

A Project Report
On
Construction Management

B. Tech (CE) Semester- VI

In fulfillment of all requirements for the subject of
SYSTEM DESIGN PRACTICE

**Bachelor of Technology
In
Computer Engineering**

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CERTIFICATE

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ABSTRACT

This document proposes a system for construction management which is used to simplify the construction business. It helps streamline all the construction needs by providing the information in a quick and efficient manner. The software helps to manage the employee details and track the allocation of employee to different projects. The software also helps to track the progress of the projects and helps to manage the inventory stock and vehicles at the site. The software also helps to manage consistency of the data and reduce paper work.

1.INTRODUCTION

The construction industry is one of the oldest industry in the world. It involves management of employees, inventory, vehicles and much more among various projects. The work in this industry is mostly done by pen paper mechanisms and hence there may be many chances where data may be inconsistent and that may lead to bad management of resources and ultimately hamper the profit of the project.

In recent times, many management software have been made to build a simple, effective and computerized system for storing and retrieving the information or data efficiently and handle the problem occurring in case of traditional methods. Using these software, the employee related to the project can add, update and retrieve the information easily.

This document talks about such system for construction management. The system takes user credential from the user and based on the post of the employee it provides relevant functionalities. For this project we have implemented some of the functionalities related to project manager, site manager, payroll officer, inventory manager and admin.

Technology Used : This software is implemented completely in **.NET framework** (with C# language support) with **MVC** architecture and was developed in **Visual Studio 2015**.

2.SOFTWARE REQUIREMENT SPECIFICATION

2.1 Purpose

This system will be used to manage inventory and employee details aspects of Construction Industry.

2.2 Scope of Project

The **Easy Construct** web based application that allows Admin to update details of employees and project and HR department can manage employees. The **Easy Construct** that is to be developed provides the Site manager to update daily stock in inventory and also inventory manager can update details and purchase order. The some required modules of construction industry like financial module, tender and bid module, engineering module, payroll module, are not included in this application.

2.3 References

IEEE SRS Format: it Provide the standard format to describe the specifications of the application.

2.4 Overall Description

2.4.1 Product Perspective

For construction industry who wants to automate their work, the **Easy Construct** is small software (web portal) that allows M.D. of company to manage or view details of each site which is under construction from his computer and also allows Inventory manager to update stock details in Inventory and purchase order and also manage employees' details. Unlike traditional paper work in which they needed to manage resource details, employee details on paper our product maintain resource details and employee details easily and accessing of that details is faster and can handle large amount of data.

2.4.2 Product Functions

- System provides registration for new employee.
- System gives authority to Project Manager to add new projects and project details.
- System provides Admin to view reports of all the projects, Inventories and employees.
- System provides all the Inventory details to inventory manager and he can also update details in Inventory stock.
- System provides authority to Inventory manager to allocate resources according to project

- requirements.
- System provides authority to site manager to update in Inventory stock daily basis according to use of stock.
 - System provides purchase order functionality to inventory manager.

2.4.3 User Classes and Characteristics

The users of the system are employee and the administrators who maintain the system. The employee and administrators are assumed to have basic knowledge of the computers and Internet browsing. The administrators of the system to have more knowledge of the internals of the system and is able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system.

2.4.4 Operating Environment

It is client-server architecture. The existing World area network (Internet) will be used for collecting data from the users and also for updating the Application Catalogue. Personal server would be needed for this application.

2.4.5 Design and Implementation Constraints

The information of all the users must be stored in a database that is accessible by the Easy Construct System. The users access the Easy Construct System from any computer that has Internet browsing capabilities and an Internet connection.

2.4.6 User Documentation

Online help is provided for each of the feature available with the Easy Construct System. All the applications provide an online help system to assist the user. Easy Construct help documentation is provided for each and every feature provided by the system. The User Manual describes the use of the system to Members.

2.5 External Interface Requirements

2.5.1 Hardware Interfaces

RAM : 4 GB

HardDisk : 1 TB

Processor : intel i3

2.5.2 Software Interfaces

Operating System: Windows

Database: SQLExpress

Framework: .NET

Language: C#

Web Server: IIS

2.6 SYSTEM REQUIREMENT

R1: System provides Login

Input: employee id, password

Output: login success

Description: System takes employee id and password from the user and returns him/her authority to access certain details of projects according to him/her role.

R2: System provides authority to admin to access employee details, project details and daily reports.

Input: filter values, some attributes.

Output: details

Description: System takes filter values and some attributes value and take details from the database and give it to admin in appropriate format.

R3: System provides authority to add or remove projects to Project Manager

Input: details of new project.

Output: updated Details.

Description: System takes details of new project from project manager., insert new entry of that project in database and return the successful updated message.

R4: System provides Inventory management

Input: details to update Inventory stock.

Output: updated details Inventory.

Description: System takes details to update Inventory stock from appropriate user, Update details in database and gives modified Inventory to user.

R4.1: System provides entire inventory details to Inventory manager

Input: filter details.

Output: Inventory details.

Description: System takes filter details from the inventory manager and according to filter it return Inventory stock details to inventory manager in good format.

R4.2: System provides authority to update Inventory stock to inventory manager.

Input: update details.

Output: updated inventory.

Description: System takes inventory update details from Inventory manager, update that values in database and returns updated inventory stock.

R4.3: System provides authority to update daily stock in inventory to site manager.

Input: daily usage details of stock.

Output: daily report of stock.

Description: System takes daily usage of stock from the site manager update usage in inventory and generates daily report of stock usage.

R5: System provides resource allocation management

Input: details of resources

Output: resources allocated to project.

Description: System takes details of resources required for the project as input then checks for availability of resources if resource is not available then order the resource and then allocates all required resources to project.

R5.1: System provides check for availability of resources

Input: details of resources

Output: resource allocated to project.

Description: System takes the details required for project checks availability of the resources and allocates resources to the project.

R5.2: System generates order for not available resources

Input: details of resources

Output: order generated.

Description: System takes details of not available resources generate order for those resources and when those resources are available they are allocated to project.

R6: System provides purchase order functionality to inventory manager.

