



UE21CS352B - Object Oriented Analysis & Design using Java

Mini Project Report

“Placement Management System”

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6th Semester E Section

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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)
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1)PROBLEM STATEMENT

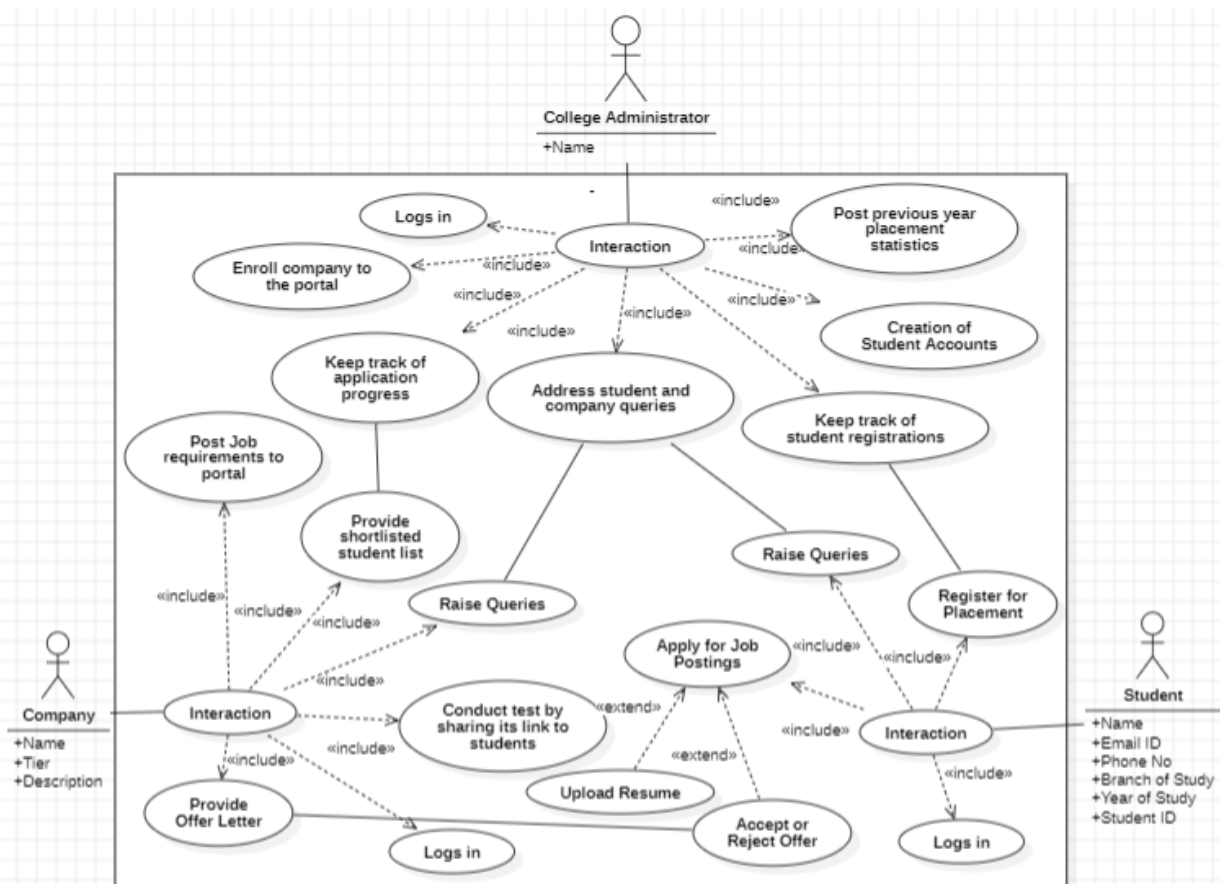
Our project aims to develop a comprehensive Placements Management System (PMS) to streamline the placement process for students, placement officers, and placement coordinators.

The system facilitates seamless interaction and efficient management of placement-related activities.

