

Vidyabharti Trust College Of Business, Computer-Science And Research, Umراكх



Project Report

On

Corporate Edge System

Submitted For Partial Requirement for the Degree of

Bachelor of Computer Application (B.C.A)
For Academic Year 2024-2025

Guided By

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Submitted By

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CERTIFICATE

This is to certify that Mr. Harsh Aalwani, Mr. Vishal Agrawal, Mr. Vatsal Bharodiya, Ms. Heer Mistry students of BCA Semester 6 having exam seat number 6966, 6968, 6979, 7034 has/have satisfactorily completed his/her Project work entitled Corporate Edge System as prescribed by the Veer Narmad South Gujarat University during the academic year 2024 - 2025.

Date: 04/04/2025

HOD

Principal

Place: Umrakh

Prof. Amit R. Patel

Dr. Snehal H. Mistry



External Examiner

ACKNOWLEDGEMENT

It gives us great pleasure in presenting this project report titled "**CORPORATE EDGE SYSTEM**" and we wish to express our immense gratitude to the people who provided invaluable knowledge and support in the completion of this project. Their guidance and motivation has helped in making this project a great success.

We are eager and glad to express our gratitude to the Head of the BCA Dept. **Prof. Amit Patel** for his approval of this project. We are also thankful to him for providing us the needed assistance, detailed suggestions and also encouragement to do the project.

We would like to express our sincere gratitude to our respected principal **Dr. Snehal Mistry**, vice principal **Dr. Payal Mahida** and the management of our College for providing such an ideal atmosphere to build up this project with wellequipped library with all the most necessary reference materials and up to date IT Laboratories. We are extremely thankful to all staff and the management of the college for providing us all the facilities and resources required.

Thanking All,

Mr. Harsh aalwani (6966)

Mr. Vishal agrawal (6968)

Mr. Vatsal bharodiya (6979)

Ms. Heer mistry (7034)

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1. INTRODUCTION

1.1 College Profile :

Attribute	Details
College Name	Vidyabharti Trust College of Business, Computer-Science & Research (VTCBCSR)
Affiliation	Veer Narmad South Gujarat University, Surat (Re-Accredited By NAAC With 'A' Grade)
Location	Vidyabharti Campus, At & Po Baben, Ta: Bardoli, Dist: Surat, Gujarat, India, Pin: 394345
Website	https://www.vtcbsr.edu.in/
Contact Information	Phone: (026622) 220581 Email: bbabca@vtcbcsr.edu.in

1.2 Project Profile :

Project Title	Corporate Edge System(CES)
Frontend	React js
Backend	Mongo, Express js, Node js, FastAPI
Browser	Google Chrome, Microsoft Edge, Brave
Platform	VS Code, Notepad++
Documentation Tool	Microsoft word 2021
Internal Guide	Prof. Amit Patel
Submitted To	Prof. Amit Patel

1.2.1 Overview :

The Corporate Edge System (CES) is a complete solution for integrated corporate operations, communication enhancement, and efficient administrative management. It allows multiple user roles to carry out certain functions while having a coherent, organized flow within the company.

1.2.2 User Roles and Descriptions :

Role	Description
Guest	Unauthenticated users with limited access. Can view announcements and fill out job vacancy forms.
Super Admin	Highest-level administrator with full access. Manages users, departments, leave allocations, organization charts, announcements, and system settings.
System Admin	Manages website configurations, user roles, departments, leave management, and monitors system logs.
HR Manager	Handles job vacancies, candidate recruitment, policy management, employee performance, and addresses employee concerns.
Department Manager	Oversees department-specific projects, manages employees within the department, and handles leave approvals.
Employee	Regular staff members who manage personal profiles, view announcements, participate in projects, and apply for leaves.

2. PROPOSED SYSTEM

2.1 Scope :

The **Corporate Edge System** is built to keep in one place all common things dealing with employees, projects, HR assignments, and announcements, by automating daily monotony such as employee reviews, leave requests, postings for vacancies, and project handling within a Web-based system.

❖ What CES Can Do:

- User Management:**

- Different roles like Super Admin, HR Manager, and Employee with specific permissions.

- HR Features:**

- Manage job vacancies, employee details, performance tracking, and appraisals.

- Leave Management:**

- Employees can apply for leave, and managers can approve or reject requests.

- Announcements & Alerts:**

- Important updates can be sent to employees or the public.

- Logs & Security:**

- Keep records of system activities, logins, and updates for security.

- Organization Chart:**

- A visual chart showing who reports to whom in the company.

2.2 Objective :

The main goal of CES is to make corporate management simple and automated so that organizations can work more efficiently.

❖ Key Goals:

- **Organized Employee & Role Management –**
 - Everyone gets the right access based on their role.
- **Easy HR Tasks –**
 - performance reviews, and employee concerns are handled smoothly.
- **Better Project Tracking –**
 - Assign tasks, track progress, and set deadlines.
- **Simple Leave Handling –**
 - Employees can apply for leave, and managers can approve/reject it easily.
- **Clear Company Structure –**
 - The Organization Chart helps employees understand the company hierarchy.
- **Effective Communication –**
 - Announcements and notifications keep everyone informed.
- **Safe & Secure System –**
 - Keeps data protected with proper user access and logs.
- **Future-Ready & Scalable –**
 - Can be expanded and customized as the company grows.

2.3 Constraints :

2.3.1 H/W Constraints:

Minimum	Recommended
Windows 10	Windows 11
4GB RAM	8 GB RAM
256 GB Storage	512 GB Storage
I3 ^{5th Gen} Processor	Ryzen 5 Processor

2.3.1 S/W Constraints:

- A Working Browser (**Chrome , Edge, Brave**)
- **Mongodb Database**

2.4 Advantages :

The **Corporate Edge System (CES)** makes managing an organization easier and more efficient.

- All-in-One Management:** CES brings together HR tasks, job postings, projects, and employee performance tracking in one place.
- Automatic Record-Keeping:** It keeps track of system access, user actions, job vacancies, leave requests, and project progress, ensuring transparency.
- Role-Based Access:** Each role (Super Admin, System Admin, HR Manager, Department Manager, Evaluator, Employee) has specific permissions, keeping data secure.
- Easy Leave Management:** Employees can apply for leave, check balances, and withdraw requests, while managers can approve or reject them easily.

5. **Employee Performance Tracking:** Helps track employees' work, making appraisals and promotions fair and transparent.
6. **Smart Hiring Process:** A built-in resume ranking system helps in selecting the best candidates quickly.
7. **Clear Organization Structure:** Displays a company hierarchy, helping employees understand reporting structures.
8. **Better Communication:** Announcements, notifications, and Discord integration keep everyone updated.
9. **User-Friendly Interface:** Designed to be simple and easy to use for everyone.

2.5 Limitations :

- CES has some limitations:
 1. **Difficult Setup:** Setting up the system requires configuring databases, assigning roles, and managing permissions.
 2. **Training Needed:** Employees and administrators need some training to use all features effectively.
 3. **Data Accuracy is Key:** The system relies on correct data. Any mistakes in input can affect decision-making.
 4. **Needs Internet Connection:** Since it's web-based, CES doesn't work offline.
 5. **Performance Issues with Large Data:** Handling too much data (logs, projects, resumes) may slow down the system if not optimized.
 6. **Limited Customization:** While flexible, some companies may require extra customization to fit their unique needs.
 7. **Security Risks:** Although access is controlled, extra security measures like encryption and two-factor authentication might be needed.
 8. **Scaling Challenges:** As the organization grows, CES may require better infrastructure and database upgrades to keep running smoothly.

3. ENVIRONMENT SPECIFICATION

3.1 Hardware & Software Requirements :

HARDWARE	
Development Environment	Processor : <ul style="list-style-type: none">• Intel I3 5th Gen Processor Minimum• Ryzen 5 Processor Recommended RAM : <ul style="list-style-type: none">• 4 GB Minimum• 8 GB Recommended HDD : <ul style="list-style-type: none">• 256 GB Minimum• 512 GB Recommended Operating System : <ul style="list-style-type: none">• Windows 10 Minimum• Windows 11 Recommended
Client Configuration	Chrome : <ul style="list-style-type: none">• Version 134.0.6998.89 and Above Edge : <ul style="list-style-type: none">• Version 134.0.3124.72 and Above Brave : <ul style="list-style-type: none">• Version 1.76.74 Chromium 134.0.6998.89 and Above

SOFTWARE	
Front-End	React js
Back-End	Node js , Express js
Database	Mongodb
Scripting Language	JavaScript (JS),Python
Other Technology	FastAPI, Deberta-v3-small
Browser	Google Chrome, Edge, Brave

3.2 Development Description :

React js	• Version 18.3.1
Mongodb	• Version 1.45.4

❖ MERN Stack :

The MERN Stack is a powerful and widely used full-stack development framework that leverages JavaScript technologies to build modern, dynamic, and scalable web applications. It consists of four core technologies: MongoDB, Express.js, React.js, and Node.js, which work together seamlessly to deliver end-to-end application development. Each component plays a critical role in the stack: MongoDB serves as a NoSQL database that stores data in a flexible, JSON-like BSON format, making it easy to scale and handle large volumes of data.

- **Express.js:** A backend web framework for Node.js that simplifies API and server development.
- **React:** A frontend JavaScript library for building dynamic user interfaces.
- **Node.js:** A runtime environment that allows JavaScript to run on the server.

❖ **FastAPI :**

FastAPI is a modern and super-fast web framework used to create APIs with Python. It is built using **Starlette** for web handling and **Pydantic** for data validation, making it very fast and reliable. FastAPI uses **async/await** to handle many requests at the same time, which makes it perfect for high-performance applications. One of the best features is that it **automatically generates API documentation** with **Swagger UI** and **ReDoc**, so you can easily test and see how your API works.

❖ **Key features :**

- **Fast Execution:** Uses asynchronous programming to handle requests quickly.
- **Automatic Documentation:** Generates OpenAPI and Swagger documentation automatically.
- **Type Safety:** Uses Python type hints to improve code reliability and reduce errors.
- **Built-in Validation:** Ensures data correctness with minimal effort.

4. SYSTEM PLANNING

4.1 Feasibility Study :

A. Technical Feasibility :

- CES is developed using **React.js** (frontend) and **Node.js** with **MongoDB** (backend).
- The system requires **cloud hosting** for scalability.
- Integration of **Socket.IO** for real-time updates and secure authentication mechanisms is feasible.

B. Operational Feasibility :

- CES is designed to enhance **corporate workflow automation**, making HR and efficient.
- The system is **user-friendly**, requiring minimal training for employees and admins.
- Ensures **smooth coordination** between departments via announcement and notification features.

C. Economic Feasibility :

- **Initial cost** includes software development, hosting, and maintenance.
- **Long-term savings** are achieved by reducing manual HR processes and improving employee productivity.
- **Return on Investment (ROI)** is high as it automates multiple organizational tasks.

D. Legal Feasibility :

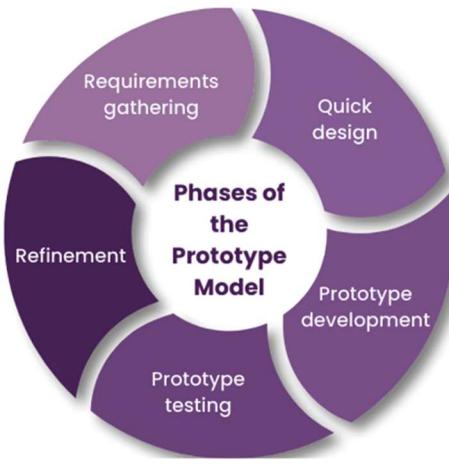
- CES complies with **data privacy laws** to ensure employee and company information security.
- Ensures **employment and labor laws compliance** in leave.
- Uses secure **authentication and authorization methods** to protect user data.

E. Schedule Feasibility :

- A prototype-based approach ensures **faster development cycles**.
- Incremental releases help in **early testing and feedback incorporation**.
- Project milestones are set to complete development **within the planned timeline**.

4.2 Software Engineering Model :

❖ Phases of Prototype Model in CES :



A. Requirements Gathering & Analysis :

- Identify key requirements from stakeholders (Super Admin, HR Manager, Evaluator, Employees, etc.).
- Define system modules (User Management, Leave Management, Evaluator , etc.).
- Prioritize critical functionalities for prototyping.

B. Quick Design :

- Develop a basic UI prototype to represent system workflows.
- Create wireframes for key modules (Login, Dashboard, Employee Management, etc.).
- Define basic navigation structure.

C. Prototype Development :

- Develop a functional **frontend prototype** in **React.js**.
- Implement a basic **backend** with **Node.js** and **MongoDB** to simulate data processing.
- Integrate essential features like **login, user roles, announcements, and leave requests**.

D. User Evaluation & Feedback :

- Provide the prototype to key users (HR, Department Managers, Employees, etc.).
- Collect feedback on UI, features, and functionality.
- Identify missing or incorrect system behaviors.

E. Refinement & Iteration :

- Modify the prototype based on user feedback.
- Improve UI/UX and enhance feature set.
- Test for performance and usability issues.
- Iterate multiple times until requirements are fully met.

F. Final Product Development :

- Convert refined prototype into the full-scale system.
- Implement complete **backend logic, database integrations, and security enhancements.**
- Conduct system testing before deployment.

- **Advantages of Prototype Model in CES :**

- **Early User Involvement:** Ensures requirements are correctly understood.
- **Improved System Design:** Identifies issues before full-scale development.
- **Reduced Development Risk:** Prevents major changes late in the project.
- **Better User Satisfaction:** Aligns the system with actual user needs.

4.3 Risk Analysis :

A. Schedule Risk :

Issue: Delays in project completion due to poor planning, affecting deadlines.

Causes:

- Incorrect time estimation.
- Lack of resource tracking (staff, infrastructure, skills, etc.).
- Failure to recognize complex functionalities.
- Unexpected project scope changes.

Solution: Proper planning, accurate time estimation, and regular progress tracking.

B. Operational Risk :

Issue: Inefficiencies or failures in the development and deployment processes.

Causes:

- Conflicts in task prioritization.
- Unclear roles and responsibilities.
- Insufficient resources and training.
- Lack of communication among teams.

Solution: Clear role assignments, structured workflows, adequate training, and improved communication strategies.

C. Technical Risk :

Issue: System failures, performance issues, or integration challenges affecting functionality.

Causes:

- Constantly changing project requirements.
- Lack of advanced or stable technology.
- Complexity in system implementation and integration.

Solution: Use proven technologies, conduct feasibility studies, and perform regular testing.

D. Programmatic Risk :

Issue: External factors beyond project control that may impact execution.

Causes:

- Budget limitations.
- Market and customer priority changes.
- Compliance with changing government regulations.

Solution: Flexible budgeting, alternative strategies, and staying updated on market and regulatory changes.

4.4 Project Schedule :

4.4.1 Task Dependency :

1. Finish to Start (FtS) :

Definition: Task B cannot start until Task A is completed.

Example in CES: A project cannot be assigned to employees until the Department Manager creates it.

2. Finish to Finish (FtF) :

Definition: Task A can only finish when Task B ends.

Example in CES: Employee performance review (Task A) can only be completed when all project progress reports (Task B) are submitted.

3. Start to Start (StS) :

Definition: Task B cannot start before Task A starts.

Example in CES: A new project (Task A) starts, and simultaneously, resource allocation (Task B) begins.

4. Start to Finish (StF) :

Definition: Task B must start for Task A to be completed.

Example in CES: The next HR Manager must be assigned before the current HR Manager can resign.

❖ Task Dependencies Summary :

Task	Depends On
Job Vacancy Creation	HR Manager
Employee Performance	HR Manager, Evaluator
Leave Approval	Department Manager
Project Creation	Evaluator
Project Approval	Department Manager
Announcement Creation	Super Admin, HR Manager
System Settings Management	System Admin
User Management	Super Admin

4.4.2 Timeline Chart :

Tasks	20-Dec-2024 To 20-March-2025 (9 Weeks)								
	1	2	3	4	5	6	7	8	9
1. Introduction									
Requirement Gathering									
Analyse Gathered information									
Determine Basic functionality									
Determine Scope of System									
Milestone Completed									
2. Planning and Risk analysis									
Analyse data for possible risk									
Identify potential risk									
Determine different modules									
Milestone Completed									
3. Designing									
Design basic interface									
Design database table									
Design UI model									
Milestone Completed									
4. Coding and integrated modules									
Define code logics									
Implementation of logics									
Master modules									
Transaction modules									
Milestone Completed									
5. Testing									
Validate input data on control									
Check accuracy of transaction									
Test system with multiple users									
Milestone Completed									

5. SYSTEM ANALYSIS

5.1 Detailed SRS :

The **Corporate Edge System (CES)** is a comprehensive **HR and Project Management System** designed to optimize business operations. It provides **role-based access**, ensuring efficient communication, task delegation, and record management for employees and administrators. CES simplifies HR workflows, project tracking, and employee management while maintaining security and scalability.

1. Functional Requirements :

2.1 User Management :

- **Super Admin** can create, update, and delete users.
- **Role-based access control (RBAC)** ensures users only access allowed features.
- Users can **update their profiles** and change passwords securely.