Input: details of inventory.

Output: order generated.

Description: System takes details of inventory required to purchase for project as input then system make list of inventory and generates order.

R7: System provides authority to Payroll manager to manage salary details of employee.

Input: no of leaves, month details,

Output: Salary for the month

Description: System asks for leave days of employee and month details and then compute the salary of the employee for the month.

R8: System provides authority to computer operator to manage details of employee.

Input: employee details.

Output: updated database.

Description: System asks for add or update employee details and then required input related employee and then add employee details or update employee details and provides updated information.

R8.1: System provides authority to add employee details.

Input: details of new employee.

Output: successful registration.

Description: System takes details of new employee and then adds employee details to database.

R8.2: System provides authority to update employee salary details.

Input: details of employee.

Output: Updated information.

Description: System takes details of the employee to be updated and updates the information in database.

R9: System provides authority to add progress of project.

Input: completed work, date of completion.

Output: completed work list project wise.

Description: System asks completed work and date of completion and then makes entry in database and then System displays completed work list project wise.

3.DESIGN

3.1 Use Case Diagram

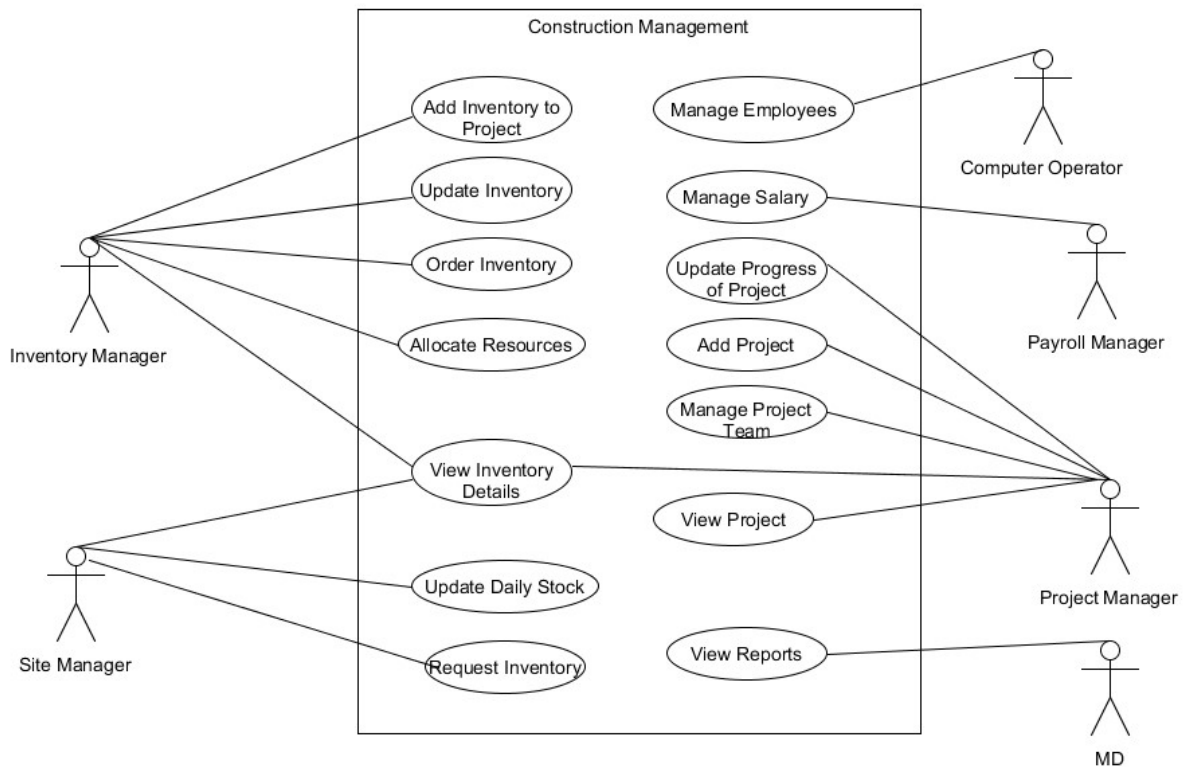


Figure 3.1 Use Case Diagram for Construction Management

3.2 Class Diagram

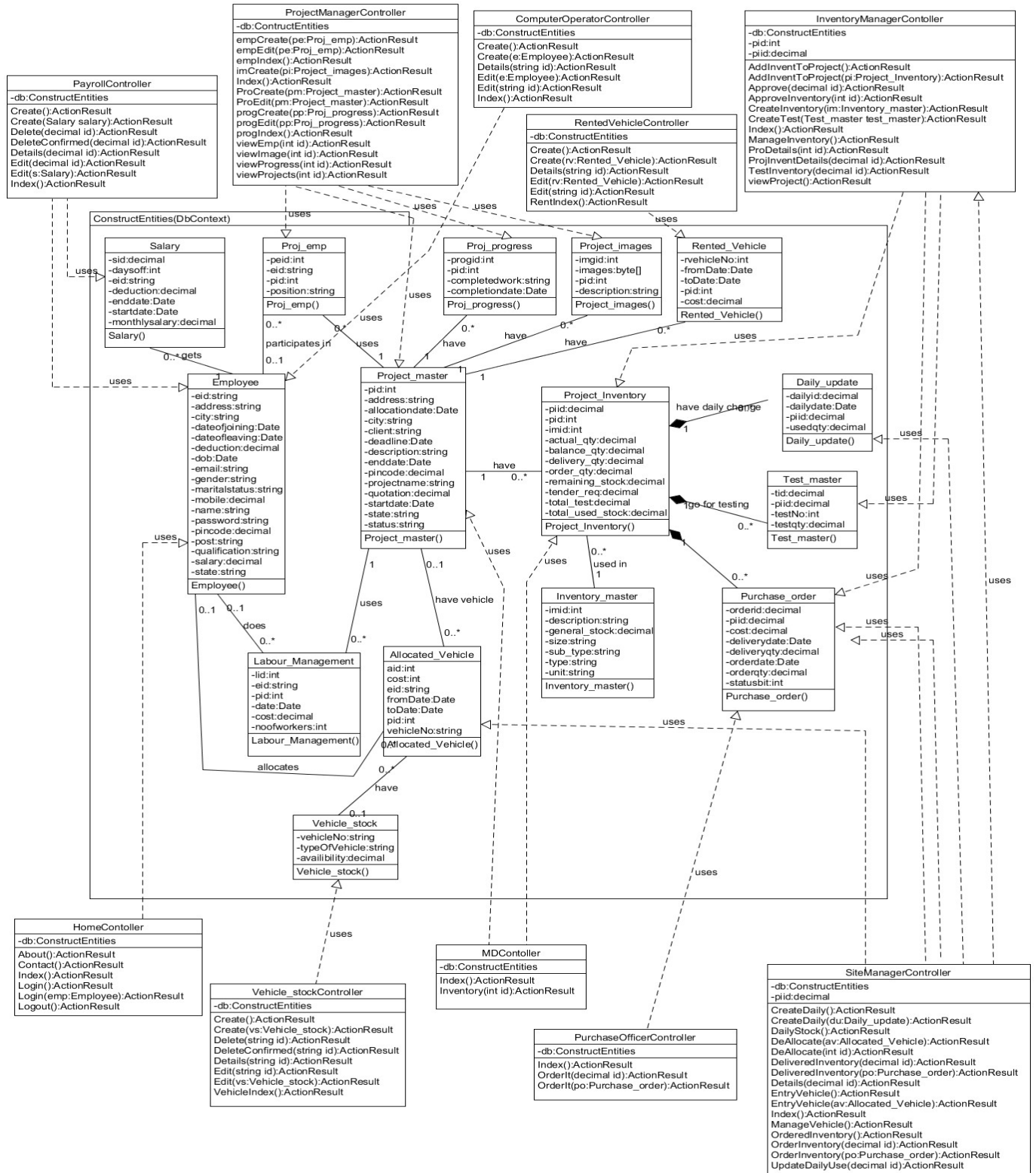


Figure 3.2 Class Diagram for Construction Management

