PLACEMENT CELL MANAGEMENT SYSTEM

LAB REPORT

Submitted by

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Under the Guidance

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In partial satisfaction of the requirements for the degree of

BACHELOR OFTECHNOLOGY

in

COMPUTER SCIENCE ENGINEERING

specialization in Blockchain Technology

SCHOOLOF COMPUTING

COLLEGE OF ENGINEERING AND TECHNOLOGY

SRM INSTITUTE OF SCIENCEAND TECHNOLOGY

KATTANKULATHUR - 603203

MAY 2023

COLLEGE OF ENGINEERING & TECHNOLOGY
SRM INSTITUTE OF SCIENCE & TECHNOLOGY
S.R.M. NAGAR, KATTANKULATHUR – 603 203

BONAFIDE CERTIFICATE

Certified that this lab report titled **"PLACEMENT CELL MANAGEMENT SYSTEM"** is the Bonafede work done by **Gautam soni(RA2111050010020)** who carried out the lab exercises under mysupervision. Certified further, that to the best of my knowledge, the work reported herein does not formpart of any other work.

SIGNATURE

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Assistant Professor
Department of Data Science and Business System.
SRMIST – KTR.

HEAD OF THE DEPARTMENT

Date:

TABLE OF CONTENTS

Abstract :-

The placement cell management system is a software solution designed to streamline and automate the process of managing student placements within educational institutions. This system aims to simplify and enhance the efficiency of various activities related to placements, including student registration, job posting, interview scheduling, and placement record management.

The placement system provides a user-friendly interface for both students and placement officers, enabling students to register for placements, upload their resumes, and browse and apply for job opportunities. Placement officers can manage and update company profiles, post job vacancies, shortlist candidates, schedule interviews, and track placement progress.

The system facilitates seamless communication between students, placement officers, and recruiters through notifications, email alerts, and an integrated messaging system. It also enables placement officers to generate comprehensive reports and analytics regarding placement statistics, student performance, and company feedback.

With the placement cell management system, educational institutions can effectively manage the placement process, enhance collaboration between stakeholders, and improve overall placement outcomes. By automating manual tasks and centralizing data, this system enables efficient tracking, monitoring, and evaluation of student placements, contributing to the success of both students and recruiters.

LIST OF FIGURE

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	1
Title of Experiment	To identify the Software Project, Create Business Case, Arrive at a Problem Statement
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	23 JAN 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the placement cell management system

Team Members:

S. No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Lead/Rep
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

Project Title: PLACEMENT CELL MANAGEMENT SYSTEM

Project Description

A placement cell management system is a software application designed to help educational institutions manage their placement activities for students. The primary purpose of this system is to simplify the entire placement process for the institution, students, and recruiters. The placement cell management system will have features that automate the placement process, including student registration, job postings, application management, and interview scheduling.

ONE PAGE BUSINESS CASE TEMPLATE

	DATE	
	SUBMITTED BY	GAUTAM SONI
	TITLE / ROLE	LEAD

LOG

THE PROJECT

In bullet points, describe the problem this project aims to solve or the opportunity it aims to develop.

The placement cell management system aims to solve these problems by automating the placement process and providing a comprehensive platform for managing the placement process. The system streamlines the entire process, from student registration to recruiter selection, and provides transparent communication and reporting capabilities. This results in a more efficient, effective, and data-driven placement process that benefits both educational institutions and students. Additionally, the system creates an opportunity for educational institutions to improve their placement outcomes and enhance their reputation among employers and students.

THE HISTORY

In bullet points, describe the current situation.

1. Registration of Students: Students interested in participating in the placement process register manually by submitting their resumes and other required documents to the placement cell management team.
2. Job Postings: Recruiters share job postings with the placement cell management team manually via email or phone calls.
3. Application Management: The placement cell management team manually manages student applications and shortlists suitable candidates for the job postings.
4. Interview Scheduling: The placement cell management team schedules interviews manually between recruiters and selected candidates.
5. Communication: The traditional communication methods used in this scenario include email and phone calls, which can be inefficient and time-consuming.
6. Reporting and Analytics: The reporting and analytics capabilities are limited, making it difficult for placement cell management to make data-driven decisions and track the success of the placement process.

LIMITATIONS

List what could prevent the success of the project, such as the need for expensive equipment, bad weather, lack of special training, etc.

1. Technical Expertise Required

Developing and implementing the system requires technical expertise, which can be a limitation for smaller educational institutions that may not have dedicated IT resources.

2. Cost

• The cost of developing and implementing a placement cell management system can be a limitation for smaller educational institutions.

3. Data Security

•

Placement cell management systems store sensitive data, such as student and recruiter information, which can be a potential target for cyber attacks.

4. User Adoption

•

Adoption of the system by students, recruiters, and placement cell management team can be a limitation, particularly if the system is not user-friendly or requires extensive training.

5. System Integration

• Integration with existing systems and databases can be a limitation, particularly if the system is developed using proprietary technologies or if there are compatibility issues with existing systems.

APPROACH

List what is needed to complete the project.

The development of a placement cell management system involves several steps, including requirement gathering, system design, development, testing, deployment, and maintenance and support. The system should be user-friendly, easy to use, and scalable. The system's key features include student registration, job postings, application management, interview scheduling, communication, and reporting and analytics. The placement cell management system is a comprehensive software solution designed to streamline the entire placement

process and improve placement outcomes for educational institutions.

BENEFITS

In bullet points, list the benefits that this project will bring to the organization.

1 Streamlined Placement Process

Automation of tasks reduces time and effort

More efficient and effective placement process

2 Improved Communication

Easy and effective communication between students, recruiters, and the placement cell management team

Improves transparency and reduces administrative burden

3 Enhanced Collaboration

Recruiters work closely with placement cell management team to identify and selectsuitable candidates

Results in more informed and effective decision-making

4 Greater Visibility

Reporting and analytics features provide visibility into the entire placement processEnables data-driven decision-making

5 Increased Placement Outcomes

Improves placement outcomes for educational institutions

Provides better employment opportunities for students and increase

recruitmentopportunities for employers

Result

Thus, the project team formed, the project is described, the business case was prepared and the problem statement was arrived.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	2
Title of Experiment	Identification of Process Methodology and Stakeholder Description
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	29 JANUARY 2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description.

Team Members:

Sl No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep/Member
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

Project Title: PLACEMENT CELL MANAGEMENT SYSTEM

The Agile model can be effectively used for the development and implementation of a placement cell management system. Here's how the Agile model can be applied to the project:

- 1. Agile Planning: The planning phase involves collaboration with stakeholders, such as students, recruiters, and placement cell management team, to define and prioritize the features and requirements for the system. The placement cell management team can use techniques such as user stories and feature prioritization to identify the key requirements and features of the system.
- 2. Iterative Development: The Agile model emphasizes iterative development, which involves the continuous delivery of working software. The placement cell management team can use short development cycles, or sprints, to deliver incremental versions of the system, which can be tested and reviewed by stakeholders.
- 3. Collaboration and Feedback: Collaboration and feedback are critical components of the Agile model. The placement cell management team can use techniques such as daily stand-up meetings, demos, and retrospectives to facilitate collaboration and feedback among team members and stakeholders.
- 4. Flexibility: The Agile model emphasizes flexibility and adaptability, which is critical for a project like the placement cell management system, where requirements and features can change over time. The placement cell management team can use

techniques such as backlog refinement and prioritization to adjust the scope of the project as needed.

- 5. Continuous Improvement: The Agile model emphasizes continuous improvement, which involves ongoing review and adjustment of the project processes and practices. The placement cell management team can use techniques such as retrospectives and process improvement to identify areas for improvement and implement changes to improve the efficiency and effectiveness of the project.

Stakeholder Name	Interest	Estimated Project Impact	Estimated Priority
College Administration	Efficient and effective management of placements	High	1
Recruiting Companies	Access to qualified and suitable candidates for their job roles	High	1
Placement Cell Coordinators	Streamlined and easy-to-use system for managing placements	High	2
Students	Access to job opportunities and career guidance	High	2
Faculty Members	Access to job and industry information to guide their teaching	Medium	3
Alumni	Opportunities to connect with the college and its students	Low	4
Information Technology (IT) Department	Developing and maintaining a reliable and secure system	High	1
Data Entry Operators	Accurate and timely data entry	Medium	3
Finance Department	Managing the budget for the system	Low	4

Result

Thus the Project Methodology was identified and the stakeholders were described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	System, Functional and Non-Functional Requirements of the Project
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	10 FEBUARY 2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To identify the system, functional and non-functional requirements for the project.

Team Members:

S No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep/Member
2	RA2111050010013	HARSHIT KAMBIJ	Member
			Member

Project Title: PLACEMENT CELL MANAGEMENT SYSTEM

System Requirements

1. Hardware: The system should have a server or hosting service with adequate processing power, storage, and memory to support the needs of the system.
2. Operating System: The system should run on a stable and secure operating system, such as Linux or Windows.
3. Database Management System: The system should have a database management system (DBMS) to store and manage data related to students, recruiters, job postings, and placement activities.
4. Web Server: The system should have a web server that can handle requests from users and serve web pages to them.
5. User Interface: The system should have a user-friendly interface that is easy to navigate and use.
6. Security: The system should have security features to protect data and prevent unauthorized access to the system.
7. Communication: The system should have built-in communication features, such as email notifications and messaging, to facilitate communication between students, recruiters, and placement cell management team.

8. Analytics and Reporting: The system should have reporting and analytics capabilities to track placement progress, monitor trends, and generate reports.
9. Mobile Compatibility: The system should be compatible with mobile devices to allow students and recruiters to access the system on-the-go.

Functional Requirements

1. Student Registration: The system should allow students to register and create a profile with their personal and academic information.
2. Job Postings: Recruiters should be able to post job openings on the system, with details such as job description, required skills, and compensation.
3. Application Management: The system should allow students to apply for job postings and recruiters to manage job applications, including reviewing resumes and scheduling interviews.
4. Interview Scheduling: The system should allow recruiters and placement cell management team to schedule interviews with selected candidates.
5. Communication: The system should allow for communication between students, recruiters, and placement cell management team through built-in messaging and email notification features.
6. Reporting and Analytics: The system should have reporting and analytics capabilities to track placement progress, monitor trends, and generate reports.
7. Placement Management: The system should allow the placement cell management team to manage and track the placement process, including job postings, applications, interviews, and placement offers.
8. Document Management: The system should allow students, recruiters, and placement cell management team to upload and manage documents such as resumes, job descriptions, and offer letters.
9. User Management: The system should allow for user management, including creating and managing user accounts, roles, and permissions.