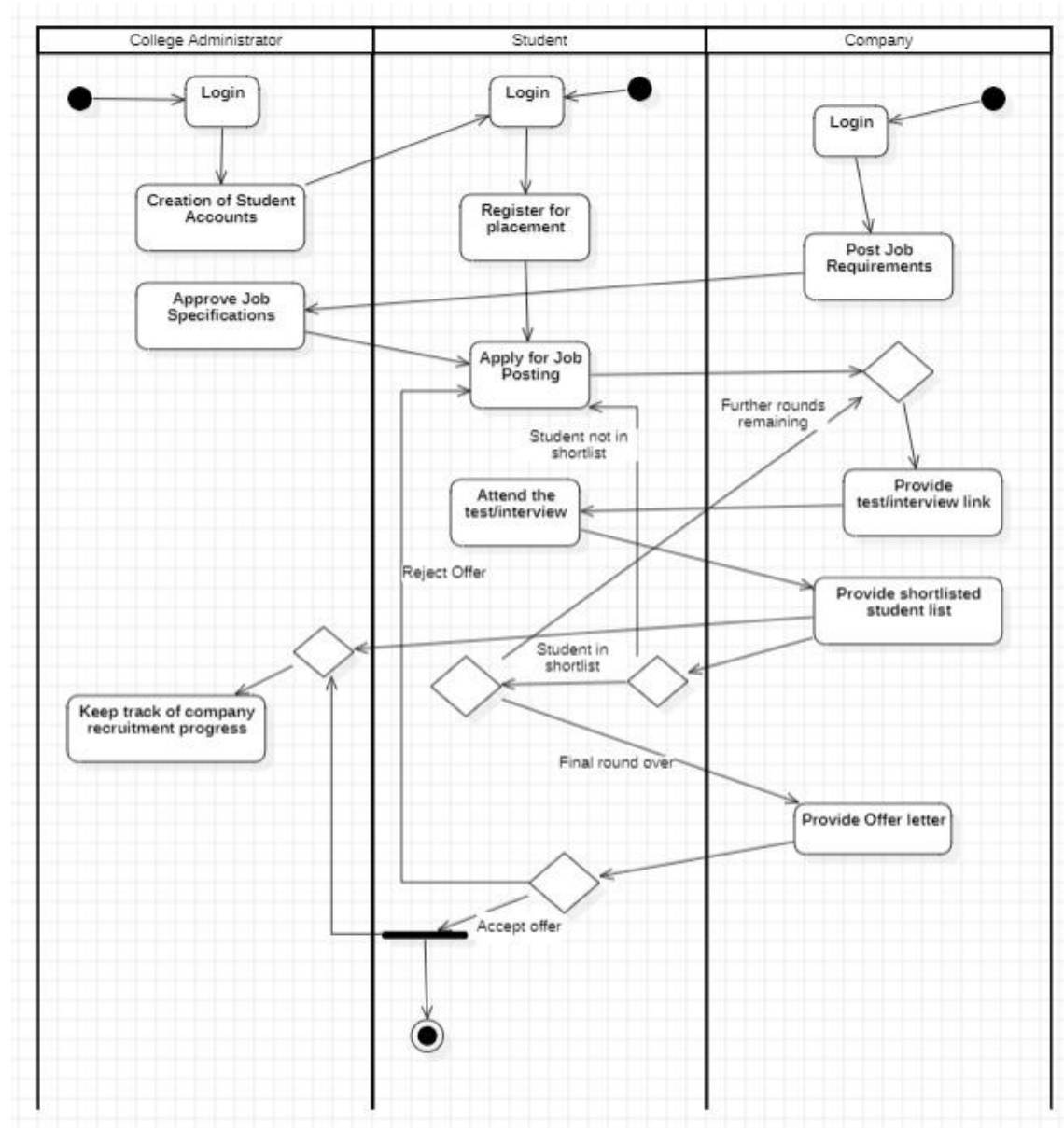
It facilitates student to easily apply for jobs and it helps companies with offering jobs and further related processes .

