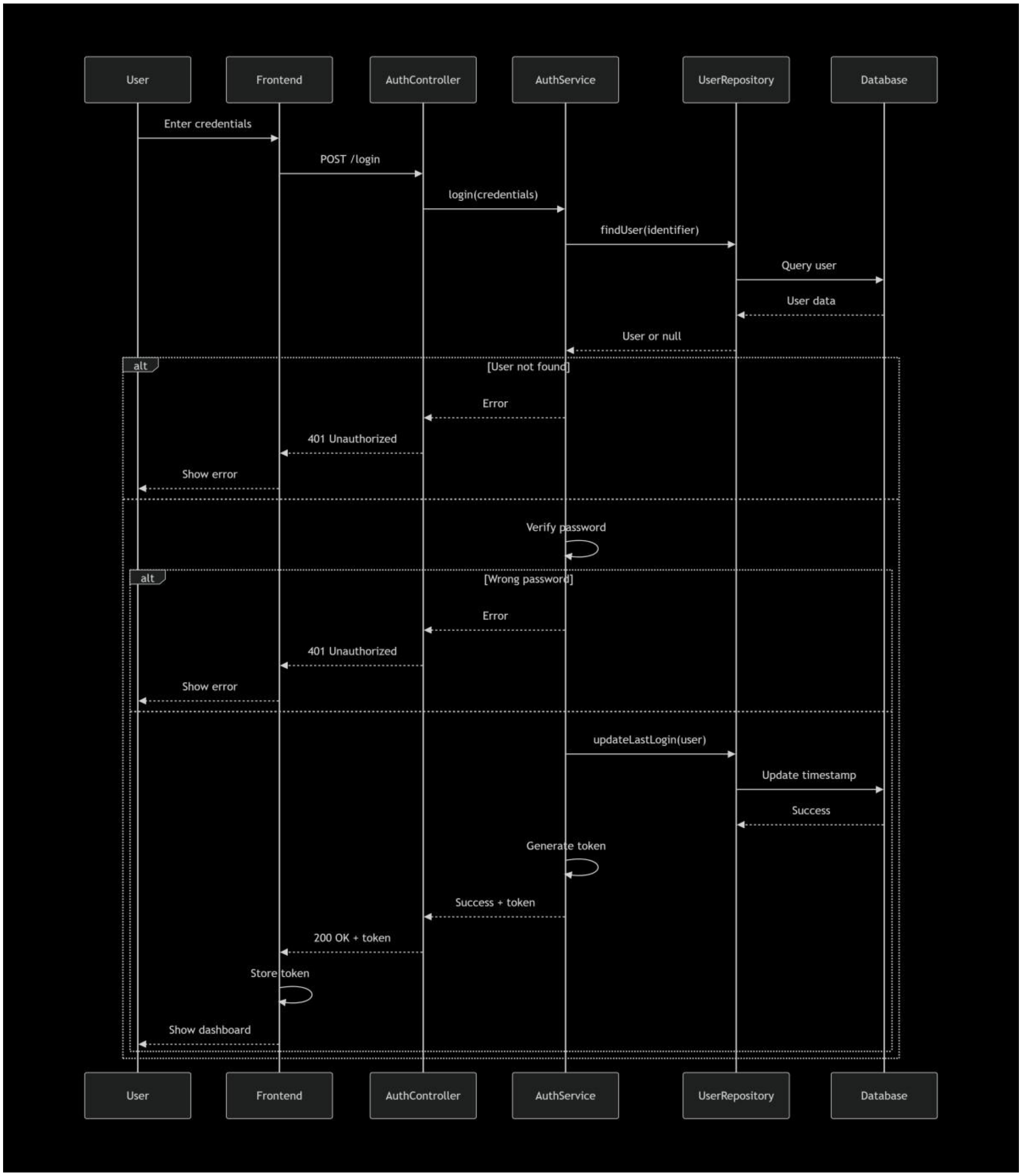


5.5. Sequence Diagram

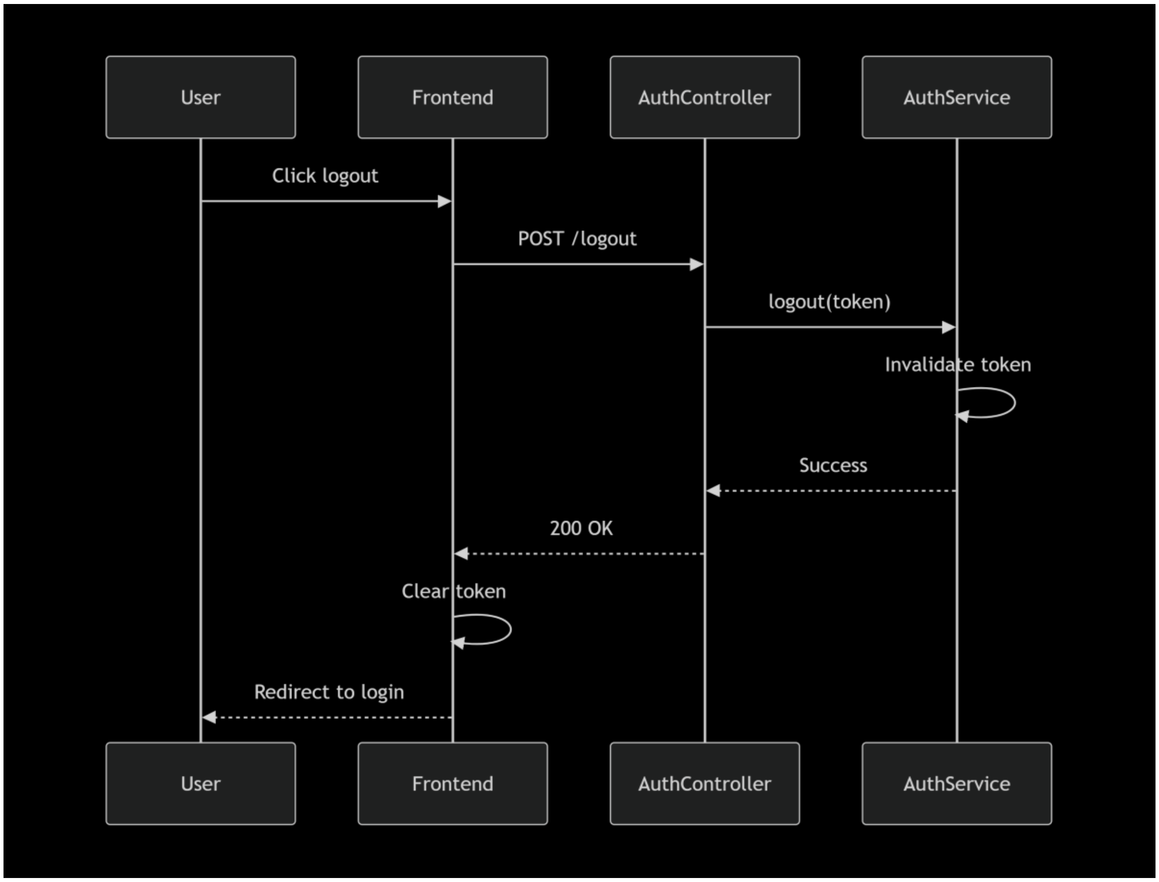