2.2 HR Management :

- Employees can apply for leave through the system.
- HR Managers can approve/reject leave requests and view employee history.
- **Performance appraisal system** to manage employee reviews, promotions, and salary increments.

2.3 Announcement & Notification System :

- Admin/HR can create company-wide announcements.
- **Real-time notifications (via Socket.IO)** for project updates, leaves, and announcements.
- Employees can acknowledge or respond to notifications.

2.4 Guest Panel & Job Vacancy Management :

- HR can post job vacancies with descriptions and requirements.
- Candidates can apply online and upload resumes.
- HR can review applications, shortlist candidates, and schedule interviews.

2.5 Logging System :

- Logs will be maintained for key activities :
 - User login/logout actions.
 - Department and role modifications.
 - Project and task changes.
 - Job applications and approvals.
 - Logs will be stored in MongoDB and can be accessed by the Super Admin.

2. Non-Functional Requirements :

3.1 Performance Requirements :

- The system should support **1000+ concurrent users**.
- **Page load time** should be **less than 3 seconds** for a seamless experience.
- **Database query response time** should be **under 200ms**.

3.2 Security Requirements :

- **Role-based authentication using JWT tokens** for access control.
- **Data encryption** to protect sensitive user information.
- **User access logs and login tracking** for security audits.

3.3 Usability Requirements :

- The system should be **easy to use for non-technical users**.
- **Responsive design** for mobile and desktop access.
- **Intuitive UI/UX** with clear navigation and tooltips.

3.4 Availability & Reliability :

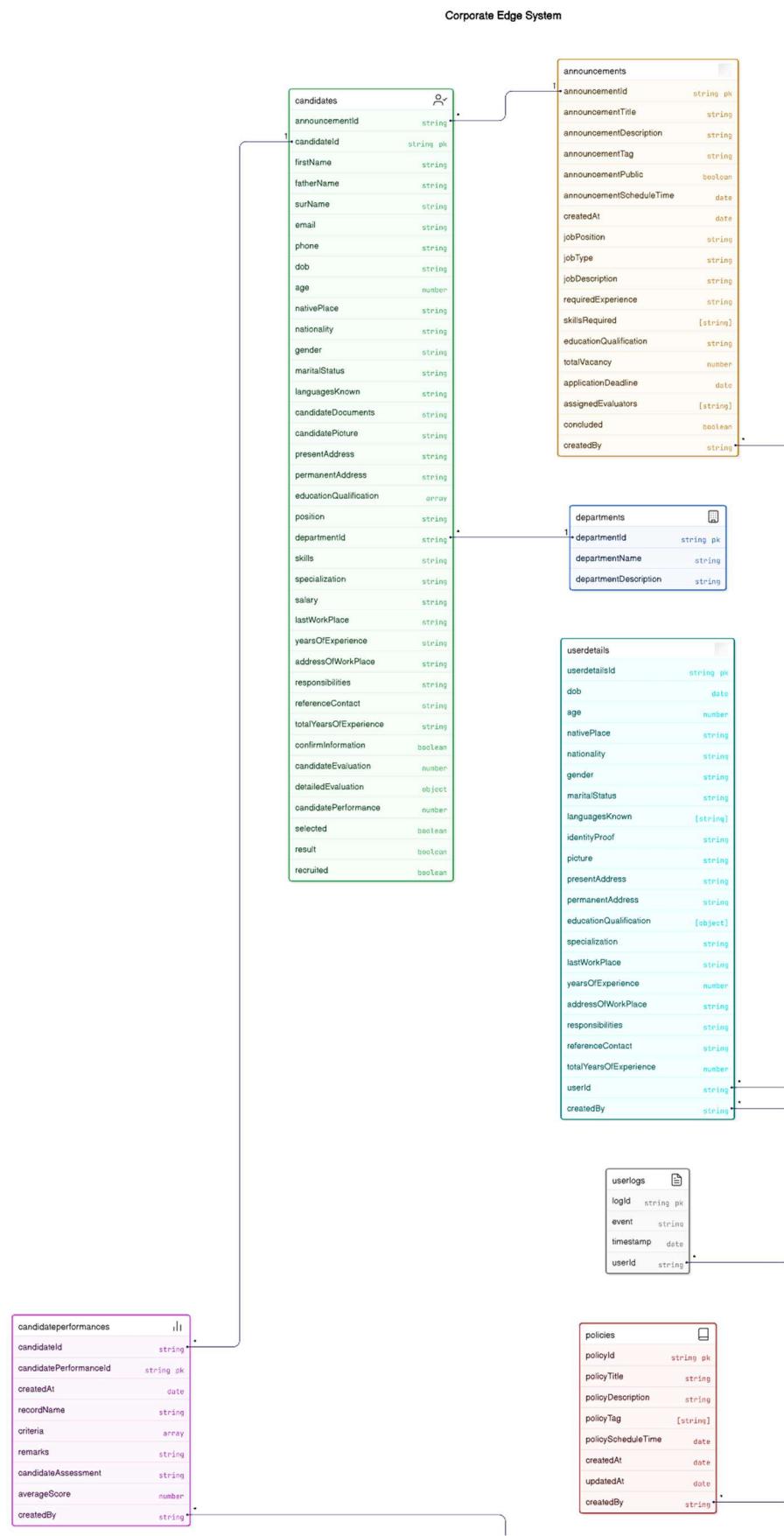
- The system should maintain **99.9% uptime** for business continuity.
- **Automated daily backups** to prevent data loss.
- **Redundant architecture** to handle failures.

3.5 Scalability Requirements :

- The system should be able to **scale up** to accommodate more users.
- The architecture should support **cloud deployment** for horizontal scaling.
- Future enhancements like **AI-based HR chatbot and automated payroll system** should be considered.

5.2 UML Diagram :

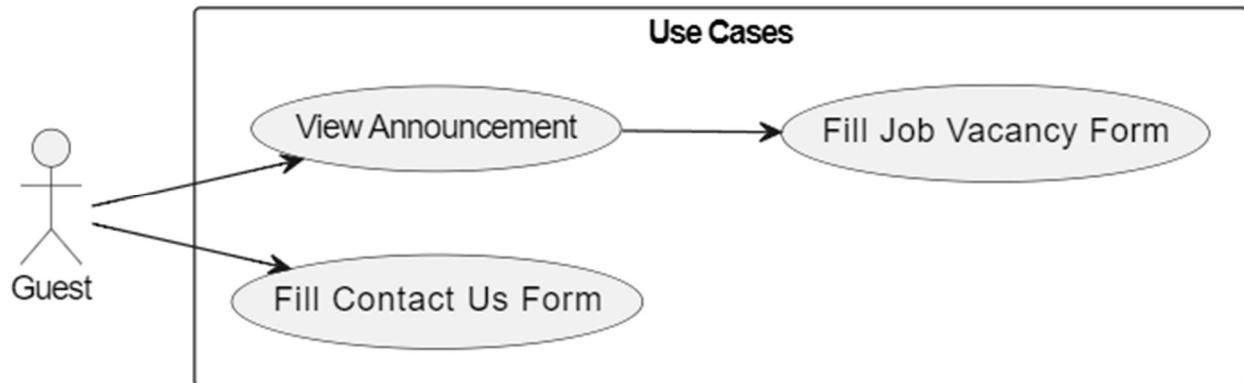
5.2.1 Class Diagram/ER Diagram :



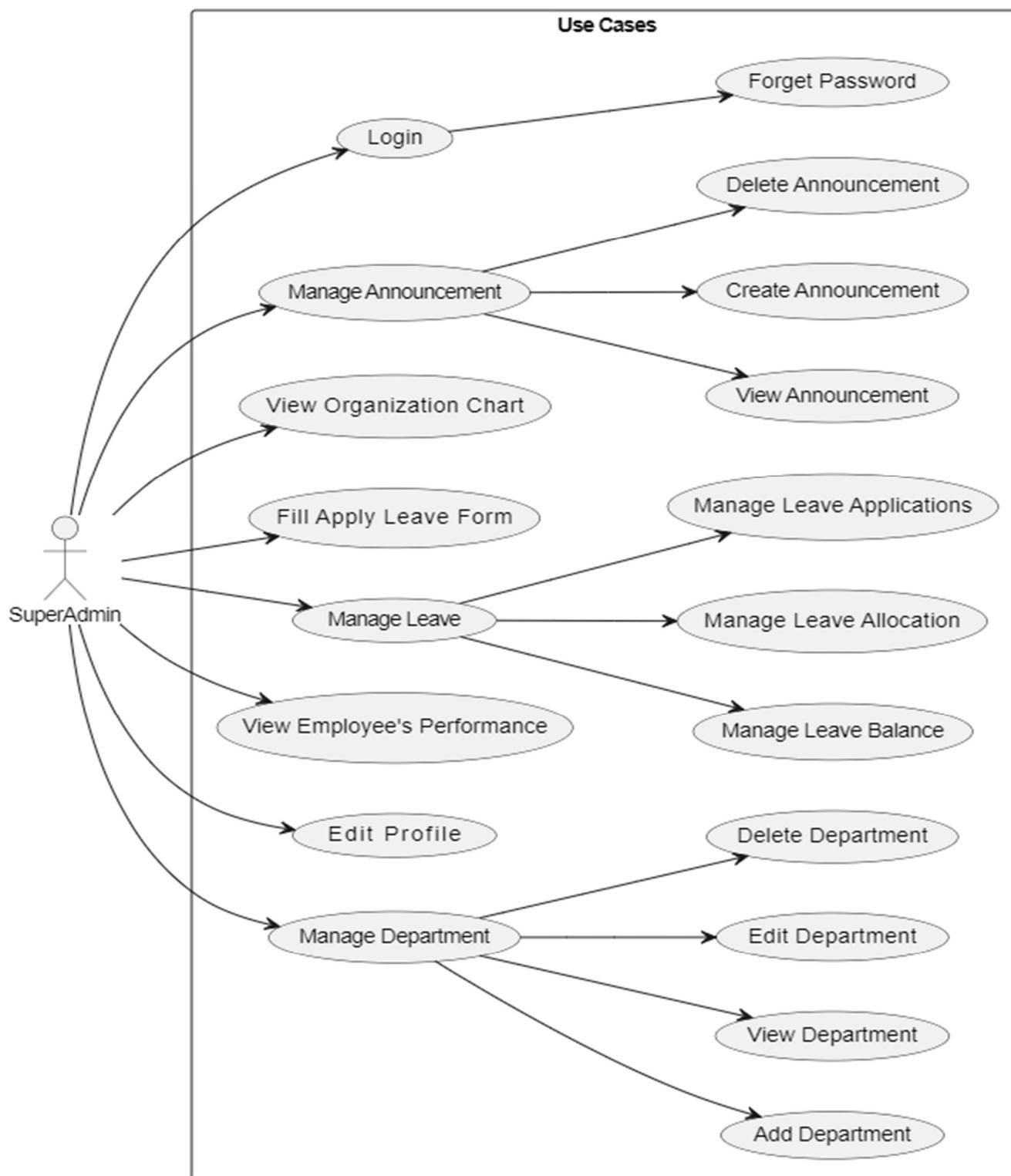


5.2.2 Use case /Activity Diagram :

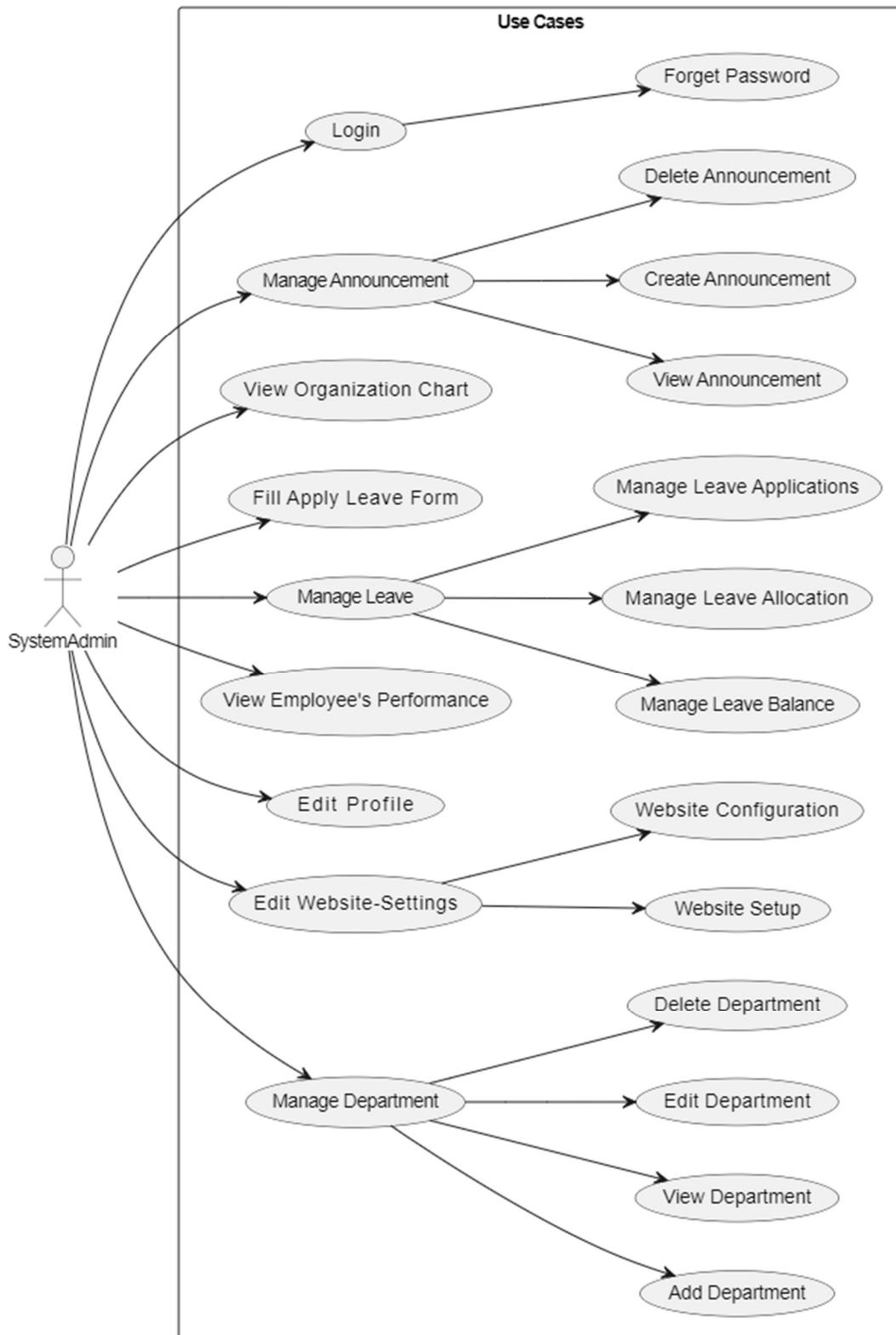
- Guest UC :



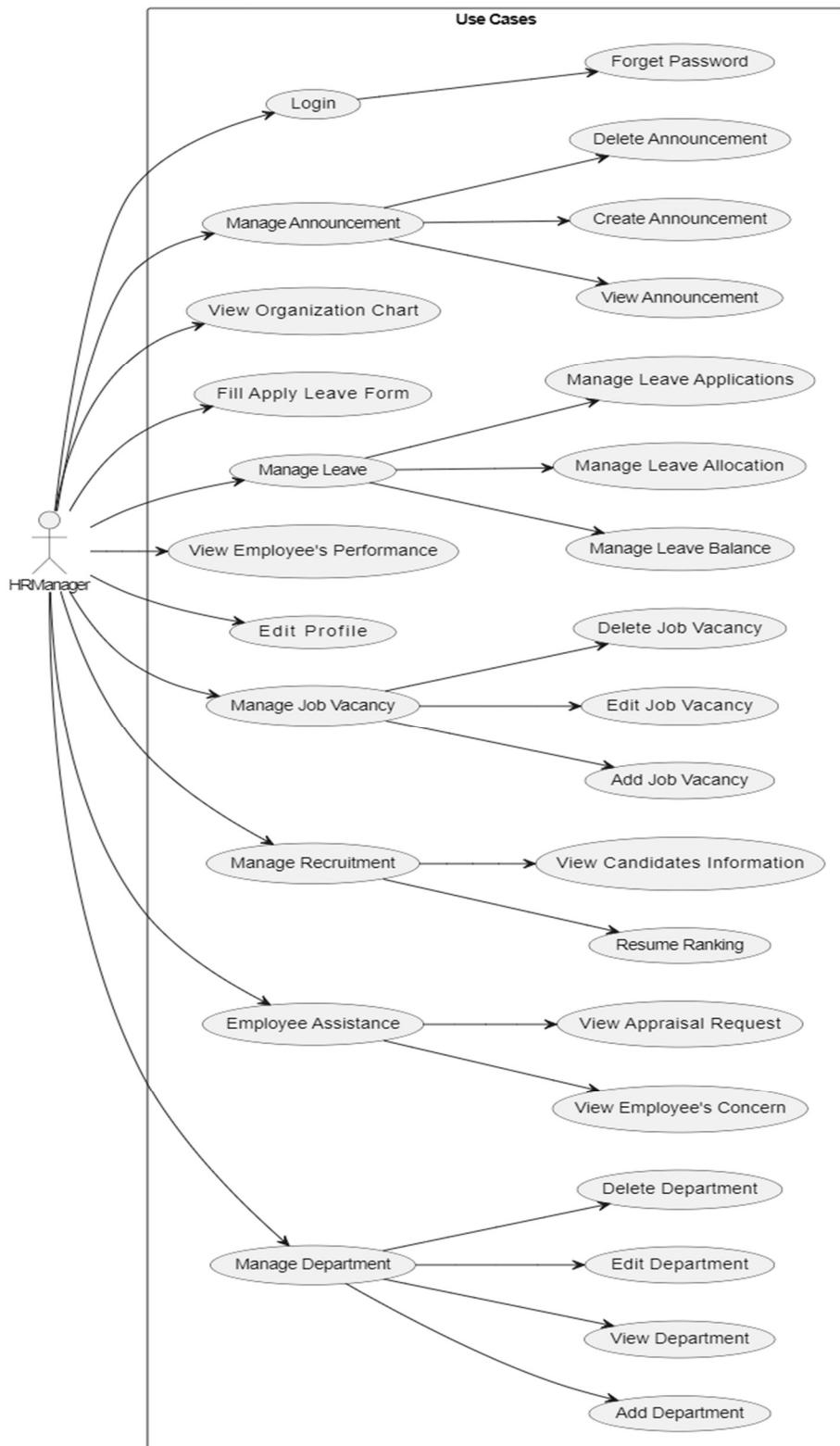
- SuperAdmin UC :