3.3 Sequence Diagrams

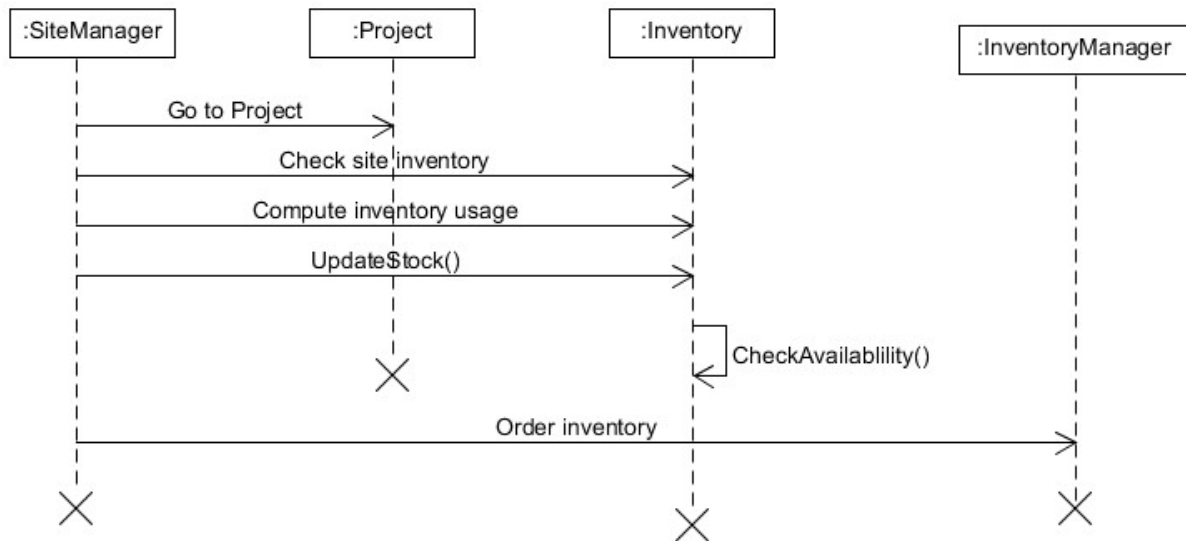


Figure 3.3 Sequence Diagram for order inventory

3.4 Activity Diagrams

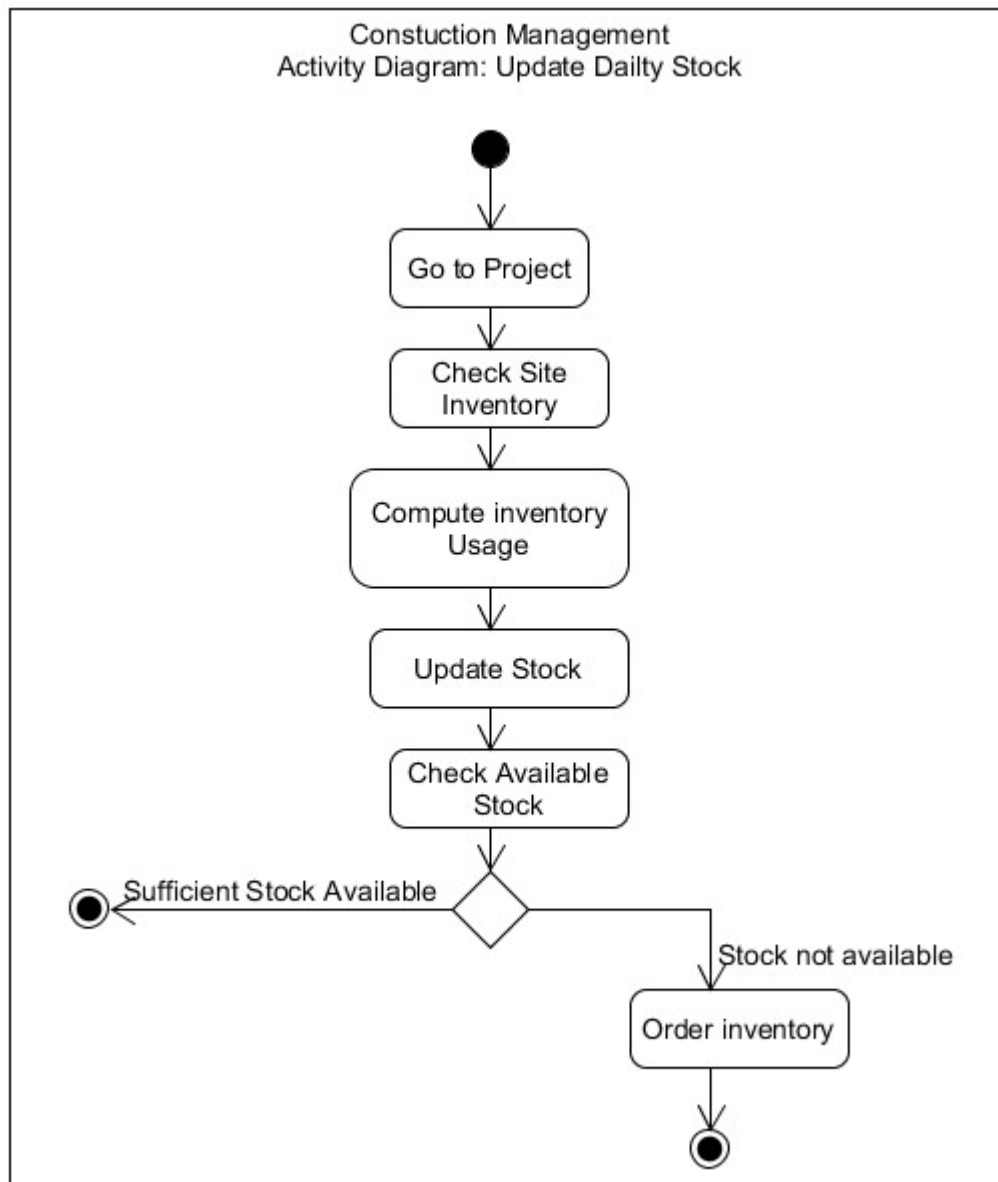


Figure 3.4.1 Activity Diagram for update daily stock

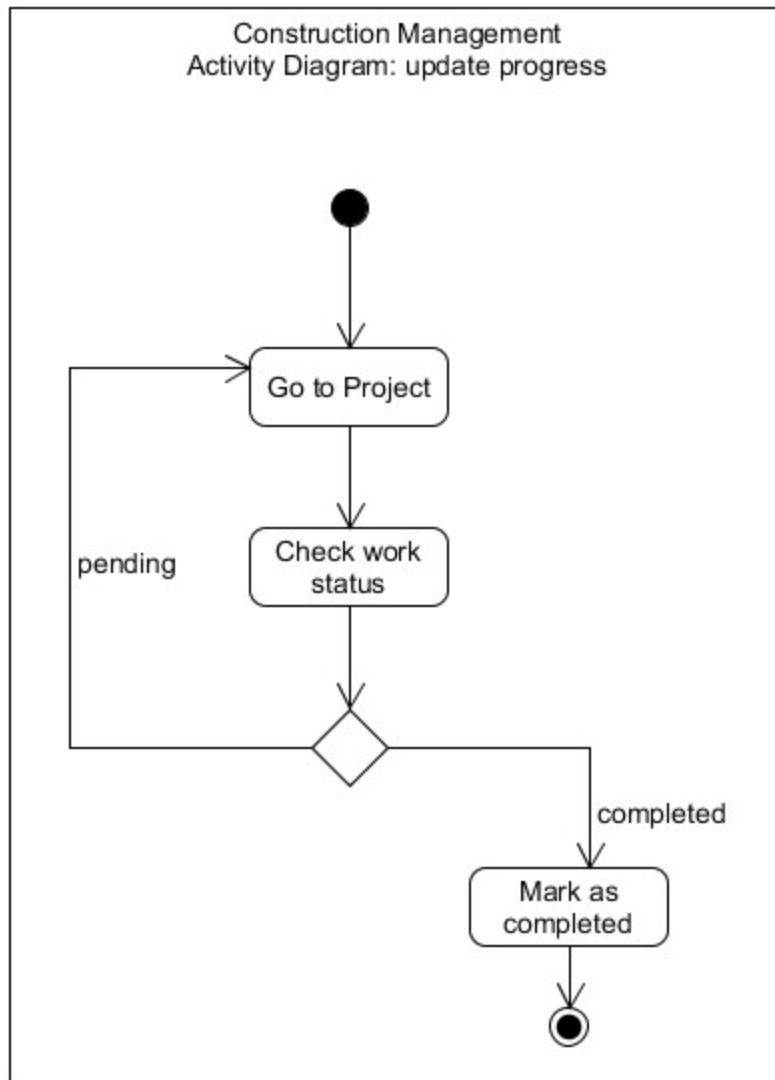


Figure 3.4.2 Activity Diagram for update progress

3.5 State Diagrams

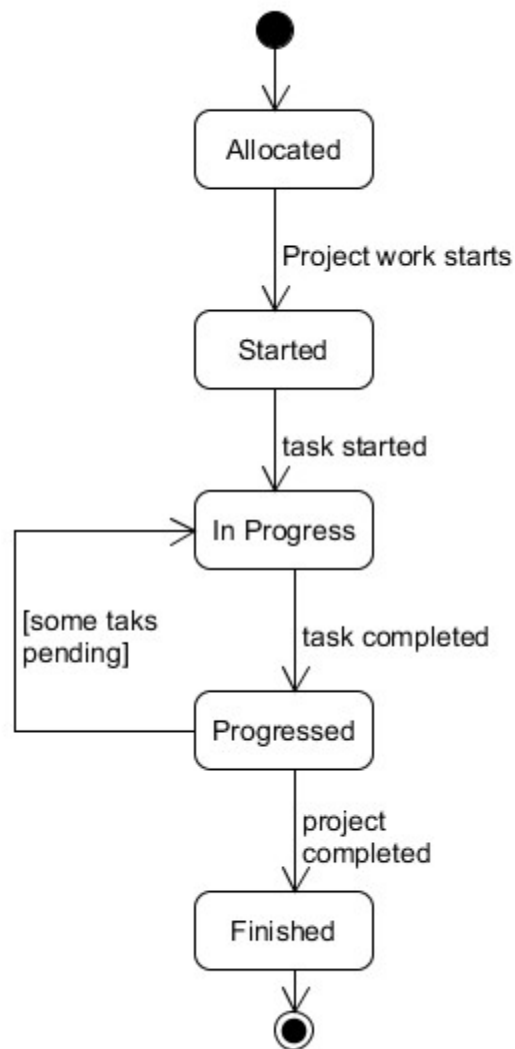


Figure 3.5 State Diagram for Project object

3.6 ER Diagram

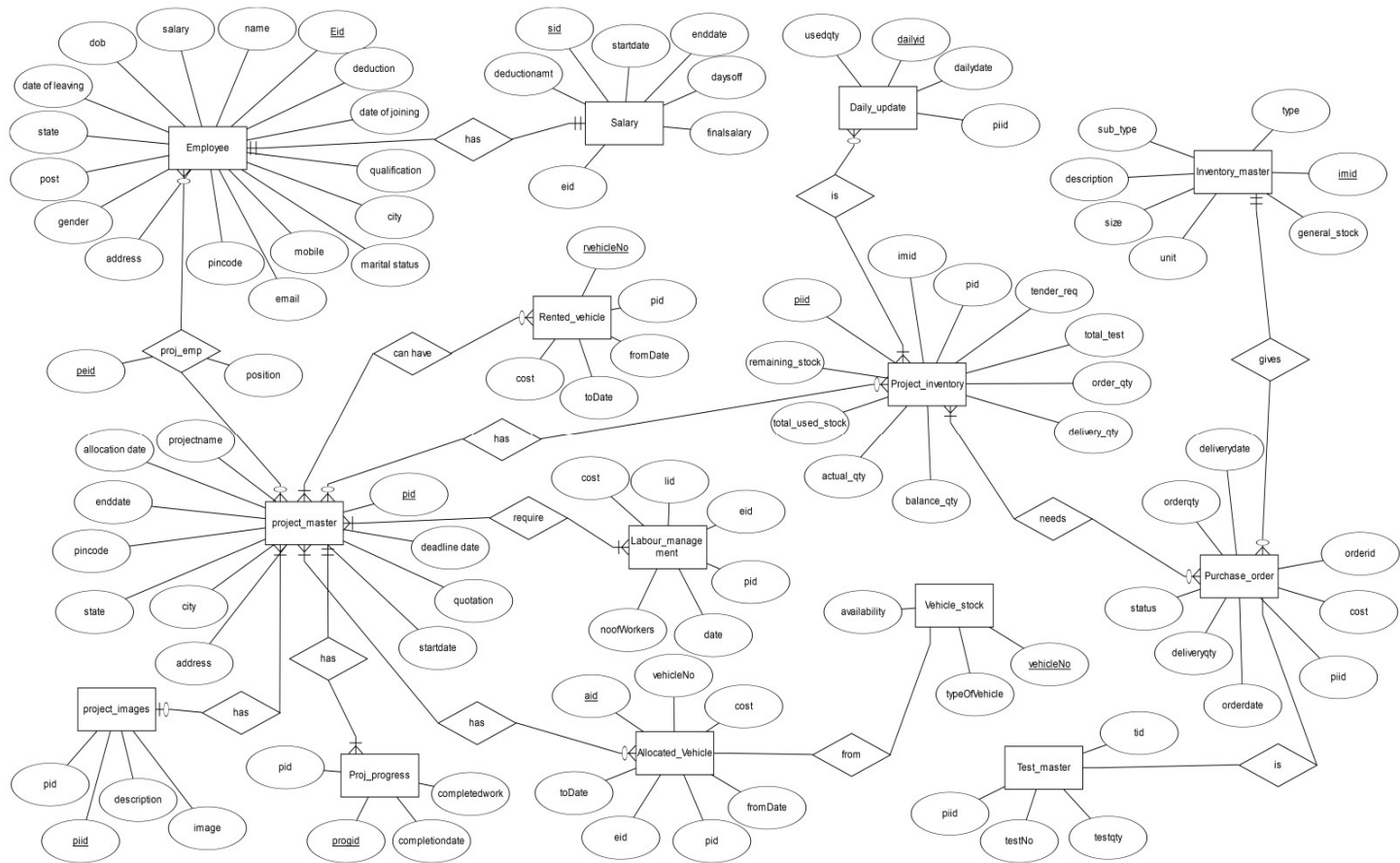


Figure 3.6 ER Diagram for Construction Management

3.7 Data Dictionary

| Employee | | | |
|----------|---------------|---------------|-------------|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Eid | nvarchar(50) | Primary key |
| 2 | Mobile | numeric(10,0) | |
| 3 | name | nvarchar(50) | |
| 4 | Dob | Date | |
| 5 | Email | nvarchar(50) | |
| 6 | Address | nvarchar(100) | |
| 7 | City | nvarchar(20) | |
| 8 | State | nvarchar(20) | |
| 9 | Pincode | numeric(6,0) | |
| 10 | Qualification | nvarchar(100) | |
| 11 | Post | nvarchar(50) | |
| 12 | Dateofjoining | Date | |
| 13 | Dateofleaving | Date | |
| 14 | Gender | nchar(10) | |
| 15 | Maritalstatus | nchar(10) | |
| 16 | salary | numeric(18,0) | |
| 17 | Deduction | numeric(4,0) | |

| Project master | | | |
|----------------|----------------|---------------|-------------|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Pid | Int | Primary key |
| 2 | Projectname | varchar(100) | |
| 3 | Description | varchar(250) | |
| 4 | Address | nvarchar(150) | |
| 5 | City | nvarchar(50) | |
| 6 | State | nvarchar(100) | |
| 7 | Pincode | numeric(6,0) | |
| 8 | Status | nvarchar(15) | |
| 9 | Quotation | numeric(18,0) | |
| 10 | Startdate | Date | |
| 11 | Enddate | Date | |
| 12 | Allocationdate | Date | |
| 13 | Deadlinedate | Date | |
| 14 | Client | nvarchar(50) | |

