Vehicle Management System

A PROJECT REPORT
Submitted By

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Submitted in partial fulfillment of the
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Under the Supervision of
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CERTIFICATE

Certified that **NAMAN GUPTA (Enrollment No. 1900290140020), ANUPAM SHUKLA (Enrollment No. 1900290140007), ROHIT SENGAR (Enrollment No. 1900290140027)** have carried out the project work having "**Vehicle Management System**" for Master of Computer Applications from Dr. A.P.J. Abdul KalamTechnical University (AKTU), Technical University, Lucknow under my supervision. The projectreport embodies original work, and studies are carried out by the student himself/herself and the contents of the project report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

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ABSTRACT

Vehicle Management System is a Web Application which help in the smooth working of an organization. It is use to store data about the Employee and the to give the organizational email for secure working in the organization.

It will help to state which team is working under particular project. Under the supervision of whom the team is performing the task, Each and every person will able to login with there allocated email id and password and know on which project they are working with whom.

Each and every member will able to see the profile of the other member correctly and efficiently.It will provide the security, and transperancy in the organizational work. Every member will know other member also due to which friendly and competitive relation will be seen in the organization which will result in productivity in an organization.

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CHAPTER 1

INTRODUCTION

1.1 PROJECT DESCRIPTION

This project has been developed to override the problems prevailing in the practicing manual Vehicle system. This application is supported to eliminate and in some cases reduce the hardships faced by the existing system. Moreover, this applicationis designed for moving the transport office toward the secure digital .It will enchance the transperancy and efficiency in the work.

No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user friendly. So, This “Vehicle Management System” can lead to error-free, secure, reliable and fast system.

This application provides the way to manage the team, office and the project for productive outcome. Through this applications we are approaching towards the less use of papers by virtue of which we are indirectly sustaining the environment.

Chapter 2
PROJECT CATEGORY

2.1 TECHNOLOGIES USED

XAMPP Server

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages.

Notepad++

Notepad++ is a text and source code editor for use with Microsoft Windows. It supports tabbed editing, which allows working with multiple open files in a single window. The product's name comes from the C increment operator. Notepad++ is distributed as free software

TECHNOLOGIES USED

APPLICATION	: Xampp Server, Notepad++
DESIGNING	: HTML, CSS, Javascript
Backend	: PHP

2.2 Language Used (Designing and Developing

- **•HTML:-**
  - HTML stands for Hyper Text Markup Language
  - HTML is the standard markup language for creating Web pages
  - HTML describes the structure of a Web page
  - HTML consists of a series of elements
  - HTML elements tell the browser how to display the content
  - HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

CSS:

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files

JavaScript:

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled and multi-paradigm. It has dynamic typing, prototype-based object-orientation and first-class functions.

PHP:

PHP is an acronym for "PHP: Hypertext Preprocessor"

- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

Chapter 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 GENERAL DESCRIPTION

This combined aggregation of information and workplace activity constructs a general, specific program or aim which is to be executed or produced within the workplace while working with others as a squad. The history of coaction began many centuries ago, long before the B.C. or A.D. epochs, where at least two persons had to pass on in the attempt of finishing a undertaking, undertaking, or written papers. Therefore, coaction is non a new term, but an enhanced and improved one in the professional workplace.

3.1.1 PROBLEM STATEMENT:

The problem occurred before having computerized system includes:

- Seeking for the help to play this traditional mode.
- Excessive use of Paper for maintaining register and updating data.
- More chance of Unfairness while giving marks due to biasness.

3.2 SYSTEM OBJECTIVES

3.2.1 Improvement in control and performance

The system is developed to cope up with the current issues and problems of forgetting the traditional mechanism. The system identify who is accessing the profile and the data/information will be updated on the portal. To declare the Project and performance of the employee and details.

Save cost

The existing system is based on the pen paper mode and several in the digital mode but is not secure mand efficient to work.

Save Time

People at any location will able to perform or know there seniors subordinate team and there uniqueness etc. by registering or Loging in the Portal.

3.2.2 Requirement Specification:

The application requirement specification is produced at the analysis task. The function and performance allocated to application as part of system engineering are refined by establishing a complete information description, a detailed functional and behavioral description, an indication of performance requirements and design constraints.