2)MODELS

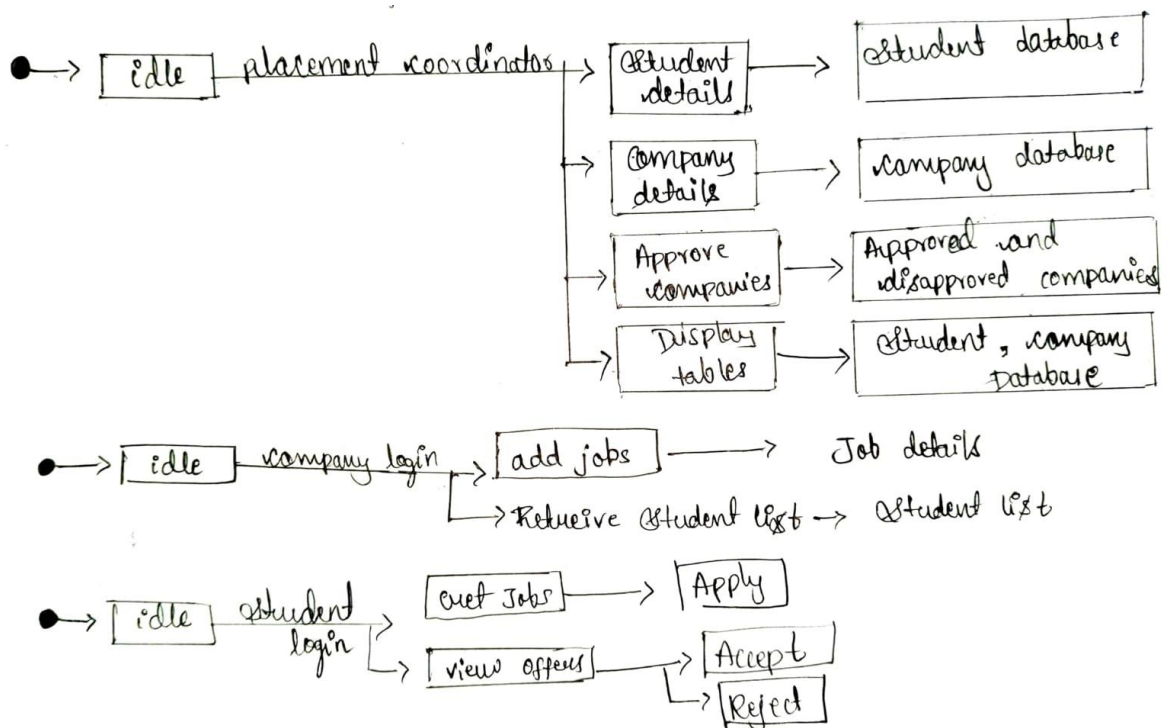
USE CASE DIAGRAM



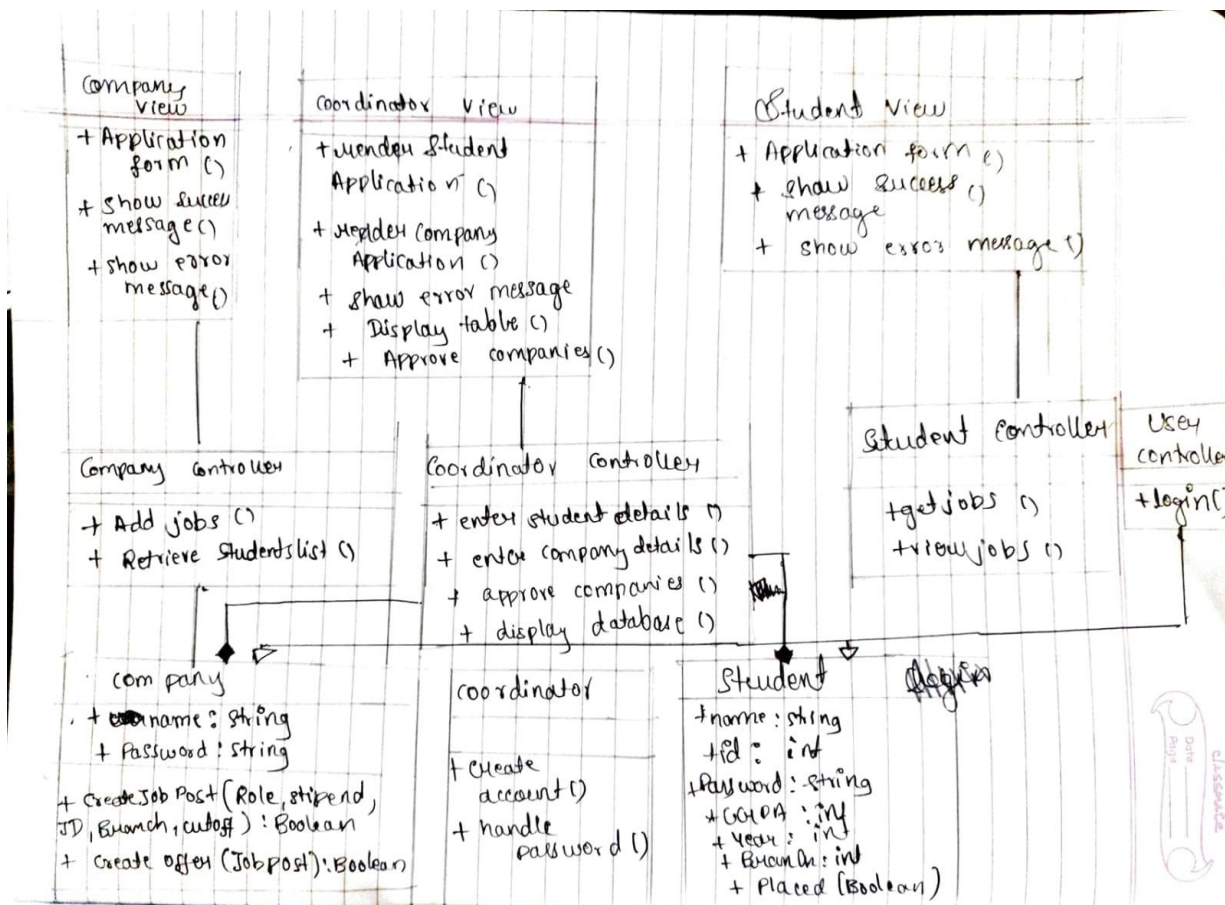
ACTIVITY DIAGRAM

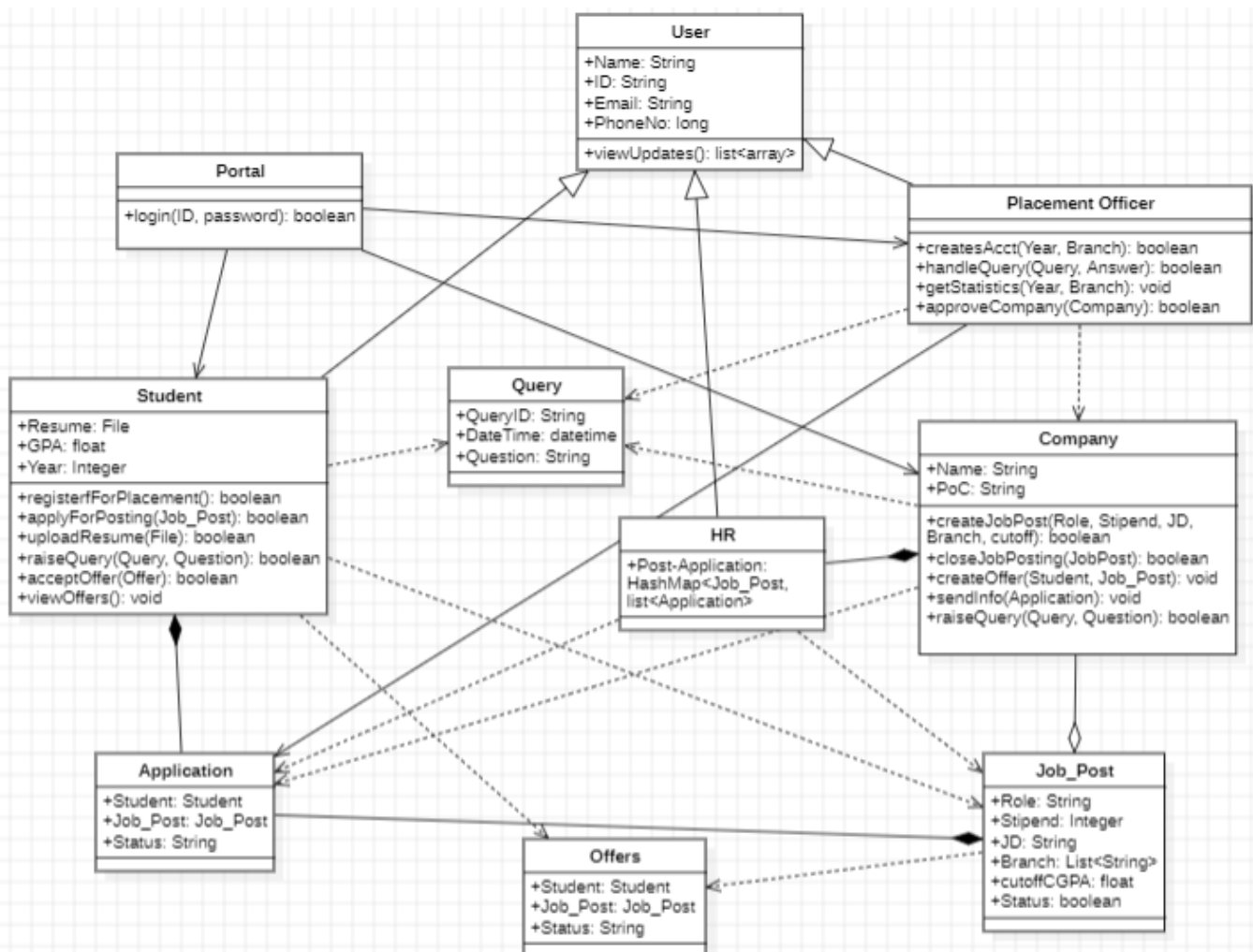


STATE DIAGRAM



CLASS DIAGRAM (MVC)





3)Architectural patterns and principles

Single responsibility principle

The Single Responsibility Principle (SRP) is a design principle in object-oriented programming that states that a class should have only one reason to change. In other words, a class should have only one responsibility or task, and all of its methods and properties should be directly related to fulfilling that responsibility.

Model-View-Controller (MVC) Pattern: The MVC pattern is used to separate concerns within the application. Models represent the data , Views represent the presentation layer (e.g., CompanyView, StudentView), and Controllers handle the interaction between models and views (e.g., CompanyController, StudentController).