Registration Sequence Diagram:



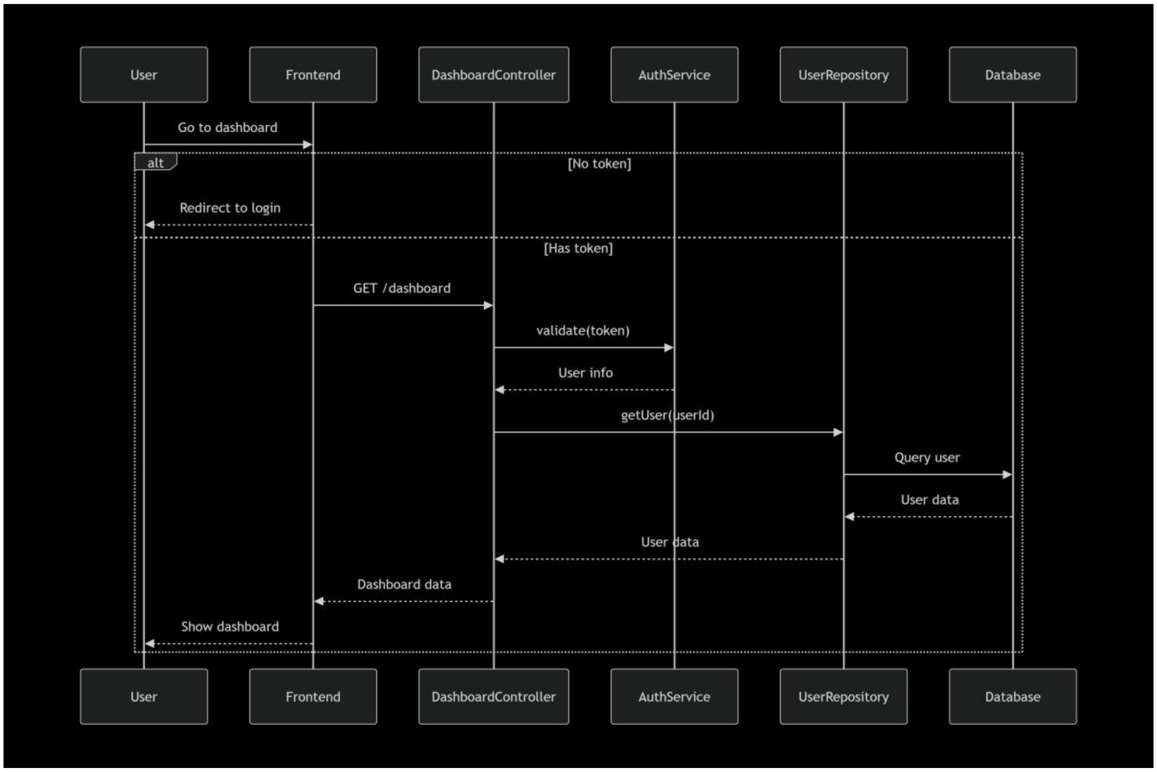
Login Sequence Diagram:



