Software Construction & Development

Submitted by:

Mahmood Khan (56067)

Submitted to:

Mr. Muhammad Islam Abbasi

Dated:

27th September 2025

RIPHAH International University
Fall 2025
Faculty of Computing

Introduction

RIPHAHLINK is a web-based attendance management system designed to modernize and streamline the attendance process in throughout different campuses of the well-known RIPHAH International University all over Pakistan. Built with security, stability and user experience as its core, RIPHAHLINK would empower the university, teachers, students to engage with a live tracking software enabled to mark the attendance with ease and high reliability with a transparent and efficient process. This system would support real-time check-in's via QR codes, automated reporting and role-based access control. It would be optimized for both desktop and mobile use, ensuring accessibility for all the relevant stakeholders. RIPHAHLINK aims to reduce administrative overhead, improve academic accountability and also serve as a model for digital transformation in the educational market and world.

Stakeholders

This project would aim the following stakeholders:

- o University Administration
- o Teachers
- o Students
- o Co-ordination Offices

Functional Requirements

This project shall have the following functional requirements

1. Teacher Module

FR 1.1: Teacher will be able to login through OTP/Password or recover password

FR 1.2: Teacher will be able to create and manage class schedules

FR 1.3: Teacher will be able to mark attendance manually or via QR Code scan

FR 1.4: Teacher will be able to view attendance history & generate downloadable reports

FR 1.5: Teacher will be able to flag students with low attendance.

2. Student Module

FR 2.1: Student will be able to login through password/OTP request

FR 2.2: Student will be able to mark attendance

FR 2.3: Student will be able to view personal attendance dashboard

FR 2.4: Student will be able to receive alerts for attendance thresholds

FR 2.5: Student will be able to submit leave applications to teacher/faculty

3. Admin Module

FR 3.1: Admin will be able to add, edit or remove users & customize permissions

FR 3.2: Admin will be able to monitor attendance trends across departments
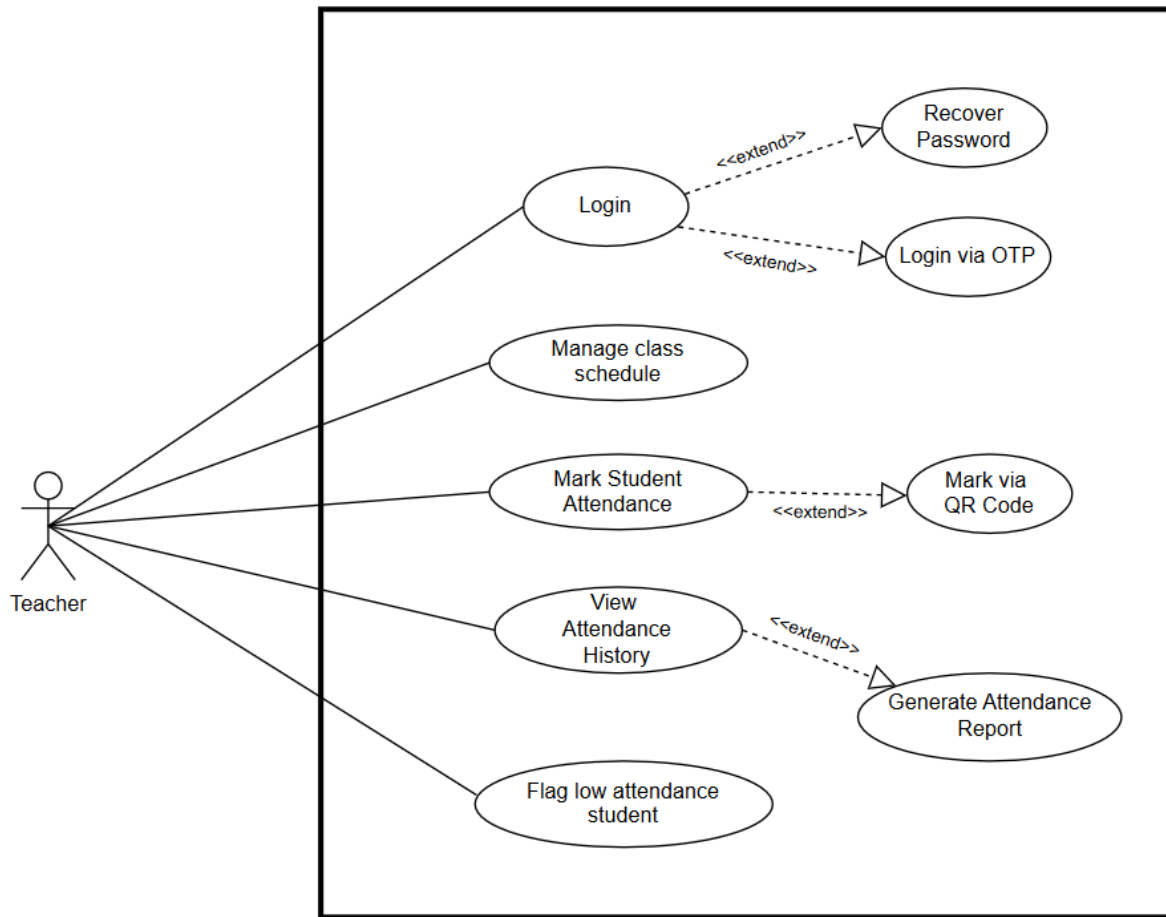
FR 3.3: Admin will be able to export data for audits or compliance.

