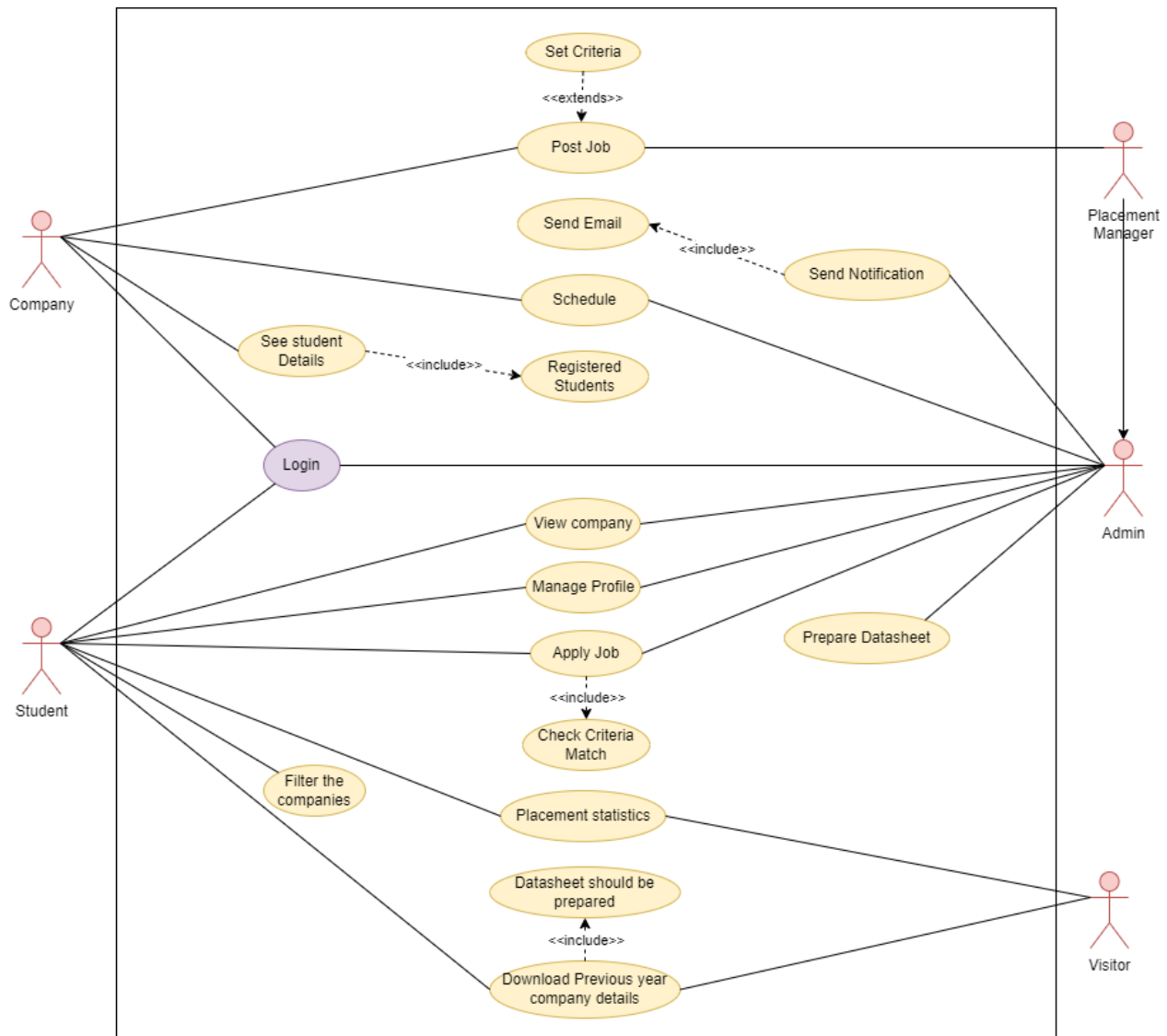# IT314

Lab3
Software Engineering
Winter Semester 2022-23

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Use Case Diagram

Set Criteria

<<extends>>

Post Job

Company

Send Email

<<include>> Send Notification

Schedule

See student Details

<<include>> Registered Students

Login

View company

Manage Profile

Apply Job

<<include>>

Check Criteria Match

Prepare Datasheet

Student

Filter the companies

Placement statistics

Datasheet should be prepared

<<include>>

Download Previous year company details

Placement Manager

Admin

Visitor

➢ **Actors:**
- Company
- Student
- Visitor
- Admin
- Placement-Manager

➢ **Use Cases:**
- Post Job
- Schedule
- See Student Details
- Send Notification
- Prepare datasheet
- View company details
- Apply for jobs
- Filter the companies
- Manage profile
- Download previous year company list
- View placement statistics

Use Case Descriptions

1. Name: Post Job

➢ <u>Actors:</u> Company, Placement-Manager

➢ <u>Goal:</u> To enable the companies to post jobs.