Logout Sequence Diagram:

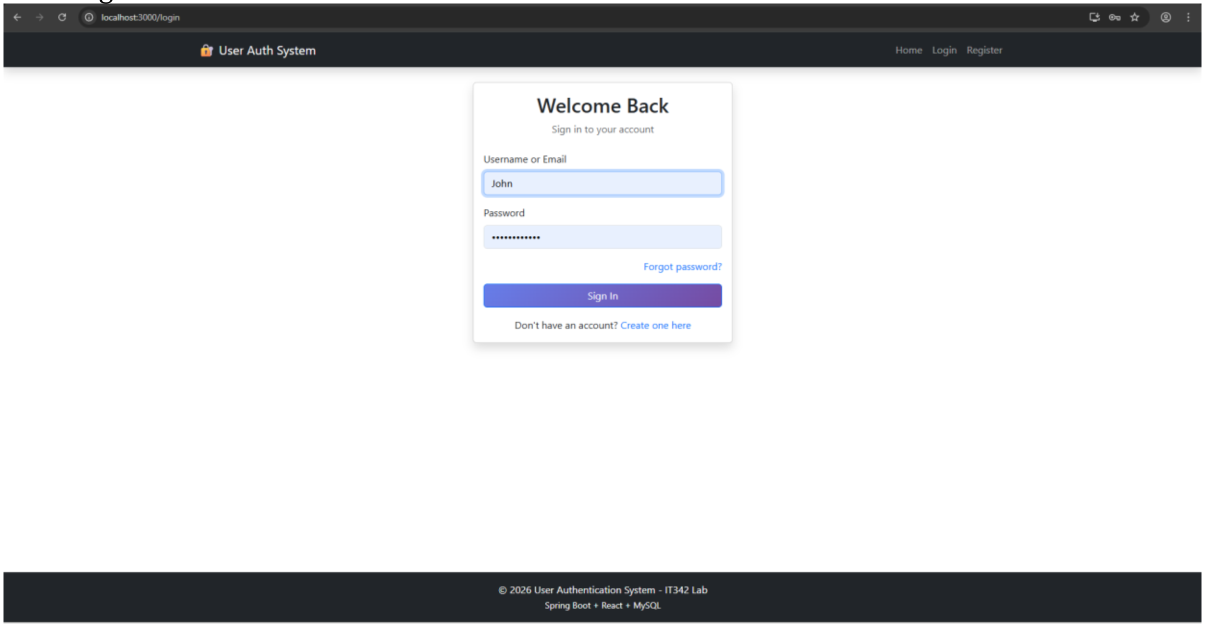


Dashboard Sequence Diagram:



6. Appendices

Web Login:



Welcome Back

Sign in to your account

Username or Email: John

Password: ••••••••••••

Don't have an account? Create one here

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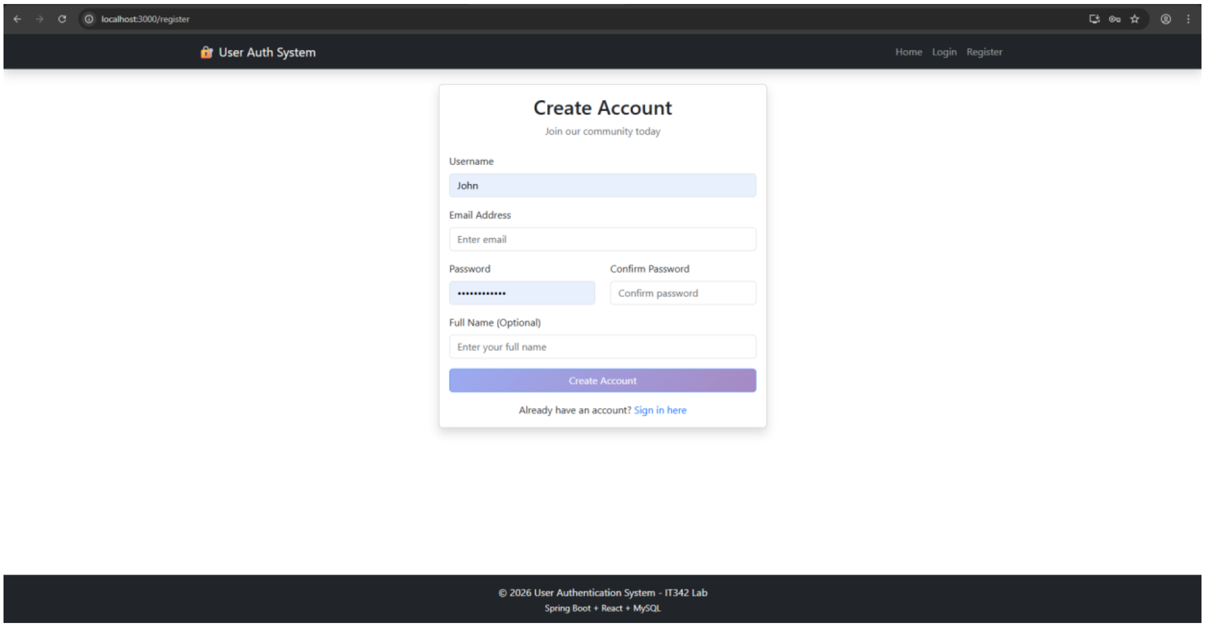
Spring Boot + React + MySQL

Web Register:



Create Account

Join our community today

Username: John

Email Address: Enter email

Password: ••••••••••••

Confirm Password: Confirm password

Full Name (Optional): Enter your full name

Already have an account? Sign in here

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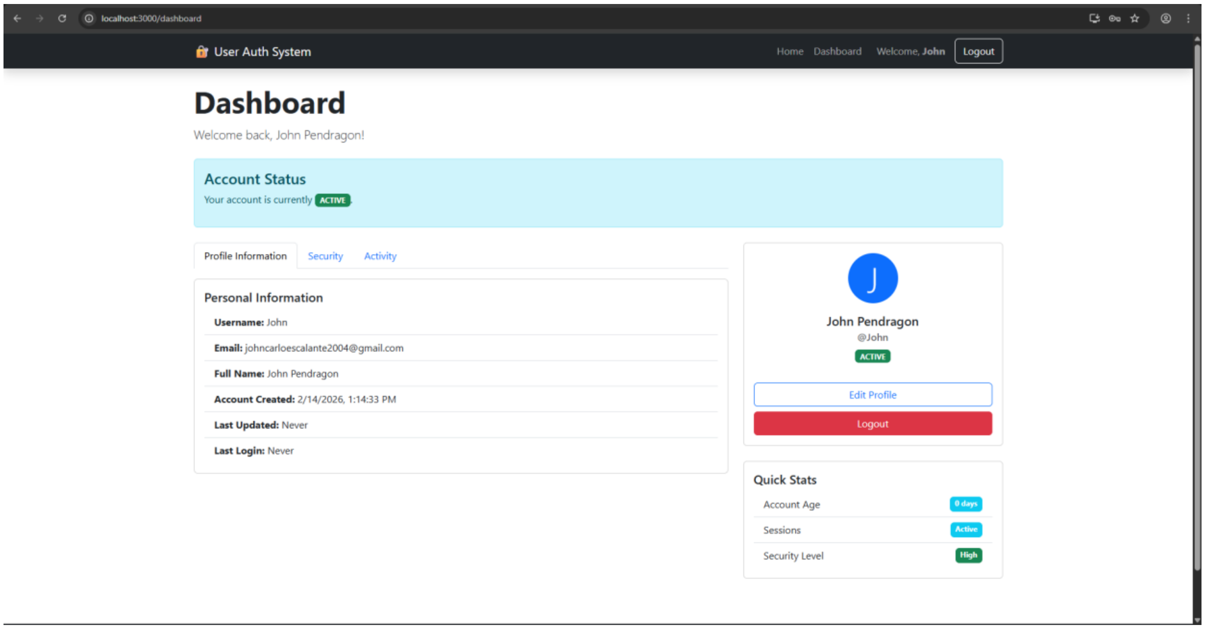
Spring Boot + React + MySQL

Web Dashboard:



Dashboard

Welcome back, John Pendragon!

Account Status

Your account is currently ACTIVE.

Personal Information

Username: John

Email: johncarloescalante2004@gmail.com

Full Name: John Pendragon

Account Created: 2/14/2026, 1:14:33 PM

Last Updated: Never

Last Login: Never

John Pendragon

@John

ACTIVE

Quick Stats

Account Age	0 days
Sessions	Active
Security Level	High