

“EMPLOYEE MANAGEMENT SYSTEM ”

A Project report submitted

In the partial fulfillment the award of degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING (2022-2023)

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DECLARATION

I hereby declare that the project entitled “EMPLOYEE MANAGEMENT SYSTEM ” submitted to the fulfillment of award the degree of B.TECH (CSE) in CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ANDHRA PRADESH.

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ABSTRACT

In this world of growing technologies everything has been computerized. With large number of work opportunities the Human workforce has increased. Thus there is a need of a system which can handle the data of such a large number of Employees in an organization. This project simplifies the task of maintain records because of its user friendly nature.

The “EMPLOYEE MANAGEMENT SYSTEM” has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly.

This project will allow admin to add new employees after proper authentication. Admin can also add new departments and posts. It can allocate employees to different departments at different posts. Database should store all personal details of employees such as date of birth full name etc. and his educational background, work experience, skill sets, current and past projects in different tables with proper relations.

This system enables employees to perform their own profile. It enables the automation of work flow notifications and leave request. Work flow notification from administrator are stored in the backend and notified to employee, once employee log in to the system. Leave request made by the employee is placed for administrator approval, the administrator module checks up with the leave availability and approves or rejects the request.

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1.INTRODUCTION

1.1 purpose

Every organization, whether big or small, has human resource challenges to overcome. Every organization has different employee management needs, therefore we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning, and will help you ensure that your organization is equipped with the right level of human resources for your future goals. Also, for those busy executives who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources. One of the main features in employee management system is time tracking for employees. Effective time tracking mechanism saves both time and money for the organization.

1.2 Scope

An employee management system or EMS is a tool that helps improve employee satisfaction and productivity to help a company achieve their overall goals. These tools help monitor, assess and control employees' working hours and efficiently utilise human resources. It ensures that HR efficiently manages each employee's payroll and disburses salaries on time. An EMS securely stores and manages the personal and work-related details of employees. This makes it easier for the managers to store and access relevant data when needed.

2.Aim And Objective

2.1 Aim :

Aim is to provide all sources at one workplace for to improve workforce productivity .

2.2 Objective:

An effective employee management system is used to manage the work process and organizational responsibilities of human resources and other departments. It helps managers and employees to work together and accurately monitor, access, manage, and efficiently utilize the working hours for better business growth. Also, it helps in error-free payrolls that can be done on time.

2.3 Definition ,Acronym and abbrevations

2.3.1 Definition:

Employee management is an approach to supporting your employees to reach their peak performance and meet your company's goals. Employee management is a comprehensive process that encompasses practically all aspects of human resources.

2.4 Improves the efficiency:

You'll have no trouble simplifying workflows if you manage your employees well. Furthermore, when your company has a proper structure and system in place, you will be able to:

- Hire individuals that have the right skill set for the job.
- Easy to monitor employees' work deliverables to verify that tasks/projects are running smoothly.

2.5 Boosts employee's productivity

If an employee feels unappreciated, they will become disinterested in their task. It will also have a significant impact on their productivity in the workplace. Thus, it is crucial to ensure your employees feel valued.

2.6 Data Security

Over the past year, the COVID-19 pandemic contributed to the rise of remote working around the world. Thus, it becomes increasingly vital to keep all your sensitive and confidential business data in a secure place.

3 TOOLS AND MONITORING

3.1 Performance Monitoring Tools:

Such tools can help you to monitor your employees' productivity level, tasks and duration they spent working on each task. It can also help you to guard against employees who may be inactive during work hours. Some performance monitoring tools have distraction management and report analysis. This feature allows you to monitor your employees' use of websites while at work and how they spend their time working.

3.2 HR Management Tools

3.3 Communication Tools

It doesn't matter if they work remotely or in the office; communication is key for collaboration. Employees need to be in frequent contact with each other to ensure work gets done. That's why investing in an app that can help your employees to streamline the communication process is highly critical.

3.4 File-Sharing Tools

One of the essential components of employee management is having everyone on the same page. Employees can keep each other up to speed about project advancements with cloud-based file-sharing software.