| Project_images | | | |
|----------------|-------------|---------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Imgid | Int | Primary key |
| 2 | Pid | Int | Foreign key references Project_master(pid) |
| 3 | Images | Image | |
| 4 | Description | nvarchar(150) | |

| Proj_progress | | | |
|---------------|----------------|---------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Progid | Int | Primary key |
| 2 | Pid | int | Foreign key references Project_master(pid) |
| 3 | Completedwork | nvarchar(150) | |
| 4 | Completiondate | Date | |

| Proj_emp | | | |
|----------|----------|--------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Peid | Int | Primary key |
| 2 | Pid | Int | Foreign key references Project_master(pid) |
| 3 | Eid | nvarchar(50) | Foreign key references Employee(eid) |
| 4 | Position | varchar(50) | |

| Salary | | | |
|--------|----------------|---------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Sid | numeric(18,0) | Primary key |
| 2 | Daysoff | Int | |
| 3 | Startdate | Date | |
| 4 | Enddate | Date | |
| 5 | Monthllysalary | numeric(18,0) | |
| 6 | Deduction | numeric(4,0) | |
| 7 | Eid | nvarchar(50) | Foreign key references Employee(eid) |

| Allocated_Vehicle | | | |
|-------------------|-----------|--------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Aid | Int | Primary key |
| 2 | vehicleNo | nvarchar(10) | |
| 3 | fromDate | Date | |
| 4 | toDate | Date | |
| 5 | Eid | nvarchar(50) | Foreign key references Employee(eid) |
| 6 | Pid | Int | Foreign key references Project_master(pid) |
| 7 | Cost | nchar(10) | |

| Vehicle stock | | | |
|---------------|---------------|--------------|-------------|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | vehicleNo | nvarchar(10) | Primary key |
| 2 | typeOfVehicle | nvarchar(50) | |
| 3 | Availability | numeric(1,0) | |

| Rented_vehicle | | | |
|----------------|------------|---------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | rvehicleNo | nvarchar(10) | Primary key |
| 2 | Pid | Int | Foreign key references Project_master(pid) |
| 3 | fromDate | Date | |
| 4 | toDate | Date | |
| 5 | Cost | numeric(10,2) | Default(0) |

| Labour_management | | | |
|-------------------|-------------|--------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Lid | Int | Primary key |
| 2 | Eid | nvarchar(50) | Foreign key references Employee(eid) |
| 3 | Pid | Int | Foreign key references Project_master(pid) |
| 4 | Date | Date | |
| 5 | Noofworkers | Int | |
| 6 | Cost | numeric(8,0) | |

| Inventory_master | | | |
|------------------|---------------|---------------|-------------|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Imid | Int | Primary key |
| 2 | Type | nvarchar(50) | |
| 3 | sub_type | nvarchar(50) | |
| 4 | Description | nvarchar(100) | |
| 5 | Size | nvarchar(50) | |
| 6 | Unit | nvarchar(10) | |
| 7 | general_stock | numeric(10,0) | Default(0) |

| Daily_update | | | |
|--------------|-----------|---------------|---|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Dailyid | numeric(18,0) | Primary key |
| 2 | Dailydate | Date | |
| 3 | Piid | numeric(20,0) | Foreign key references Project_Inventory(piid) |
| 4 | Usedqty | numeric(10,0) | Default(0) |

| Project_Inventory | | | |
|-------------------|------------------|---------------|--|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Piid | numeric(20,0) | Primary key |
| 2 | Pid | Int | Foreign key references Project_master(pid) |
| 3 | Imid | Int | Foreign key references Inventory_master(imid) |
| 4 | tender_req | numeric(10,0) | |
| 5 | total_test | numeric(10,0) | Default(0) |
| 6 | order_qty | numeric(10,0) | Default(0) |
| 7 | delivery_qty | numeric(10,0) | Default(0) |
| 8 | balance_qty | numeric(10,0) | Default(0) |
| 9 | actual_qty | numeric(10,0) | Default(0) |
| 10 | total_used_stock | numeric(10,0) | Default(0) |
| 11 | remaining_stock | numeric(10,0) | Default(0) |

| Purchase_order | | | |
|-----------------------|--------------|------------------|---|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Ordered | numeric(20,0) | Primary key |
| 2 | Orderdate | Date | |
| 3 | Orderqty | numeric(10,0) | |
| 4 | Deliverydate | Date | |
| 5 | Deliveryqty | numeric(10,0) | Default(0) |
| 6 | Piid | numeric(20,0) | Foreign key references Project_Inventory(piid) |
| 7 | Statusbit | Int | Default(0) |
| 8 | Cost | numeric(18,0) | Default(0) |

| Test_master | | | |
|--------------------|--------------|------------------|---|
| SR_NO | FIELD | DATA TYPE | CONSTRAINT |
| 1 | Tid | numeric(18,0) | Primary key |
| 2 | testNo | Int | Default(0) |
| 3 | Testqty | numeric(10,0) | |
| 4 | Piid | numeric(20,0) | Foreign key references Project_Inventory(piid) |

4. IMPLEMENTATION DETAIL

The following sections will introduce the numerous implementation details of the system from the point of view of different users and will introduce a number of decisions that have been made regarding implementation. These sections also attempt to somewhat describe the role of each user group in the system, discussing their individual roles through the functions they can perform.

4.1 Modules

4.1.1 Home

- In this module login facility is provided. It takes user credentials and based on role/post it redirects user to the appropriate home page to provide appropriate functionalities.

4.1.2 Project Manager

- This module is for the project manager. It provides functionalities like managing project details, managing team allocated to project and updating progress of the project.

4.1.3 Inventory

- This module is for the inventory manager where he can manage the inventory details, managing vehicles and approving the inventory order.

4.1.4 Site Manager

- This module is for the site manager. It provides functionalities like updating daily stock, generate an order request and gives delivery acknowledgement. It also does vehicle(own and rented) management at the site.