Non-Functional Requirements

1. Performance: The system should be fast and responsive, with low latency and quick load times, to provide a seamless user experience.
2. Usability: The system should be easy to use, with a user-friendly interface that is intuitive and easy to navigate.
3. Security: The system should be secure, with features such as data encryption, secure user authentication, and access control, to protect sensitive data and prevent unauthorized access.
4. Scalability: The system should be able to handle large volumes of data and users, and be able to scale up or down as needed to meet changing demands.
5. Reliability: The system should be reliable, with high availability and minimal downtime, to ensure that users can access the system when needed.
6. Compatibility: The system should be compatible with different devices and web browsers, to ensure that users can access the system from a variety of platforms.
7. Accessibility: The system should be accessible to users with disabilities, with features such as alternative text for images and audio descriptions for video content.
8. Maintainability: The system should be easy to maintain, with modular and well- documented code, and clear guidelines for system updates and upgrades.

Result

Thus the requirements were identified and accordingly described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	4
Title of Experiment	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	14 FEBUARY 2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

Team Members:

Sl No	Register No	Name	Role
1	**RA2111050010020**	**GAUTAM SONI**	**Lead**
2	**RA2111050010013**	**HARSHIT KAMBOJ**	**Member**
3			**Member**

Requirements

1. Student Management: The system should be able to manage student data such as personal details, academic records, and skill sets.
2. Company Management: The system should be able to manage company data such as company profiles, job descriptions, and recruitment criteria.
3. Job Posting: The system should allow companies to post job openings and manage job applications received from students.
4. Placement Process Management: The system should be able to manage the entire placement process, including scheduling interviews, sending interview invitations, and managing candidate selection.
5. Communication: The system should have a communication module to facilitate communication between students, companies, and placement cell coordinators.
6. Analytics: The system should have analytics capabilities to track and analyze the placement process, including the number of job postings, the number of students placed, and the average salary offered.
7. User Roles and Permissions: The system should have different user roles such as placement cell coordinators, students, and recruiters, each with specific permissions and access levels.
8. Mobile Compatibility: The system should be compatible with mobile devices to allow students and recruiters to access the system from anywhere.
9. Security: The system should have proper security measures such as user authentication and data encryption to ensure data privacy and prevent unauthorized access.
10. Integration with Other Systems: The system should be able to integrate with other systems such as the institution's student management system or HR management system to streamline the process and avoid duplication of data.

1. Project Management Plan

Focus Area	Details	Activities and Sub-Tasks
Integration Management	Governance Framework	Develop a governance framework to manage the project and ensure project objectives are met.
Integration Management	Project Team Structure	Define the project team structure and assign roles and responsibilities to team members.
Integration Management	Roles & Responsibilities of Team	Define roles and responsibilities for each team member to ensure effective project delivery.
Integration Management	Change Management	Develop and implement a change management plan, including change control and issue management, to manage any changes to the project scope or requirements.
Integration Management	Project Closure	Develop and execute a plan to close out the project and transition to ongoing support and maintenance.
Scope Management	Scope Statement	Define the project scope and develop a scope statement to guide the project delivery.
Scope Management	Requirement Management	Gather, control, and manage requirements throughout the project lifecycle, including assumptions and constraints, and involve stakeholders in the process.
Scope Management	Define Deliverable	Define project deliverables and ensure they meet stakeholder expectations and project objectives.
Scope Management	Requirement Change Control	Develop a process to manage changes to project requirements and ensure they are implemented correctly.
Schedule Management	Define Milestones	Develop a project schedule with key milestones and deliverables.

Cost Management	Estimate Effort	Develop an estimate of the effort required to deliver the project, including resource and budget requirements.
Cost Management	Assign Team	Assign team members to project tasks and manage resource utilization throughout the project lifecycle.
Cost Management	Budget Control	Monitor and control project costs to ensure they remain within budget and adjust as necessary.
Quality Management	Quality Assurance	Develop and implement a quality assurance plan to ensure project deliverables meet stakeholder expectations.
Quality Management	Quality Control	Develop and implement mechanisms to measure and control the quality of project deliverables.
Resource Management	Estimate and Manage the Need	Estimate and manage resource needs throughout the project lifecycle, including people, finance, and physical resources.
Resource Management	People	Identify the people and skills required to deliver the project and manage resource allocation.
Resource Management	Finance	Estimate and manage project budgets to ensure project costs remain within budget.
Resource Management	Physical	Identify and manage physical resources required to deliver the project, such as facilities and IT infrastructure.
Stakeholder Management	Identify, Analyze, Engage Stakeholders	Identify project stakeholders, analyze their needs and expectations, and engage them in the project delivery process.
Communication Management	Determine Communication Requirements	Determine communication requirements, including type, schedule, mechanism, and

2. Estimation

2.1. Effort and Cost Estimation

Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

Infrastructure Requirement	Qty	Cost per qty	Cost per item
Server	2	$2,500	$5,000
Network Equipment	1	$5,000	$5,000
Database Server	1	$3,000	$3,000
Backup Server	1	$2,500	$2,500
Total			**$15,500**

Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin	3	$2,000,000	$6,000,000
	Developer , Support Consultant	3	$2,000,000	$6,000,000
License	Operating System	10	$10,000	$100,000
	Database	10	$10,000	$100,000
	Middleware	10	$10,000	$100,000
	IDE	10	$10,000	$100,000
Infrastructures	Server, Storage and Network	20	$20,000	$400,000
Total				**$7,100,000**

3. Project Team Formation

3.1. Identification Team members

Name	Role	Responsibilities
Key Business User (Product Owner)	Provide clear business and user requirements	
Project Manager	Manage the project	
Business Analyst	Discuss and Document Requirements	
Technical Lead	Design the end-to-end architecture	
UX Designer	Design the user experience	
Frontend Developer	Develop user interface	
Backend Developer	Design, Develop and Unit Test Services/API/DB	
Cloud Architect	Design the cost effective, highly available and scalable architecture	
Cloud Operations	Provision required Services	
Tester	Define Test Cases and Perform Testing	

Responsibility Assignment Matrix

Team Members	Activity	Name (BA)	Name (Developer)	Name (Project Manager)	Key Business User
User Requirement Documentation	Responsible				R
Confirm the user requirements	Accountable				A
Design the user screen	Consulted/Informed (C/I)	R, KBU, PM, TL		KBU, PM, TL	C/I

A	Accountable
R	Responsible
C	Consult
I	Inform

Result:

Thus, the Project Plan was documented successfully.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	5
Title of Experiment	Prepare Work breakdown structure, Timeline chart, Risk identification table
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	21 FEB 2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To Prepare Work breakdown structure, Timeline chart and Risk identification table

Team Members:

Sl No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

PLACEMENT CELL MANAGEMENT SYSTEM

1. Project planning and requirements analysis 1.1 Define project scope and objectives
1.2 Identify stakeholders and their requirements
1.3 Conduct market research and competitor analysis 1.4 Develop project schedule and budget
2. Design and architecture
2.1 Develop user interface and user experience design
2.2 Develop system architecture design
2.3 Create wireframes and prototypes for user feedback
2.4 Obtain approval for design and architecture from stakeholders
3. Database design and setup
3.1 Analyze data requirements and develop data models
3.2 Install and configure database management system
3.3 Implement data security and backup procedures
3.4 Populate the database with sample data for testing purposes 4. Front-end development
4.1 Develop HTML/CSS templates for user interface
4.2 Implement front-end functionality using JavaScript 4.3 Integrate front-end with backend APIs
4.4 Develop responsive design for mobile devices
5. Back-end development
5.1 Develop server-side APIs and web services 5.2 Implement business logic and data access layer 5.3 Configure and deploy server-side infrastructure 5.4 Implement security and authentication features 6. Integration and testing
6.1 Conduct unit testing and integration testing 6.2 Perform system and acceptance testing
6.3 Address and resolve issues identified during testing
6.4 Conduct user acceptance testing with stakeholders

7. Deployment and launch
7.1 Deploy the system to production servers
7.2 Conduct final system testing and performance tuning
7.3 Train end-users and provide documentation
7.4 Launch the system and monitor for issues

TIMELINE – GANTT CHART

Task	Duration	Start Date	End Date
Project planning and requirements analysis	4 weeks	2023-03-06	2023-04-02
Design and architecture	6 weeks	2023-04-03	2023-05-14
Database design and setup	2 weeks	2023-05-15	2023-05-28
Front-end development	8 weeks	2023-05-29	2023-07-23
Back-end development	8 weeks	2023-07-24	2023-09-17
Integration and testing	4 weeks	2023-09-18	2023-10-15
User acceptance testing	2 weeks	2023-10-16	2023-10-29
Deployment and launch	2 weeks	2023-10-30	2023-11-12

RISK ANALYSIS – SWOT & RMMM

SWOT Analysis:

Strengths:

1. Efficient management of student and company data

2. Easy communication between Placement Officer and students/companies

3. Streamlined job application and selection process

Comprehensive reporting and analysis capabilities

Weaknesses:

1.Potential for technical glitches and data loss

2.Lack of proper training or support for users

3.Limited customization options for individual users or companies

4.Limited scalability for larger institutions

Opportunities:

1.Integration with other student management systems or career development platforms

2.Expansion of job offerings beyond traditional corporate jobs

3.Incorporation of AI or machine learning algorithms for candidate matching and job recommendations

4.Creation of partnerships with non-profit organizations or startups

Threats:

1.Competition from other placement cell management systems

2.Changes in government regulations or economic downturns affecting job market

3.Security breaches or hacking attempts

4.Negative feedback or reputation damage due to mishandling of sensitive student or company data

RMMM

Risk	Mitigation	Monitoring	Management
Technical Glitches and Data Loss	Regular system backups and maintenance checks, implementation of fail-safe measures	System logs and error reports	Rapid response and resolution of technical issues, user notification and support
Lack of Proper Training or Support for Users	Creation of comprehensive user manuals and training sessions, creation of user forums for peer support	User feedback and support requests	Improvement of user manuals and training sessions based on feedback, prompt response to support requests
Limited Scalability for Larger Institutions	Thorough testing and optimization of system for larger user bases, implementation of load balancing measures	Performance metrics and user feedback	Continued optimization and expansion of system capabilities to accommodate larger user bases
Security Breaches or Hacking Attempts	Implementation of strong security protocols, regular security audits and updates, user authentication measures	System logs and security breach reports	Prompt response and resolution of security breaches, communication with users and authorities if necessary

Result:

Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	6
Title of Experiment	Design a System Architecture, Use Case and Class Diagram
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	28 FEB 2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