➢ <u>References to requirements:</u>
  ● Refers to the Feature: 3.

➢ <u>Pre-conditions:</u>
  ● The Company must be registered with the system and have a unique login Id.

➢ <u>Description:</u>
  1. The company logs into the system using their login Id.
  2. The company selects the "Post Job" option.
  3. The system presents a form for the company to enter details about job opening, such as job title, job description, package, criteria if any and application deadline.
  4. The company fills in the required fields and submits the job posting to the system.
  5. The system saves the job posting and displays it on the "Companies" page of the system, where it can be viewed by the students.
  6. The company can later edit or delete the job posting as needed.

➢ <u>Exceptions:</u>
  4.a. If the company leaves any required fields blank, the system prompts the company to fill in the missing information before submitting the job posting.

➢ <u>Post-conditions:</u>
  ● The students should get notified that the company has posted a job.

2. Name: Schedule

➢ <u>Actors:</u> Company, Admin

- ➢ <u>Goal:</u> To enable a registered company to schedule an assessment test for applicants who have applied to their job opening.

- ➢ <u>References to requirements:</u>
  - ● Refers to the Feature - 3.

- ➢ <u>Pre-conditions:</u>
  - ● The company must be registered with the Placement Cell system and have a unique login ID.
  - ● The company must have posted a job opening on the Placement Cell system.
  - ● The job posting deadline must have passed, and students must have applied for the job opening.

- ➢ <u>Description:</u>
  1. The company logs into the system using their login id.
  2. The company selects the "Schedule" option.
  3. The company enters the date, time, and location for the assessment test.

- ➢ <u>Post-conditions:</u>
  - ● Company should be able to successfully see its schedule after filling in details.

3. Name: View Student Details

- ➢ <u>Actors</u>: Company

- ➢ <u>Goal:</u> To enable the company to view the details of a student's profile on the placement cell website.

- ➢ <u>References to requirements</u>:
  - ● Refers to Functional Requirements: 2, 4.

- ➢ <u>Pre-conditions</u>:
  - ● Company must be logged in to the system.

- ➢ <u>Description</u>:

1. When the company is logged in to their account on the placement cell website, they should be able to view a list of the students who have registered for the company.
2. The company can select any student from the list.
3. Once they have selected a student, they should be able to view the details of the student's profile.

➢ Exceptions:
> 1.a. If the company has not logged in to the account, they can't see the details of the students registered for their company.
> 3.a. If there are technical issues with the website, such as slow loading times or broken links, the company representative may not be able to view the student's profile.
> 3.b. The company can only see specific details of the student like name, student id, cpi, resume etc. The company can not see the list of companies the student has registered for and the contact details of the student.

➢ Post-conditions:
● The company can analyze the student data available on the profile and may shortlist the student for the further process.

4. **Name: Send Notification**

➢ Actors**:** Admin

➢ Goal**:** To send notification to every user of new sessions or events , or any new job posts.

➢ References to requirements:
● Refers to Function Requirement: 13.

➢ Pre-conditions:
● System should have to update with new information.
● The user must be logged in.

➢ Description:

1. When system updated with new sessions, new job posts or any other activity.
2. Administrator must send a notification to user through e-mail as soon as an update of any information.

➢ Exceptions:

1.a. The message will loss due to a system crash or any other case of internet issue, in this case the message will not reach to users.

➢ Post-conditions:
  ● The notification will be shown to the user in the email notifications section.

5. Name: Prepare Datasheet

➢ Actors: Admin

➢ Goal: To prepare a datasheet of users and jobs.

➢ References to requirements:
  ● Refers to Non-Functional Requirements: NFRS-3

➢ Pre-conditions:
  ● Admin must be logged in.

➢ Description:
  1. Admin will collect data from the database and create a datasheet about user details like name, mobile number, email address, CPI details, reference resume details, and backlog details.
  2. Admin will create a datasheet about job details like the company's name, package details, posting location, selection process, and reference to job details.
  3. Admin will create a datasheet about candidates hired by the company with their package details.

➢ Post-conditions:
  ● An authorized person can see the details presented in datasheets.

6. Name: View Company Details

➢ Actors: Student, Admin

➢ Goal: Show list of companies to the user.

➢ References to requirements:
  ● Refers to Non-Functional Requirements: 5,6,7.

➢ Pre-conditions:
  ● Students and Admin must be logged in.

➢ Description:
  1. Students can check the companies which have come for the placements.
  2. Admin can view all the details about the companies which have come for placements including HR details etc.

➢ Exceptions:
  1.a. If anyhow the database failed to connect then the student must retry.
  2.a. As same as 1a.

➢ Post-conditions:
  ● Students can choose and apply for the company in which (s)he are interested in.

7. Name: Apply for jobs

➢ Actors: Student , Admin

➢ Goal: To make students apply for a job posted by a registered company on the System.

➢ References to requirements:
  ● Refers to Functional Requirement: 5.