3.3 Functional Requirements:

Admin Generated Email and Password

The application will work with Email and password generated by the admin after joining the firm.

Internet Connectivity:

As discussed that Application will work on Online mode so it need regular Internet Connectivity.

Register and Login:

To Work on the web application one should be registered and should have to login with the organizational email and password.

3.4 Non-functional Requirements:

Performance Requirements

- User friendly**:** The system should be user friendly so that it can easily be understand by the user without any difficulty.

- Ease of maintenance :- System should be easy to maintain and use.
- Less time consuming: The system should be less time consuming which could be achieved by good programming.
- Error free: The system should easily handle the user error in any case.
- Static: Application runs on stand alone machine . Support only single user.

3.5 SOFTWARE AND HARDWARE REQUIREMENTS

This section describes the software and hardware requirements of the system .

3.5.1 SOFTWARE REQUIREMENTS

· **Operating system**- Windows/Linux Operating System This is the web Application which can run on any of the Operating System.

Database: PHPAdmin is used in storing the data in structured manner.

XAMPP is a Software used for server which is use to serve the client what he/she wants from the server.

Browser: Any of the browser can be used to run and test the web application's Appearance and working eg. Internet Explorer, Google Chrome, Mozilla Firefox etc.

· **Development tools and Programming language**-HTML, CSS, Javascript, PHP is used to write the whole designing and operational code. PHP is used for backend maintainance.

3.5.2 HARDWARE REQUIREMENTS

- Desktop/Laptop any configuration.

3.6 EXISTING VS PROPOSED SYSTEM

Existing system does not have a secure facility of Vehicle Management System application with transperancy in Workplace whereas proposed system is secure and transperancy in the work of the people.

Existing system does not have any facility of generating Email Online whereas proposed system is working on the facility of generating email and password online by the admin with security .

Existing System does not have the facility of registering and generating organizational password Whereas proposed system are more focused on it.

3.7 . Software System Attributes

- **Portability**:- The system should be machine independent.
- **Security**:- The system is designed in such a way that it will store the recorded data in the system of the owner. The system will be secure from unauthorized access of the application.
- **Maintainability**: The system will be designed in a maintainable order. The system can be easily modified and renewed according to the need of the organization.

3.8 . Feature of Vehicle Management System

- no internet connection required against the computer
- multiple users can login and register on the same portal remotely.
- People can register and login in the system.
- graphics with a classic look and the feel of a royal Web Application
- classic Profile Details to display profile of each employee
- security of data to be stored
- ensures data accuracy (number of alert generated)
- minimize manpower
- minimize time consumption
- greater efficiency
- fast
- better services
- user friendliness and interactive
- minimum time requried
- easy to update
- user friendly
- free for the user

3.9. Preliminary investigation:

Fact Finding:

After obtaining the background knowledge, we began to collect data on the existing system.

The tools that are used in information gathering are as follows:

- Online Apps observation.
- Review of the peoples.

The model we have used is Incremental Model. In this model, first of all the existing system is observed, then customer requirements are taken in consideration then planning, modelling, construction and finally deployment and again adding the new system if asked by the customer to do so.