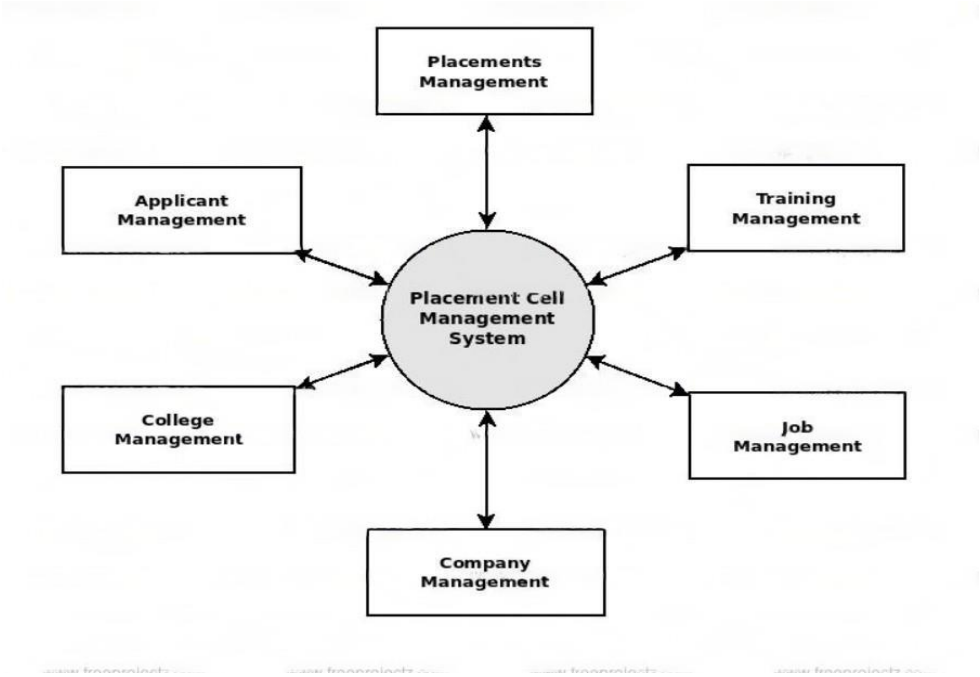
To Design a System Architecture, Use case and Class Diagram

Team Members:

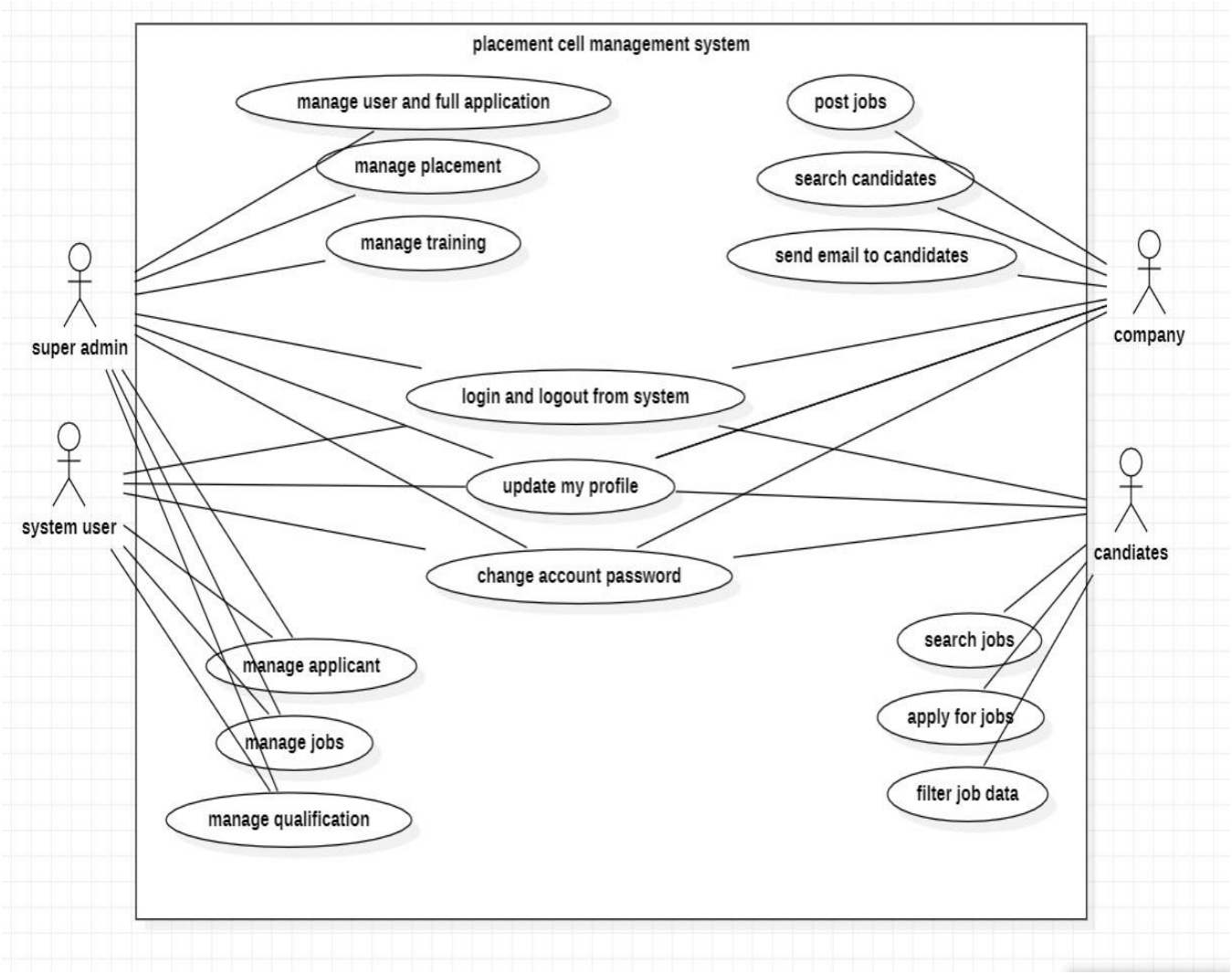
Sl No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

TOPIC - PLACEMENT CELL MANAGEMENT SYSTEM

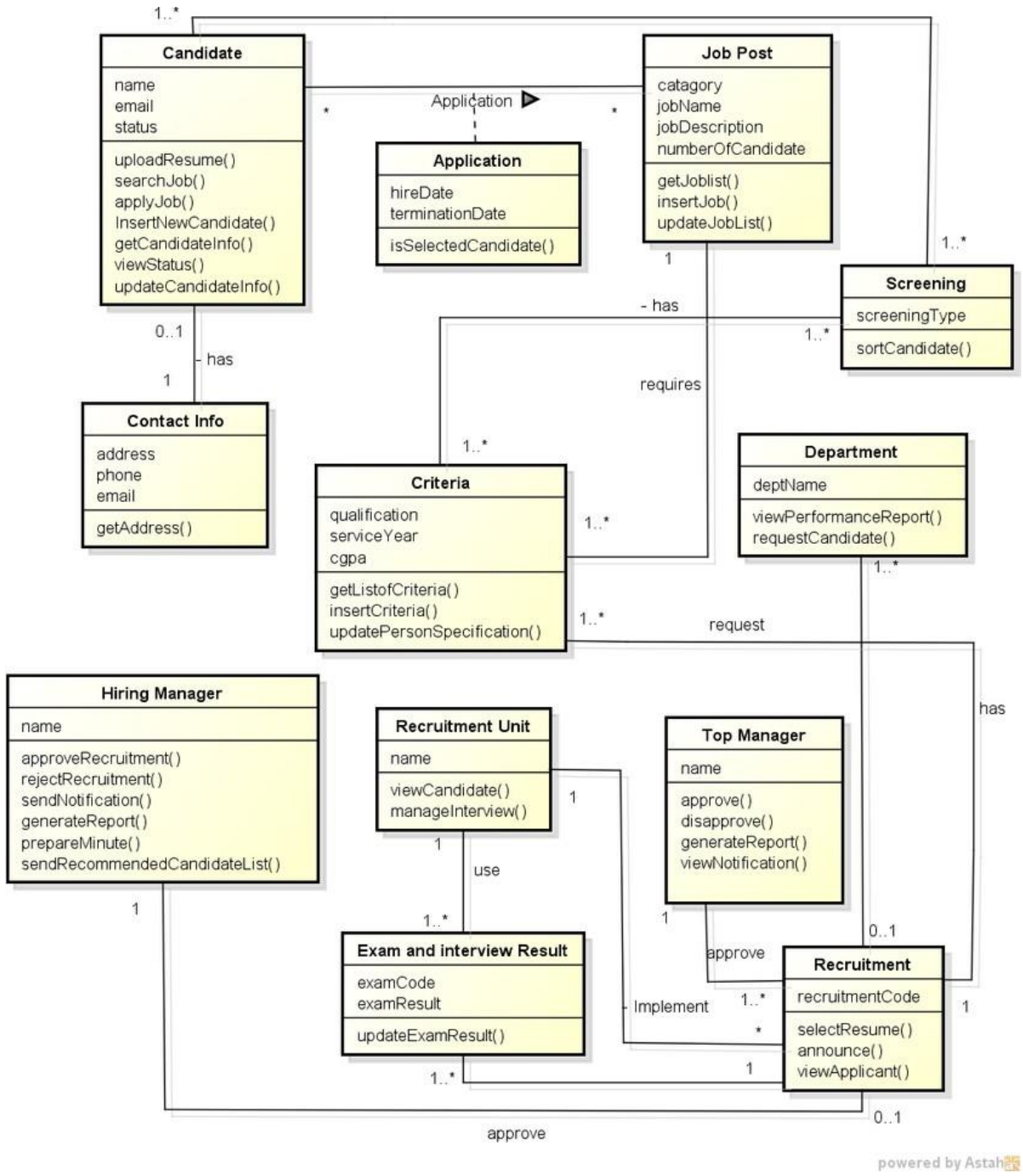
System design



USE CASE DIAGRAM -



class diagram



Result:

Thus, the system architecture, use case and class diagram created successfully.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	7
Title of Experiment	Design a Entity relationship diagram
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	7 MARCH 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To create the Entity Relationship Diagram

Team Members:

S No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

PLACEMENT CELL MANAGEMENT SYSTEM

What is ER Diagram?

- ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.
- ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.
- At first look, an ER diagram looks very similar to the flowchart. However, ER Diagram includes many specialized symbols, and its meanings make this model unique. The purpose of ER Diagram is to represent the entity framework infrastructure.

What is ER Model?

- ER Model stands for Entity Relationship Model is a high-level conceptual data model diagram. ER model helps to systematically analyze data requirements to produce a well-designed database.
- ER Model represents real-world entities and the relationships between them. Creating an ER Model in DBMS is considered as a best practice before implementing your database.

- ER Modeling helps you to analyze data requirements systematically to produce a well-designed database. So, it is considered a best practice to complete ER modeling before implementing your database.

Why use ER Diagrams?