Observer Pattern: The ActionListener interface is used for event handling in Swing components, which follows the Observer pattern. Listeners (Observers) are registered with the components (Subjects) to receive notifications when events occur.

Separation of Concerns: The code separates different concerns into distinct classes. For example, database operations are handled in the model classes (Company), user interface rendering and event handling are managed in the view classes (CompanyView, StudentView), and business logic and interaction management are handled in the controller classes (CompanyController, StudentController)

The Factory Pattern -The Factory Pattern is a creational design pattern that provides an interface for creating objects in a superclass, but allows subclasses to alter the type of objects that will be created. It abstracts the process of object creation, allowing the client code to use the factory method to create objects without needing to specify the exact class of the object being created.

The Singleton Pattern -

The singleton pattern is a creational design pattern that ensures a class has only one instance and provides a global point of access to that instance. It involves creating a class with a method that returns the same instance of the class every time it is called, rather than creating a new instance.

4)Github Link

<https://github.com/mmohana27/OOAD-Project>

5)Individual Contribution

Mohana: Coded for full placement coordinator part ,company and student part of the project, Diagrams

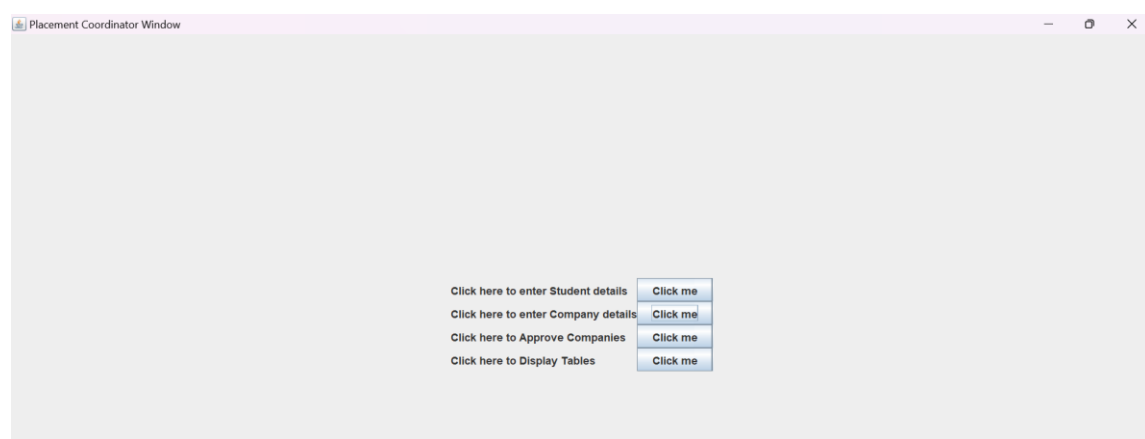
Kunjam: Connection of database

Keerthana: Diagrams,database

Krishna: Database

6) Screenshots

Placement coordinator window



Student database

Student Database

Id	1
Name	M.Mohana
Password	mohana@123
CGPA	8.3
Year	2025
Branch	CSE
Placed	false