➢ Pre-conditions:

- The student must be registered with the Placement Cell system and have their details approved by the admin.
- The company must be registered with the Placement Cell system and have posted a job opening.

➢ Description:
1. The student logs into the Placement Cell system using their unique ID and password.
2. The student selects the "Apply for Job" option from the menu.
3. The system presents a list of all the job openings posted by registered companies.
4. The student selects the job opening they wish to apply for.
5. The system displays the job opening details, including the job description, criteria, and application deadline.
6. The student confirms that they meet the required criteria for the job opening.
7. The student submits their application by providing their resume and any additional requested information.
8. The system confirms that the student has applied for the job opening.

➢ Exceptions:
      2.a. If the student tries to apply for a job before their details have been verified and approved by the admin, the system notifies the student that they are not yet eligible to apply for jobs.
      6.a. If the student doesn't meet the criteria provided by the company, the system notifies the student that he is not eligible for that job.

➢ Post-conditions:
- Students can see his/her application.

8. Name: Filter the companies

➢ Actors: Students

➢ Goal: Students can register in the companies based on the job location, package etc.

➢ <u>References to requirements:</u>
  - Refers to Feature: 15.

➢ <u>Pre-conditions:</u>
  - Students must be logged in to the system.

➢ <u>Description:</u>
  1. Students will have a choice for the companies based on their preference like job location, package offering, categories, register end date, role in the company etc.

➢ <u>Post-conditions:</u>
  - Students will have an accurate choice on the company selection so s(he) have the better opportunities.

9. Name: Manage Profile

➢ <u>Actors:</u> Student, Admin

➢ <u>Goal:</u> To manage your student profile information.

➢ <u>References to requirements:</u>
  - Refers to Functional Requirement: 1 and Non-Functional Requirements: 1,2,5,6,7,8

➢ <u>Pre-conditions:</u>
  - The student has logged in to the system

➢ <u>Description:</u>
  1. The student goes to 'my profile' option .
  2. The system displays his/her profile.
  3. The student selects the edit option.
  4. Student makes the required changes to his profile.
  5. The student saves the changes made and sends his profile for approval.
  6. Admin checks the validity of the profile.
  7. Admin approves it and profile status is shown as approved to the student.

➢ Exceptions:
   6.a. Admin disapproves the profile and the system shows profile status as disapproved to the user.

➢ Post-conditions:
   ● Valid changes made to the profile will be accepted by the admin.

10.   Name: Download previous year company list

➢ Actors: Student, Visitor

➢ Goal: Get the list of the companies that visited the campus last year.

➢ References to requirements:
   ● Refers to Non-Functional Requirements: 5,6

➢ Pre-conditions:
   ● The Student should be logged in to the system.

➢ Description:
   1. The Student goes to the Companies section of the system.
   2. The student finds the previous year companies option and downloads the list of companies from there.

➢ Post-conditions:
   ● Students get the excel sheet of the list of the previous year companies and their offers.

11. Name: View placement statistics

➢ Actors: Visitor, Student

➢ Goal: Show placement statistics to user

➢ References to requirements:
   ● Refers to Need: 6.

➢ Pre-conditions:
- Details about placement statistics must be updated.

➢ Description:
1. User goes to the "view placement statistics" section.
2. User asked to choose a year.
3. According to the user input display result.

➢ Exceptions:

3.a. There might be a case that , for a given input year data has not been updated / uploaded.

➢ Post-conditions:
- Users should be able see overview of placement statistics.

Non-functional requirements

1. The system should be able to handle many students and company managers without significant degradation in response time.
   JUSTIFICATION -This is important because the system will be used by many students, who must be able to access job openings and apply for them quickly and give good performance.

2. The system should be designed to ensure the privacy and security of student and employer data.
   JUSTIFICATION- This is important because the system will contain sensitive information, such as student resumes and employer job requirements, which must not be accessible by unauthorized personnel.

3. The system should be designed to minimize latency and ensure that it is always available all time to students and employers.
   JUSTIFICATION - This is important because high latency can prevent students from applying for job openings and negatively impact the Placement Cell's reputation.

4. The system should be easily maintained and updated with minimal user disruption.
   JUSTIFICATION- This is important because any maintenance or updates to the system should not negatively impact the ability of students and employers to use the system.

5. The system should be designed to scale quickly as the number of students and companies increase.
   JUSTIFICATION- This is important because the system needs to accommodate the needs of a growing number of students and employers without compromising performance or security.

6. The system should be easy to use and navigate, with clear instructions and feedback provided to students and employers.

JUSTIFICATION - This is important because a wide range of users with varying technical expertise will use the system. The user interface should be simple and easy to use.

7. System should sent a email to user to inform about registration, new company etc,
   JUSTIFICATION - Users don't have to check all the time for new companies or their registration information on placement cell portal.

8. System should provide useful and relevant functions to both students and employers to give better utility.
   JUSTIFICATION - student can easily match job matching with their Qualification and preference of students and also to companies. It can help to find the suitable candidates for jobs.