3.10 . Model used: Incremental Model

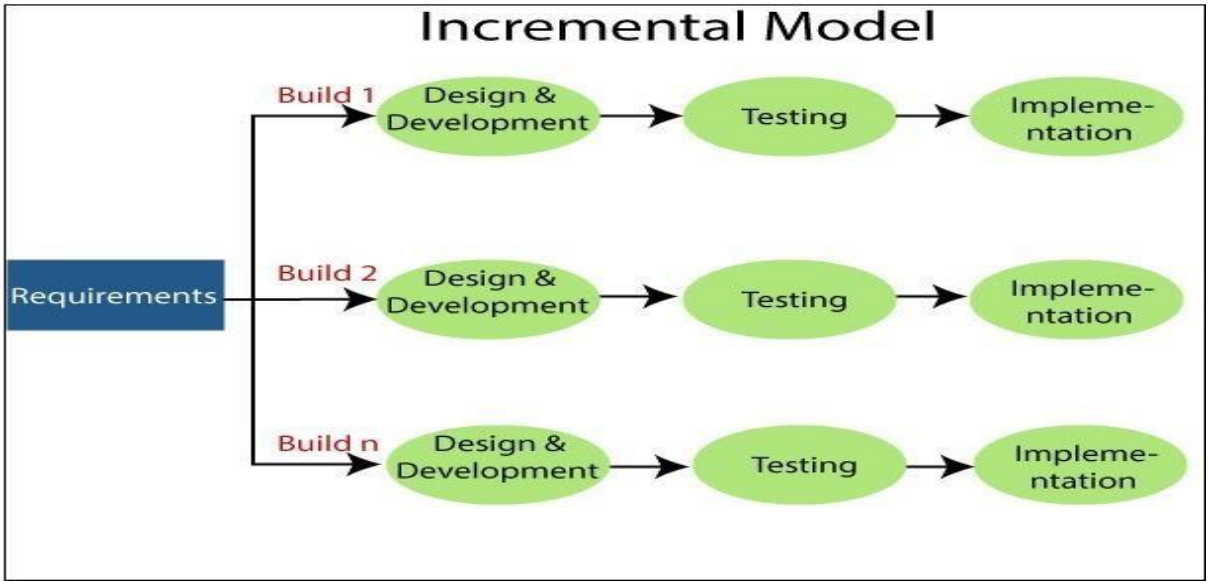

Fig 1.0: Incremental Model

Incremental Model is a software development process where requirements are divided into several stand-alone software development modules. In this project the first increment is often a core product where the basic requirements are addressed, and supplementary features are added in the next increments.

3.10 Preliminary Description:

The first step in the system development life cycle is the preliminary investigation to determine the feasibility of the system. The purpose of preliminary investigation is to evaluate project requests. It is not a design study nor does it include the collection of details to describe the system in all respect. Rather, it is the collecting of information that helps committee members to evaluate the merits of project request and make an informed judgement about the feasibility of the proposed project.

Analyst working on the preliminary investigation should accomplish the following objectives:

- Clarify and understand the project request.
- Determine the size of the project.
- Access costs and benefits of alternative approaches.
- Determine the technical and operational feasibility of alternative approaches.
- Report the findings to management with recommendations outlining the acceptance and rejection of the proposal

Chapter 4

4.1 Feasibility study:

After studying and analyzing all the existing and requires functionalities of the system, the next task is to do the feasibility study for the project. Feasibility study includes consideration of all the possible ways to provide a solution to a given problem. The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements.

- ### 4.1.1 Economical Feasibility:

  For the economic feasibility, Economic analysis or cost/benefits analysis is most frequently used technique the effectiveness of a proposed system. it is a procedure to determine the benefits and saving those are expected from the proposes system and compare them with cost .if the benefits outweigh the costs, a decision is taken to design and implement the system. otherwise, further justification or alternative in proposed system will have to be made if it is to have a chance of being approved this is ongoing effort that improves in accuracy at each phase of a system life cycle

- ### 4.1.2 Technical feasibility:

  This included the study of function, performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionalities to be provided in the system, as described in the System Requirement Specification (SRS), and checked if everything was possible using different type of front end and back end platform.

4.1.3 Operational Feasibility:

No doubt the technically growing world needs more enhancement in technology, this apps is very user friendly and all inputs to be taken all self-

explanatory even to a layman. As far our study is concerned, the clients will be comfortable and happy as the system has cut down their loads and bring the young generation to the same virtual world they are growing drastically.

Operational feasibility cover two aspects.one technical performance

aspects and the other is acceptance within the organization.

Operation feasibility determine how the proposed the system will fit in with the current operation and what needs to implement the system

Chapter 5

5.1 Planning and scheduling

5.1.1 Gantt chart

A Gantt chart can be developed for the entire project or a separate chart can be developed for each function. A tabular form is maintained where rows indicate the task with milestones and columns indicate duration (Days).