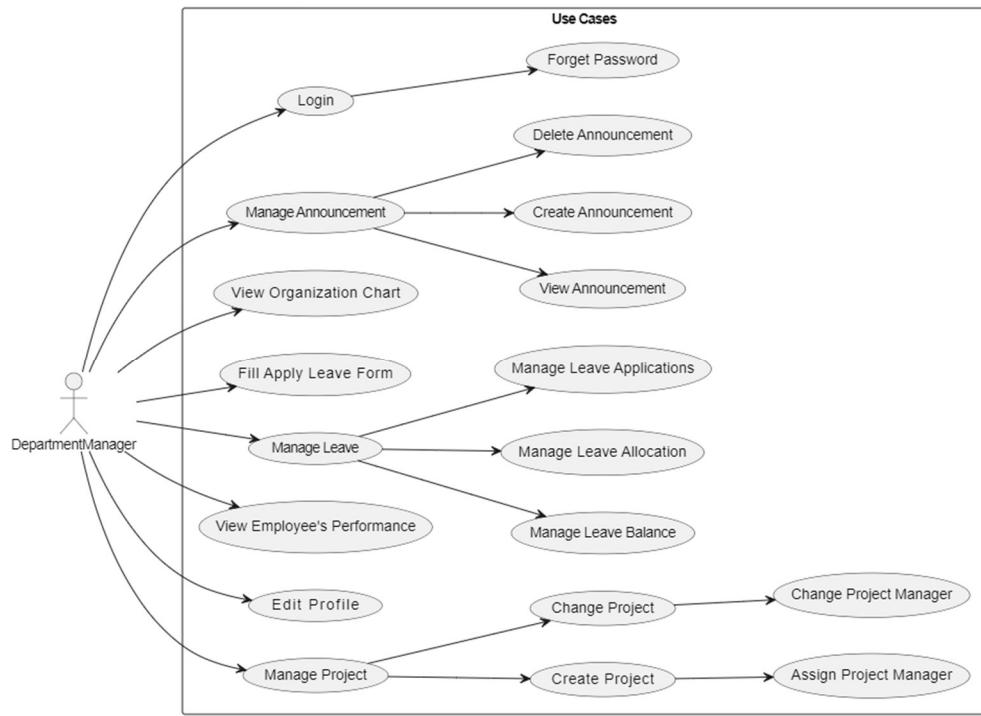
- SystemAdmin UC :



