



UE22CS352B - Object Oriented Analysis & Design

Mini Project Report

Placement Management System

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
FACULTY OF ENGINEERING
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(Established under Karnataka Act No. 16 of 2013)
100ft Ring Road, Bengaluru – 560 085, Karnataka, India

Problem Statement:

The Placement Management System is designed to streamline and automate the process of job applications, interview scheduling, and company approval for educational institutions. The current manual or semi-automated process often leads to inefficiencies, errors, and delays in managing job openings, applications, and student-company interactions. The primary objective of this system is to provide an easy-to-use platform that simplifies job posting, application management, interview scheduling, and approval processes for both students and companies.

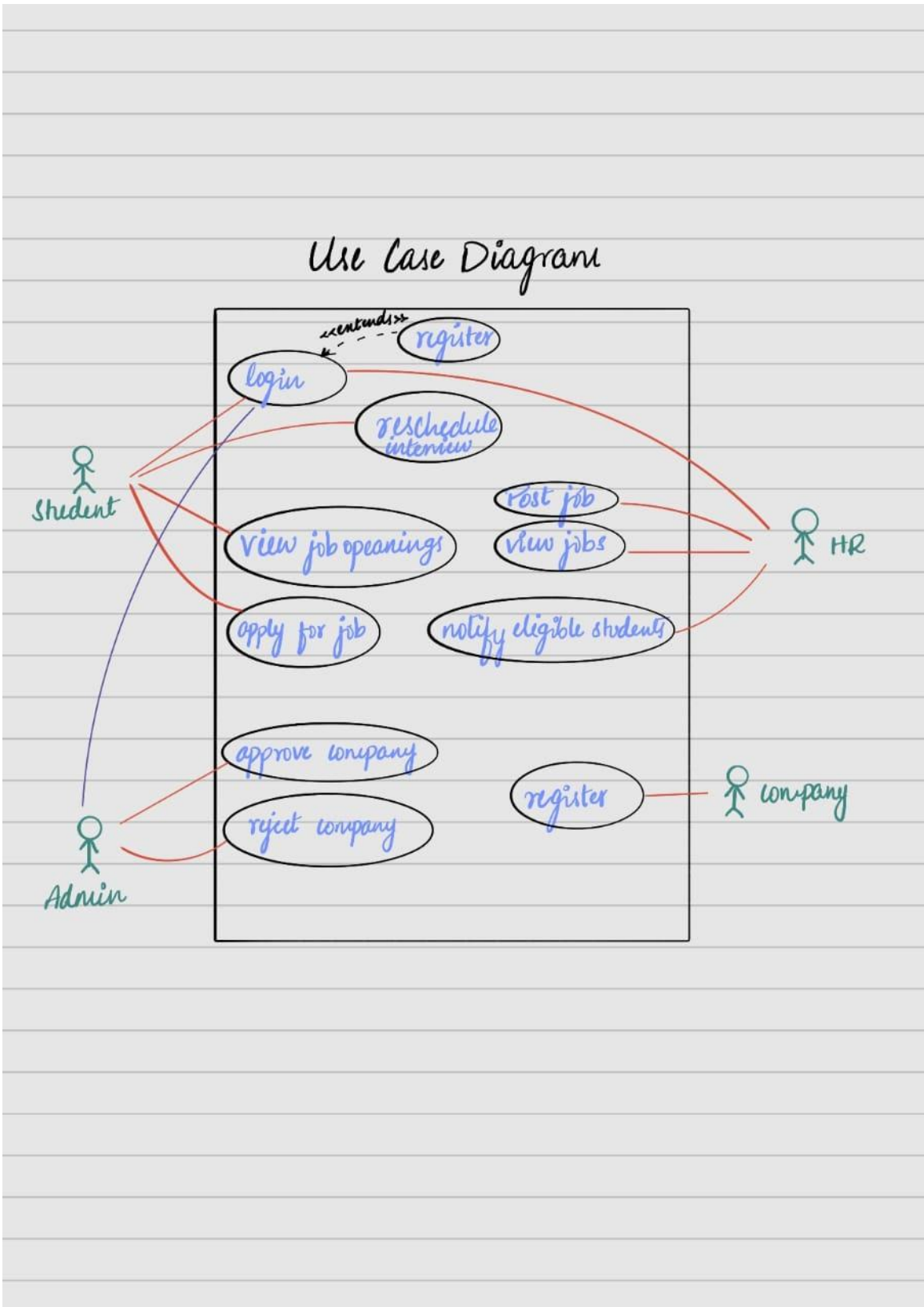
This system allows students to register, apply for jobs, and request interview reschedules. Companies can post job openings and notify eligible students. Admins can approve or reject companies based on their registration request. The system is built using the Model-View-Controller (MVC) architecture to ensure clear separation of concerns, scalability, and maintainability.