3.5 Human Resource Management System

A human resource management system (HRMS) is a software program that provides the tools and technologies needed to manage an organization's workforce. HRMS is used by organizations to manage their workforce, including job descriptions and applications, recruitment processes and benefits, performance management, staff development and training, payroll functions, and taxes.

3.6 Staff Project Management System

Staff Project management system is software that can be used to manage projects. A staff project management system is software that can be used to manage projects. It helps in tracking the progress of a project and also helps in maintaining the records of projects.

3.7 Employee Leave Management System

An employee leaves management system is a software program that helps you keep track of your employees' leave requests and manage them accordingly. It can help you not only to better manage your leave requests but also to make sure that your employees are getting the time away from work when they need it.

3.8 Employee Payroll Management System

An employee payroll management system (EPS) is a software application that helps you calculate payroll and manage your employees' wages. It can automate many of the manual processes that come with managing payroll, including calculating deductions and payments, reconciling account balances, and generating reports.

3.9 Employee Performance Management System

An employee performance management system is strategic planning, systems, and methodology that provide real-time feedback to a company's employees on how they are performing. An effective employee performance management system allows the organization to identify issues, set goals, deliver feedback, and measure progress.

4 .Limitations

4.1 Unclear reward systems.

Rewards are a great way to increase morale and motivation levels, but if the ask and reward aren't clear, a rewards system might not work effectively. Signs of an unclear rewards system include:

4.2. Unfair performance ratings.

If employees receive performance ratings that don't match the reality of their effectiveness within an organization, it's a clear sign of poor performance management

4.3 Failure to set standards.

A lack of clear standards for performance in employees' roles means they won't know what's expected of them and what to aim for.

4.4 Lack of personalized objectives.

When specific objectives tailored to expanding the skillsets of individuals are ignored.

5 .SYSTEM STUDY

5.1 EXISTING SYSTEM

The company uses an application which is a single user system to find the employee information.

- The important and the most significant drawback is that the system is manual. There are errors due to carelessness or oversight that may result in loss to the data and as to the organization. For an organization, time is very important factor .
- The employee information are stored in the application which is like a excel sheet. This makes it impossible to search for a company information in such a long table manually and to add a new query if the searched query is not available.

5.2 BENEFITS OF THIS SYSTEM

This system will reduce the complexity of employee management. By using this system we can easily maintain all the records about “ON.EMPLOYEES” or “OFF EMPLOYEES”.

It will reduce searching time. It can be easily handled by the person who have elementary knowledge of computer because it provides an user friendly environment. Its hardware and software configuration is not very costly that means.

5.3 PROPOSED SYSTEM

The proposed system is designed to eliminate all the drawbacks of the existing system. The system is part of a large HRMS Application and shall be responsible for maintaining information about employees, positions, company benefits, departments, warnings, administration.

5.3.1 Some major advantage of the proposed system:

- It's online, so that information is available anytime.
- High integrity and security.
- Ability to incorporate newly available data.
- It is user friendly.
- Speed and accuracy is increased.
- Fully automated.
- Security is associated with user authentication.
- Duplication of information is curbed.

6.INPUT AND OUTPUT

6.1Inputs:

- Admin enter his user id and password for login.
- User enters his user id and password for login.
- Admin enter user id or date for track the user login information.
- New users give his completed personnel, address and phone details for registration.
- Admin gives different kind of user information for search the user data.
- User gives his user id, hint question, answer for getting the forgotten password.
- Employee asking customer service details before process the queries.
- Employees search the customer information while process.

6.2 Outputs:

Admin can have his own home page.

Users enter their own home page.

The user defined data can store in the centralized database.

Admin will get the login information of a particular user.

The new user's data will be stored in the centralized database.

Admin get the search details of different criteria.

7. FEASIBILITY REPORT

7.1 FEASIBILITY

Preliminary investigation examine project feasibility, the likelihood the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. All system is feasible if they are unlimited resources and infinite time. There are aspects in the feasibility study portion of the preliminary investigation:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

7.2 TECHNICAL FEASIBILITY

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- Does the necessary technology exist to do what is suggested?
- Do the proposed equipments have the technical capacity to hold the data required to use the new system?
- Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- Can the system be upgraded if developed?
- Are there technical guarantees of accuracy, reliability, ease of access and data security?