Here, are prime reasons for using the ER Diagram

- Helps you to define terms related to entity relationship modeling
- Provide a preview of how all your tables should connect, what fields are going to be on each table
- Helps to describe entities, attributes, relationships
- ER diagrams are translatable into relational tables which allows you to build databases quickly
- ER diagrams can be used by database designers as a blueprint for implementing data in specific software applications
- The database designer gains a better understanding of the information to be contained in the database with the help of ERP diagram
- ERD Diagram allows you to communicate with the logical structure of the database to users

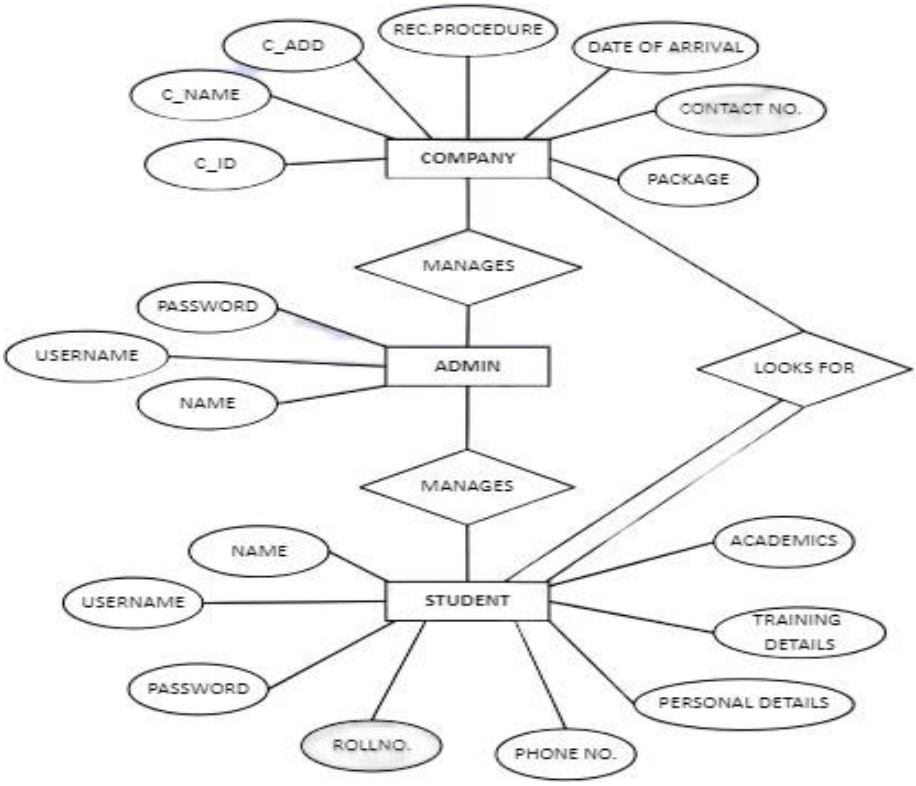
Components of the ER Diagram

This model is based on three basic concepts: Entities, Attributes, Relationships

ER Diagram – Notations

- Rectangles represent entity sets.
- Diamonds represent relationship sets.
- Lines link attributes to entity sets and entity sets to relationship sets.
- Ellipses represent attributes
- Double ellipses represent multivalued attributes.
- Dashed ellipses denote derived attributes.
- Underline indicates primary key attributes

ER Diagram of PLACEMENT CELL MANAGEMENT SYSTEM



Result:

Thus, the entity relationship diagram was created successfully.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	8
Title of Experiment	Develop a Data Flow Diagram (Process-Up to Level 1)
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	15 MARCH 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To develop the data flow diagram up to level 1 for the placement management dsystem

Team Members:

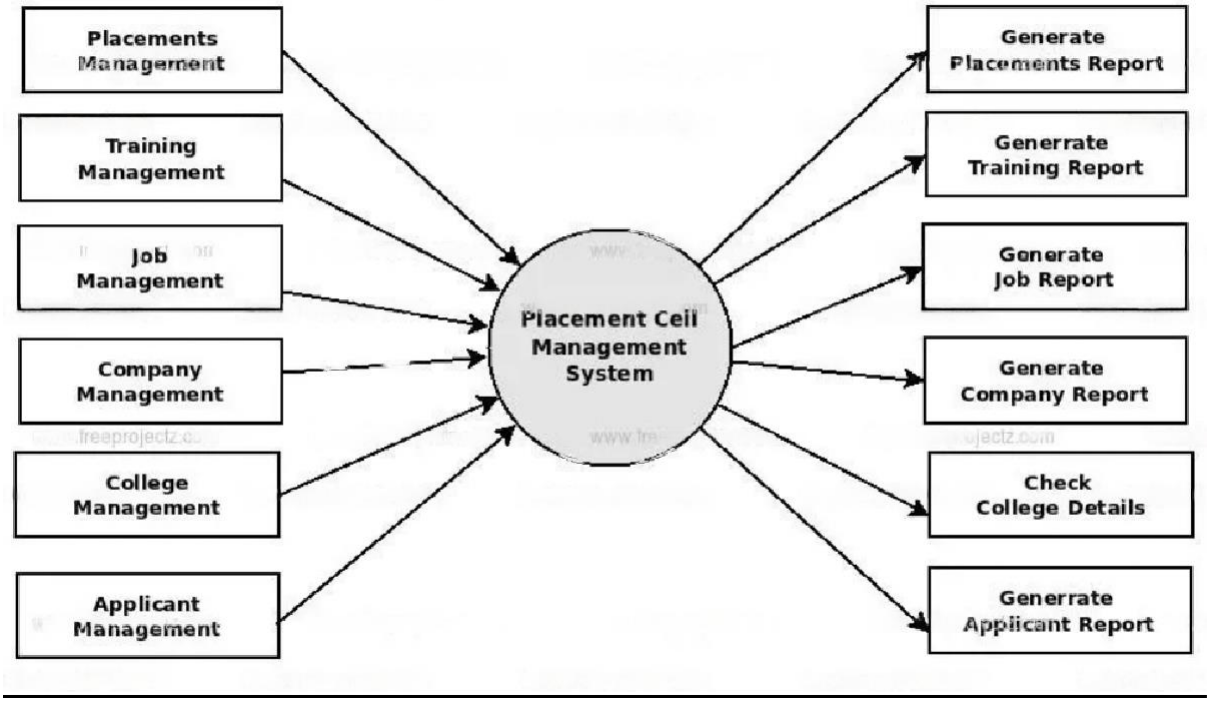
S No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

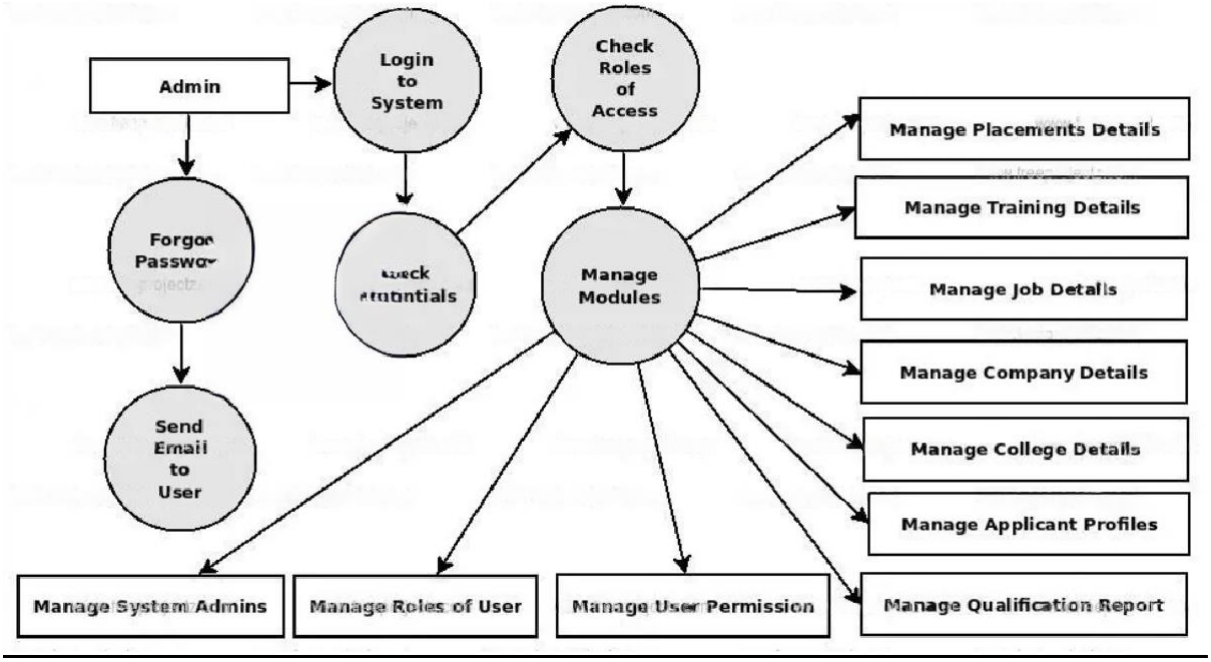
Data Flow Diagram

The DFD takes an input-process-output view of a system. That is, data objects flow into the software, are transformed by processing elements, and resultant data objects flow out of the software. Data objects are represented by labeled arrows, and transformations are represented by circles (also called bubbles). The DFD is presented in a hierarchical fashion. That is, the first data flow model (sometimes called a level 0 DFD or context diagram) represents the system as a whole. Subsequent data flow diagrams refine the context diagram, providing increasing detail with each subsequent level.

The data flow diagram enables you to develop models of the information domain and functional domain. As the DFD is refined into greater levels of detail, you perform an implicit functional decomposition of the system. At the same time, the DFD refinement results in a corresponding refinement of data as it moves through the processes that embody the application.
A few simple guidelines can aid immeasurably during the derivation of a data flow diagram:
(1) Level 0 data flow diagram should depict the software/system as a
single bubble;
(2) Primary input and output should be carefully noted;
(3) Refinement should begin by isolating candidate processes, data objects, and data stores to be represented at the next level;
(4) All arrows and bubbles should be labeled with meaningful names;
(5) Information flow continuity must be maintained from level to level and

(6) One bubble at a time should be refined. There is a natural tendency to overcomplicate the data flow diagram. This occurs when you attempt to show too much detail too early or represent procedural aspects of the software in lieu of information flow.





Result:

Thus, the data flow diagrams have been created for the PLACEMENT CELL MANAGEMENT SYSTEM..