FR 3.4: Admin will be able to configure system settings and institutional policies.
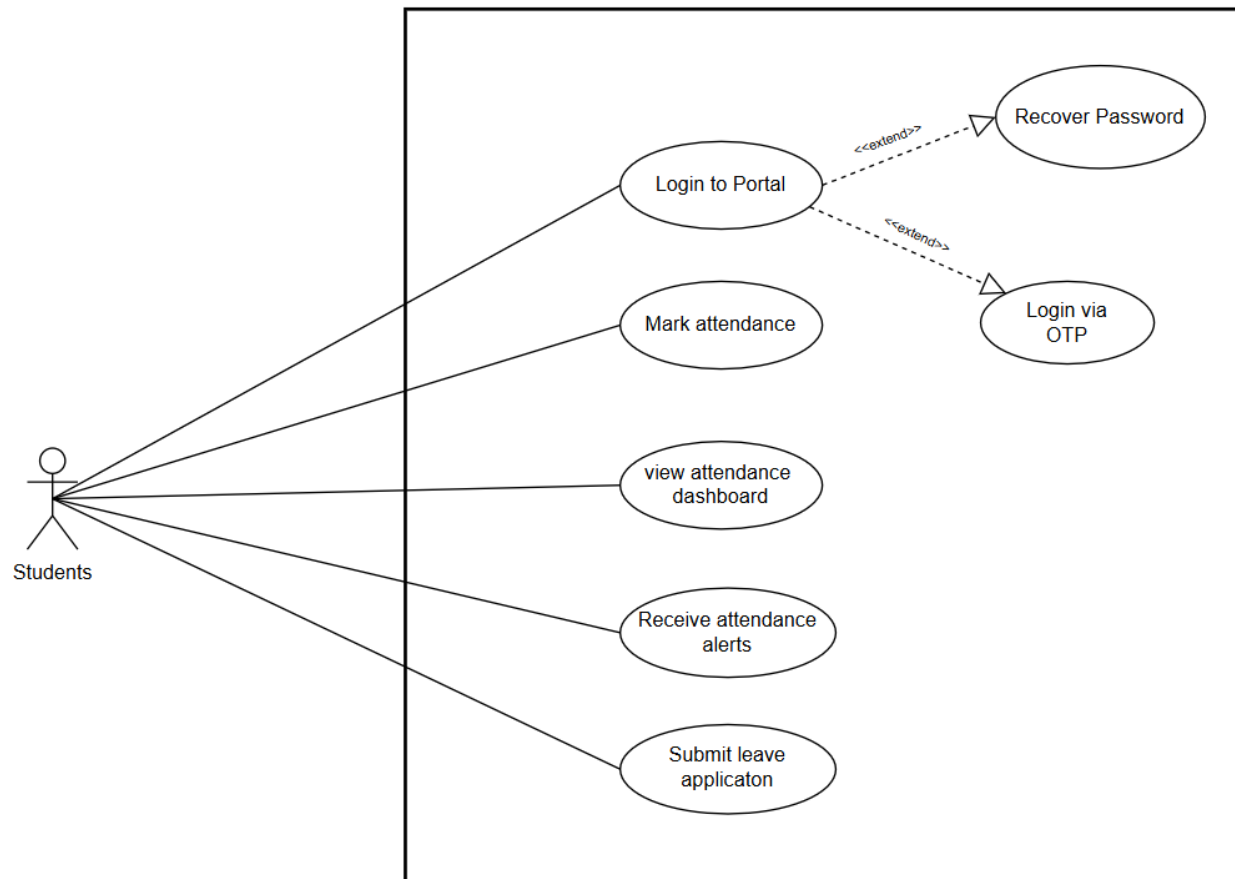
FR 3.5: Admin will be able to upload department wide notifications

Use Case Diagram

Teacher Use Case

Student Use Case

Admin Use Case