Earlier no system existed to cater to the needs of 'Secure Infrastructure Implementation System'. The current system developed is technically feasible.

7.3 OPERATIONAL FEASIBILITY

Proposed projects are beneficial only if they can be turned out into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following:

-

- Is there sufficient support for the management from the users?
- Will the system be used and work properly if it is being developed and implemented?
- Will there be any resistance from the user that will undermine the possible application benefits?

7.4 ECONOMICAL FEASIBILITY

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

The system is economically feasible. It does not require any additional hardware or software. Since the interface for this system is developed using the existing resources and technologies available at NIC, there is nominal expenditure and economical feasibility for certain.

8.REQUIREMENTS

8.1SOFTWARE REQUIREMENTS

The minimum software requirements needed for developing and implementing this application is as follows

PLATFORM	:	Windows 7
FRONT END	:	Visual basics 6.0
BACK END	:	MS Access

8.2 HARDWARE REQUIREMENTS

Processor	-	Pentium-III
Speed	-	1.1Ghz
RAM	-	512MB(min)
Hard Disk	-	40GB
Floppy Drive	-	1.44MB
Key Board	-	Standard Windows Keyboard
Mouse	-	Two or Three Button Mouse
Monitor	-	SVG

9.SOFTWARE REQUIREMENT SPECIFICATION

9.1 DEVELOPERS RESPONSIBILITIES OVERVIEW:

The developer is responsible for:

- Developing the system, which meets the SRS and solving all the requirements of the system?
- Demonstrating the system and installing the system at client's location after the acceptance testing is successful.
- Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
- Conducting any user training that might be needed for using the system.
- Maintaining the system for a period of one year after installation.

9.2FUNCTIONAL REQUIREMENTS

9.2.1OUTPUT DESIGN

Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provides a permanent copy of the results for later consultation. The various types of outputs in general are:

- External Outputs, whose destination is outside the organization.
- Internal Outputs whose destination is within organization and they are the
- User's main interface with the computer.
- Operational outputs whose use is purely within the computer department.
- Interface outputs, which involve the user in communicating directly.

9.3 Output Definition

The outputs should be defined in terms of the following points:

- Type of the output
- Content of the output
- Format of the output
- Location of the output
- Frequency of the output
- Volume of the output
- Sequence of the output

It is not always desirable to print or display data as it is held on a computer. It should be decided as which form of the output is the most suitable.

For Example

- Will decimal points need to be inserted
- Should leading zeros be suppressed.

9.4 PERFORMANCE REQUIREMENTS

Performance is measured in terms of the output provided by the application.

Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The requirement specification for any system can be broadly stated as given below:

- The system should be able to interface with the existing system
- The system should be accurate
- The system should be better than the existing system

The existing system is completely dependent on the user to perform all the duties.

9.5 Why MySQL:

MySQL is a relational database management system based on SQL- Structure Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce and logging applications. The most common use for MySQL is for the purpose of a web database.

MySQL creates a database for storing and manipulating data, defining the relationship of each table. Clients can make request by typing specific SQL statements on MySQL.

Advantages:

- MySQL is more secure.
- MySQL is available for free to download and use from the official site of MySQL.

9.6 XAMPP:

XAMPP is a free and Open-source cross-platform Web Server Solution Stack built by Apache Friends, which consists mostly of the Apache HTTP Server, MariaDB/MySQL Database, and interpreters for php and Perl scripts. As most real-world web server deployments share the same components as XAMPP, moving from a local test server to a live server is simple.

9.7 PHP Application

The actual program that will perform the operations is written in PHP. All data will be database.

10.FUNCTIONAL REQUIREMENTS:

10.1 ER DIAGRAM :

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how “entities” such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research.