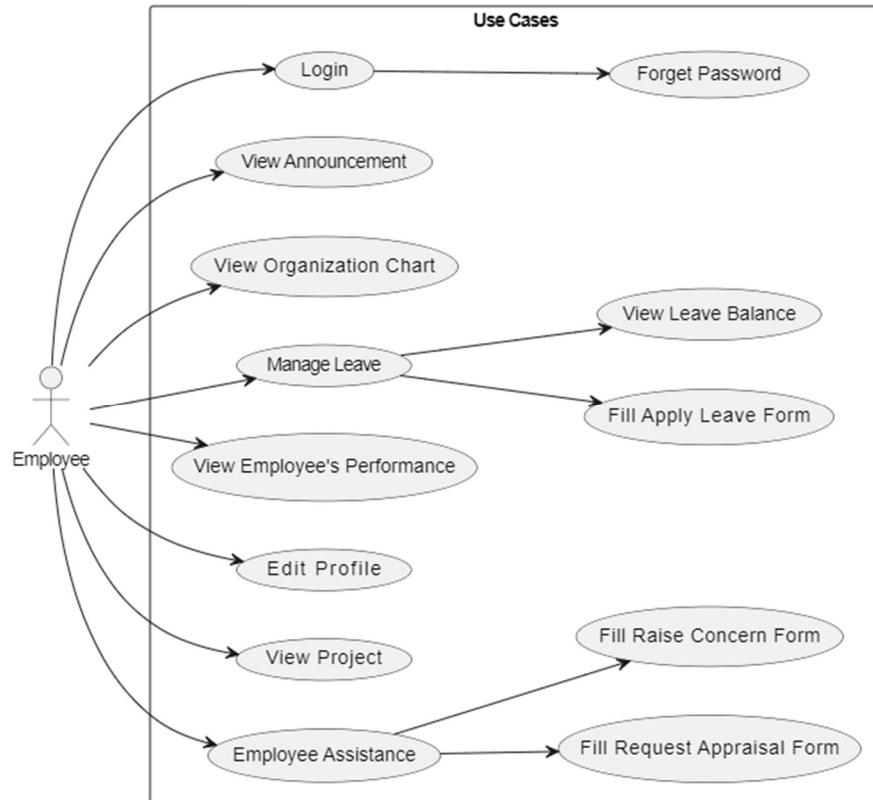
- **HRManager :**



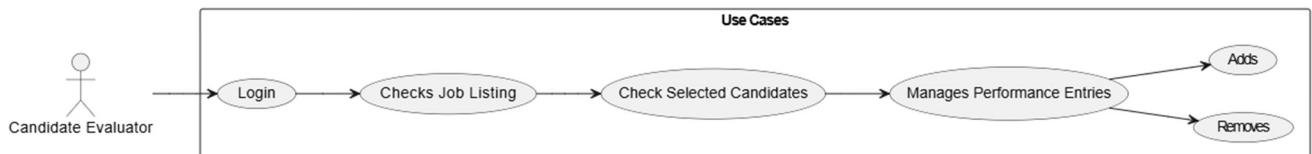
- **Department Manager :**



- **Employee UC :**

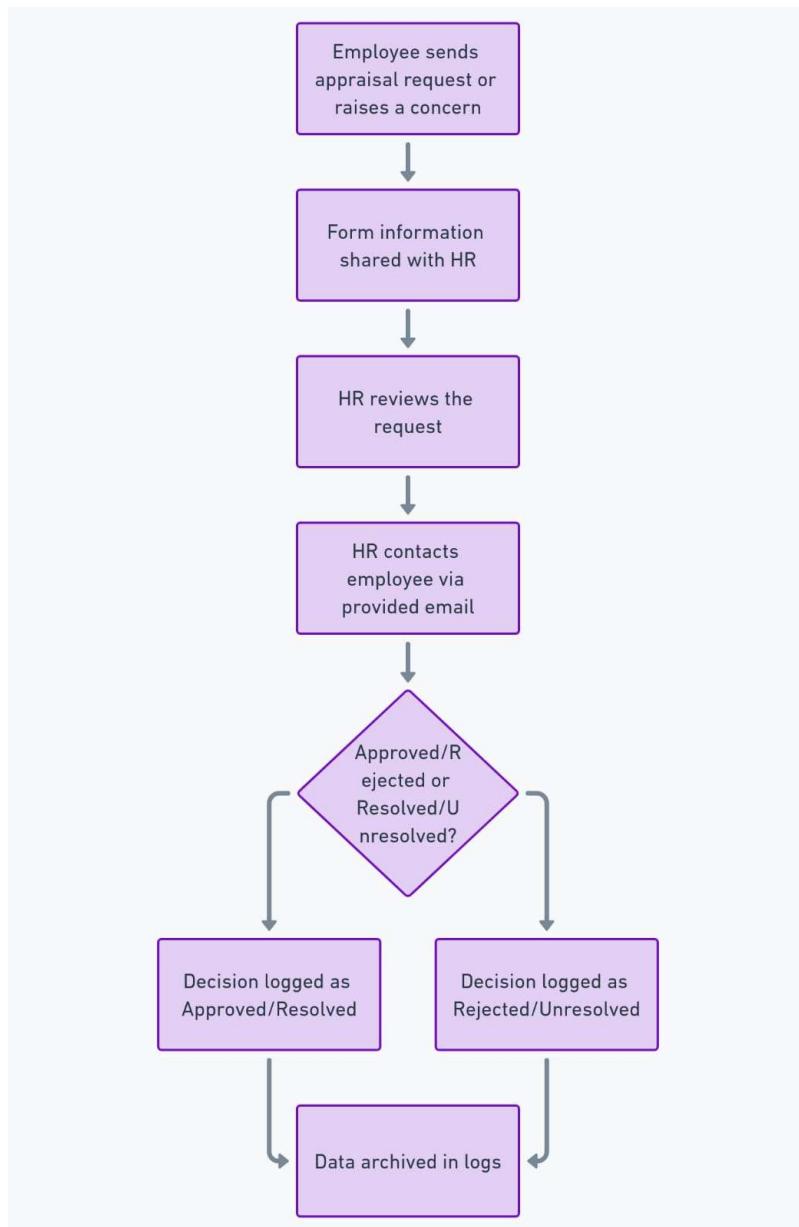


- **Evaluator UC :**

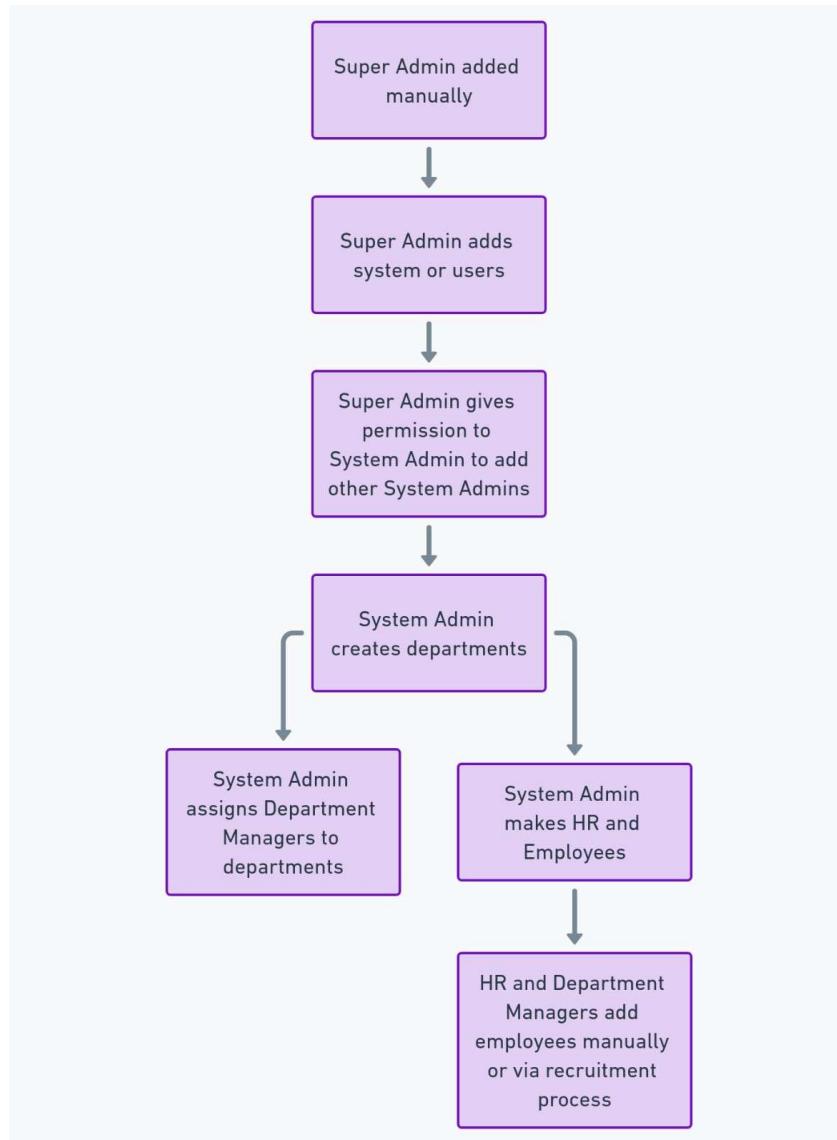


❖ **Flow Chart Diagram :**

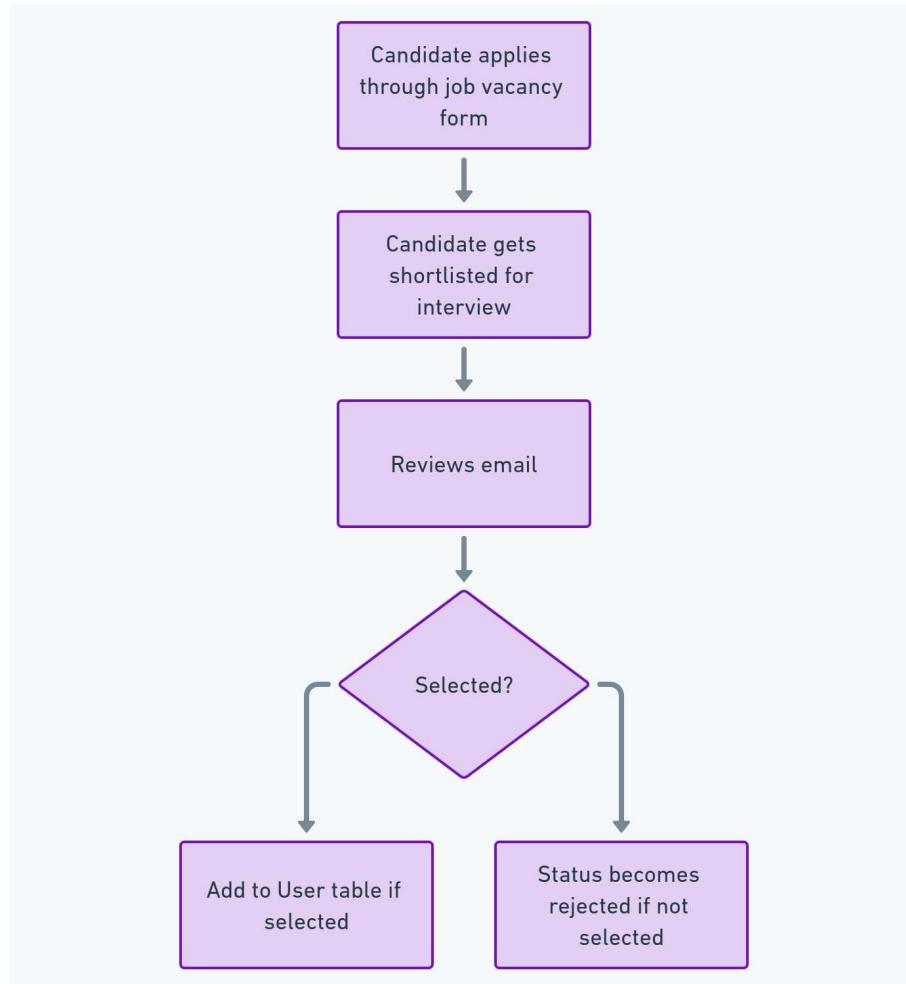
- **Employee Assistance Diagram :**



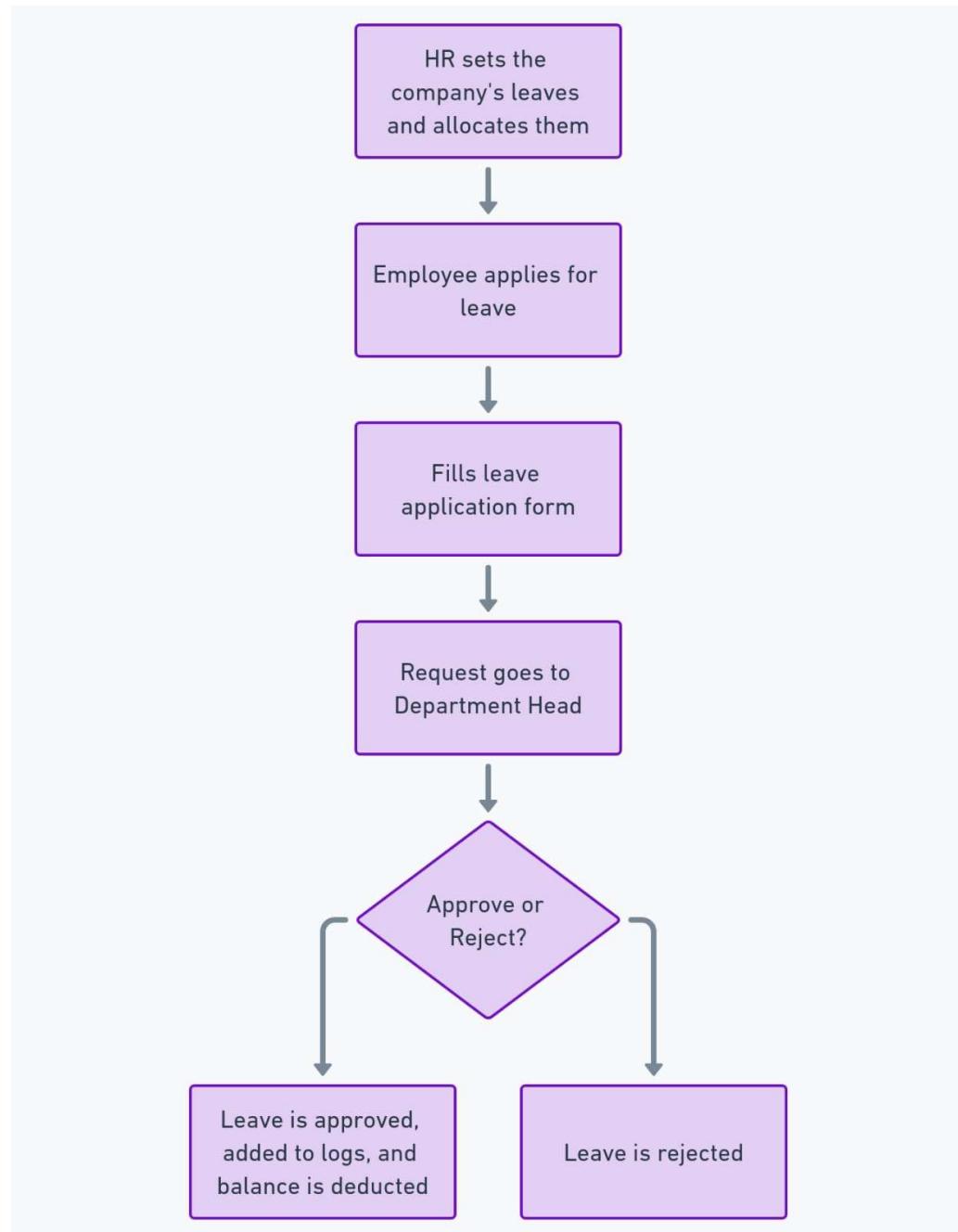
- **System Setup :**



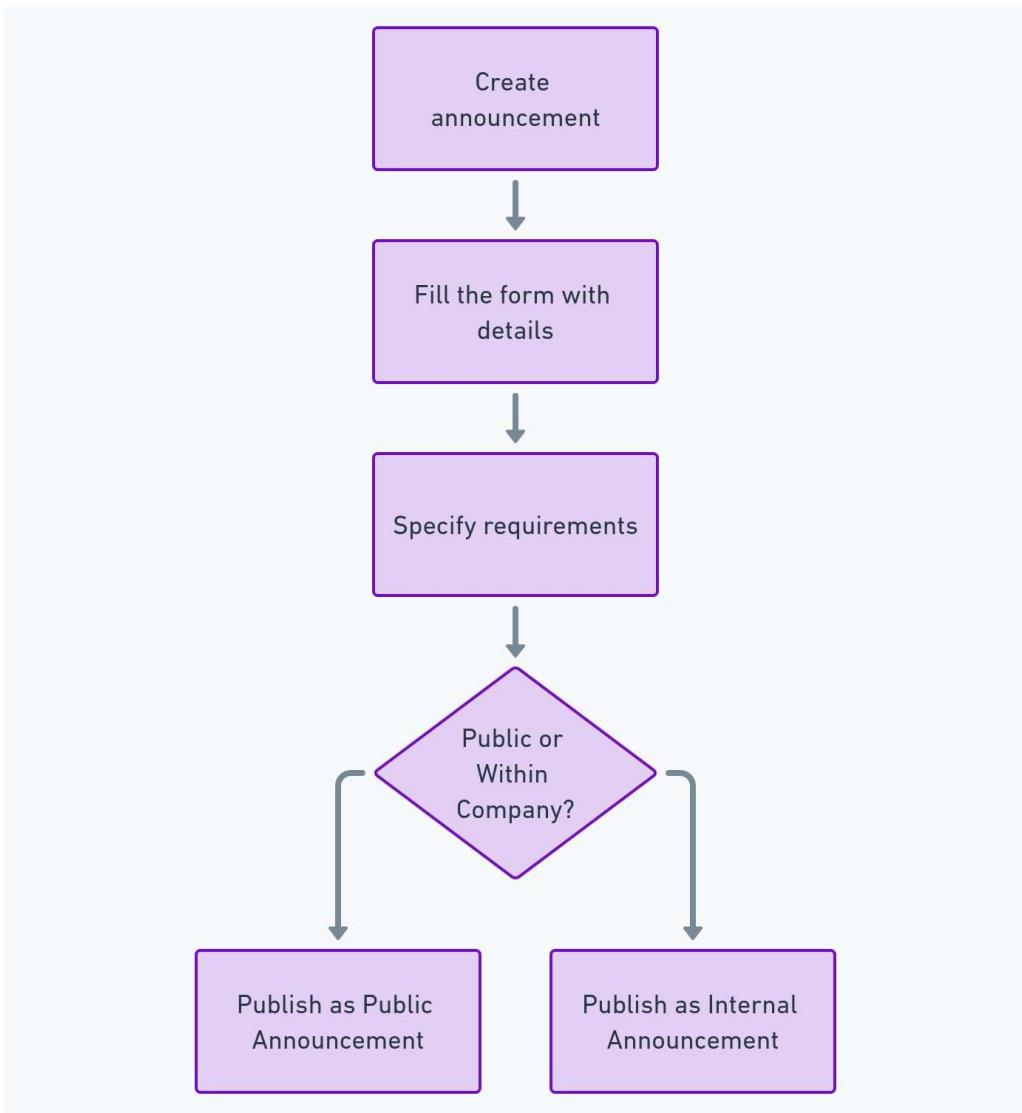
- Candidate Recruitment :



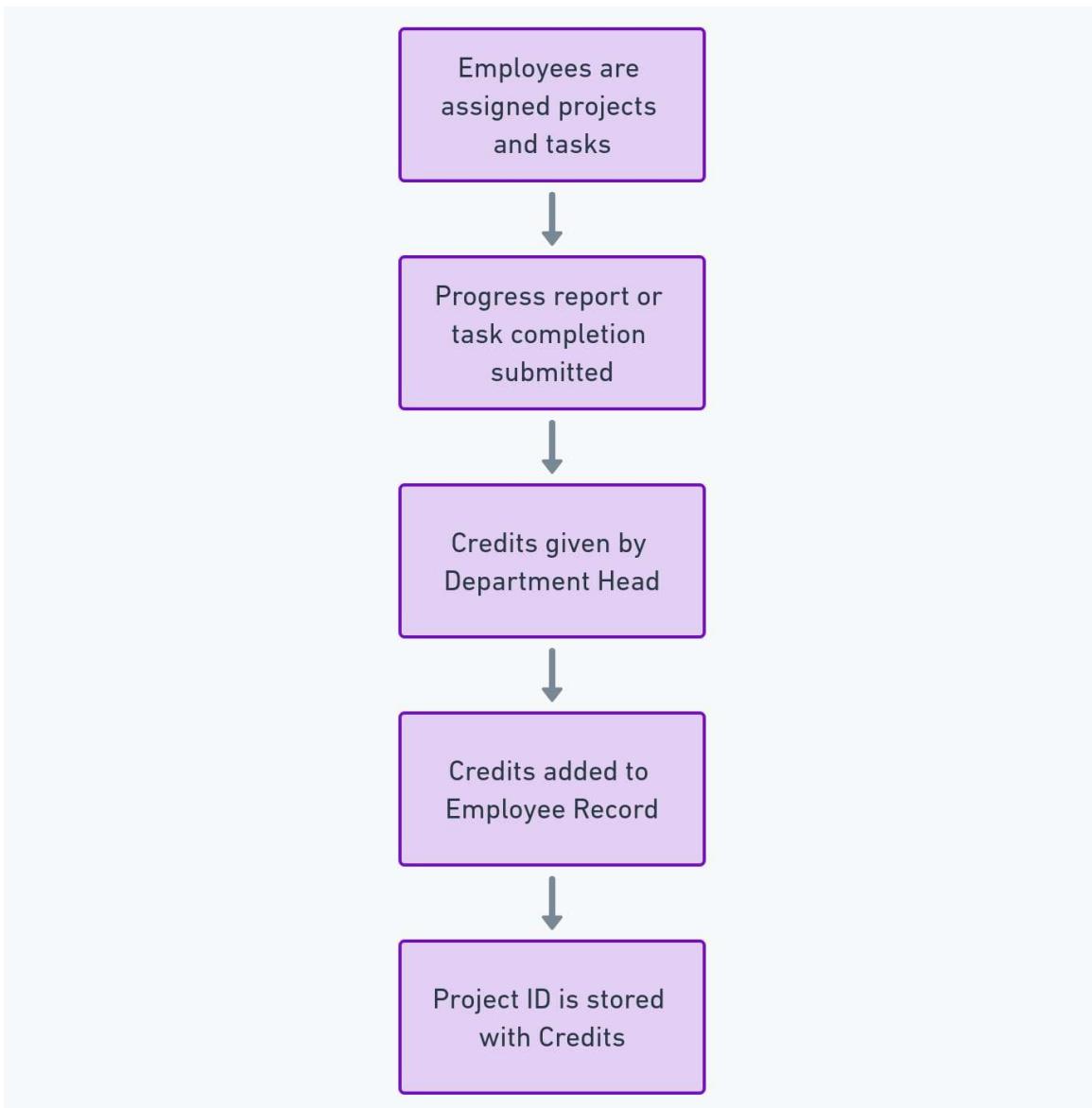
- **Leave Management :**



- **Announcement Management :**

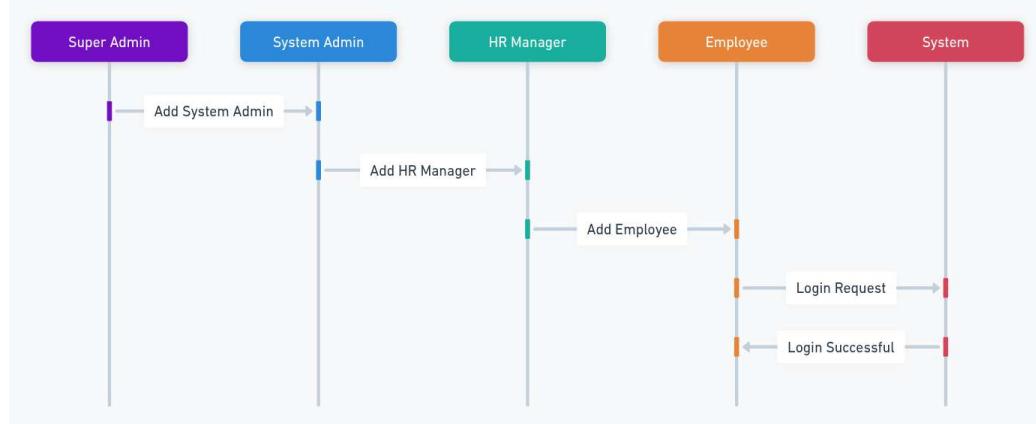


- **Performance Tracking :**



5.2.3 Sequence Diagram :

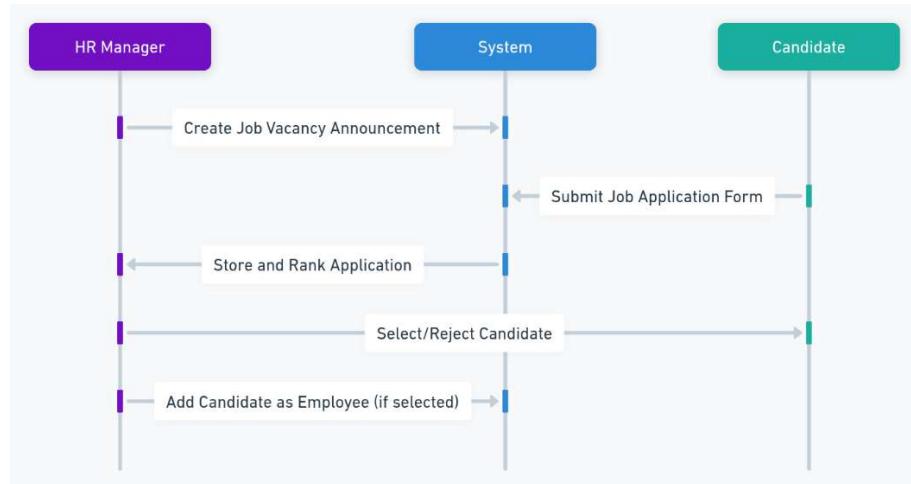
- User Management :



- Leave Request Process :



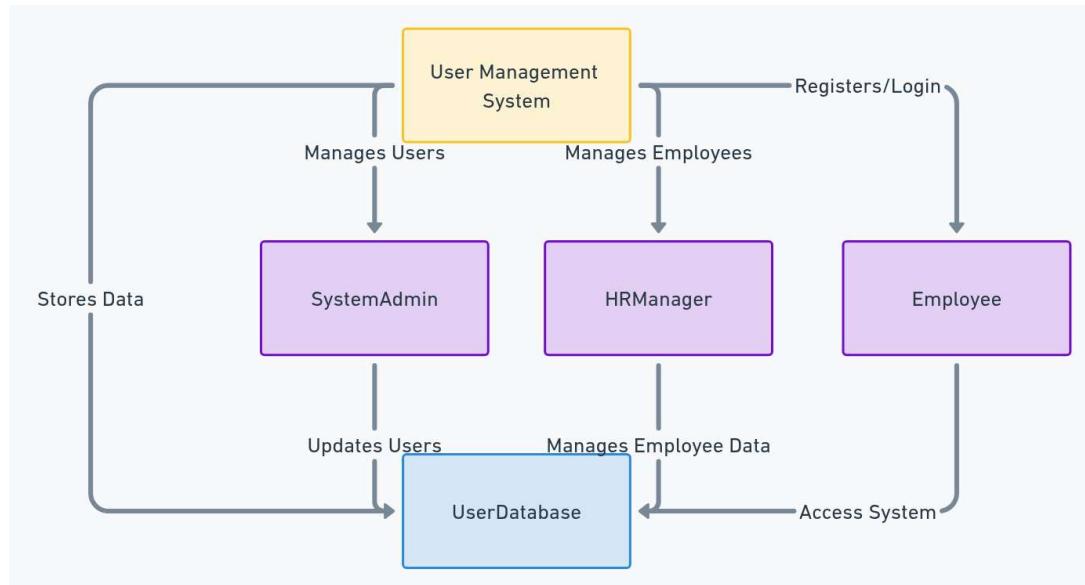
- Candidate Recruitment :



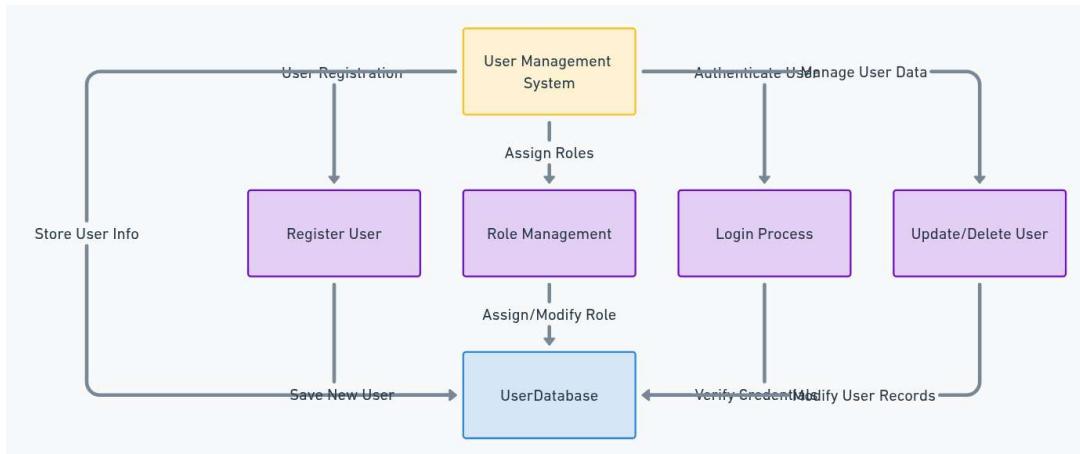
5.3 DFD :

- User Management Data Flow Diagram :