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	9
Title of Experiment	Design a Sequence and Collaboration Diagram
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	22 MARCH 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

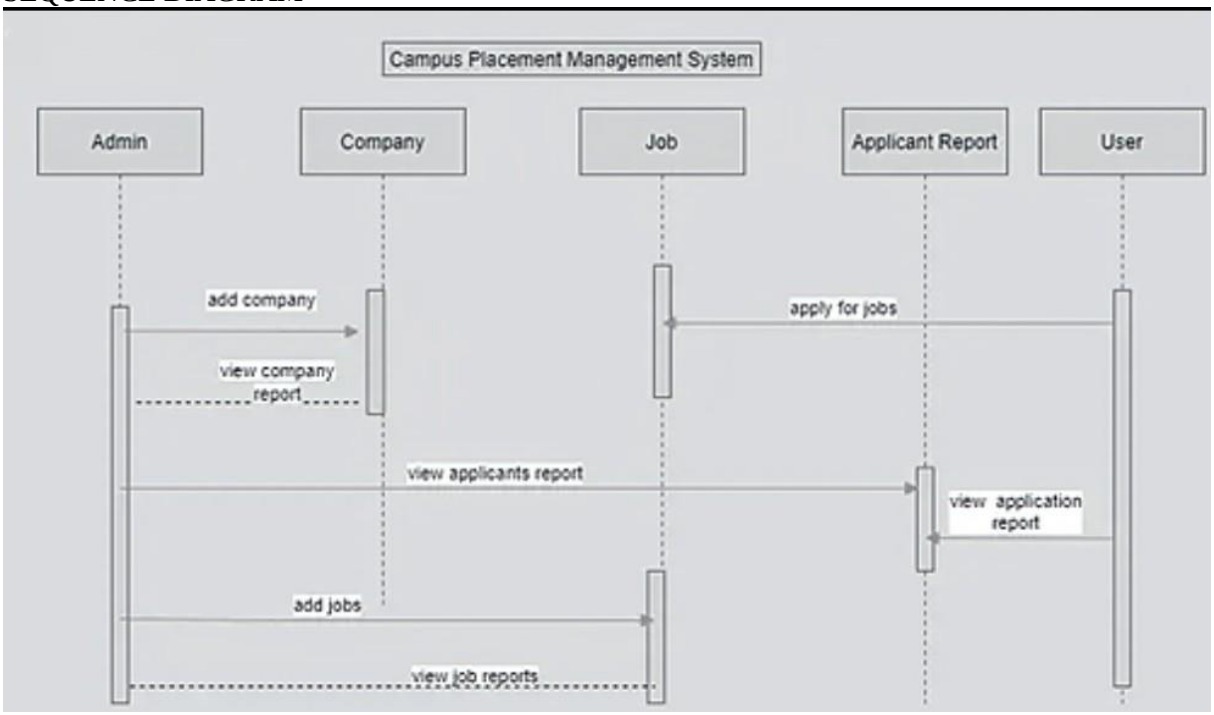
Aim

To create the sequence and collaboration diagram for the <project name>

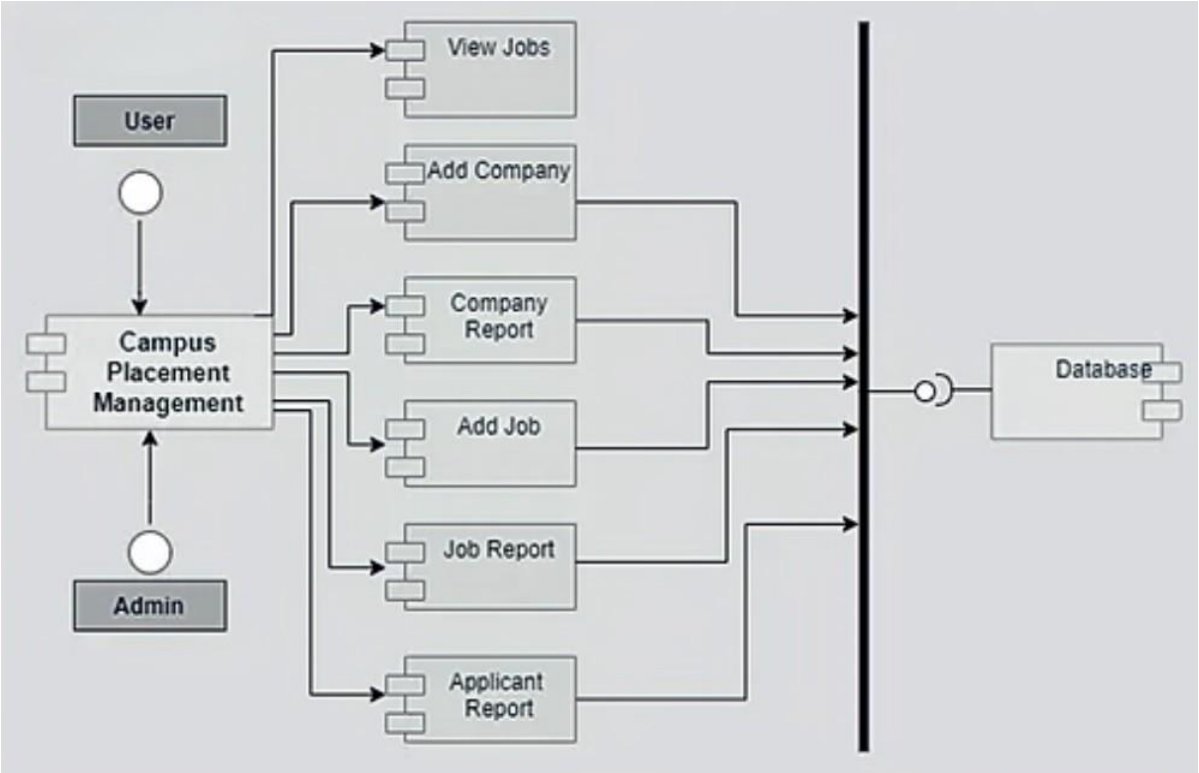
Team Members:

S No	Register No	Name	Role
1	**RA2111050010020**	**GAUTAM SONI**	**Rep/Member**
2	**RA2111050010013**	**HARSHIT KAMBOJ**	**Member**
3			**Member**

SEQUENCE DIAGRAM



COLLABORATION DIAGRAM



Result:

Thus, the sequence and collaboration diagrams were created for the PLACEMENT CELL MANAGEMENT SYSTEM

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	10
Title of Experiment	Develop a Testing Framework/User Interface
Name of the candidate	GAUTAM SONI
Team Members	Harshit kamboj
Register Number	RA2111050010020
Date of Experiment	23 MARCH 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To develop the testing framework and/or user interface framework for the placement management system

Team Members:

S No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep/Member
2	RA2111050010013	HARSHIT KAMBOJ	Member
3			Member

Executive Summary

Placement cell management system is a software solution designed to streamline the process of managing and organizing campus recruitment activities in educational institutions. The system provides a centralized platform for managing student profiles, job postings, employer information, and scheduling of interviews.

The system allows students to create profiles, upload their resumes, and apply for job postings that match their qualifications and interests. Employers can also register and post job openings, view student profiles, and schedule interviews with qualified candidates.

Placement cell management system offers various features such as automated notifications, data analytics, and reporting capabilities that help placement officers and administrators to track the progress of placement activities, measure the success rate, and make informed decisions.

Overall, the placement cell management system is a comprehensive solution that helps educational institutions to improve their placement processes, enhance student employability, and foster relationships with potential employers.

Test Plan

A test plan is a document that outlines the objectives, scope, and approach for testing a software application. The following is a general outline of a test plan:

1. Introduction: Provide an overview of the software application, its purpose, and its

intended audience.

2. Objectives: Define the goals of testing, such as verifying the functionality, ensuring user-friendliness, and confirming the compatibility with various platforms and devices.

3. Scope: Identify the features, modules, and components that will be tested, as well as the

types of testing that will be performed, such as unit testing, integration testing, system testing, and acceptance testing.

4. Test environment: Specify the hardware and software requirements, as well as the test data and tools that will be used during testing.

5. Test procedures: Define the specific steps that will be performed during testing, such as configuring the software, executing test cases, and recording test results.

6. Risk management: Identify potential risks and their impact on the software application, such as security vulnerabilities, performance issues, and compatibility problems.

7. Test schedule: Provide a timeline for testing, including the start and end dates,

milestones, and delivery dates.

8. Test deliverables: Specify the documents and reports that will be produced during testing, such as test cases, test results, and defect reports.

9. Test team: Identify the roles and responsibilities of the individuals involved in testing, such as testers, developers, and project managers.

10. Approval: Obtain approval from stakeholders, including the development team, project sponsors, and other relevant parties, before beginning testing.

By following a well-designed test plan, the testing process can be more organized, efficient, and effective, helping to ensure the quality and reliability of the software application.

Scope of Testing

Functional:

The scope of testing for a placement management system would typically include functional, performance, and security testing.

Functional testing would involve verifying that all modules of the system are working as expected and meeting the requirements. This would include testing features such as student profiles, job postings, employer information, and interview scheduling. The testing would also ensure that any exceptions or edge cases are handled appropriately.

In terms of automation, the functional test cases could be automated to increase efficiency and consistency in testing. However, it would also be important to have manual testing for critical path scenarios.

Performance testing would involve verifying that the system can handle the expected load of users and data. This would include testing the system's response time, throughput, and resource utilization under various scenarios.

Security testing would involve verifying that the system is secure from external threats and vulnerabilities. This would include testing the system's authentication and authorization mechanisms, data encryption, and protection against common attack vectors such as SQL injection and cross-site scripting.

Overall, the scope of testing for a placement management system would be to ensure that the system is functioning correctly, performing well under expected loads, and is secure from potential threats.

Non-Functional:

Yes, non-functional testing would typically be included in the scope of testing for a

placement management system. Non-functional requirements refer to the system's qualities or characteristics, such as usability, reliability, maintainability, and scalability. These requirements can be more difficult to test than functional requirements, as they are not always directly measurable and can be subjective.

Usability testing would involve verifying that the system is user-friendly and easy to use. This would include testing the system's navigation, layout, and overall user experience.

Reliability testing would involve verifying that the system is dependable and performs consistently over time. This would include testing the system's error handling, fault tolerance, and disaster recovery procedures.

Maintainability testing would involve verifying that the system is easy to maintain and update. This would include testing the system's documentation, support, and update procedures.

Scalability testing would involve verifying that the system can handle growth and expansion over time. This would include testing the system's ability to handle increased loads and data volumes, as well as its ability to scale up or down as needed.

In summary, the scope of testing for a placement management system would include both functional and non-functional testing, with non-functional testing covering aspects such as usability, reliability, maintainability, and scalability.