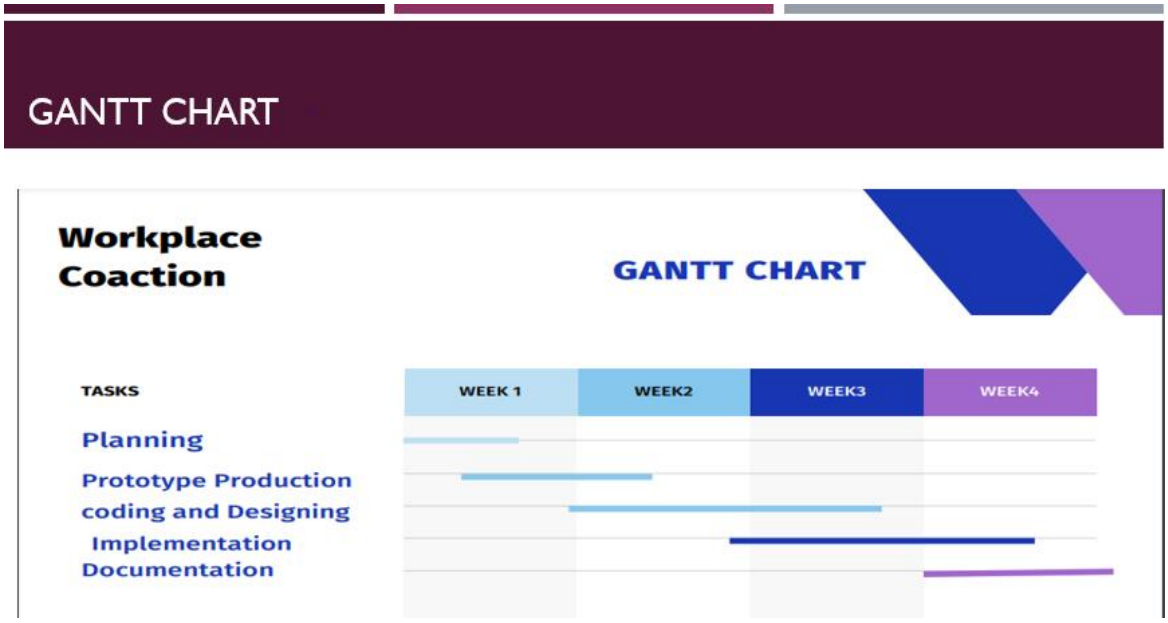

Fig 2.0 Gantt Chart

5.1.2 Software Requirements with specifications:

Name of Components	Specifications
Operating system	Windows
Language	HTML,CSS, Javascript, PHP

Software Development kit	XAMPP, Google Chrome
Markup Language Enable	HTML

5.1.3 Hardware Requirements with specifications:

Name of Components	Specifications
Desktop/Laptop	Any Configuration
Memory Used	6.31 MB

5.2 : DATA FLOW DIAGRAM

Are used to graphically represent the flow of data in a Vehicle Management System. DFD describes the processes that are involved in a system to transfer data from the admin to the employee, employee to the employee, employee to admin etc.

Vehicle Management System this system shows the flow of data in admin Modules on many Action. It shows the flow of data among the sub module in it Admin data flow on the sub screen.