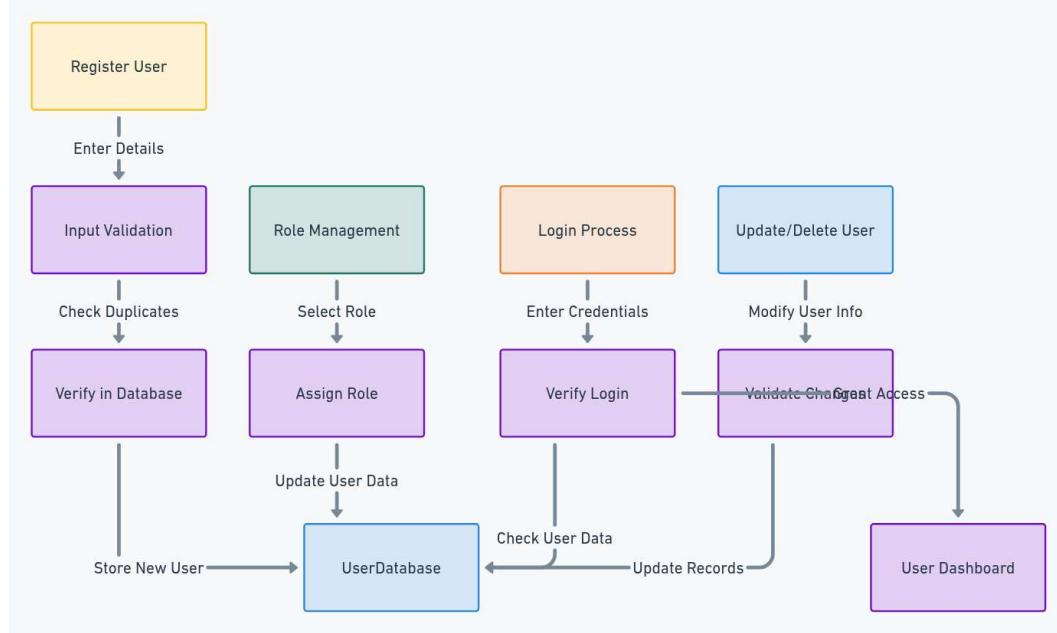
- Level 0:



- Level 1:

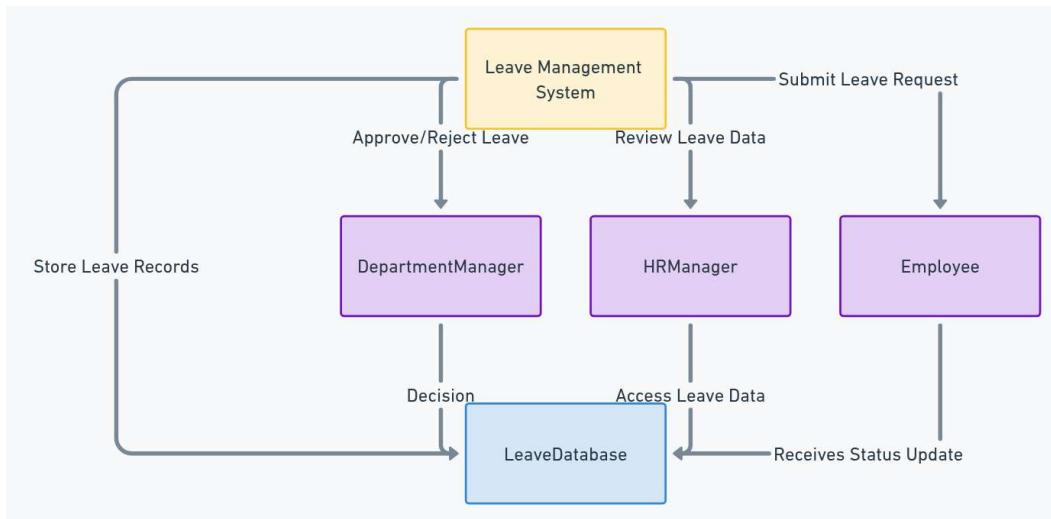


- **Level 2:**

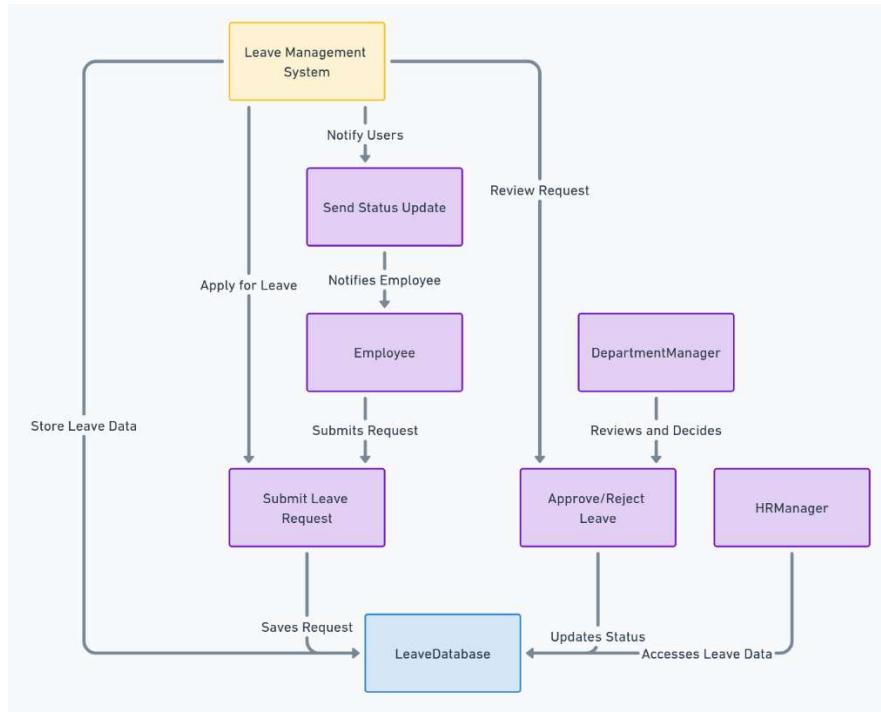


- **Leave Management :**

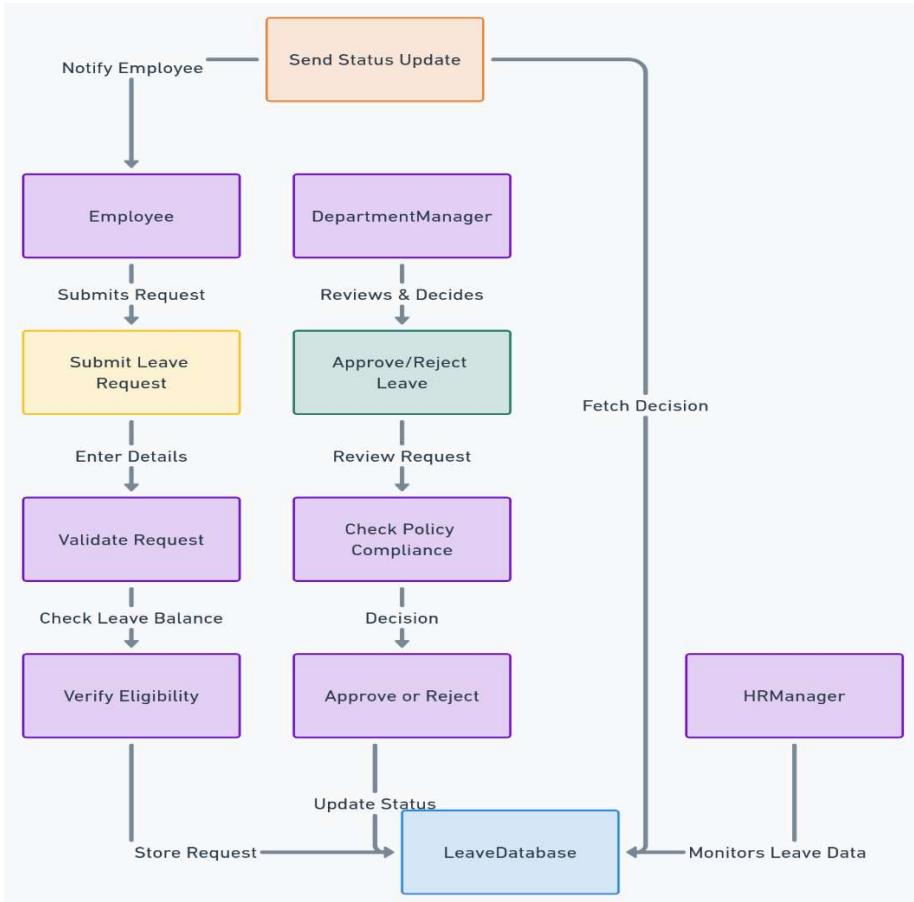
- **Level 0:**



- Level 1:

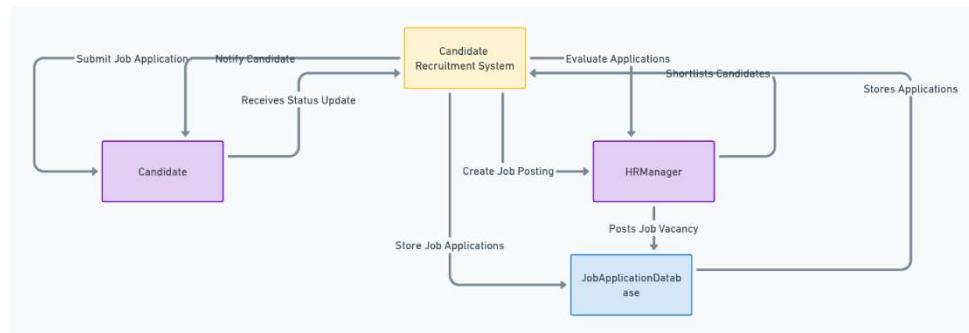


- Level 2:

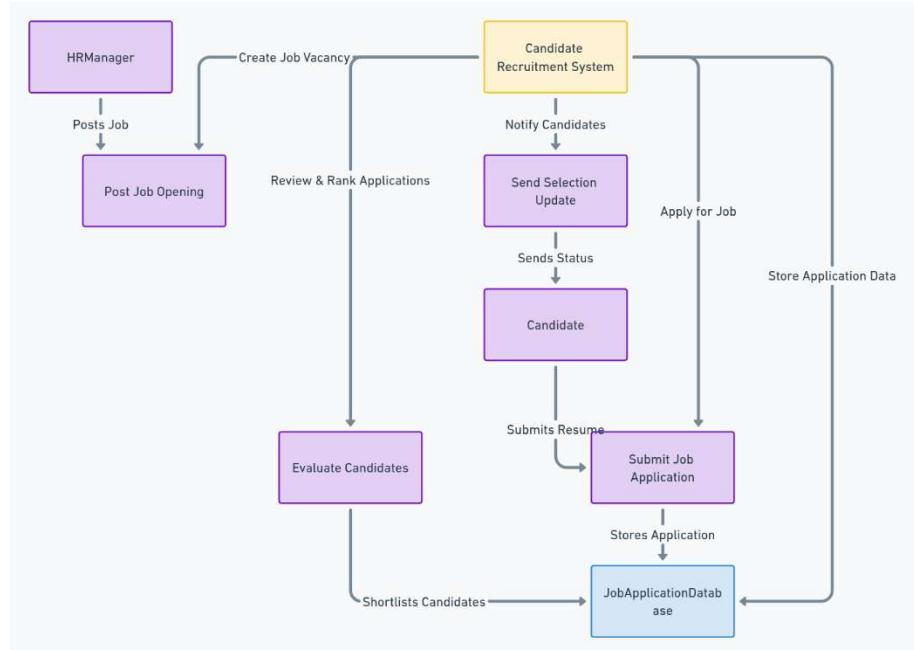


- Candidate Recruitment DFD :

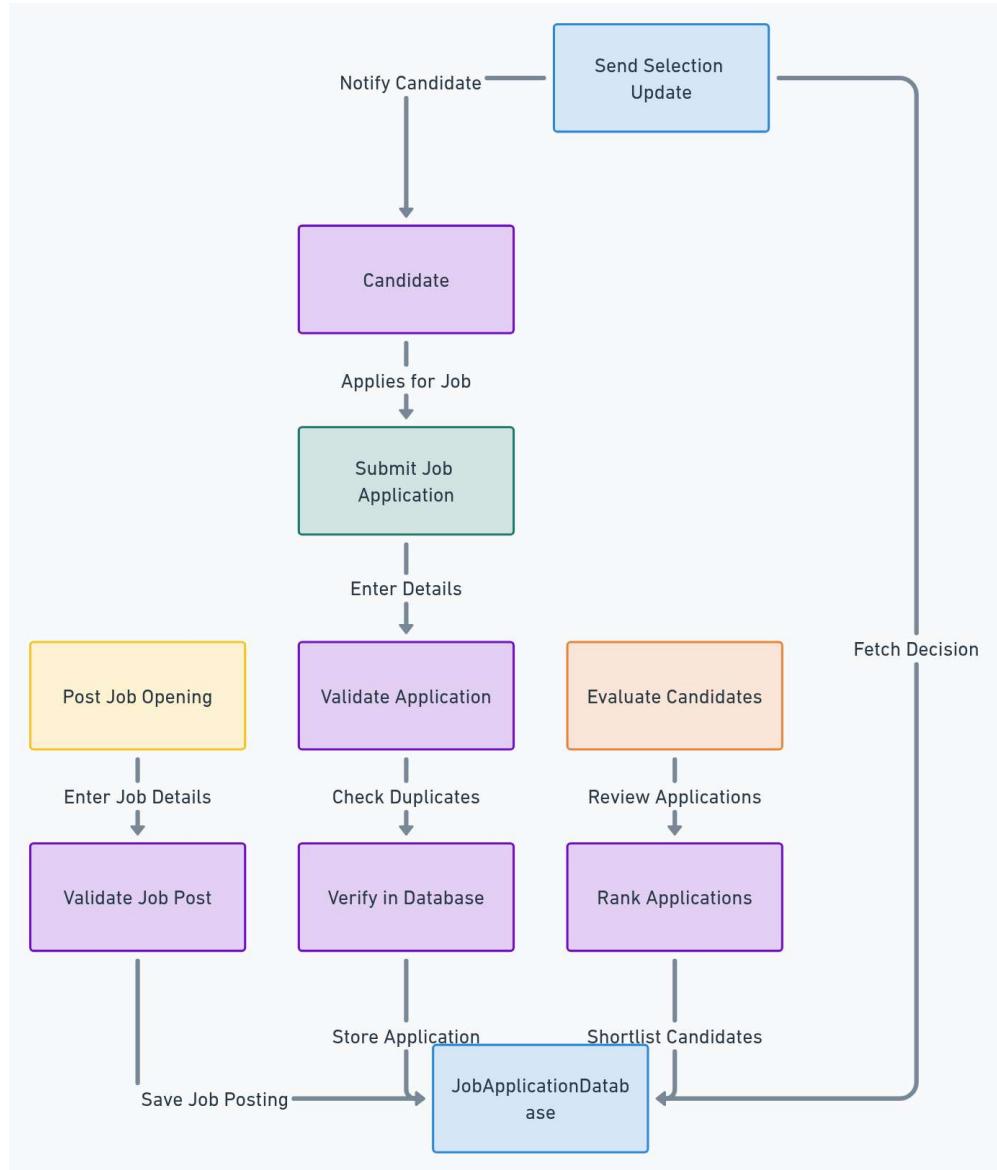
- Level 0 :



- Level 1:

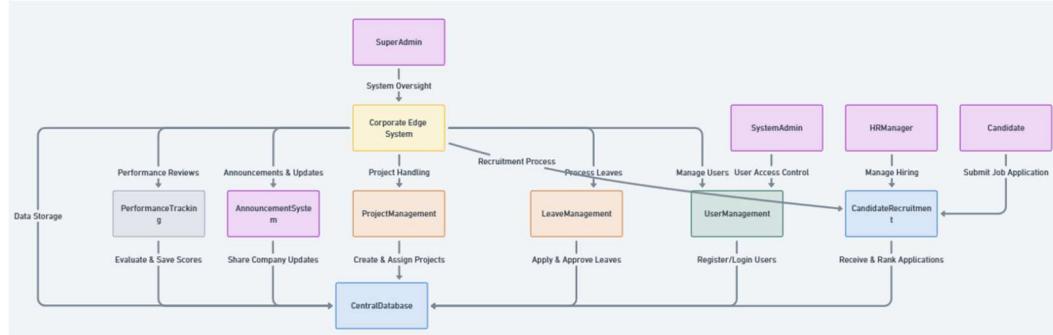


- **Level 2:**

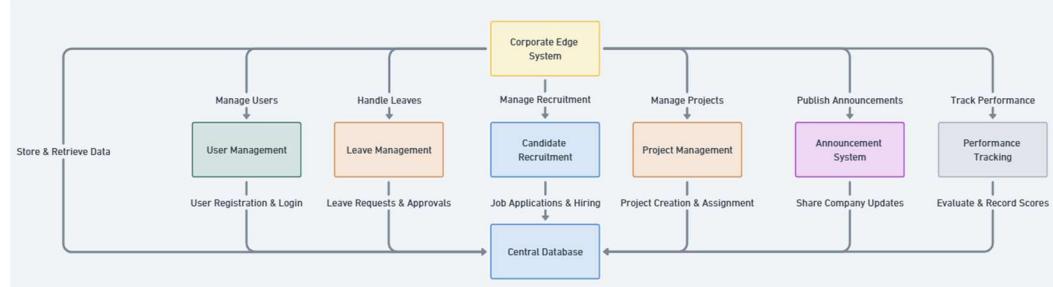


- CES DFD :