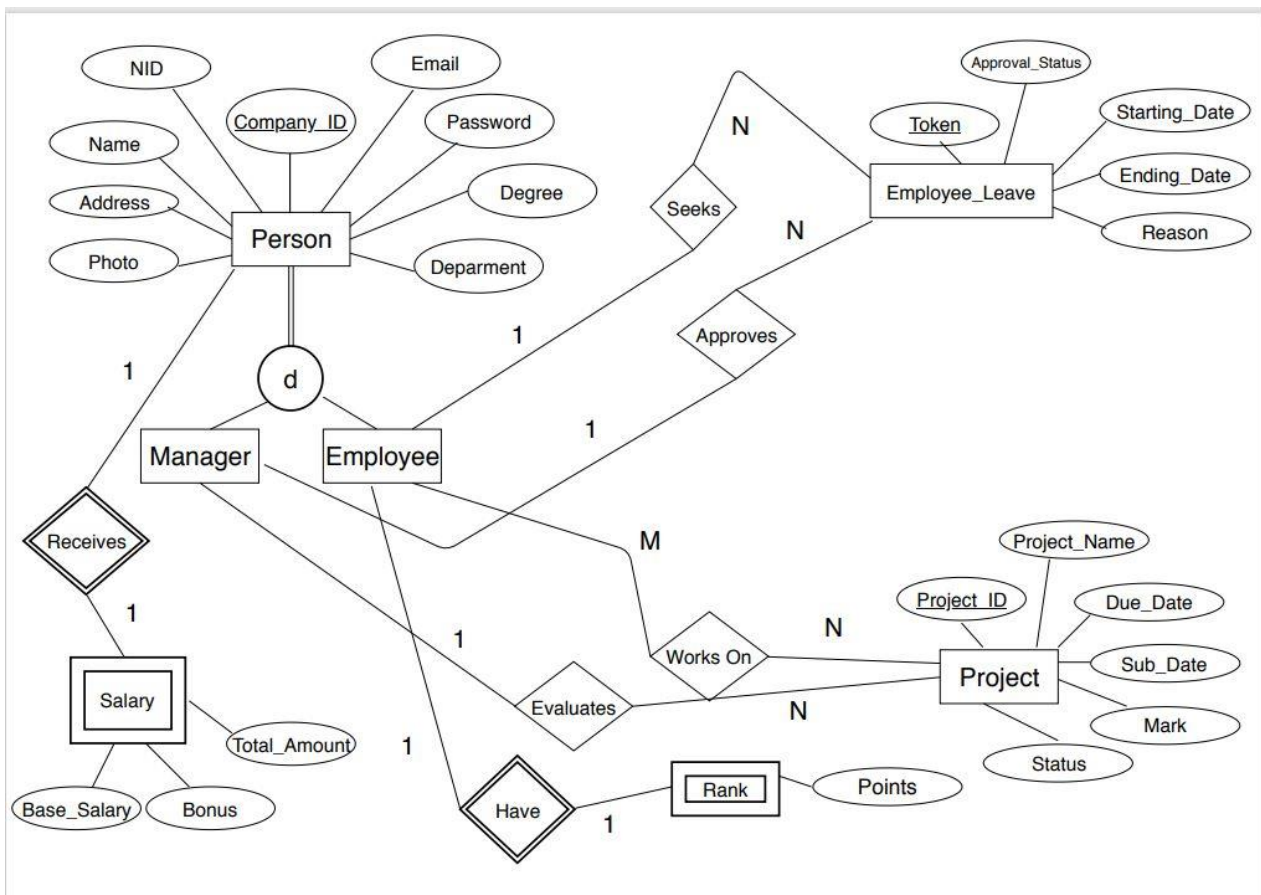


Figure .1 ER-DIAGRAM

10.2 Case Relational Diagram :

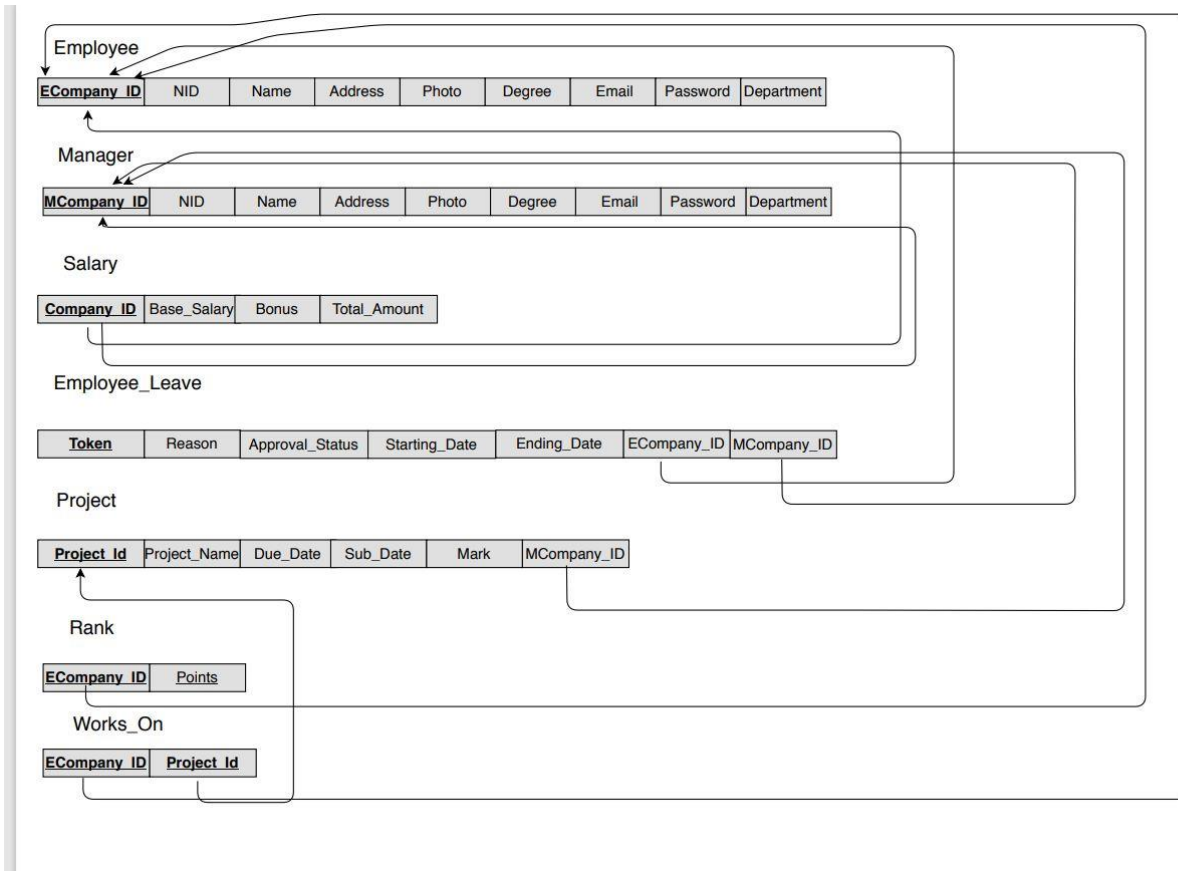


Figure 2: class relation diagram

10.3 CLASS DIAGRAM:

The class diagram is the main building block of object-oriented modelling. It is used for general conceptual modelling of the structure of the application, and for detailed modelling, translating the models into programming code. Class diagrams can also be used for data modelling. The classes in a class diagram represent both the main elements, interactions in the application, and the classes to be programmed. Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application

11.SYSTEM DESIGN :