Key Features:

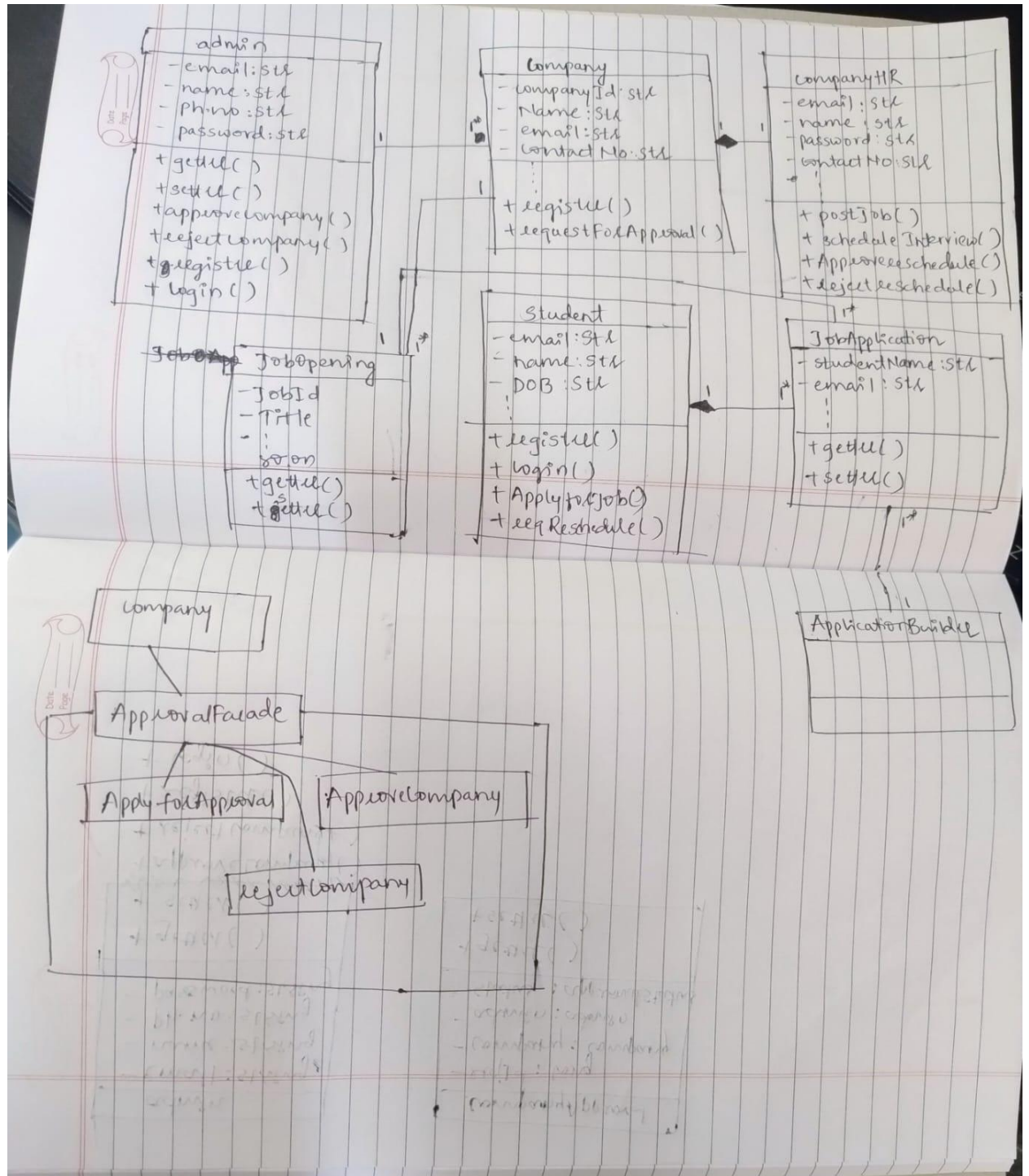
1. **User Registration and Authentication:** Students, Companies, Company HRs, and Admins can register and log in to the system using a secure authentication process.
2. **Job Posting and Job Application:** Companies (through Company HR) can post job openings with details like job title, description, location, salary, requirements, and application deadlines. Students can apply for job openings based on their profile details (e.g., name, email, department, CGPA, resume, LinkedIn, GitHub, etc.).
3. **Interview Scheduling and Rescheduling:** Company HR can schedule interviews for shortlisted students, specifying the date, time, and meeting mode (online or offline). Students can request a reschedule of their interview if needed, and the system will notify the company HR for approval.
4. **Approval System for Companies:** Company Approval Team (Admin role) is responsible for approving or rejecting company registrations based on the provided company details. Companies are required to submit an approval request, which is then reviewed by the admin for approval or rejection.
5. **Job Status Tracking:** Students and Company HR can track the status of a job application (e.g., applied, interviewed, accepted, or rejected) in real time.
6. **Notification System:** The system notifies eligible students about new job openings, application status updates, and interview schedules. Company HR can send notifications to eligible students based on their qualifications and job requirements.
7. **Admin Dashboard:** Admins can manage the overall system, including approving or rejecting company registration requests, viewing job postings, and overseeing the entire placement process.
8. **Role-Based Access Control:** Different user roles (students, companies, company HRs, and admins) have different levels of access and functionality within the system. Each user role has its own dashboard and set of features, ensuring that users only have access to the features relevant to them.