Save

Company database

Company Database

Name	Bosch
Password	Bosch@123

Save

Approval of companies

cName	Role	JD	Branch	Stipend	Cutoff	Status
amazon	sdk	bd	cse	100000	7.0	1
bosch	se	bd	cse	40000	6.0	1

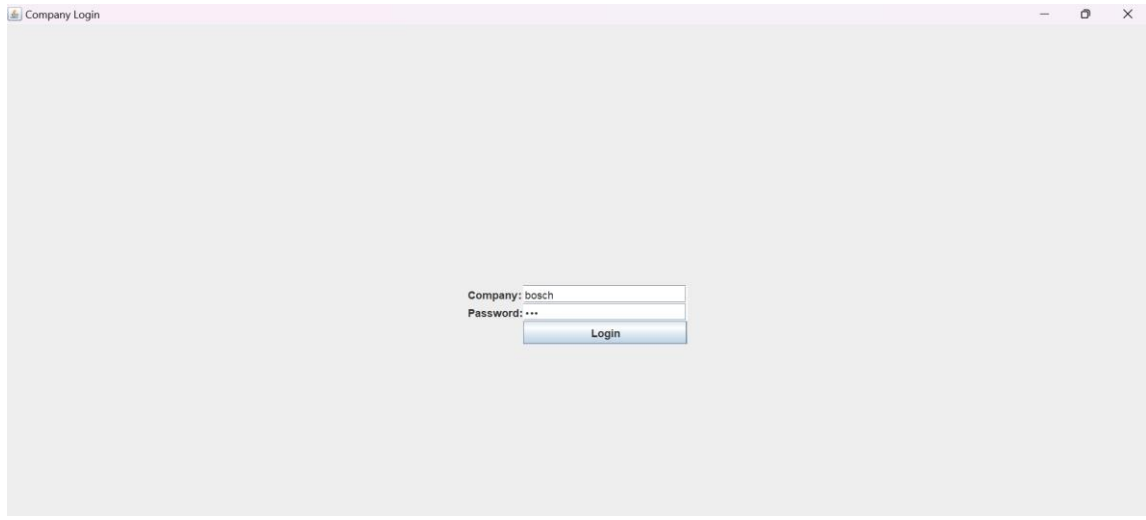
Enter the Threshold for stipends

All tables displayed

Student Database:-						
ID	Name	Password	CGPA	Year	Branch	Paced
1	mithu	123	10.0	2025	cse	1
7	mohana	123	7.0	2025	cse	0
9	kesu	123	8.3	2025	cse	0

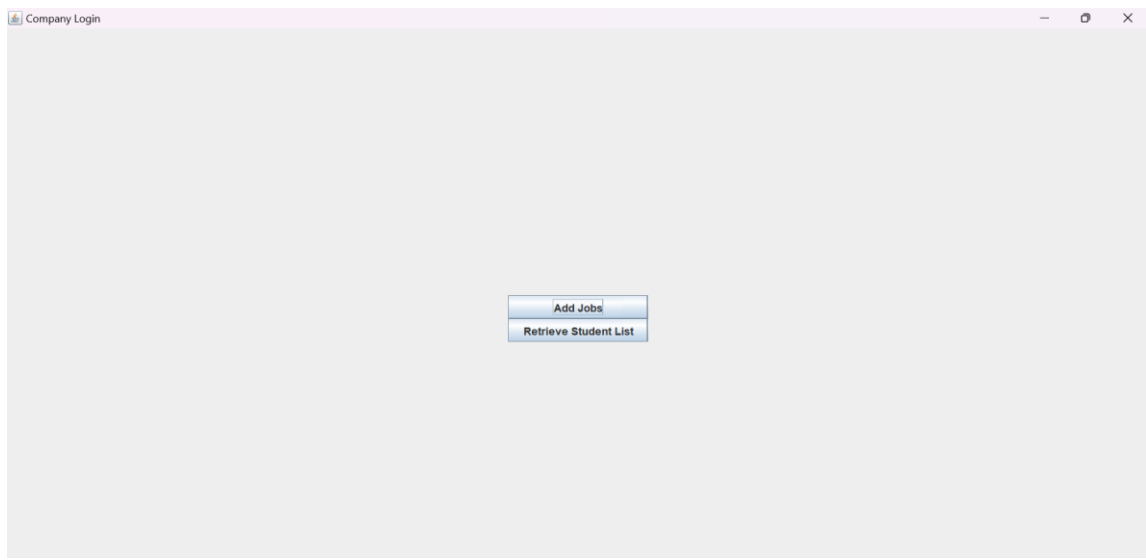
Comapany Database:-	
Name	Password
amazon	123
flipkart	123
bosch	123