11.1 Admin login :

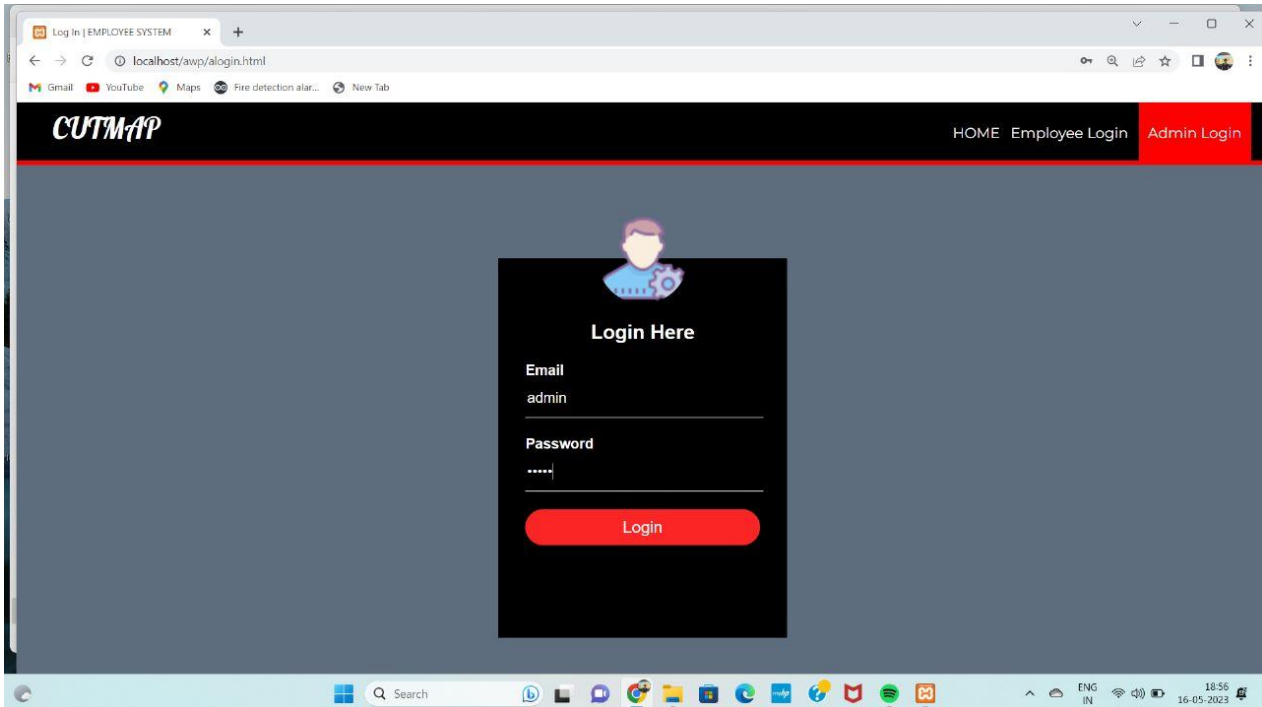


Figure 3:admin login

11.2 Employee login:

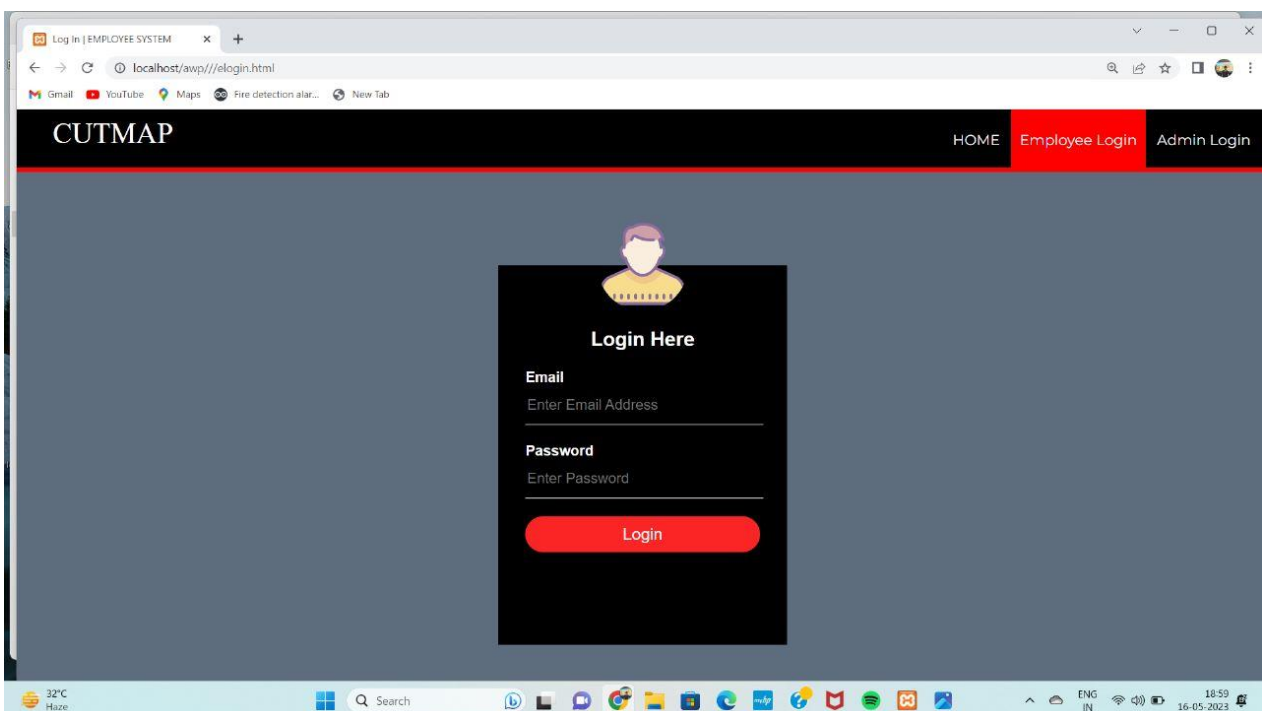


Figure 4 employee login

11.3 Class diagram:

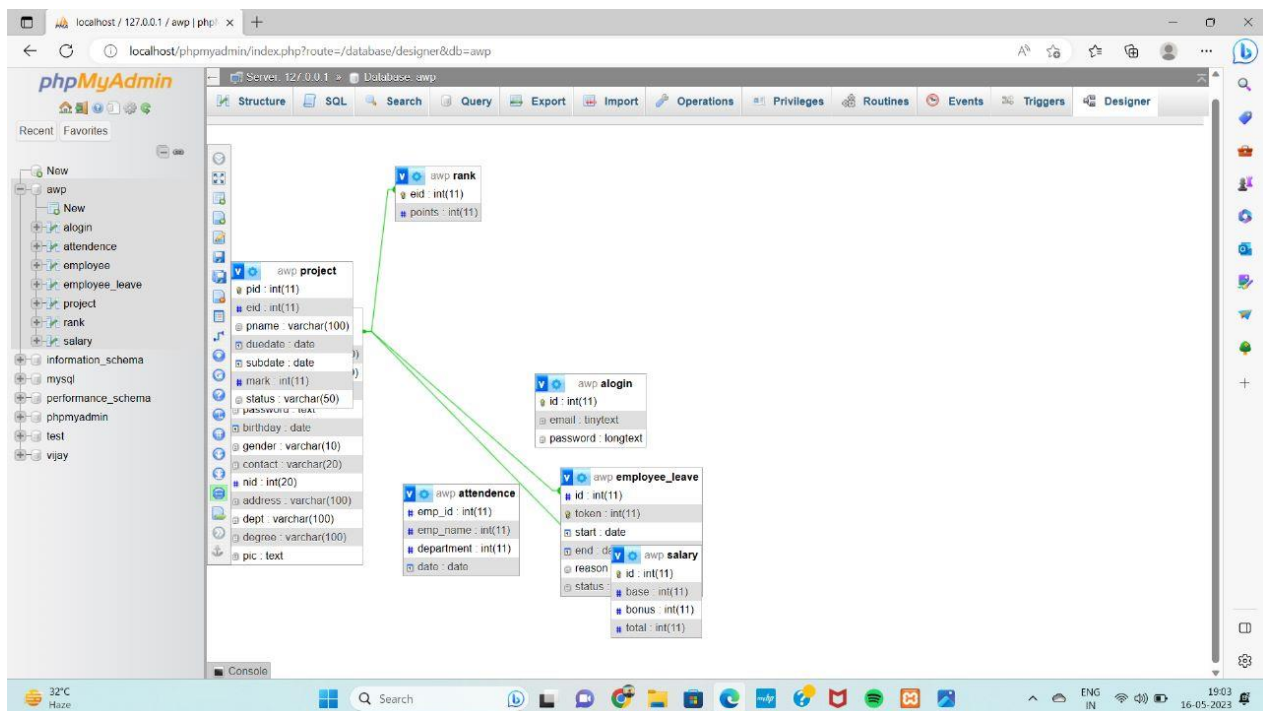


Figure 5:class diagram

11.4 SYSTEM DESIGN:

The screenshot shows the phpMyAdmin interface for the 'employee' table. The table has 13 columns: id, firstName, lastName, email, password, birthday, gender, contact, nid, address, dept, degree, and pic. The data is displayed in a table with 13 rows, each containing an employee's details. The interface includes a sidebar with a database structure tree, a top navigation bar with various tools like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Triggers, and a bottom status bar showing the server version and database name.

id	firstName	lastName	email	password	birthday	gender	contact	nid	address	dept	degree	pic
101	Penke	Vijay	Vijay@gmail.com	1234	1997-06-13	Male	01919	12121	Razabagh	IT	Head	image
102	Gujala	Gnanashewar	gnane@gmail.com	1234	2018-01-01	Male	0202	303	Ad	CSE	CSE	image
103	Yenni	Sai	sai@gmail.com	1234	1990-02-02	Male	5252	6262	Thames, UK	Creative	MSc	image
104	Ch	Vamshi	vamshi@gmail.com	1234	1971-12-01	Male	9595	5859	Chemsford, USA	Creative	MSc	image
105	Yeragana	Khagesh	khagesh@gmail.com	1234	1971-06-28	Male	8585	5858	LA, USA	SpaceTech	BSc	image