Types of Testing, Methodology, Tools

Category	Methodology	Tools Required
Functional Requirements	Manual	Word Template

Functional testing involves verifying the system's features and ensuring that they meet the specified requirements. Manual testing is a methodology that involves testers manually executing test cases to verify the system's functionality.
A Word template is a tool that can be used to document test cases and test results during manual testing. It can include fields such as the test case ID, test steps, expected results, actual results, and any defects found during testing.
Using a Word template to document test cases can help ensure that testing is consistent and thorough, and can also serve as a reference for future testing efforts. However, it is important to note that manual testing may not be suitable for all types of testing, and automated testing may be required for more complex or repetitive tests.
Result:

Thus, the testing framework/user interface framework has been created for the placement management system

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	11
Title of Experiment	Test Cases
Name of the candidate	HARSHIT KAMBOJ
Team Members	GAUTAM SONI
Register Number	RA2111050010013,RA2111050010013
Date of Experiment	16 APRIL 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To develop the test cases manual for the placement cell management system

Team Members:

S No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Rep
2	RA2111050010020	HARSHIT KAMBOJ	Member
3			Member

PLACEMENT CELL MANAGEMENT SYSTEM

Test Case

Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
001	Verify Login Functionality	Valid Login Credentials	1. 1. Navigate to the Login page. 2. Enter valid login credentials.	User should be redirected to the dashboard.	User was redirected to the dashboard.	Pass	

			 3. Click on the Login button.				
002	Verify Login Functionality	Invalid Login Credentials	1. Navigate to the Login page. 2. Enter invalid login credentials. 3. Click on the Login button.	An error message should be displayed informing the user that the login credentials are invalid.	An error message was displayed.	Pass	

Non-Functional Test Cases

test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks

NF-001	Performance Testing	Load Testing	1. Define the expected number of users accessing the system at the same time. 2. Create test cases with high loads, ramp-up and ramp-down rates, and peak loads. 3. Monitor CPU, memory, and network usage, response time, throughput, and errors.	The system should handle the expected load within acceptable performance parameters without crashing or slowing down.	The system successfully handles the expected load without significant performance degradation.	Pass	
NF-002	Security Testing	Penetration Testing	1. Simulate external and internal attacks with malicious intent. 2. Attempt to bypass or exploit vulnerabilities in the system. 3. Evaluate the system's ability to detect and prevent attacks.	The system should be resistant to unauthorized access, data breaches, and other security threats.	The system successfully detects and prevents attacks without compromising data security.	Pass	

NF-003	Usability Testing	User Interface Testing	1. Evaluate the system's interface for ease of use, clarity, and consistency. 2. Collect user feedback and suggestions. 3. Analyze feedback and suggest improvements.	The system should provide a user-friendly, intuitive, and consistent interface.	Users should find the system's interface easy to use, clear, and consistent.	Pass

Result:

Thus, the test case manual has been created for the placement cell management system.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	12
Title of Experiment	Manual Test Case Reporting
Name of the candidate	GAUTAM SONI
Team Members	HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	17 MARCH 2023

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

Aim

To prepare the manual test case report for the placement cell management system.

Team Members:

S No	Register No	Name	Role
1	**RA2111050010020**	**GAUTAM SONI**	**Rep/Member**
2	**RA2111050010013**	**HARSHIT KAMBOJ**	**Member**

Manual Test Case Report to be incorporated

Test Case ID: PCM001

Test Case Name: Student Registration

Test Case Description: This test case verifies the functionality of student registration in the Placement Cell Management System. It ensures that students can successfully register and their information is stored correctly.

Test Steps:

1. Open the Placement Cell Management System.
2. Navigate to the student registration page.
3. Enter valid student details, including name, contact information, and academic information.
4. Click on the "Register" button.
5. Verify that the student details are saved correctly in the system.
6. Validate that a unique student ID is generated and assigned to the student.

Test Data:

- Student Name: John Doe
- Contact Information: john.doe@example.com, +1-123-456-7890
- Academic Information: University ID: U123456, Branch: Computer Science, Batch: 2023

Expected Results:

- The student details should be saved successfully in the system.
- A unique student ID should be generated and assigned to the student.

Actual Results:

- The student details were saved correctly.
- Student ID "S0001" was generated and assigned to the student.

Pass/Fail: Pass

Severity: Low

Test Environment:

- Operating System: Windows 10
- Browser: Google Chrome 90.0.4430.212
- Placement Cell Management System version: 2.1.0

Test Data Sources:

- Sample student data provided by the university.

Test Case Author:

- Jane Smith
- Email: jane.smith@example.com

Test Case Reviewer:

- John Johnson
- Email: john.johnson@example.com

Test Case Execution Date:

- May 12, 2023

Test Case Status:

- No issues or defects were identified during testing. The test case passed successfully.

Summarize the current status of the Testing

The current status of testing for the Placement Cell Management System is as follows:

Test Case ID: PCM001 (Student Registration) has been executed and passed successfully. No issues or defects were identified during testing.

• The test case focused on student registration functionality and ensured that student details are saved correctly in the system, and a unique student ID is generated and assigned.

The severity of any potential issues encountered during testing was low.

• The test case was authored by Jane Smith and reviewed by John Johnson.

• The test case execution date was May 12, 2023.

• The test environment consisted of Windows 10, Google Chrome 90.0.4430.212, and Placement Cell Management System version 2.1.0.

Sample student data provided by the university was used as the test data source.

Based on the successful execution of the test case and the absence of identified issues, the current testing status is positive, indicating that the tested functionality is working as expected.

present obstacles to proceed further

1. Incomplete or changing requirements: Lack of clear and well-defined requirements can make it difficult to create effective test cases and determine the expected behavior of the system.

2. Limited test coverage: Limited time and resources may prevent thorough testing of all

system functionalities, leading to potential gaps in test coverage.

3. Technical constraints: Issues with the test environment, such as compatibility issues with different browsers, operating systems, or hardware configurations, can hinder the testing process.

4. Lack of test data: Insufficient or inadequate test data can limit the effectiveness of testing and the ability to cover various scenarios and edge cases.

5. Time constraints: Tight deadlines or project timelines may put pressure on the testing team, reducing the time available for comprehensive testing.

6. Communication and coordination challenges: Miscommunication or lack of collaboration between team members can lead to misunderstandings, delays, and inefficiencies in the testing process.

7. Defect resolution delays: If issues or defects identified during testing are not promptly addressed and resolved by the development team, it can hinder the progress of testing and impact the overall quality of the system.

8. Limited resources: Insufficient staffing, tools, or infrastructure can pose challenges in conducting effective testing activities.

Seek help from stakeholders to remove obstacles/constraint

Category	Progress Against Plan	Status
Functional Testing	Green / Amber / Red	Not-Started / In-Progress / Completed
Non-Functional Testing	Green / Amber / Red	Not-Started / In-Progress / Completed

Obstacle/Constraint	Stakeholder Input and Suggestions	Priority	Action Plan
Incomplete test data	Suggestions for acquiring relevant data	High	1. Collaborate with the university to obtain sample student data. 2. Develop test data generation methods.
Limited resources for testing (personnel, tools, etc.)	Input on resource allocation	Medium	1. Assess available resources and identify gaps. 2. Seek additional resources or redistribute workload accordingly.
Time constraints and tight deadlines	Suggestions for managing time	High	1. Prioritize testing activities based on critical functionalities. 2. Evaluate the feasibility of adjusting project timelines.
Technical compatibility issues (browser, OS, etc.)	Recommendations for resolving issues	Medium	1. Identify specific compatibility issues and document them. 2. Collaborate with development team to address compatibility issues.
Lack of clear and well-defined requirements	Suggestions for requirement clarification	Low	1. Schedule meetings with stakeholders to clarify requirements. 2. Document and update requirements for better clarity.

Module ID	Test Case Coverage (%)	Status
Module001	30%	Not-Started
Module002	-	Not-Started
Module003	-	Not-Started
...	...	...

Result:

Thus, the test case report has been created for the PLACEMENT CELL MANAGEMENT SYSTEM.

School of Computing
SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	13
Title of Experiment	Provide the details of Architecture Design/Framework/Implementation
Name of the candidate	GAUTAM SONI
Team Members	GAUTAM SONI , HARSHIT KAMBOJ
Register Number	RA2111050010020
Date of Experiment	24/04/23

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		**10**	

Staff Signature with date

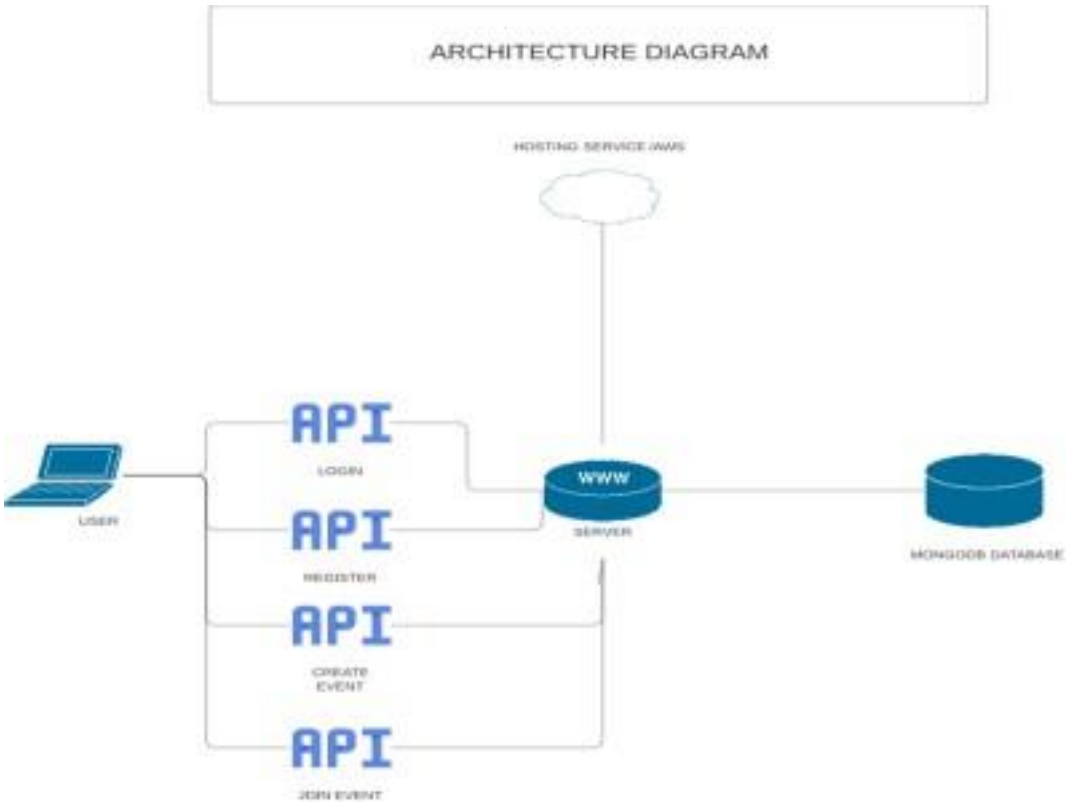
Aim

To provide the details of architectural design/framework/implementation

Team Members:

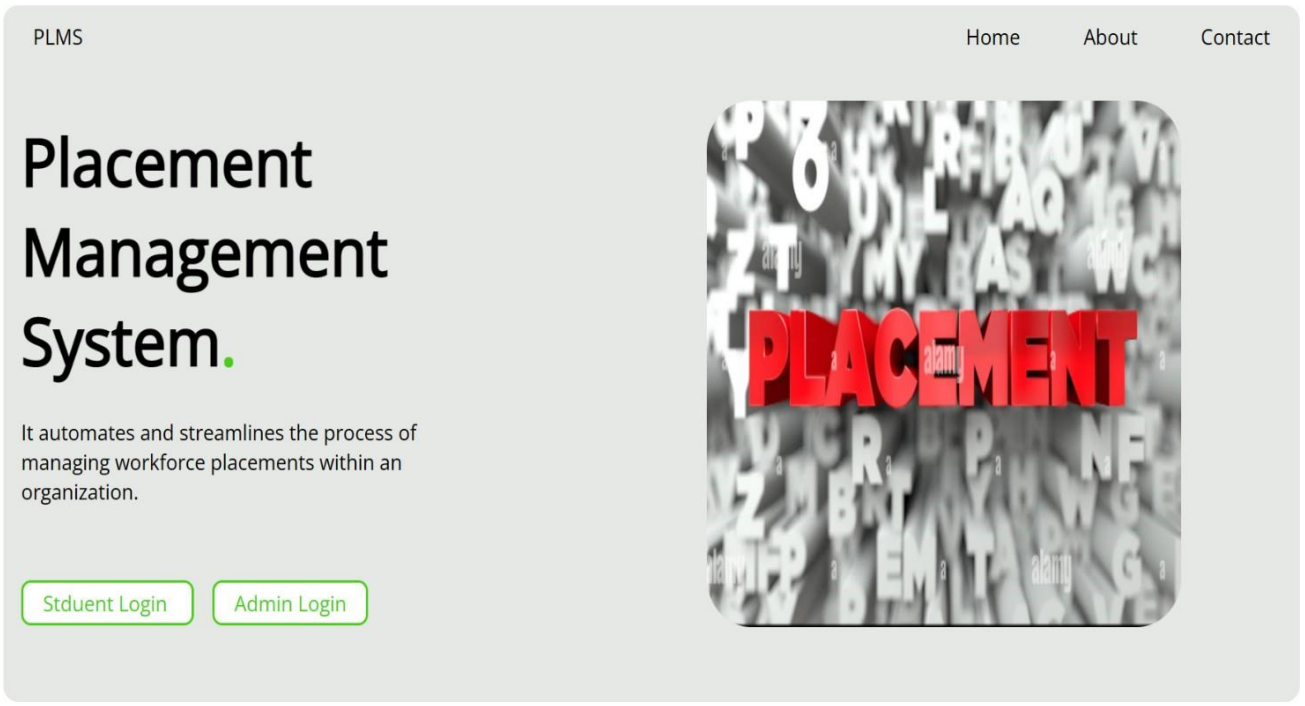
S. No	Register No	Name	Role
1	RA2111050010020	GAUTAM SONI	Lead
2	RA2111050010013	HARSHIT KAMBOJ	Member

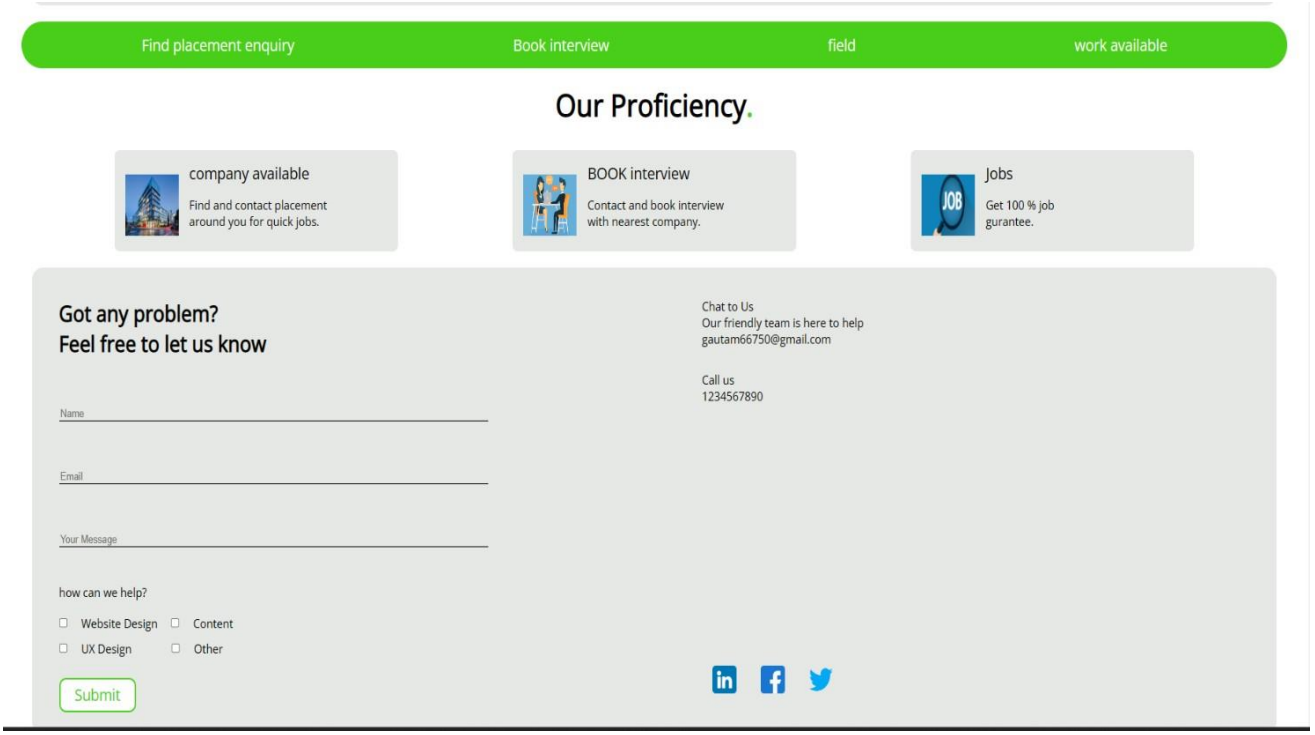
ARCHITECTURE DIAGRAM



IMPLEMENTATION:

1.FIRST PAGE :





CODE FOR FIRST PAGE :

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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Placement  Management System</title>
  <link rel="stylesheet" href="style.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link href="https://fonts.googleapis.com/css2?family=Open+Sans&display=swap" rel="stylesheet">
</head>
<body>
```

```
<div class="upper-section">
    <div class="nav">
        <div class="logo">
            <a href="#" class="nav-link font-32">PLMS</a>
        </div>
        <div class="nav-elements">
            <a href="#" class="nav-link font-32">Home</a>
            <a href="#" class="nav-link font-32">About</a>
            <a href="#" class="nav-link font-32">Contact</a>
        </div>
    </div>
    <div class="main-area">
        <div class="main-text">
            <p class="font-100 front-text">Placement Management System<span class="green">.</span></p>
            <p class="front-sub-text font-32"> It automates and streamlines the process of managing workforce placements within an
organization.</p>
            <div class="home-btns">
                <a href="#" class="btn btn-adjust">Stduent  Login <img src="./" alt=""></a>
                <a href="#" class="btn btn2 btn-adjust">Admin Login</a>
            </div>

        </div>
        <div class="img">
            <img class="main-img" src="./images/main-banner.jpg" alt="">
        </div>
    </div>
</div>
<div class="pre-mid font-32">
    <p>Find placement enquiry</p>
    <p>Book interview</p>
    <p>field</p>
    <p>work available </p>
</div>
<div class="mid-section">
    <p class="mid-main-text font-62 bold">Our Proficiency<span class="green">.</span></p>
    <div class="features">
        <div class="feature-1">
            <div class="feature-icon">
                <img class="icon" src="./images/location ping.jpg" alt="location ping image">
            </div>
            <div class="feature-text">
                <p class="font-32">company available </p>
                <p class="font-24 about-feature">Find and contact placement around you for quick jobs.</p>
            </div>
        </div>
        <div class="feature-2">
            <div class="feature-icon">
                <img class="icon" src="./images/jobs.png" alt="location ping image">
            </div>
            <div class="feature-text">
                <p class="font-32">BOOK interview</p>
                <p class="font-24 about-feature">Contact and book interview with nearest company. </p>
            </div>
        </div>
        <div class="feature-3">
```

```
            <div class="feature-icon">
                <img class="icon icon-3" src="./images/get.png" alt="location ping image">
            </div>
            <div class="feature-text">
                <p class="font-32">Jobs</p>
                <p class="font-24 about-feature">Get 100 % job gurantee.</p>
            </div>
        </div>
    </div>
</div>
<div class="bottom-section">
    <div class="bottom-main-area">
        <p class="font-48 bold">Got any problem?</p>
        <p class="font-48 bold bot-text">Feel free to let us know</p>
        <form class="form" action="">
            <input type="text" class="input-field" placeholder="Name">
            <br>
            <input type="text" class="input-field" placeholder="Email">
            <br>
            <input type="text" class="input-field" placeholder="Your Message">
            <p class="form-para">how can we help?</p>
            <input type="checkbox" name="website design" id="#" class="checkbox">
            <label for="website design">Website Design</label>
            <input type="checkbox" name="content" id="#" class="checkbox check-left">
            <label for="content">Content</label>
            <br>
            <input type="checkbox" name="ux" id="#" class="checkbox">
            <label for="ux">UX Design</label>
            <input type="checkbox" name="other" id="#" class="checkbox check-left other">
            <label for="other">Other</label>
        </form>
        <a href="#" class="btn submit-btn">Submit</a>
    </div>
    <div class="bottom-promotion">
        <div class="promotions">
            <div class="promotion-1">
                <p>Chat to Us</p>
                <p>Our friendly team is here to help</p>
                <p>gautam66750@gmail.com</p>
            </div>
            <div class="promotion-2">
                <p>Call us</p>

                <p>1234567890</p>
            </div>
        </div>
        <div class="social-media">
            <a href="#"><img class="social-icon" src="./images/linkedin.png" alt=""></a>
            <a href="#"><img class="social-icon" src="./images/facebook.png" alt=""></a>
            <a href="#"><img class="social-icon" src="./images/twitter.png" alt=""></a>
        </div>
    </div>
</div>
</body>
</html>
```

CSS CODE :- body

```
{
   margin:0;
   padding:0;
   font-family:'open sans','monospace';
}
.green
{
   color:#49CE1A;
}

.font-32
{
   font-size:1.3rem;
}
.font-48
{
   font-size:1.8rem;
}
.font-62
{
   font-size:2.5rem;
}
.font-100
{
   font-size:4rem;
}
.font-24
{
   font-size:1rem;
}
.bold
{
   font-weight:bold;
}
a
{
   text-decoration: none;
   color:black;
}
p
{
   margin:0;
}
a:hover
{
   color:#49CE1A;
}
.upper-section
{
   background-color: #E5E8E4;
   width:95%;
   height:95vh;
   margin:0 auto;
```

```
    margin-top:1rem;
    border-radius:1em;