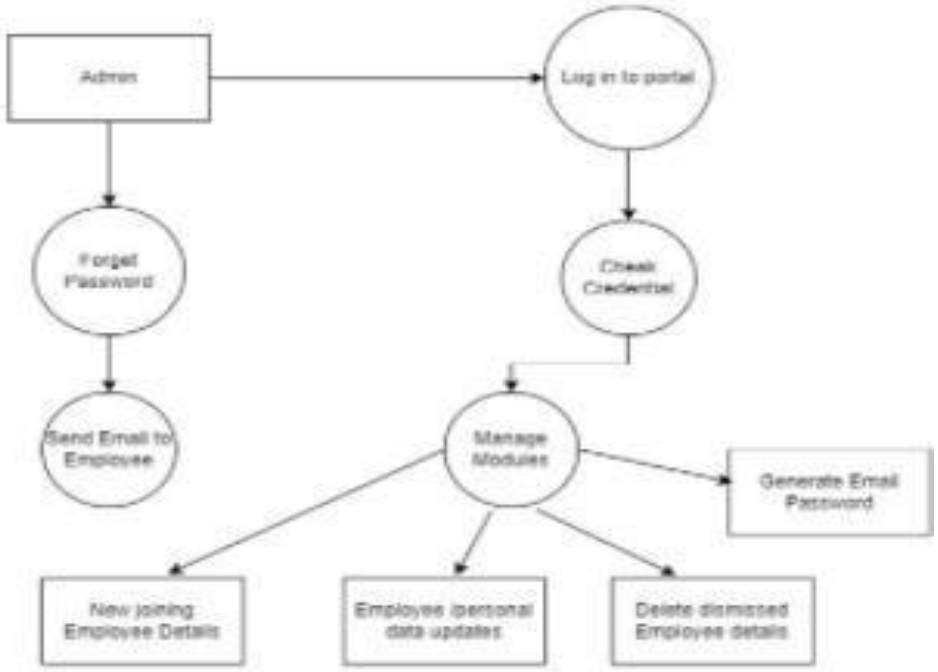

Fig 3.1 Admin Mode DFD

Vehicle Management System this system shows the flow of data in Employee Modules on many Action. It shows the flow of data among the sub module in it Employee data flow on the sub screen.

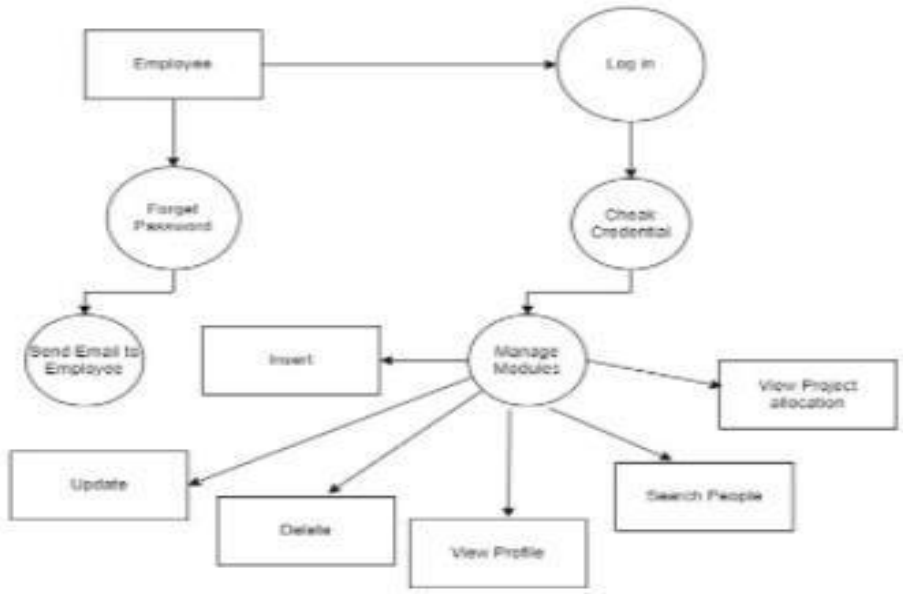

Fig 3.2 Employee DFD

5.3 ENTITY RELATIONSHIP DIAGRAM:

This ER Diagram represents the model of Vehicle Management System Entity. The Entity Relationship Diagram show all visual instrument of Database table and relation between HomePage, Admin Page, Employee Page. All of it have Structured data and every entity may have some attributes.

Vehicle Management System Entity and their Attributes:

1. Admin: Attribute ofAdmin: Email id, Password, Forget Password.
2. Insert New Employee Details: Attributes are: Name, Email, Password, Gender, Qualification, Project, Project Manager, Phone.
3. Delete New Employee: Attributes are: Name, Email, Password, Gender, Qualification, Project, Project Manager, Phone.
4. Update Details of Self: Attributes are: Name, Email, Password, Gender, Qualification, Project, Project Manager, Phone.
5. Employee: Attribute of Employee: Email id, Password, Forget Password.