106	G	Jyoshna	Jyoshna@gmail.com	1234	1990-02-02	Female	7575	5757	Underground, Dhaka	NetworkSecurity	MSc	image
107	Sai	Lakshmi	lakshmi@gmail.com	1234	1993-03-03	Female	4545	5454	USA	Defense	MS	image
108	Vakada	Keerthi	Keerthi@gmail.com	1234	1976-04-16	Female	758758	857857	USA	AI	PhD	image
109	Yeragana	Mani	Mani@gmail.com	1234	1985-01-01	Male	652852	258258	USA	AI	PhD	image
110	Palli	Abhishek	abhishek@gmail.com	1234	1985-09-18	Male	147147	741741	USA	NLP	PhD	image
111	Routhu	Shankar	shankar@gmail.com	1234	2011-02-01	Male	0187282	112233	Winterfell	Management	BSc	image
112	yennu	sai	saiyennu263@gmail.com	12345	2003-09-29	Male	9854621432	143	vizianagaram	CSE	B-Tech	image
113	p.vijay	kumar	vijay1234@gmail.com	1234	2023-05-06	Male	9876545689	4545	godavari district	CSE	B-Tech	image

Figure 6: database table

The screenshot shows the phpMyAdmin interface for the 'salary' table. The table has 4 columns: id, base, bonus, and total. The data is displayed in a table with 13 rows, each containing an employee's salary details. The interface includes a sidebar with a database structure tree, a top navigation bar with various tools like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Triggers, and a bottom status bar showing the server version and database name.

id	base	bonus	total
101	55000	0	55000
102	16500	0	16500
103	65000	0	65000
104	79000	0	79000
105	105000	0	105000
106	60000	0	60000
107	77000	0	77000
108	50000	0	50000
109	85000	0	85000
110	47000	0	47000
111	45000	0	45000
112	100000	0	100000
113	100000	0	100000

Figure 6.1 database table

12. CONCLUSION:

Software for employee management systems helps your organization improve workforce productivity and boost overall well-being by tracking and monitoring the daily working activities of every employee. In conclusion of employee management system blog, Desk Track is one of the best software for workforce management. It keeps track of every activity done by an employee during his working hours. As a result, if you are searching for the best employee productivity monitoring software then Desk Track has some impressive features that can be the best fit for your organization. The system was developed in line with three tier architecture software model and implemented using web based technologies which include CSS, JS,HTML, MySQL. The system serves as improvement in staff management, maintain accuracy, transparency and highlight the need to integrate advance technology in employee record and welfare management in higher institution. The developed system enables the employees in academic institutions to request and track their leave at their own convenient time in timely manner.

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