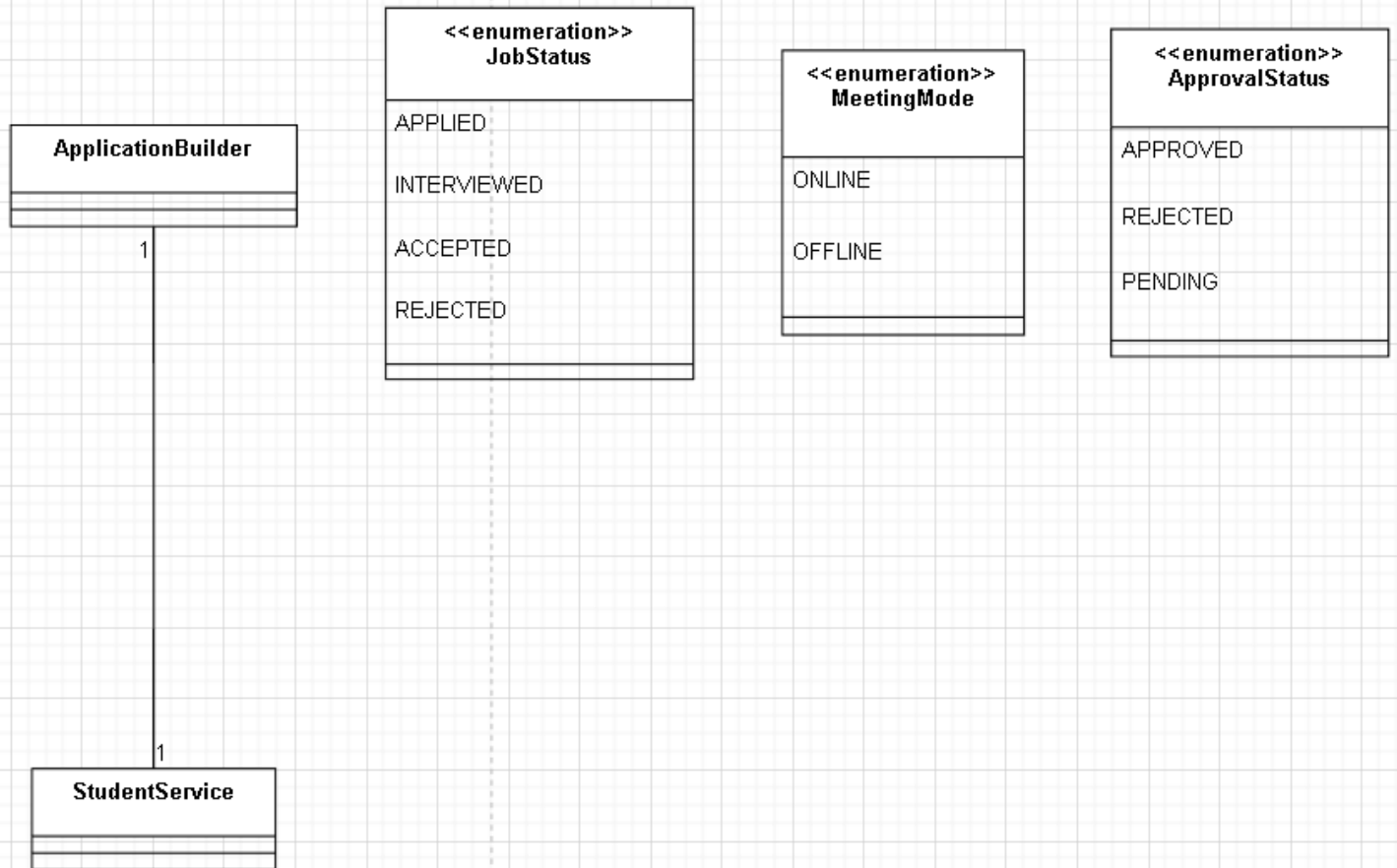
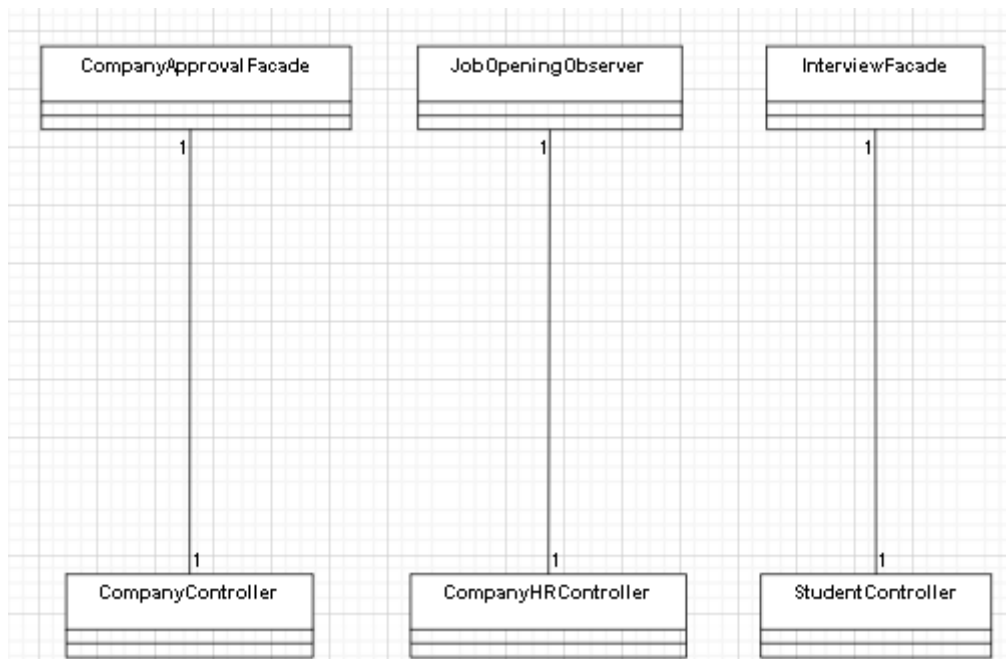
Models:

Use Case Diagram:

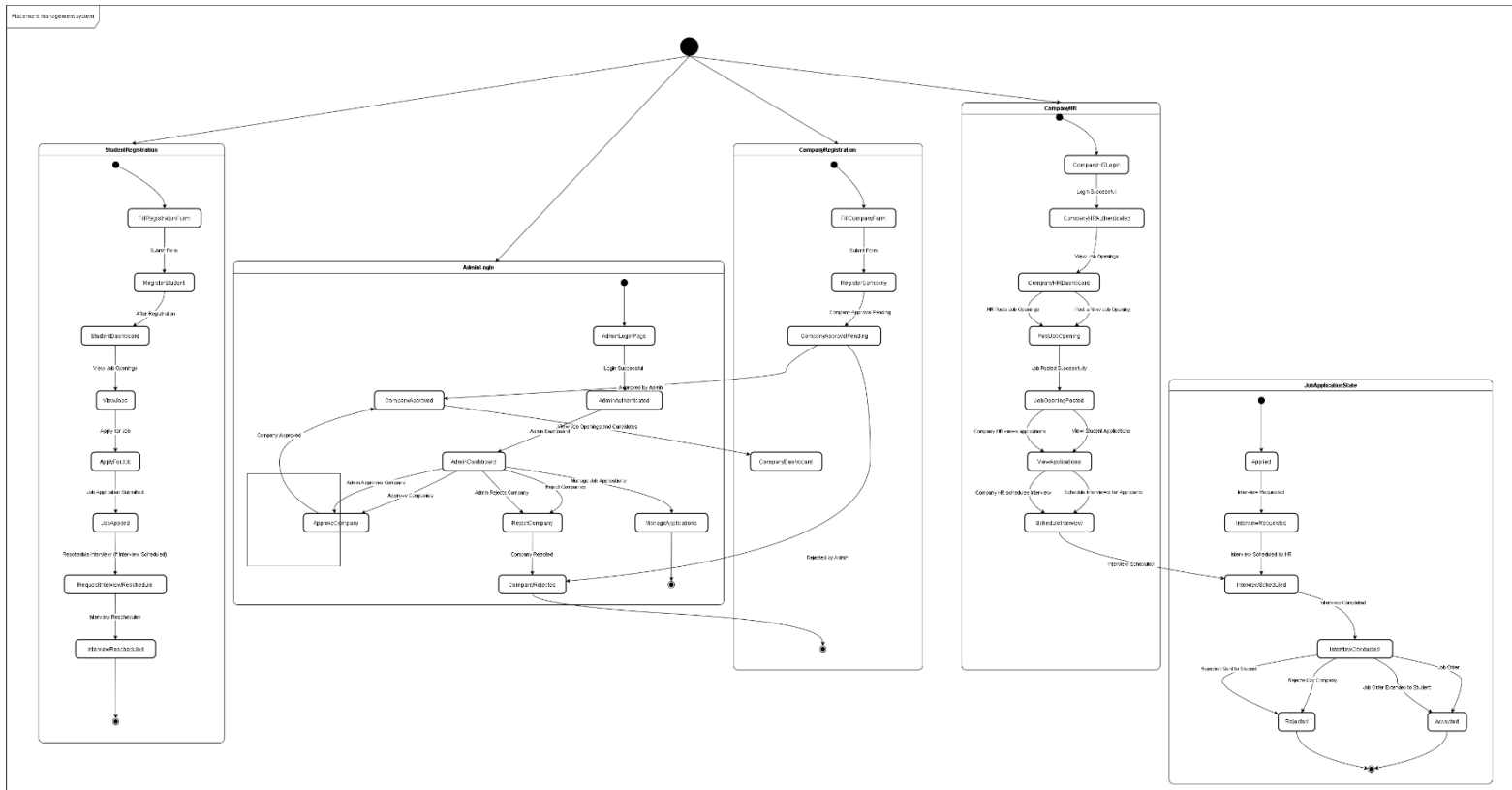


Class Diagram:



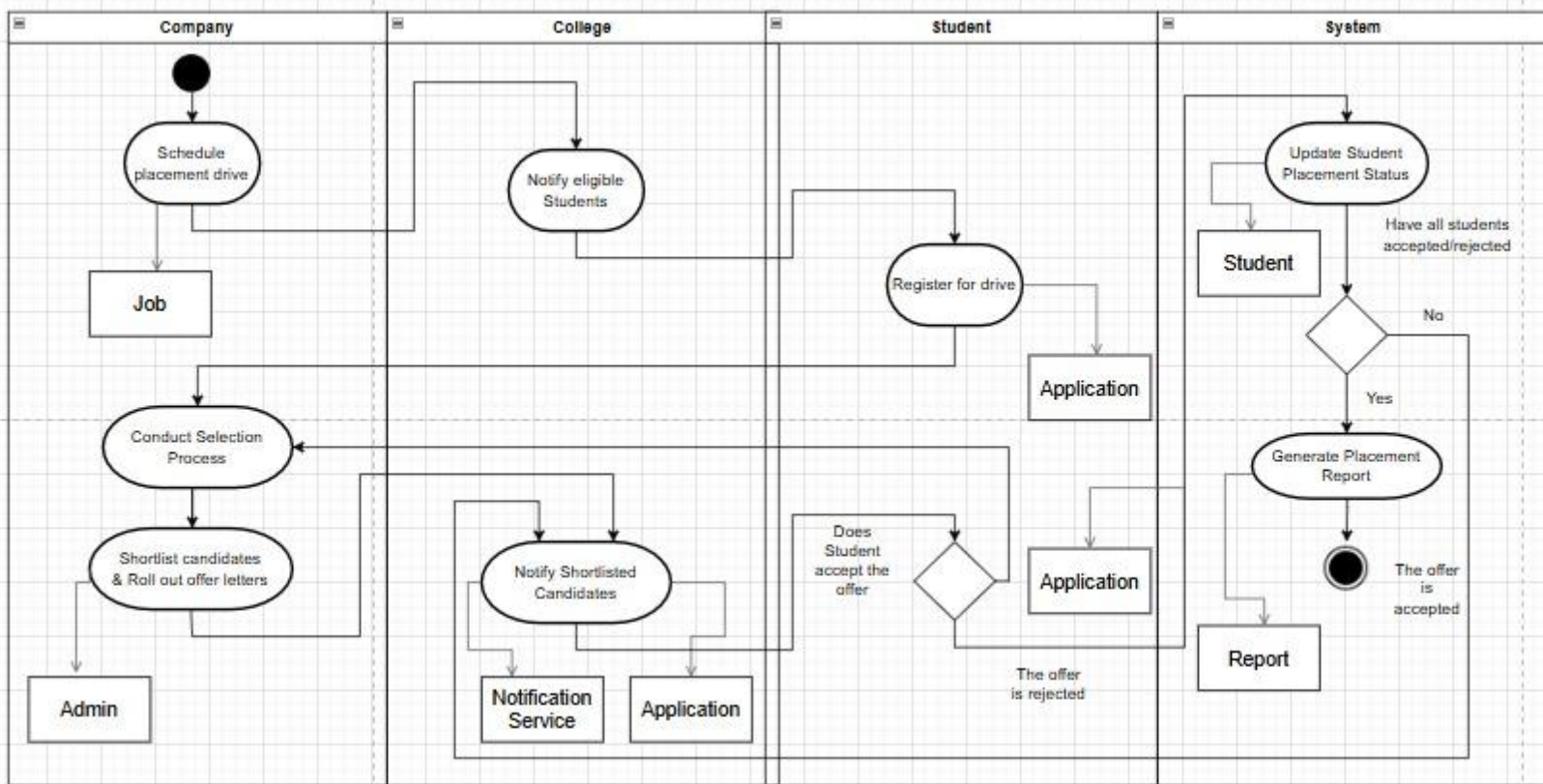


State Diagram:



Link for image: https://drive.google.com/file/d/1gFA_r-nAnVW_vDF-4_ASRbK8brkEsKB4/view?usp=sharing

Activity Diagrams:



Architecture Patterns, Design Principles, and Design Patterns:

Architecture Patterns

Model – View – Controller Pattern (MVC)