}
.nav
{
    display:flex;
    justify-content:space-between;
    padding-top:1rem;
}
.nav-link
{
    margin:0 2rem 0 2rem;
}
.front-text
{
    width:84%;
    font-weight: bold;
    margin-left:1.2rem;
    margin-top:3rem;
    margin-bottom:2rem;
}
.front-sub-text
{
    margin-left:1.2rem;
    width:30rem;
    margin-bottom:4rem;
}
.btn
{
    width:10rem;
    height:3rem;
    background-color: white;
    font-size: 1.3rem;
    color:#49CE1A;
    border: #49CE1A 0.125em solid;
    padding: 0.25em 1em;
    border-radius: 0.50em;
}
.btn:hover
{
    cursor: pointer;
    background-color: #49CE1A;
    color:white;
}
.btn2
{
    margin-left:1rem;
}
.home-btns
{
    margin-top:1rem;
    margin-left:1.2rem;
}
.main-img
```

```
{
   height:512px;
   width:512px;
   margin-right:8rem;
   border-radius:3rem;
   margin-top:3rem;
}
.main-area
{
   display:flex;
}
.main-text
{
   display:flex;
   flex-direction: column;
   justify-content: center;
}


.pre-mid
{
   color:white;
   display:flex;
   justify-content: space-around;
   background-color: #49CE1A;
   width:95%;
   margin: 0 auto;
   margin-top:1.3rem;
   border-radius:3rem;
   padding:1rem;
}

.mid-section
{
   margin-top:1.3rem;
}
.mid-main-text
{
   text-align:center;
}
.icon
{
   height:80px;
   width:80px;
   margin-top:1rem;
   margin-right:1rem;
}

.feature-1,.feature-2,.feature-3
{
   background-color: #E5E8E4;
   display:flex;
   width:20%;
   border-radius:0.50em;
   padding:1rem;
```

```
}
.about-feature
{
   margin-top:1rem;
   width:80%;
}
.features
{
   margin-top:2rem;
   display: flex;
   justify-content: space-evenly;
}



.bottom-section
{
   background-color: #E5E8E4;
   border-radius: 1em;
   width:95%;
   height:38rem;
   margin: 0 auto;
   margin-top:1.3rem;
   margin-bottom:1.3rem;
   display:flex;
}
.bottom-main-area
{
   padding-top:2.5rem;
   padding-left:2.5rem;
   margin-bottom:3rem;
}
.bot-text
{
   margin-bottom:3rem;
}

.form
{
   margin-bottom:1.5rem;
}
.form-para
{
   margin-bottom:1.2rem;
}
.input-field
{
   margin:1rem 0 3rem 0;
   background: transparent;
   border: none;
   border-bottom: 1px solid #000000;
   width: 40rem;
}
.checkbox
{
```

```
   margin:0 1rem 1rem 0;
}
.check-left
{
   margin-left:1rem;
}
.other
{
   margin-left:3.5rem;
}


.bottom-promotion
{
   display:flex;
   flex-direction: column;
   justify-content: space-between;
   padding-top:2.5rem;
   margin-bottom:3rem;
   margin-left:20rem;
}
.promotion-2
{
   margin-top:2rem;
}
.social-icon
{
   height:36px;
   width:36px;
   margin-left:1rem;
   margin-top:1rem;
   margin-right: 1rem;
}
```

2. SECOND PAGE:

PLMS

Home Find a job book appiontment

Book interview

"You don't have to worry about being a number one, number two, or number three. Numbers don't have anything to do with placement. Numbers only have something to do with repetition."

Get your job

Code:
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link href="https://fonts.googleapis.com/css2?family=Open+Sans&display=swap" rel="stylesheet">
  <link rel="stylesheet" href="page_2_style.css">
  <title>Document</title>
</head>
<body>
  <div class="nav">
    <div class="logo">
      <a href="#" class=" link nav-link font-32">PLMS</a>
```

```
    </div>
    <div class="nav-elements">
      <a href="#" class=" link nav-link font-32">Home</a>
      <a href="#" class=" link nav-link font-32">Find a job</a>
      <a href="#" class=" link nav-link font-32 right-link">book appiontment</a>
    </div>
  </div>
  <div class="section-1">
    <div class="text-part">
      <div class="intro-text">
        <img class="small-icon" src="./patient_page_images/Screenshot 2023-05-13 172810.png" alt="">
        <p class="small-text">Job Comes First</p>
      </div>
      <div class="intro-phrase">
        <p class="font-100 big-text bold">Get job and protect your future.</p>
        <img class="big-icon" src="./patient_page_images/Screenshot 2023-05-13 172627.png" alt="ECG_image">
      </div>
      <p class="font-32 small-para">Better high-tech job  at your fingertips</p>
      <a href="#" class="btn btn-adjust">Book interview</a>
    </div>
    <div class="image-part">
      <img class="main-img" src="./patient_page_images/Screenshot 2023-05-13 172544.png" alt="">
    </div>
  </div>
  <div class="section-2">
    <div class="image-part">
      <img class="section-2-main-img" src="./patient_page_images/Screenshot 2023-05-13 172727.png" alt="">
    </div>
    <div class="section-2-text-part">

      <p class="font-32 section-2-small-para">“You don’t have to worry about being a number one, number two, or number three. Numbers don’t have anything to do with placement. Numbers only have something to do with repetition.”</p>
      <a href="https://symptomate.com/" class="btn btn-adjust"> Get your job</a>
    </div>
  </div>
</body>
</html>
```

CSS CODE:-

```
    body
{
  margin:0;
  padding:0;
  font-family:'open sans','monospace';
}
p
{
  margin:0;
}
.bold
{
  font-weight: bold;
}
.font-32
```

```
{
   font-size:1.3rem;
}
.font-100
{
   font-size:3.5rem;
}
a
{
   text-decoration: none;
   color:black;
}
a:hover
{
   color:#49CE1A;
}
.link{
   text-decoration: none;
   font-size:  20px;
   color: #000;
   display: inline-block;
   position: relative;
}
.link::after{
   content: '';
  position: absolute;
  width: 100%;
  transform: scaleX(0);
  height: 2px;
  bottom: 0;
  left: 0;
  background-color: #49CE1A;
  transform-origin: bottom right;
  transition: transform 0.40s ease-out;
}
.link:hover{
   color: #49CE1A;
}
.link:hover::after{
   color: #49CE1A;
   transform: scaleX(1);
  transform-origin: bottom left;
}
.nav
{
   width:95%;
   margin:0 auto;
   display:flex;
   justify-content: space-between;
   margin-top:2rem;
   margin-bottom:3rem;
}
.nav-link
{
   margin:0 1.4rem 0 1.4rem;
```

```
}

.section-1
{
   display:flex;
   width:95%;
   margin:0 auto;
}
.small-icon
{
   height:32px;
   width:32px;
}
.intro-text
{
   display:flex;
   margin-top:6rem;
}
.small-text
{
   margin-top: 0.5rem;
   margin-left:0.5rem;
}

.text-part
{
   margin-left:1.4rem;
}

.big-text
{
   width:52%;
}
.big-icon
{
   position:absolute;
   left:16rem;
   height:72px;
   width:72px;
}
.intro-phrase
{
   align-items: flex-end;
   display:flex;
}
.small-para
{
   margin-top:1.5rem;
   margin-bottom:3rem;
   width:52%;
}
.main-img
{
   position:relative;
   right:8rem;
```

```
    margin-top:3rem;
    height: 520px;
    border-radius:4rem;
}
.btn
{
    width:10rem;
    height:3rem;
    background-color: white;
    font-size: 1.3rem;
    color:#49CE1A;
    border: #49CE1A 0.125em solid;
    padding: 0.25em 1em;
    border-radius: 0.50em;
}
.btn:hover
{
    cursor: pointer;
    background-color: #49CE1A;
    color:white;
}
.section-2
{
    padding-top:5rem;
    display:flex;
    justify-content: space-between;
    width:95%;
    margin:0 auto;
    padding-bottom:3rem;
}
.section-2-main-img
{
    margin-right:5rem;
    width:480px;
    height:300px;
    border-radius:3rem;
}
.section-2-main-text
{
    margin-bottom:2rem;
}
.section-2-small-para
{
    width:70%;
    margin-bottom:3rem;
}


@media screen and (max-width: 768px)
{
    .section-1
    {
        flex-direction: column;
        width:100%;
        margin:0;
```

```
}
.nav-elements
{
    display: none;
}
.big-text
{
    font-size:2rem;
    width:90%;
}
.intro-text
{
    margin-top:0.5rem;
}
.big-icon
{
    height:48px;
    width:48px;
    left:8rem;
}
.main-img
{
    right:0;
    height:300px;
}
.small-para
{
    margin-top:1.5rem;
    margin-bottom:3rem;
    width:90%;
    text-align:center;
}
.section-2
{
    flex-direction: column;
}
.section-2-main-img
{
    margin-right:0;
    height:180px;
    width:240px;
}
.section-2-main-text
{
    font-size: 2rem;
    margin-top:2rem;
    text-align: center;
}
.section-2-small-para
{
    text-align: center;
    font-size: 1rem;
    width:100%;
}
.image-part
```

```
  {
    display:flex;
    justify-content: center;
  }
  .btn
  {
    margin:auto;
  }
}
```

```
});
```

Result:

Thus, the details of architectural design/framework/implementation along with the screenshots were provided.

Conclusion

In conclusion, the placement cell management system provides a robust and efficient solution for managing student placements within educational institutions. By automating various processes and centralizing data, the system streamlines the placement process, enhances collaboration, and improves overall outcomes.

With its user-friendly interface, students can easily register for placements, apply for job opportunities, and stay updated on their placement progress. Placement officers benefit from features such as job posting, candidate shortlisting, interview scheduling, and comprehensive reporting, enabling them to effectively manage placements and track student performance.

The system's communication capabilities facilitate seamless interaction between students, placement officers, and recruiters, ensuring timely notifications, email alerts, and messaging for efficient coordination.

By leveraging the placement cell management system, educational institutions can optimize their placement activities, save time and resources, and provide a seamless experience for students and recruiters alike. The system's analytics and reporting capabilities enable institutions to gain valuable insights into placement trends, student performance, and recruiter feedback, allowing for continuous improvement and better placement outcomes.

Overall, the placement cell management system is a valuable tool that empowers educational institutions to streamline their placement processes, enhance collaboration, and ultimately contribute to the success of their students in securing employment opportunities.

Reference

Here are some references for placement cell management system:

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2.Ahmad S. et al. (2020) A review of placement cell management system and prevention techniques. International Journal of Information Management, Volume 51, 102053. https://doi.org/10.1016/j.ijinfomgt.2019.07.003

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6. L. F. Marin, et al. (2019). A framework for placement cell management system in multi-cloud environments. Journal of Cloud Computing, 8(1), 1-15. https://doi.org/10.1186/s13677-019-0127-2

7. H. R. Souri, et al. (2021). A placement cell management system framework for industrial control systems using machine learning algorithms. Journal of Intelligent & Fuzzy Systems, 40(2), 1811-1821. https://doi.org/10.3233/JIFS-189097