4.1.5 Purchase Order

- This module provides functionalities like generating order for inventory. This module is designed for purchase officers.

4.1.6 Computer Operator

- This module provides functionalities like adding new employee and updating the details related to them.

4.1.7 Payroll

- This module is for the payroll department. It provides functionalities like managing salary of the employee and calculating monthly salaries of each employee.

5. TESTING

| Entity | Test case | Expected Output | Actual Output | Result |
|------------------|--|---|--|--------|
| Login | User authentication at login | Only authenticated users should be able to login | Authentication done successfully | PASS |
| CreateProject | Add a new project | Project database should be updated | Database updated properly | PASS |
| EditProject | Edit the project details | Project information in the database should be updated properly | Data updated properly | PASS |
| DeleteProject | Delete a project entry | Entry should be deleted from the database | Entry deleted | PASS |
| UploadImage | Add image related to a project to the database | Image should be added to the respective project | Image added properly | PASS |
| CalculateSalary | Calculate monthly salary of the employee | Salary of the employee for the given month should be calculated based on number of leaves taken | Salary calculated properly | PASS |
| AddTeam | Add a member to the project team | Member should be added to the team least for the corresponding project | Member added properly | PASS |
| AddInventory | Add inventory to the project | Inventory should be added to the project's allocated inventory | Inventory added successfully | PASS |
| CreateInventory | Make entry for a new kind of inventory | Inventory list should be updated with the specified information | Inventory added successfully | PASS |
| UpdateProgress | Add a progress entry for a project | Project progress should be updated for the respective project properly | Progress updated properly | PASS |
| UpdateDailyStock | Update daily usage of the inventory | Usage of inventory at the project should be added and remaining stock should be calculated | Remaining stock calculated properly and usage added properly | PASS |

6. SCREENSHOTS

1. **Login:** The user is validated against the stored credentials and based on the role he is redirected to the appropriate home page.

[Application name](#) [Home](#) [About](#) [Contact](#) [Login](#)

Login

eid

rutvi1997

password

••••

Login

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Image 6.1

2. **View Projects:** It is a functionality of project manager where he can see the details of projects and manage the details as per requirement.

[Home](#) [Project Details](#) [Progress Details](#) [Team Details](#) [Logout](#)

Projects

to create new project ← [Create New](#)

| projectname | city | state | status | quotation | client | |
|-------------|-------|---------|-----------|-----------|------------|--|
| Aavas | surat | gujarat | Completed | 500000.00 | government | Edit Details Delete Images |
| Vesu School | surat | gujarat | ongoing | 150000.00 | private | Edit Details Delete Images → to see image related to project |

to edit or see details or to delete the project ↑

Image 6.2

3. **Upload Image** : project manager can upload images related to project and see it.

[Home](#) [Project Details](#) [Progress Details](#) [Team Details](#) [Logout](#)

Upload

pid

Vesu School

▼

images

Browse...

4th floor.jpg

description

rding work at the 4th floor of the building

Create

[Back to List](#)

Image 6.3.1

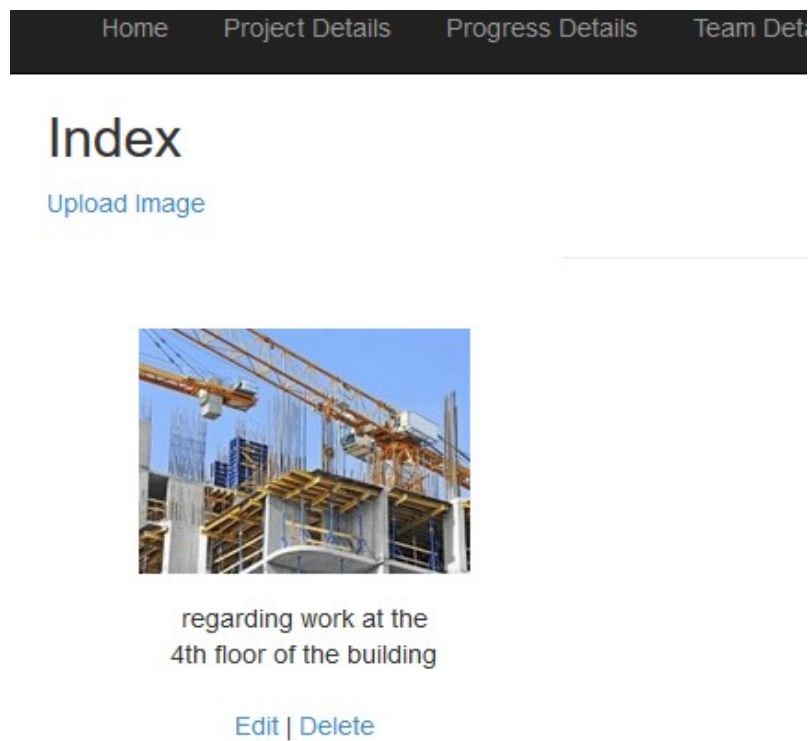


Image 6.3.2

4. **Project Progress:** Project manager can add, view and update project progress.

[Home](#) [Project Details](#) [Progress Details](#) [Team Details](#) [Logout](#)

Create

Proj_progress

pid

Vesu School

completedwork

slab for 1st floor

completiondate

3/2/18

Create

[Back to List](#)

Image 6.4.1

[Home](#) [Project Details](#) [Progress Details](#) [Team Details](#) [Logout](#)

Index

[Create New](#)

| completedwork | completiondate | projectname | |
|--------------------|----------------|-------------|---|
| Excavation | 01/01/2018 | Vesu School | Edit Delete |
| column | 01/25/2018 | Vesu School | Edit Delete |
| slab for 1st floor | 03/02/2018 | Vesu School | Edit Delete |

Image 6.4.2

5. **Manage Team:** Project manager can add, edit or delete a member for the project team.

| Home | Project Details | Progress Details | Team Details | Logout |
|----------------------------|-----------------|------------------|---|--------|
| Index | | | | |
| Create New | | | | |
| position | name | projectname | | |
| Site Manager | Aman | Aavas | Edit Delete | |