Design Principles

Single responsibility
DIP (dependency inversion)
Interface Segregation

Design Patterns

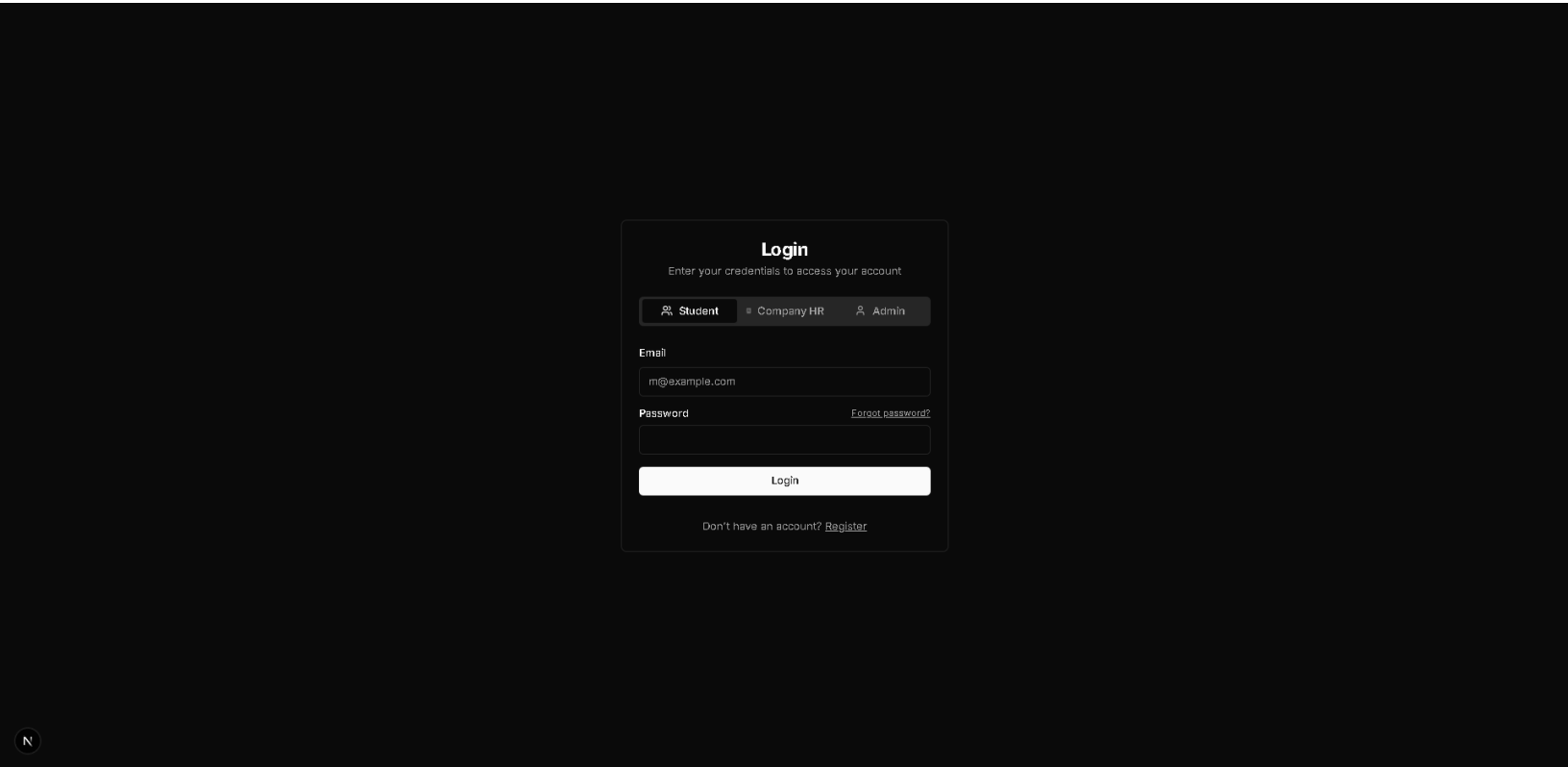
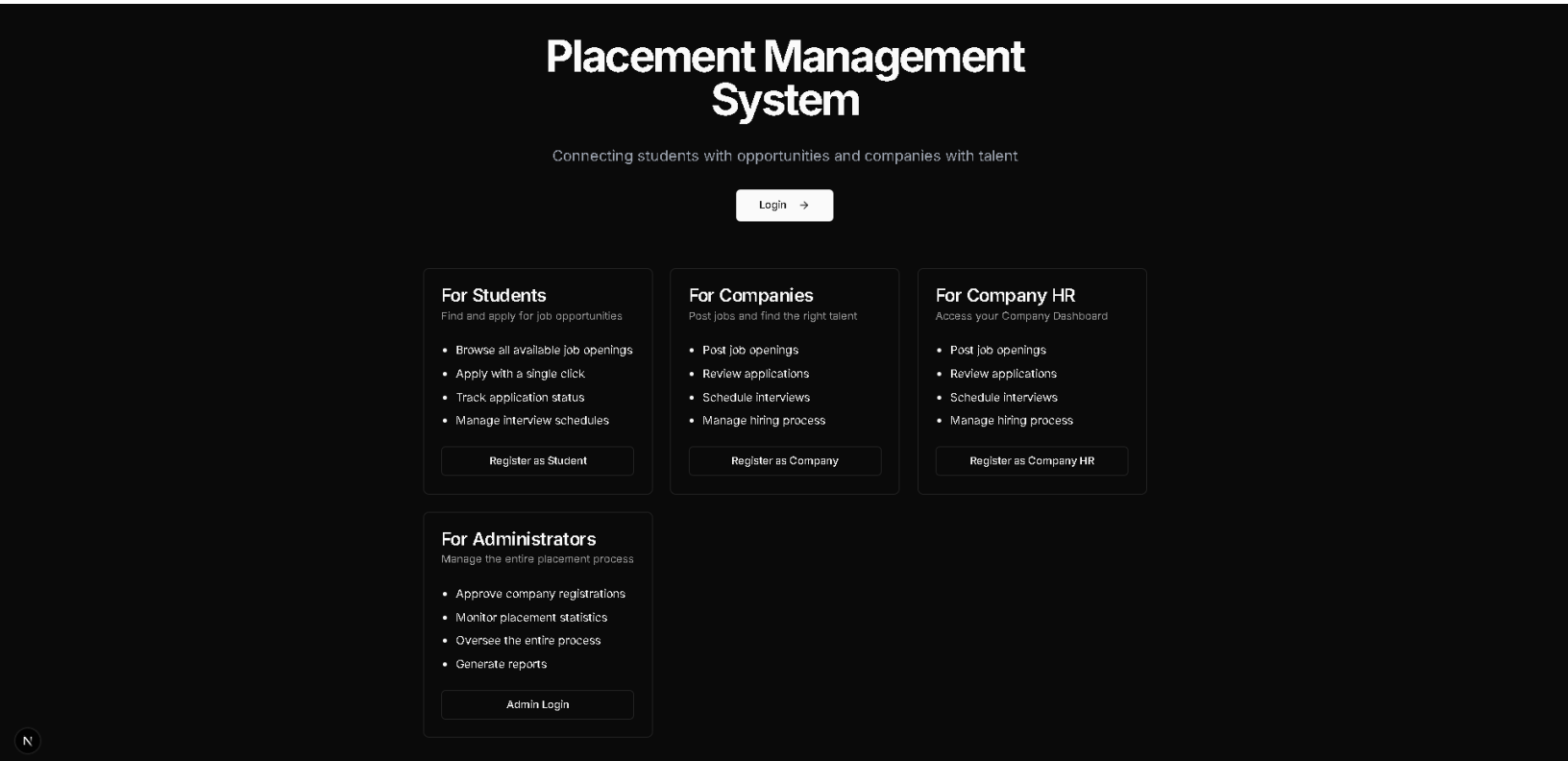
Facade: For company approval and interview process
Builder: To build job Application
Observer: To notify Students when a new job posting is made
Singleton: To handle database and in application builder