Company login



A screenshot of a software window titled "Company Login". The window has a light gray background and a standard Windows-style title bar with minimize, maximize, and close buttons. In the center of the window, there is a login form. The form consists of two text input fields: the first is labeled "Company:" and contains the text "bosch"; the second is labeled "Password:" and contains three asterisks "***". Below these fields is a blue button with the text "Login".

Company window after log in



A screenshot of a software window titled "Company Login". The window has a light gray background and a standard Windows-style title bar with minimize, maximize, and close buttons. In the center of the window, there are two blue buttons stacked vertically. The top button is labeled "Add Jobs" and the bottom button is labeled "Retrieve Student List".

Company adding jobs

Company Login

Role:
Software developer

Stipend:
40000

JD:
Frontend Develpoer

Branch:
CSE

Cutoff:
7.75

Year:
2025

Add Job

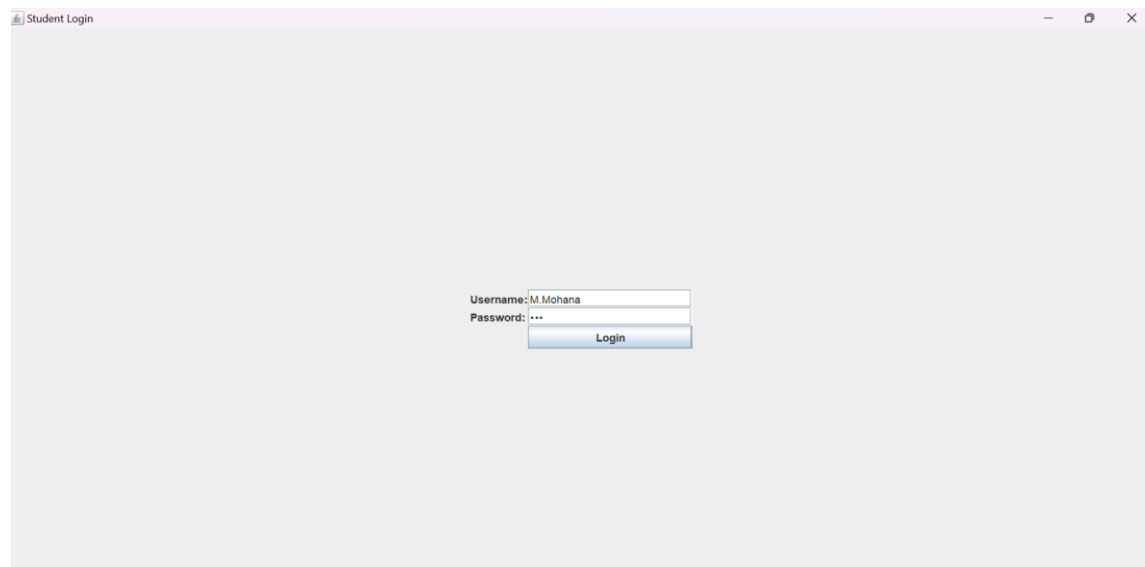
Company retrieving students

Company Login

bosch se mohana 2025

Send Offer

Student login



A screenshot of a web application window titled "Student Login". The window has a light gray background and a standard Windows-style title bar with minimize, maximize, and close buttons. In the center of the window, there is a login form. The form consists of two text input fields: the first is labeled "Username:" and contains the text "M.Mohana"; the second is labeled "Password:" and contains three asterisks "***". Below these fields is a blue "Login" button.

Student Login

Username: M.Mohana

Password: ***

Login

Students window after log in



A screenshot of the same web application window after a successful login. The window title remains "Student Login". The login form is no longer visible. Instead, there are two blue buttons side-by-side in the center of the window: "Get Jobs" and "View Offers".

Student Login

Get Jobs View Offers

Jobs that can be applied by student

Student Login

amazon	sdk	bd	cse	100000	7.0		Apply!
bosch	se	bd	cse	40000	6.0		

Offers given to student

Student Login

bosch			se	2025
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Accept Reject