6. Employee Update Details: Attributes are: Name, Email, Gender, Qualification, Project, Project Manager, Phone.
7. Search Employee: Attributes are: Name, Email, Gender, Qualification, Project, Project Manager, Phone.
8. View Profile of Employee: Attributes are: Name, Email, Gender, Qualification, Project, Project Manager, Phone.

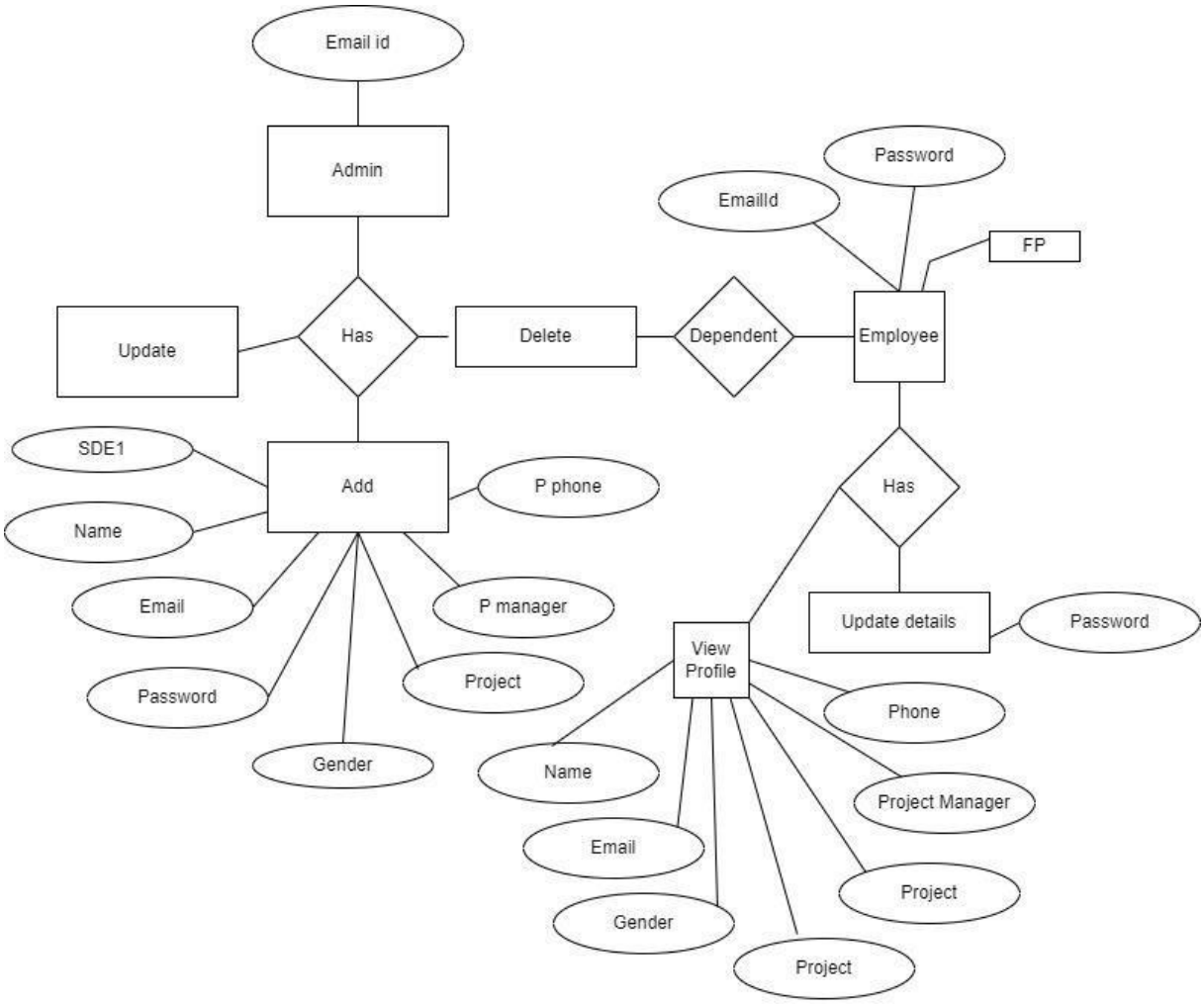

Fig 4.1 Entity relationship Diagram