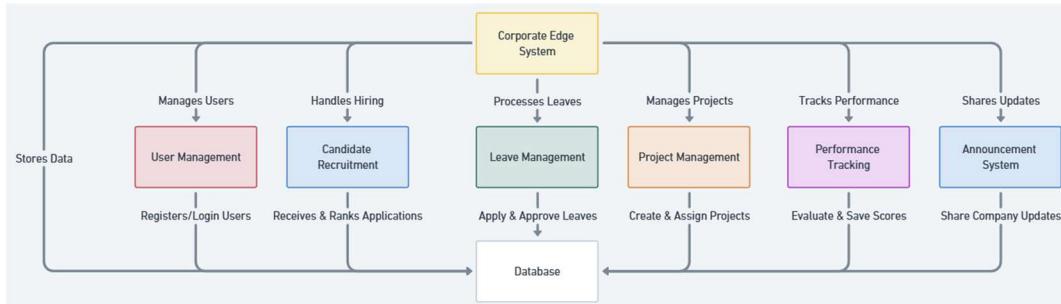
- Level 0:



- Level 1:



- Level 2:



6. SOFTWARE DESIGN

6.1 Database Design :

- Announcement Schema :

Sr No.	Field Name	Type
1	announcementId	String
2	announcementTitle	String
3	announcementDescription	String
4	announcementTag	String
5	announcementPublic	Boolean
6	announcementSend.sendDiscord	Boolean
7	announcementSend.sendEmail	Boolean
8	announcementScheduleTime	Date
9	createdBy	String
10	createdAt	Date
11	jobPosition	String
12	jobType	String
13	jobDescription	String
14	salaryRange.currency	String
15	salaryRange.min	Number
16	salaryRange.max	Number
17	requiredExperience	String
18	skillsRequired	[String]
19	educationQualification	String
20	totalVacancy	Number
21	applicationDeadline	Date
22	assignedEvaluators	[String]
23	concluded	Boolean

- **AuthUser Schema :**

Sr No.	Field Name	Type
1	Email	String
2	otp	String
3	otpExpiration	Date

- **Candidate Schema :**

Sr No.	Field Name	Type
1	candidateId	String
2	firstName	String
3	fatherName	String
4	surName	String
5	email	String
6	phone	String
7	dob	String
8	age	Number
9	nativePlace	String
10	nationality	String
11	gender	String
12	maritalStatus	String
13	languagesKnown	String
14	candidateDocuments	String
15	candidatePicture	String
16	presentAddress	String
17	permanentAddress	String
18	educationQualification	Array
19	announcementId	String
20	position	String
21	departmentId	String
22	skills	String
23	specialization	String
24	salary	String
25	lastWorkPlace	String
26	yearsOfExperience	String
27	addressOfWorkPlace	String
28	responsibilities	String

29	referenceContact	String
30	totalYearsOfExperience	String
31	confirmInformation	Boolean
32	candidateEvaluation	Number
33	detailedEvaluation	Object
34	candidatePerformance	Number
35	selected	Boolean
36	result	Boolean
37	recruited	Boolean

- CandidatePerformance Schema :

Sr No.	Field Name	Type
1	candidatePerformanceI	String
2	candidateId	String
3	createdBy	String
4	createdAt	Date
5	recordName	String
6	criteria	Array
7	remarks	String
8	candidateAssessment	String
9	averageScore	Number

- Department Schema :

Sr No.	Field Name	Type
1	departmentid	String
2	departmentName	String
3	departmentDescription	String

- **UserDetails Schema :**

Sr No.	Field Name	Type
1	userdetailsId	String
2	userId	String
3	dob	Date
4	age	Number
5	nativePlace	String
6	nationality	String
7	gender	String
8	maritalStatus	String
9	languagesKnown	[String]
10	identityProof	String
11	picture	String
12	presentAddress	String
13	permanentAddress	String
14	educationQualification	[Object]
15	specialization	String
16	lastWorkPlace	String
17	yearsOfExperience	Number
18	addressOfWorkPlace	String
19	responsibilities	String
20	referenceContact	String
21	totalYearsOfExperience	Number
22	createdBy	String

- **User Schema (tableUser) :**

Sr No.	Field Name	Type
1	userId	String
2	fullName	String
3	userEmail	String
4	userMobileNumber	String
5	userStatus	Boolean
6	userPassword	String
7	userRoleid	String
8	userDepartment	String

9	userDesignation	String
10	userPermissions	Object
11	activateAccount	Boolean
12	accountActivationTime	Date
13	createdAt	Date

- **User Log Schema (tableUserLogs) :**

Sr No.	Field Name	Type
1	logId	String
2	userId	String
3	event	String
4	timestamp	Date

- **Leave Allocation Schema (leaveallocations) :**

Sr No.	Field Name	Type
1	leaveId	String
2	leaveName	String
3	leaveNumber	Number
4	leaveDescription	String
5	leaveValidFrom	Date
6	leaveValidTo	Date
7	leaveYearlyRefresh	Boolean
8	isPaidLeave	Boolean

- **Leave Schema (tableLeave) :**

Sr No.	Field Name	Type
1	leaveId	String
2	employeeId	String
3	employeeName	String
4	employeeEmail	String
5	employeeDepartment	String
6	employeeDesignation	String
7	type	String
8	leaveName	String
9	startDate	Date
10	endDate	Date

11	reason	String
12	status	String
13	halfDay	Boolean
14	halfDayTime	String
15	fullDay	Boolean
16	createdAt	Date
17	remarks	String

- **Policy Schema (Policy Collection) :**

Sr No.	Field Name	Type
1	policyId	String
2	policyTitle	String
3	policyDescription	String
4	policyTag	[String]
5	policyScheduleTime	Date
6	createdAt	Date
7	updatedAt	Date

- **Concern Schema (Concern Collection) :**

Sr No.	Field Name	Type
1	concernId	String
2	userId	String
3	userName	String
4	userDepartment	String
5	userDesignation	String
6	subject	String
7	message	String
8	supportingDocuments	[String]
9	managerStatement	String
10	status	String
11	createdAt	Date
12	updatedAt	Date

- Employee Appraisal Schema (EmployeeAppraisal Collection) :

Sr No.	Field Name	Type
1	appraisalId	String
2	appraisalDate	Date
3	achievements	[String]
4	files	[String]
5	goalsAchieved	String
6	nextGoals	String
7	trainingNeeds	[String]
8	challengesFaced	String
9	feedbackSuggestions	String
10	employeeAcknowledgment	Boolean
11	name	String
12	employeeId	String
13	department	String
14	designation	String
15	dateOfJoining	Date
16	signature	String
17	supportingDocuments	[String]
18	finalAssessment	String
19	performanceRatings	Object
20	performanceRatings.JobKnowledge	String
21	performanceRatings.WorkQuality	String
22	performanceRatings.Productivity	String
23	performanceRatings.Teamwork	String
24	performanceRatings.Communication	String
25	performanceRatings.Punctuality	String
26	status	String
27	rejectionReason	String
28	reviewDate	String
29	reviewTime	String
30	reviewLink	String
31	reportUrl	String
32	createdBy	String
33	createdAt	Date
34	updatedAt	Date

- Leave Usage Schema (leaveusages Collection) :

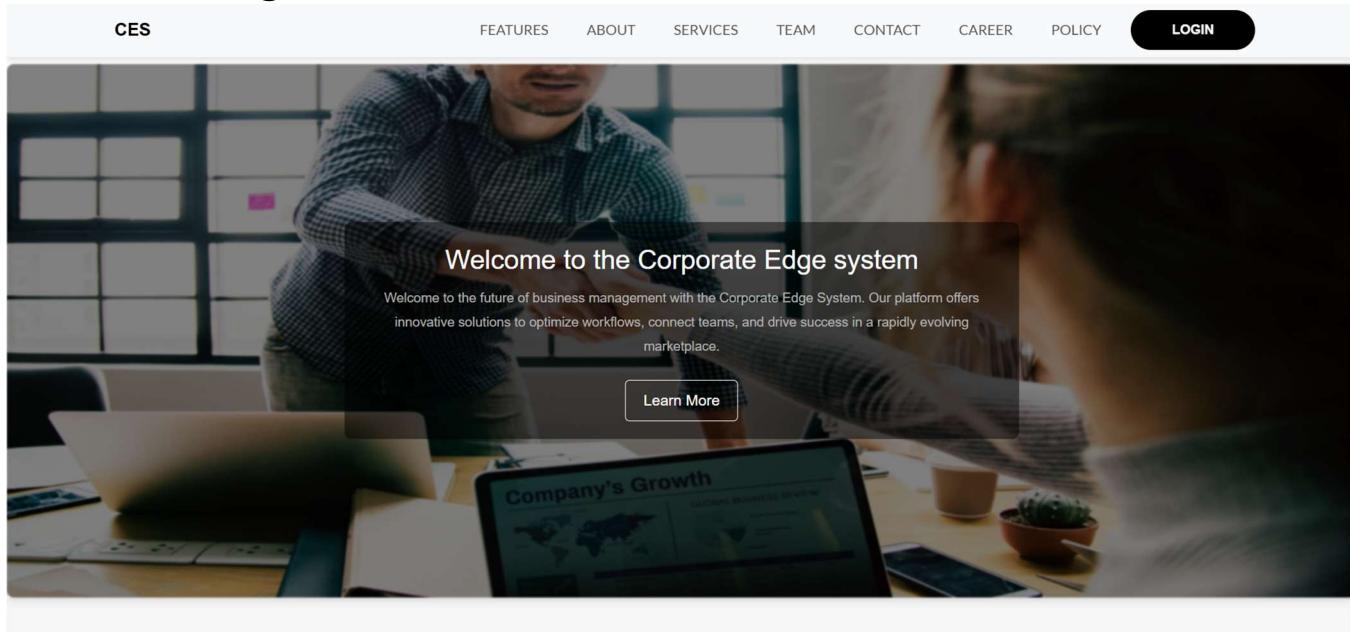
Sr No.	Field Name	Type
1	employeeId	String
2	type	String
3	used	Number

- UserSchedule schema :

Sr No.	Field Name	Type
1	title	String
2	description	String
3	date	Date
4	createdBy	String
5	createdAt	Date

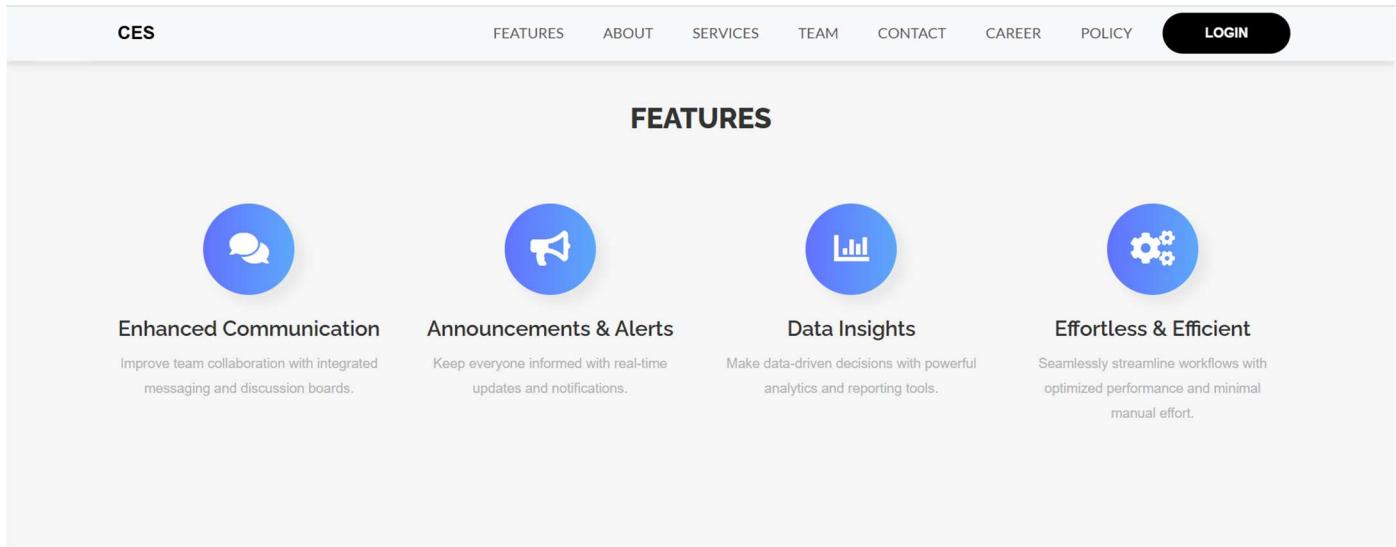
6.2 Interface Design :

- Guest panel :
Home Page :



The screenshot shows the homepage of the Corporate Edge system. At the top, there is a navigation bar with links for FEATURES, ABOUT, SERVICES, TEAM, CONTACT, CAREER, and POLICY, along with a LOGIN button. Below the navigation bar is a large banner featuring a man in a checkered shirt working at a desk. The banner has a dark overlay with the text "Welcome to the Corporate Edge system" and a brief description of the platform's purpose: "Welcome to the future of business management with the Corporate Edge System. Our platform offers innovative solutions to optimize workflows, connect teams, and drive success in a rapidly evolving marketplace." A "Learn More" button is located at the bottom of the banner.

Features :



The screenshot shows the "FEATURES" page of the Corporate Edge system. The page has a similar navigation bar at the top. The main heading "FEATURES" is centered above four feature cards, each with an icon and a title. The features are: Enhanced Communication (blue speech bubble icon), Announcements & Alerts (blue megaphone icon), Data Insights (blue bar chart icon), and Effortless & Efficient (blue gear icon). Each card also includes a brief description below the title.

Feature	Description
Enhanced Communication	Improve team collaboration with integrated messaging and discussion boards.
Announcements & Alerts	Keep everyone informed with real-time updates and notifications.
Data Insights	Make data-driven decisions with powerful analytics and reporting tools.
Effortless & Efficient	Seamlessly streamline workflows with optimized performance and minimal manual effort.

About Us :

CES

FEATURES ABOUT SERVICES TEAM CONTACT CAREER POLICY

LOGIN



ABOUT US

The Corporate Edge System is designed to streamline operations, enhance collaboration, and drive efficiency across all business functions. Our platform ensures seamless integration and a user-friendly experience, helping organizations achieve their goals effortlessly.

Why Choose Us?

- ✓ Seamless business operations
- ✓ Enhanced team collaboration
- ✓ Data-driven decision making
- ✓ Scalable and flexible platform
- ✓ User-friendly and intuitive interface
- ✓ Secure and reliable system
- ✓ Real-time analytics and insights
- ✓ Customizable to fit business needs

Our Services :

CES

FEATURES ABOUT SERVICES TEAM CONTACT CAREER POLICY

LOGIN

OUR SERVICES

With our service, you can improve the workflow in your organization and make daily processes easier.



Business Management

Optimize your operations with a system that integrates all essential business functions seamlessly.



Team Collaboration

Enhance productivity with tools designed for effective communication and teamwork.



Performance Analysis

Gain valuable insights with real-time data analytics and reporting capabilities.



Automation

Automate repetitive tasks to increase efficiency and reduce manual workload.



Security & Compliance

Ensure data security and regulatory compliance with robust system safeguards.



Fast & Reliable

Experience a high-performance system with minimal downtime and quick responses.

Team :

Navigation bar:

- CES
- FEATURES
- ABOUT
- SERVICES
- TEAM
- CONTACT
- CAREER
- POLICY
- LOGIN**

MEET THE TEAM

We are the team who developed the system.



Harsh Aalwani



Vishal Agrawal



Vatsal Bharodiya



Heer Mistry

Contact :

Navigation bar:

- CES
- FEATURES
- ABOUT
- SERVICES
- TEAM
- CONTACT
- CAREER
- POLICY
- LOGIN**

GET IN TOUCH

Please fill out the form below, and we will get back to you as soon as possible.

Name

Email

Message

Contact Info

📍 Address: Preferred not to be disclosed

📞 Phone: Preferred not to be disclosed

✉️ Email: projectces123@gmail.com

© 2025 Corporate Edge System.

Announcements :

The screenshot shows the CES homepage with a navigation bar at the top. Below the navigation bar are four announcement boxes:

- ACCOUNTANT ANNOUNCEMENT**: Includes a "test" button, a "Job Vacancy" button, and a "Learn More →" button.
- FINANCE MANAGER VACANCY**: Includes a "test" button, a "Job Vacancy" button, and a "Learn More →" button.
- CHARTED ACCOUNTANT VACANCY**: Includes a "CA" button and a "Learn More →" button.
- DEMO**: Includes a "demo" button and a "Learn More →" button.

At the bottom of the page is a dark footer bar with the text "© 2025 Corporate Edge System."