Github link to the Codebase:

<https://github.com/sohanshanbhag1502/Placement-Management-System.git>

Screenshots

UI:



Student dashboard

PlaceMe

Navigation

Dashboard

Job Openings

My Applications

Interviews

Job Openings

Browse and apply for available job opportunities

Software Engineer

Akamai • Bangalore

Posted: 5-3-2025

Apply

Full-time

Deadline: 3-3-2025

Details

PlaceMe

Navigation

Dashboard

Job Openings

My Applications

Interviews

My Applications

Track the status of your job applications

Browse Jobs

All Applications

All Applications

Complete history of your job applications

Application Id	Company	Position	Status
1	Akamai	Software Engineer	APPLIED

HR dashboard

PlaceMe

Navigation

- Dashboard
- Job Openings
- Post Job
- Interviews

ujen@gmail.com

Help

Post a New Job

Create a new job opening for students to apply

Job Details

Fill in the details for the new job opening

Job Title

e.g. Software Engineer

Location

e.g. New York, NY

Job Type

Select job type

Application Deadline

Pick a date

Job Description

Describe the job role, responsibilities, and requirements...

Requirements

List the skills, qualifications, and experience required...

Salary Range

e.g. \$60,000 - \$80,000

Post Job

PlaceMe

Navigation

- Dashboard
- Job Openings
- Post Job
- Interviews

ujen@gmail.com

Help

Schedule an Interview

Schedule an interview for candidate

Application Id

Candidate email

Date

dd-mm-yyyy

Time

--:-- --

Meeting Mode

Online

Meeting Link/Location

Interviewer Name

Schedule

The image displays a web application interface for an Admin dashboard. The dashboard has a dark theme and a sidebar on the left. The sidebar contains a logo 'PlaceMe' and a navigation menu with 'Dashboard' selected. The main content area is titled 'Admin dashboard' and 'Companies'. It features a search bar for companies and a table titled 'Companies Requested for Approval'. The table has columns for Name, Status, and Actions. One company, 'Akamai', is listed with a 'PENDING' status and a 'View' button. Below the table, there is a 'View Company' section showing details for Akamai, including its logo, name, website, location, email, phone number, and a description.

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Individual contributions of the team members:

Name	Module worked on
Sohan Shanbhag	Frontend, MVC classes, Services ,
Shrujan V	Observer, Services, MVC
Shobith PS	Façade, Builder, testing
Soyel Gunnapur	Façade, Builder, testing