Image 6.5

6. **Update Stock :** Inventory Manager can update the daily stock

Application name Vehicle Management Rented Vehicle Inventory Acknowledgement Daily Stock Management Logout

DailyStock

| tender_req | total_test | order_qty | delivery_qty | balance_qty | actual_qty | total_used_stock | remaining_stock | description | projectname | | |
|------------|------------|-----------|--------------|-------------|------------|------------------|-----------------|---------------------|-------------|--------------------------------|--------------------------------|
| 15000 | 3000 | 2000 | 4000 | 2000 | 0 | 7000 | -3000 | DWC pipe 200x300 | Vesu School | UpdateDailyUse | OrderInventory |
| 30000 | 3500 | 0 | 0 | 0 | 0 | 0 | 0 | RCC Pipe 800 | Vesu School | UpdateDailyUse | OrderInventory |
| 50000 | 20000 | 0 | 0 | 0 | 0 | 20000 | -20000 | RCC Pipe 800 | Vesu School | UpdateDailyUse | OrderInventory |
| 60000 | 40000 | 0 | 0 | 0 | 0 | 0 | 0 | DWC pipe 200x300 | Vesu School | UpdateDailyUse | OrderInventory |

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Image 6.6.1

| Application name | Vehicle Management | Rented Vehicle | Inventory Acknowledgement | Daily Stock Management | Logout |
|----------------------------|--------------------|----------------|---------------------------|------------------------|--------|
| UpdateDailyUse | | | | | |
| Create New | | | | | |
| dailydate | | | | usedqty | piid |
| 09/04/2018 | | | | 5000 | 1 |
| 10/04/2018 | | | | 2000 | 1 |

Image 6.6.2

7. **Manage Vehicle:** Inventory manager can allocate a vehicle to a project.

| Application name Vehicle Management Rented Vehicle Inventory Acknowledgement Daily Stock Management Logout | | | | | |
|---|------------|-------|------|-------------|---------------|
| ManageVehicle | | | | | |
| Create New | | | | | |
| fromDate | toDate | cost | name | projectname | typeOfVehicle |
| 09/04/2018 | 09/05/2018 | 2000 | Jay | Vesu School | JCB |
| 04/15/2018 | 04/20/2018 | 3000 | Jay | Vesu School | JCB |
| 04/25/2018 | 04/30/2018 | 10000 | Jay | Vesu School | JCB |

Image 6.7

8. **Create Employee :** Computer Operator here can make entry for new employee.

Create Employee

| | |
|----------|---|
| eid | <input type="text" value="rutu19"/> |
| mobile | <input type="text" value="90903719872"/> |
| name | <input type="text" value="Rutu"/> |
| dob | <input type="text" value="5/19/97"/> |
| email | <input type="text" value="rutu.patel@gmail.com"/> |
| password | <input type="password"/> |

Image 6.8

9. **Salary:** Payroll Manager can deduce monthly salary based on leaves taken.

Create

Salary

eid

Aman

startdate

1/1/18

enddate

1/31/18

daysoff

1

Create

[Back to List](#)

Image 6.9.1

Index

[Create New](#)

| name | startdate | enddate | daysoff | deduction | monthlSalary | |
|------|------------|------------|---------|-----------|--------------|---|
| Aman | 01/01/2018 | 01/31/2018 | 1 | 100 | 59900 | Edit Delete |

Image 6.9.2

10. Inventory : Inventory Manager can manage inventory for project and add test quantity here

AddInventory

[Create New](#)

| projectname | description | tender_req | |
|-------------|------------------|------------|---|
| Vesu School | DWC pipe 200x300 | 15000 | Details Testing |
| Vesu School | RCC Pipe 800 | 30000 | Details Testing |
| Vesu School | RCC Pipe 800 | 50000 | Details Testing |
| Vesu School | DWC pipe 200x300 | 60000 | Details Testing |

[Back to Project List](#)

Image 6.10

11. Vehicle Management: Inventory manager can add a vehicle to the stock.

Create

Vehicle_stock

vehicleNo

BD6066

typeOfVehicle

JCB

Create

[Back to List](#)

Image 6.11

12. Reports: MD can see the reports

Index

| projectname | description | address | city | state | pincode | status | quotation | startdate | enddate | allocationdate | deadlinedate | client |
|-------------|--|-------------------------|-------|---------|---------|-----------|-----------|------------|------------|----------------|--------------|------------|
| Vesu School | Govt project for school. 2 buildings with furniture fitting and drainage | 256, megha garden, vesu | surat | gujarat | 395003 | ongoing | 150000 | 01/02/2018 | 03/05/2019 | 11/20/2017 | 12/15/2020 | private |
| Aavas | buildings for poor | Kamrej char rasta | surat | gujarat | 395003 | Completed | 500000 | 01/02/2018 | 03/05/2019 | 11/20/2017 | 02/18/2018 | government |

Image 6.12

7. CONCLUSION

At the time of submitting the report we have successfully designed the application to handle the construction management. The system manages the data properly and provides user an efficient way to handle the data. The system successfully provides functionalities like managing project, inventory and employee details. It also provides functionality like calculating monthly salary of the employee and generating purchase order for inventory. The website provides fast and easy retrieval and reduces the work and time for managing the data.

8. LIMITATIONS AND FUTURE EXTENSIONS

Limitations

- Employee cannot change his details directly.
- There is no provision to track from where the inventory was purchased.
- Pdf of report cannot be generated.

Future Extension

- Add planning module.
- Add vendor details service for purchase purposes.
- Generate pdf of reports.

9. BIBLIOGRAPHY

1. <https://docs.microsoft.com/enus/aspnet/mvc/overview/gettingstarted/introduction/getting-started>
2. <https://www.codeproject.com/Articles/765519/ASP-NET-MVC-for-Beginners-in-Web-Development>

10. MISCELLANEOUS

SOFTWARE(s)

Microsoft Visual Studio [Community Version, 2015 with required resources]

TECHNOLOGIES

ASP.NET Support

.NET framework

C# language support

Entity Framework 5.0