The screenshot shows the "ACCOUNTANT ANNOUNCEMENT" details page. The page has a dark blue header with the title "ACCOUNTANT ANNOUNCEMENT". Below the header is a "Description" section containing placeholder text about joining the company. There is also a "How to Apply" section with instructions for candidates. To the right of the text are several data fields with icons and descriptions:

- Date:** 3/3/2025
- Company Name:** Corporate Edge System
- Job Type:** Full-Time
- Experience Required:** 2 Years
- Job Position:** Accountant
- Salary:** INR 300000 - 3100000
- Location:** Preferred not to be disclosed
- Application Deadline:** 2025-03-05T06:00:00Z
- Education Qualification:** Graduate Computer Science
- Total Vacancies:** 2

At the bottom of the page are two buttons: "Apply Now" and "Go Back".

Policy :

The screenshot shows the CES homepage with a navigation bar at the top. Below the navigation is a large image featuring office supplies like papers, a lock, and a shield, with the text "ACCEPTABLE USE POLICY FOR COMPANY DEVICES". Below this image are two buttons: "acceptable use" and "Learn More →". A dark footer bar at the bottom contains the copyright notice "© 2025 Corporate Edge System."

CES FEATURES ABOUT SERVICES TEAM CONTACT CAREER POLICY **LOGIN**

ACCEPTABLE USE POLICY
FOR COMPANY DEVICES

acceptable use Learn More →

© 2025 Corporate Edge System.

This screenshot shows a detailed view of the acceptable use policy. It features a header with the title "Acceptable Use Policy for Company Devices" and a "GO BACK" button. The main content area contains a paragraph describing the policy's purpose and scope, followed by a "GO BACK" button and a dark footer bar with the copyright notice "© 2025 Corporate Edge System."

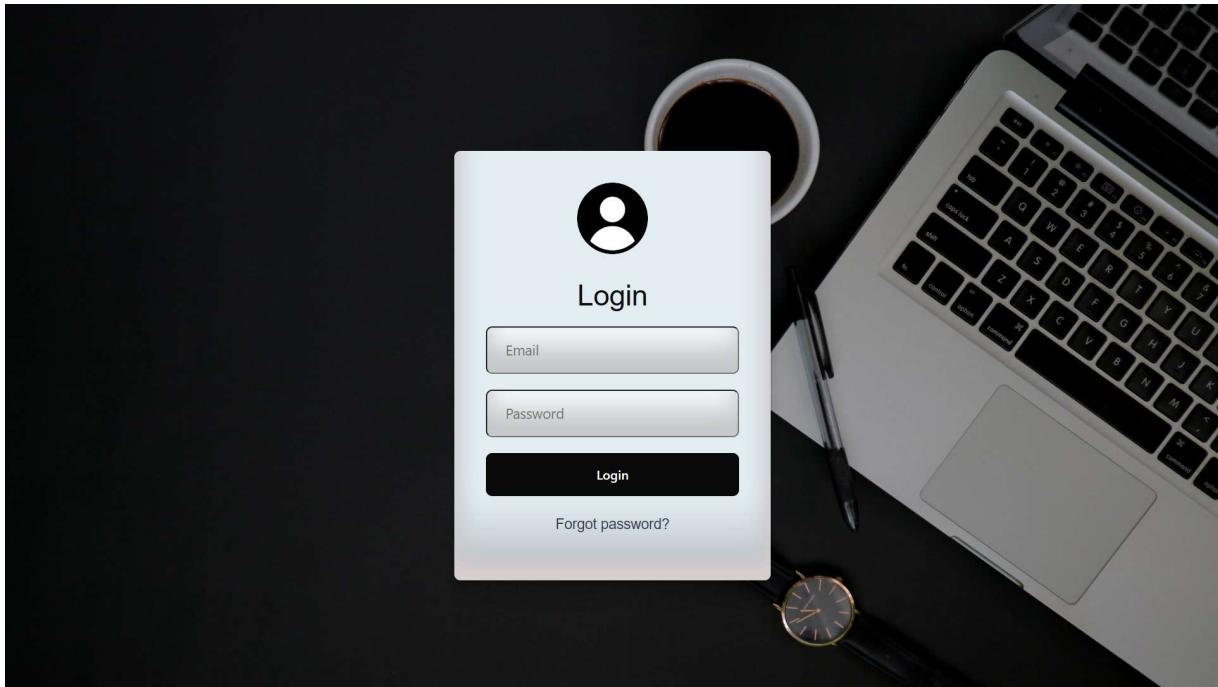
Acceptable Use Policy for Company Devices

acceptable use

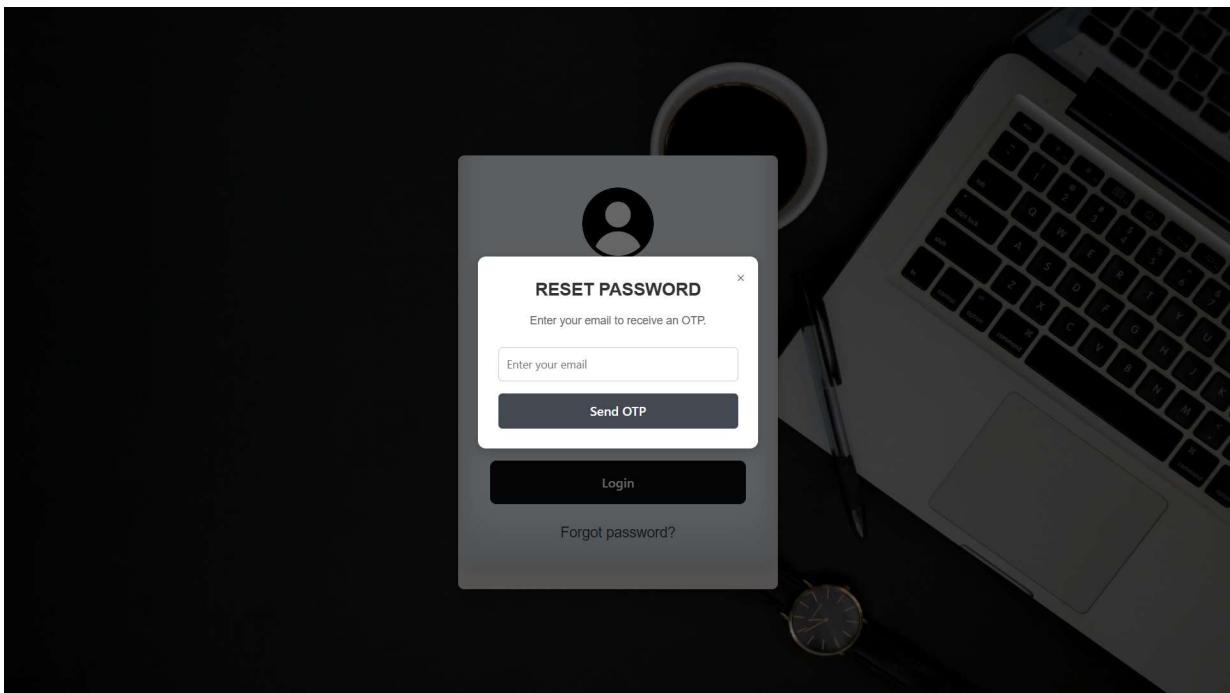
GO BACK

© 2025 Corporate Edge System.

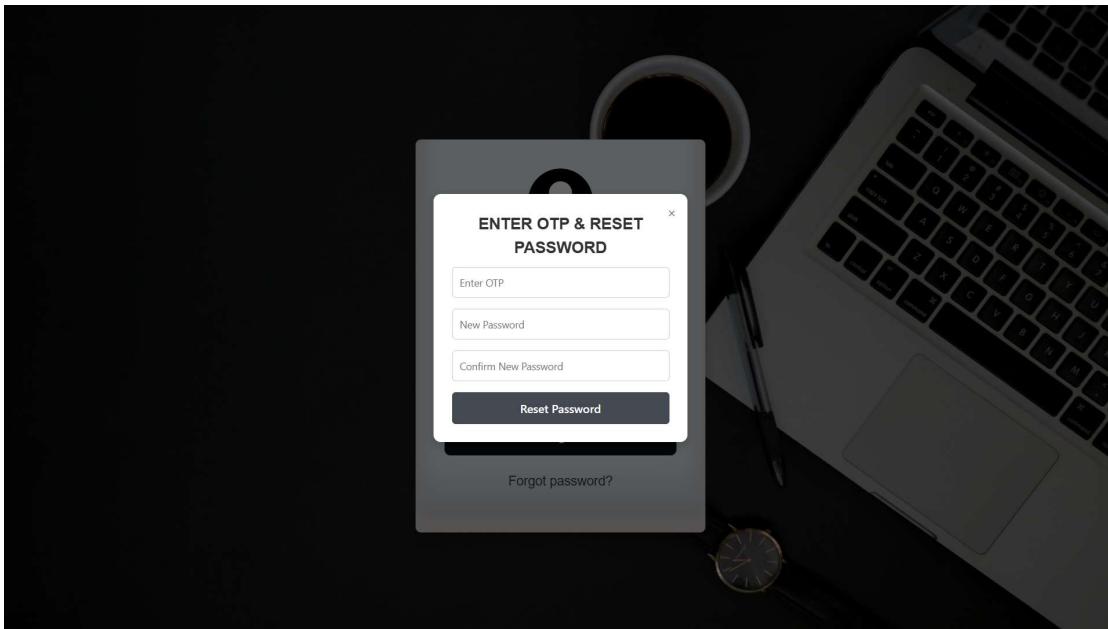
Login :



Reset Password :



OTP & Reset Password :



❖ Admin Side :

System Admin :

The screenshot shows the CES application's user interface. On the left, a dark sidebar menu lists various system components: Dashboard, Manage Users (selected), Departments, Leave Management, Organization Chart, Announcement, My Profile, and Logs. The main content area is titled "CORPORATE EDGE SYSTEM" and "Manage System Admins". It includes a search bar and buttons for "Edit", "Add", and "Remove". A table displays the following data:

STATUS	ID	NAME	EMAIL	MOBILE NUMBER	CAN MANAGE ADMINS
●	SY1	Heer Ashokbhai Mistry	22bca20@vtcbcsr.edu.in	7869543567	No

HR Manager :

The screenshot shows the Corporate Edge System interface for managing HR Managers. The left sidebar has a dark theme with the logo 'CES' and a navigation menu under 'COMPONENTS' including Dashboard, Manage Users (selected), Departments, Leave Management, Organization Chart, Announcement, My Profile, and Logs. The main content area is titled 'CORPORATE EDGE SYSTEM' and 'Manage HR-Manager'. It displays a table with one row:

STATUS	ID	NAME	EMAIL	MOBILE NUMBER
●	HR1	Vatsal A Bharodiya	vatsalbharodiya1@gmail.com	7944558493

Buttons for Edit, Add, and Remove are located at the top right of the table.

Department Manager :

The screenshot shows the Corporate Edge System interface for managing Department Managers. The left sidebar has a dark theme with the logo 'CES' and a navigation menu under 'COMPONENTS' including Dashboard, Manage Users (selected), Departments, Leave Management, Organization Chart, Announcement, My Profile, and Logs. The main content area is titled 'CORPORATE EDGE SYSTEM' and 'Manage Department Managers'. It displays a table with one row:

STATUS	ID	NAME	EMAIL	MOBILE NUMBER
●	DM1	harsh A Aalwani	22bca01@vtcbcsr.edu.in	7876954356

Buttons for Edit, Add, and Remove are located at the top right of the table.

Employee :

The screenshot shows the 'Manage Employees' section of the Corporate Edge System. The left sidebar has a dark theme with white text and icons. The main area is titled 'CORPORATE EDGE SYSTEM' and 'Manage Employees'. It says 'Add, Change, and Delete Employees' and includes a search bar. A table lists one employee: EM1, Vishal Ashokbhai Agrawal, with email agrawalvisha3010@gmail.com and mobile number 9537068362. There are 'Edit', 'Add', and 'Remove' buttons at the top right.

Departments :

The screenshot shows the 'Manage Departments' section of the Corporate Edge System. The left sidebar has a dark theme with white text and icons. The main area is titled 'CORPORATE EDGE SYSTEM' and 'Manage Departments'. It says 'Add, Change, and Delete Departments' and includes a search bar. A table lists two departments: D1 FINANCE & ACCOUNTING (description: Budgeting, Auditing, Financial Planning, Taxes) and D5 MARKETING & SALES (description: Digital Marketing, Lead Generation, Customer Relationship Management (CRM)). There are 'Edit', 'Add', and 'Remove' buttons at the top right.

Add and Edit Form :

Add New-User Form

Personal Information:

First Name:

Father Name:

Surname:

Gender: Select Gender

Email:

Phone:

Date of Birth: dd-mm-yyyy

Age:

Native Place:

Nationality:

Marital Status: Select Status

Languages Known:

Present Address:

Permanent Address:

Picture: Choose File No file chosen

Identity Proof: (Any Government Document) Choose File No file chosen

Education Qualifications:

+ Add Education

In-organization Information:

User Role: Select Role

Specialization:

User Designation:

Other Information: [Optional]

Last Workplace:

Years of Experience:

Address of Workplace:

Responsibilities:

Reference Contact:

Total Years of Experience:

I confirm that all the information provided is an accurate depiction of a real person and/or organization.

Action Buttons:

[Go Back](#) [Submit](#) [Clear Data](#)

Edit User Form

Personal Information:

First Name: Visha

Father Name: A

Surname: Aswan

Email: 236456789@outlook.com.in

Phone: 9876543210

Date of Birth: 26-02-2005

Age: 19

Native Place: Kardoli

Nationality: Indian

Gender: Male

Marital Status: Unmarried

Languages Known: English

Present Address: Bhopal

Permanent Address: Kardoli

Education Qualifications:

+ Add Education

Type of Education:	SSC
Name of Board:	Cbse
School Name:	dig
Marks Obtained:	45%
Out of:	60%
Percentage:	75%
No. of Attempts:	1
Year of Passing:	2019

In-organization Information:

User Role: Select Role

Specialization: Audit Accounting

User Designation: Accountant

Other Information: [Optional]

Last Workplace:

Years of Experience:

Address of Workplace:

Responsibilities:

Reference Contact:

Total Years of Experience:

I confirm that all the information provided is an accurate depiction of a real person and/or organization.

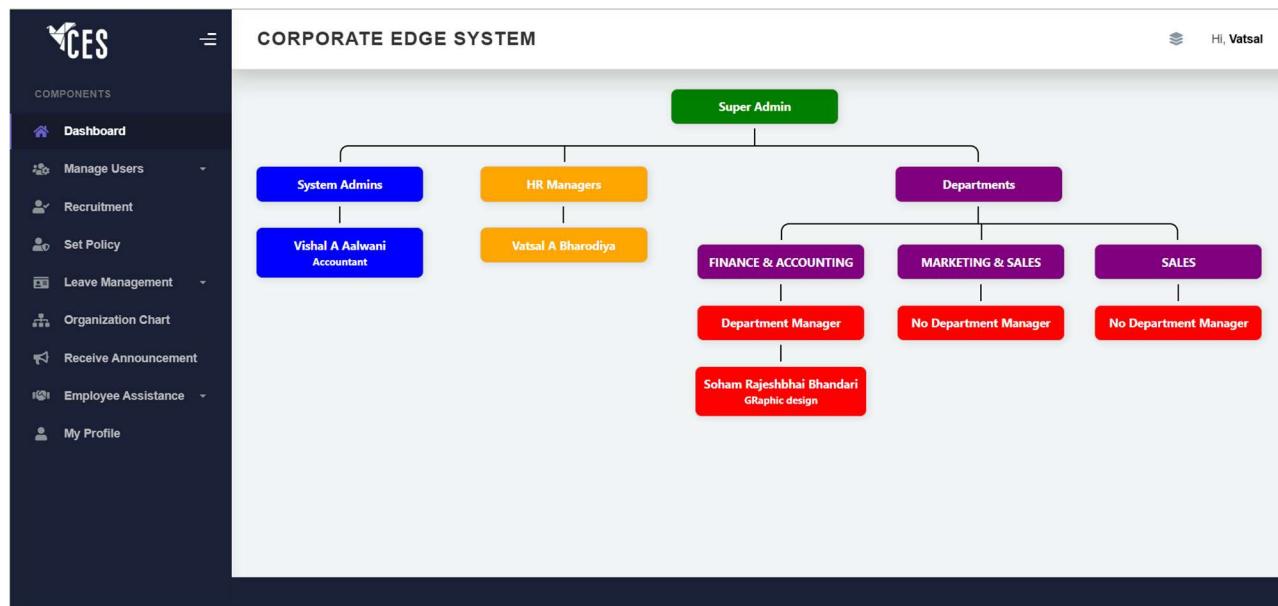
Action Buttons:

[Go Back](#) [Submit](#) [Clear Data](#)

Leave :

The screenshot shows the 'Manage Leave Allocations' section of the Corporate Edge System. The left sidebar has a 'Leave Management' option selected. The main area title is 'Manage Leave Allocations' with a subtitle 'Add, Change, and Delete Leave Allocations'. It includes a search bar 'Search by Name or Description...', a table header with columns 'ID', 'LEAVE NAME', and 'DESCRIPTION', and a single row entry 'LA1 sick' with a note about proof required. Action buttons 'Edit', 'Add', and 'Remove' are at the top right.

Organization chart :



Add Announcement :

Add Announcement

Title:

Description:

Sans Serif Normal **B** **I** **U** **S** **A** **A** x_2 x^2

≡ ≡ ≡ " </> 🔍 📸 📈 T_x

Tags:

Public Announcement:

Schedule Time:

Send Announcement:

 Send to Discord

 Send to Email

[Go Back](#) [Submit](#) [Clear Data](#)

Manage Announcement :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the CES logo and a navigation menu under 'COMPONENTS' containing links for Dashboard, Manage Users, Departments, Leave Management, Organization Chart, Announcement (which is highlighted), My Profile, and Logs.

The main content area has a header 'CORPORATE EDGE SYSTEM'. Below it is a sub-header 'Manage Announcements' with the sub-instruction 'Add, Change, and Delete Announcements'. There are three buttons: 'Edit' (light blue), 'Add' (blue), and 'Remove' (black).

A search bar labeled 'Search by Title or Description...' is present. Below it is a table with columns: ID, TITLE, TAG, PUBLIC, and SCHEDULE TIME. The table contains three rows:

ID	TITLE	TAG	PUBLIC	SCHEDULE TIME
AN3	Vatsal	"vatsal"	Yes	3/20/2025, 11:01:00 AM
AN5	Harsh	"harsh"	Yes	3/20/2025, 10:26:00 AM
AN2	Demo1	'demo'	Yes	3/5/2025, 10:50:00 AM

Receive Announcement :

The screenshot shows the Corporate Edge System interface. The left sidebar is identical to the previous screenshot, featuring the CES logo and a navigation menu under 'COMPONENTS'.

The main content area has a header 'CORPORATE EDGE SYSTEM'. It displays three separate announcement cards:

- VATSAL**
 - Tag: "vatsal"
 - Public: Yes
 - Schedule Date: 3/20/2025
 - Schedule Time: 11:01:00 AM
- HARSH**
 - Tag: "harsh"
 - Public: Yes
 - Schedule Date: 3/20/2025
 - Schedule Time: 10:26:00 AM
- DEMO1**
 - Tag: "demo"
 - Public: Yes
 - Schedule Date: 3/5/2025
 - Schedule Time: 10:50:00 AM

User Logs :

User Login/Logout Logs

Filter by Event:

Sort by:

Order:

Records per page:

LOG ID	USER ID	EVENT
SU1-1742574954266	SU1	Login
DM2-1742574944560	DM2	Logout
DM2-1742574531776	DM2	Login
SU1-1742574526076	SU1	Logout
SU1-1742574394209	SU1	Login
SU1-1742568336791	SU1	Logout
SU1-1742567849330	SU1	Login
SU1-1742567844216	SU1	Logout
SU1-1742566399196	SU1	Login
SU1-1742566387858	SU1	Logout

Page 1 of 1

My Profile :



Vishal Ashokbhai Agrawal
agrwalvishal3010@gmail.com

[Change Password](#)

Personal Details

Dob:	Age:
21/02/2001	24
Gender:	Marital Status:
Male	Unmarried
Native Place:	Nationality:
sarbhon	indian
Languages Known:	User Designation:
Hindi,Gujarati	Accountant

Organizational Details

User Department:
ACC

Other Details

Identity Proof:	
Available Open Document	
Present Address:	Permanent Address:
Sarbhon	sarbhon

HR panel : Job Listings :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the logo 'CES' and a navigation menu. The main area is titled 'CORPORATE EDGE SYSTEM' and 'JOB LISTINGS'. It displays three job postings: 'HR' (1 Candidate), 'Graphic design' (1 Candidate), and 'test' (1 Candidate). Each listing includes department, vacancies, selected candidates, and salary ranges.

Job Title	Department	Vacancies	Selected	Salary Range
HR	MARKETING & SALES	5	0	INR 100000 - 200000
Graphic design	FINANCE & ACCOUNTING	4	1	INR 12000 - 15999
test	FINANCE & ACCOUNTING	5	0	INR 10000 - 20000

Candidate List :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the logo 'CES' and a navigation menu. The main area is titled 'CORPORATE EDGE SYSTEM' and 'Candidate List'. It shows a table of candidates with columns for ID, Name, Email, Phone, Score, Performance, Hire status, and Resume download. A search bar and pagination controls are also present.

ID	Name	Email	Phone	Score	Performance	Hire	Resume
CA2	Soham Bhandari	22bca17@vtcbcsr.edu.in	91564782	30.92%	75%	No	<button>Download</button>

Check List :

The screenshot shows a modal window titled "CORPORATE EDGE SYSTEM" with a "Check List" tab selected. The modal has a header with "Send Email" and "Manage Evaluator" buttons. Below the header is a section titled "CHECK LIST" containing a table with one row:

ID	NAME	EMAIL	HIRE	ACTION
CA2	Soham Bhandari	22bca17@vtcbcsr.edu.in	No	<button>Remove</button>

Send Email :

The screenshot shows a modal window titled "CORPORATE EDGE SYSTEM" with a "Send Email" tab selected. The modal has a header with "Check List" and "Manage Evaluator" buttons. Below the header is a section titled "SEND EMAIL" with the following options:

- Interview Invitation
- Job Offer
- Rejection Letter
- Follow Up After Interview
- Others

The "Interview Invitation" option is selected. The email body contains placeholder text:

Interview Invitation – [[CompanyName]]
Hello [[CandidateName]].
We are pleased to invite you for an interview for the [[JobTitle]] position at [[CompanyName]].
Interview Details:
Date: [InsertDate]

Below the email body is a file upload area with a dashed blue border:

Click or Drag files here (Max 5)

0 / 5 files uploaded

At the bottom are "Clear" and "Send" buttons.

Manage Evaluator :

The screenshot shows the Corporate Edge System interface. On the left, a dark sidebar lists components: Dashboard, Manage Users, Recruitment, Set Policy, Leave Management, Organization Chart, Receive Announcements, Employee Assistance, and My Profile. The main area has a title "CORPORATE EDGE SYSTEM". A sub-menu at the top includes "Check List", "Send Email", "Manage Evaluator" (which is highlighted in blue), and "x". Below this is a section titled "MANAGE EVALUATOR". It has a "SELECT DEPARTMENT:" dropdown set to "MARKETING & SALES". Under "ASSIGNED EVALUATORS [1/5]", it shows "EM2: parth m patel" with a red delete button. A green "Save" button is below. To the right, a section titled "AVAILABLE USERS" shows a table with one row:

ID	NAME	EXPERIENCE	Action
DM3	Niraj Ashokbhai Agrawal	0 years	

Navigation buttons "Prev" and "Next" are at the bottom, along with "Page 1 of 1". On the far right, there are "Download Resumes", "Load", "Reopen", and "Conclude" buttons.

Candidate Performance :

The screenshot shows the Corporate Edge System interface. The left sidebar is identical to the previous screenshot. The main area has a title "CORPORATE EDGE SYSTEM". A sub-menu at the top includes "Check List", "Send Email", "Manage Evaluator", "Candidate Performance" (which is highlighted in blue), and "Add as User". Below this is a section titled "CANDIDATE PERFORMANCE". It has a "Select Candidate:" dropdown with the placeholder "... Select Candidate ...". A blue "Hire" button is to the right. Below this is a button "Only Checked Candidates". A large chart titled "ALL CANDIDATES PERFORMANCE DISTRIBUTION" shows the "Distribution of Candidate Performance Scores". The Y-axis is "Percentage of Candidates" from 0% to 100%. The X-axis is "Performance in Intervals". The distribution is bell-shaped, peaking around 75-80%.

The screenshot shows the Corporate Edge System interface. The top navigation bar includes 'Check List', 'Send Email', 'Manage Evaluator', 'Candidate Performance' (which is highlighted in blue), and 'Add as User'. A sidebar on the left lists components: Dashboard, Manage Users, Recruitment, Set Policy, Leave Management, Organization Chart, Receive Announcements, Employee Assistance, and My Profile. The main content area is titled 'CANDIDATE PERFORMANCE' and displays 'Select Candidate: CA2 : Soham Bhandari (75%)'. Below this is a section titled 'Previous Performance Records' with a sub-section 'INTERVIEW PERFORMANCE' showing an 'Assessment: Above Average [75%]', 'Remarks: good', and evaluation criteria for 'C++' (50/100) and 'python' (100/100). A 'Hire' button is located at the bottom right of this section.

Add As User :

The screenshot shows the Corporate Edge System interface with the 'Add as User' tab selected in the top navigation bar. The sidebar on the left is identical to the previous screenshot. The main content area is titled 'ADD AS USER' and shows 'Select Candidate: CA2 : Soham Bhandari'. Below this is a 'Personal Information:' section with fields for First Name (Soham), Father Name (Rajeshbhai), Surname (Bhandari), Gender (Male), Email (22bca17@vtcbsr.edu.in), and Phone (91564782). At the bottom of the page are links for 'Popular Category' and 'Our Company'.

Resume :

Soham Rajeshbhai Bhandari

22bca17@vtcbcsr.edu.in | 91564782
Candidate Evaluation: 30.92%



Personal Information

Field	Value
Date of Birth	14/01/2005
Age	20
Gender	Male
Marital Status	Married
Nationality	Indian
Native Place	Bardoli
Languages Known	hindi
Present Address	sarbhon
Permanent Address	sarbhon

Evaluation Breakdown

#	Category	Score	Max Score
1	Skills	17.25%	40.00%
2	Specialization	7.18%	20.00%
3	Education Qualification	0%	15.00%
4	Responsibilities	3.11%	10.00%
5	Total Years Of Experience	3.38%	15.00%
	Total Evaluation	30.92%	100%

Manage policies :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with a logo and a navigation menu titled 'COMPONENTS' containing items like Dashboard, Manage Users, Recruitment, Set Policy, Leave Management, Organization Chart, Receive Announcement, Employee Assistance, and My Profile. The main area is titled 'CORPORATE EDGE SYSTEM' and 'Manage Policies'. It displays a table with one row:

ID	TITLE	TAG	SCHEDULE TIME	Action
P1	Acceptable Use Policy for Company Devices	acceptable use	3/25/2025, 11:26:00 AM	<input type="checkbox"/>

Buttons for 'Edit', 'Add', and 'Remove' are located at the top right of the table.

Add Policy :

The screenshot shows the 'Add Policy' form within the Corporate Edge System. The left sidebar is identical to the previous screenshot. The main form is titled 'Add Policy' and contains the following fields:

- Title: A text input field.
- Description: A rich text editor with a toolbar and a text input field below it.
- Tags: A text input field with placeholder text 'Type and press Enter or ','...'
- Schedule Time: A date and time input field with a placeholder 'dd-mm-yyyy -::--'.

At the bottom are three buttons: 'Go Back' (red), 'Submit' (blue), and 'Clear Data' (black).

Edit policy :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the logo 'CES' and a navigation menu. The main area is titled 'CORPORATE EDGE SYSTEM' and contains a form titled 'Edit Policy'. The form includes fields for 'Title' (Acceptable Use Policy for Company Devices), 'Description' (a rich text editor with a toolbar and placeholder text about acceptable use guidelines), 'Tags' (a single tag 'acceptable use'), 'Schedule Time' (set to 25-03-2025 05:56), and buttons for 'Go Back', 'Submit', and 'Clear'.

Apply For Leave :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the logo 'CES' and a navigation menu. The main area is titled 'CORPORATE EDGE SYSTEM' and contains a form titled 'Apply for Leave'. The form includes fields for 'Leave Type' (sick), 'Start Date' (25-03-2025), 'End Date' (26-03-2025), 'Reason' (Demo), and a 'Leave Duration' section with checkboxes for 'Apply for Half-Day Leave' (unchecked) and 'Apply for Full-Day Leave' (checked). There are also buttons for 'Go Back', 'Submit Application', and 'Clear Data'.

My Leave :

The screenshot shows the Corporate Edge System interface. On the left is a dark sidebar with the logo 'CES' and a navigation menu under 'COMPONENTS' containing items like Dashboard, Manage Users, Recruitment, Set Policy, Leave Management, Organization Chart, Receive Announcement, Employee Assistance, and My Profile. The main content area is titled 'CORPORATE EDGE SYSTEM' and 'My Leave'. It displays a summary table:

LEAVE TYPE	TOTAL LEAVE	USED LEAVE	REMAINING LEAVE
sick	1	0	1

Buttons for 'Apply Leave' and 'My Leave Status' are visible at the top right.

The screenshot shows the Corporate Edge System interface. The left sidebar is identical to the previous one. The main content area is titled 'CORPORATE EDGE SYSTEM' and 'My Leave'. It displays a table of leave applications:

LEAVE TYPE	START DATE	END DATE	STATUS	ACTION
sick	25/03/2025	25/03/2025	Pending	No Action

Buttons for 'My Leave Balance' and 'Apply Leave' are visible at the top right.

The screenshot shows the Corporate Edge System (CES) interface. On the left is a dark sidebar with a logo and a navigation menu. The main area has a title bar and a search/filter section, followed by a table displaying leave records.

COMPONENTS

- Dashboard**
- Manage Users
- Recruitment
- Set Policy
- Leave Management**
- Organization Chart
- Receive Announcement
- Employee Assistance
- My Profile

CORPORATE EDGE SYSTEM

Hi, Vatsal

Leave Record

All Departments Leave List

Search by Department...

LEAVE ID	DEPARTMENT	EMPLOYEE NAME	TYPE	START DATE	END DATE	STATUS	DETAILS
LE1	HRManager	Vatsal A Bharodiya	LA1	25/03/2025	25/03/2025	Pending	Reason

7. TESTING

Testing is the process of checking if the system works correctly and finding errors.

A good test finds errors that are not yet discovered. It ensures that all functions work as expected with minimum time and effort.

- **Two Types of Inputs for Testing:**

- 1. **Software Configuration:**

- Software Requirement Document (SRS)
 - Design Document
 - Source Code

- 2. **Test Configuration:**

- Test Plan and Procedures
 - Test Cases and Expected Results
 - Testing Tools

7.1 Unit Testng :

- **What is Unit Testing?**

- Each part is tested separately before combining it with other parts.

- **Modules Tested:**

- Login and Forget Password System
 - User Management (Add, Edit, Delete Users)
 - Announcements Module
 - Job Vacancy Management
 - Leave Management System
 - Profile Management
 - Logs and Analytics

- **Errors Fixed:**

- Fixed login validation errors.
 - Corrected issues in leave application.
 - Resolved minor UI problems.

7.2 Integration Testing :

- **What is Integration Testing?**
 - Integration testing checks if all the modules work well together.
 - It ensures that data flows correctly between different parts of the system.
- **Modules Combined and Tested:**
 - **API Communication** between frontend and backend.
 - **Database Operations** for storing and retrieving data.
 - **User Role Management** with permissions for different roles.
 - **Announcement and Vacancy Workflow** to ensure smooth process.
- **Errors Fixed:**
 - API errors in announcements list.
 - Fixed permission conflicts in HR and Department Manager roles.
 - Notification issues in the job vacancy module.

8. FUTURE ENHANCEMENT

1. AI-Powered HR Assistance :

- Implement an **AI-driven chatbot** to assist employees with HR-related queries, such as leave requests, policies, and salary details.
- Use **AI-based candidate screening** to analyze resumes and shortlist the best candidates automatically.

2. Advanced Data Analytics & Reporting :

- Generate **real-time reports** on employee performance, attendance, and project progress.
- Use **predictive analytics** to forecast trends in leave management, recruitment needs, and project deadlines.
- Implement **dashboard visualization** to present HR insights in a user-friendly format.

3. Mobile Application for Accessibility :

- Develop a **mobile app** that allows employees and managers to access CES features on the go.
- Enable **push notifications** for approvals, announcements, and important updates.
- Provide a **self-service portal** where employees can check their leave balance, update personal details, and view HR documents.

4. Integration with Third-Party Tools :

- Integrate with **payroll systems** to automate salary calculations and payments.
- Enable **cloud storage** integration for secure document sharing and storage.

5. Enhanced Security Features :

- Implement **multi-factor authentication (MFA)** for increased security.
- Use **role-based access control (RBAC)** to ensure only authorized personnel can access sensitive HR data.
- Conduct **regular security audits and updates** to prevent cyber threats and data breaches.

6. Cloud-Based Storage & Backup :

- Store employee records, reports, and documents in a **secure cloud environment** for easy access.
- Implement **automated backups** to prevent data loss and ensure business continuity.
- Allow **department-based access** to maintain confidentiality and compliance with data protection laws.

7. Employee Engagement & Communication Features :

- Introduce an **employee feedback system** with polls and surveys.
- Develop an **employee recognition program** to reward high-performing employees.
- Implement an **internal social feed** for HR announcements, news, and discussions.

8. Automation of HR & Administrative Processes :

- Enable **automated leave approvals** based on predefined rules and policies.
- Implement **automated employee onboarding**, including document verification and training modules.
- Use AI for **smart workload distribution**, ensuring fair task allocation in projects.

9. REFERENCE

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