Project Report on

Construction Management System

Kamani Science & Prtaprai Arts College, Amreli

Developed By

Ved Gondaliya

Guided By

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Mr. Vipul Baldha

Year Of Submission

Submitted in partial fulfillment of the requirement for the award of the degree of Bachelor of Computer Application (BCA)

2023 - 2024

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Preface

The main objective of any computer science student is to get practical knowledge as possible. Being able to have a practical knowledge by developing a project is a lifetime experience. As practical knowledge is important as theoretical knowledge we are thankful of having a project.

Through the development of the project we had a great experience of various strategies that can be applied in development of the project. This project is the stepping stone for our career.

We are pleased to present this project report. Proper case has been taken while organizing the report so that it is easy to comprehend. Also, various software engineering concepts have been implemented.

Acknowledgment

We are student of BCA sem-5 Studying in the Kamani Science College Amreli. We Thanks to the entire person who has given their Support in shaping of the system.

We thank Mr. Vipul Baldha and Mr. Ravi Joshi for giving us guidance and co-operation in understanding the system. We also thanks them for their unconditional help in making of this project.

We have great deal of gratitude towards our head of department who encourages in taking up this activity. We thank all faculties and administrative staffs of the institute.

I am also thankful to all those friends who have helped me in this endeavor either of indirectly & especially my family.

Thanks to all!!

Introduction

The Title of my project is Construction Management System.

I have designed this system in such a way that the on ground record of the construction site will be easy to maintain and also the proper use of resource will be done.

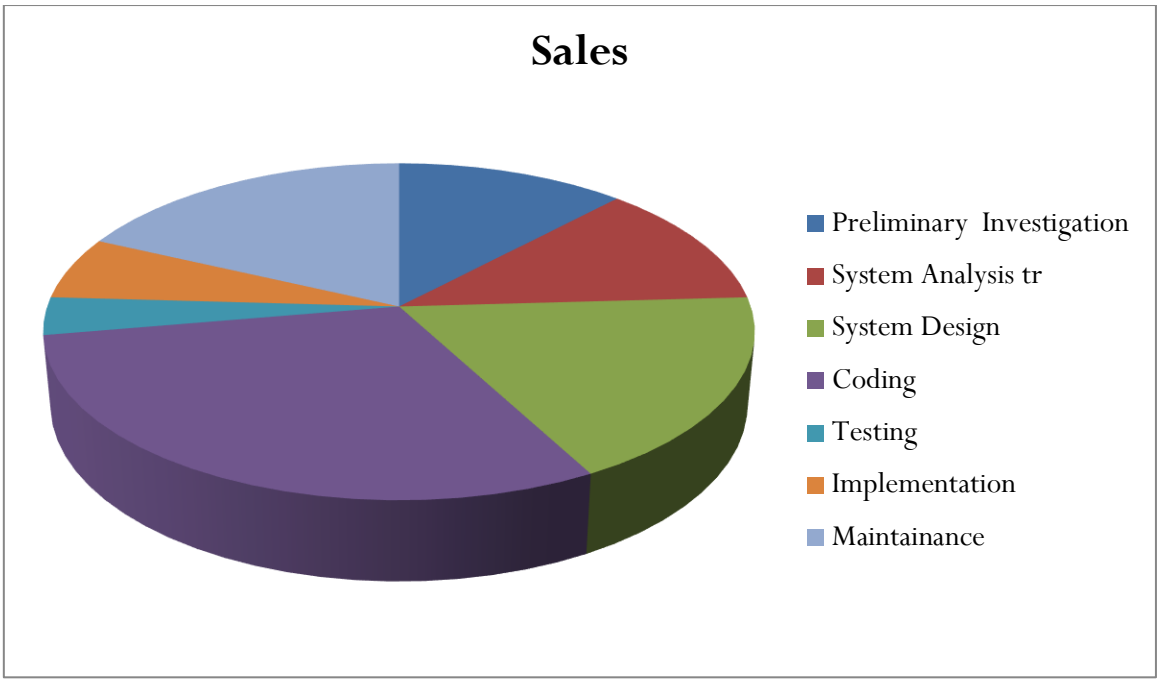
There are two level one is Admin and another is Site Manager Level.

Admin Account will be handel by the main person or the Owners which will inspect all the sites.Suppose there are 5 sites means 5 different site manager, So the Admin can see all the work which will happen in all 5 sites through their admin account.

Site Manager or the Branch Manager User will only allows to access the site when the owners(Admin) assign them their Username and Password to do the respective works. It only allows to do work in the system around the boundary

of their own site.

Time Line Chart



Preliminary Investigation	⇨	**10 Days**
System Analysis	⇨	**10 Days**
System Design	⇨	**15 Days**
Coding	⇨	**25 Days**
Testing	⇨	**5 Days**
Implementation	⇨	**5 Days**
Maintenance	⇨	**15 Days**

Project Profile

- **Project Name** : Construction Management System
- **Developed by** : Ved Gondaliya
- **Front End tool** : PHP ,HTML,CSS, Ajax
- **Back End tool** : PHP MySQL
- **Operating System** : Microsoft Windows 7 &Microsoft Windows 10
- **Computer System** : Pentium-IV or Higher, RAM: 256 MB
- **Project Details** : The on ground record of the construction site will be easy to maintain and also the proper use of resource will be done.
- **Completion Time** : 3 Months
- **Guided by** : Mr. Ravi Joshi & Mr. Vipul Baldha
- **Submitted by** : Saurashtra University, Rajkot

Hardware Requirement

- 512+ MB Of RAM
- Multimedia Keyboard And Mouse
- GHz Processor
- Printer
- Monitor

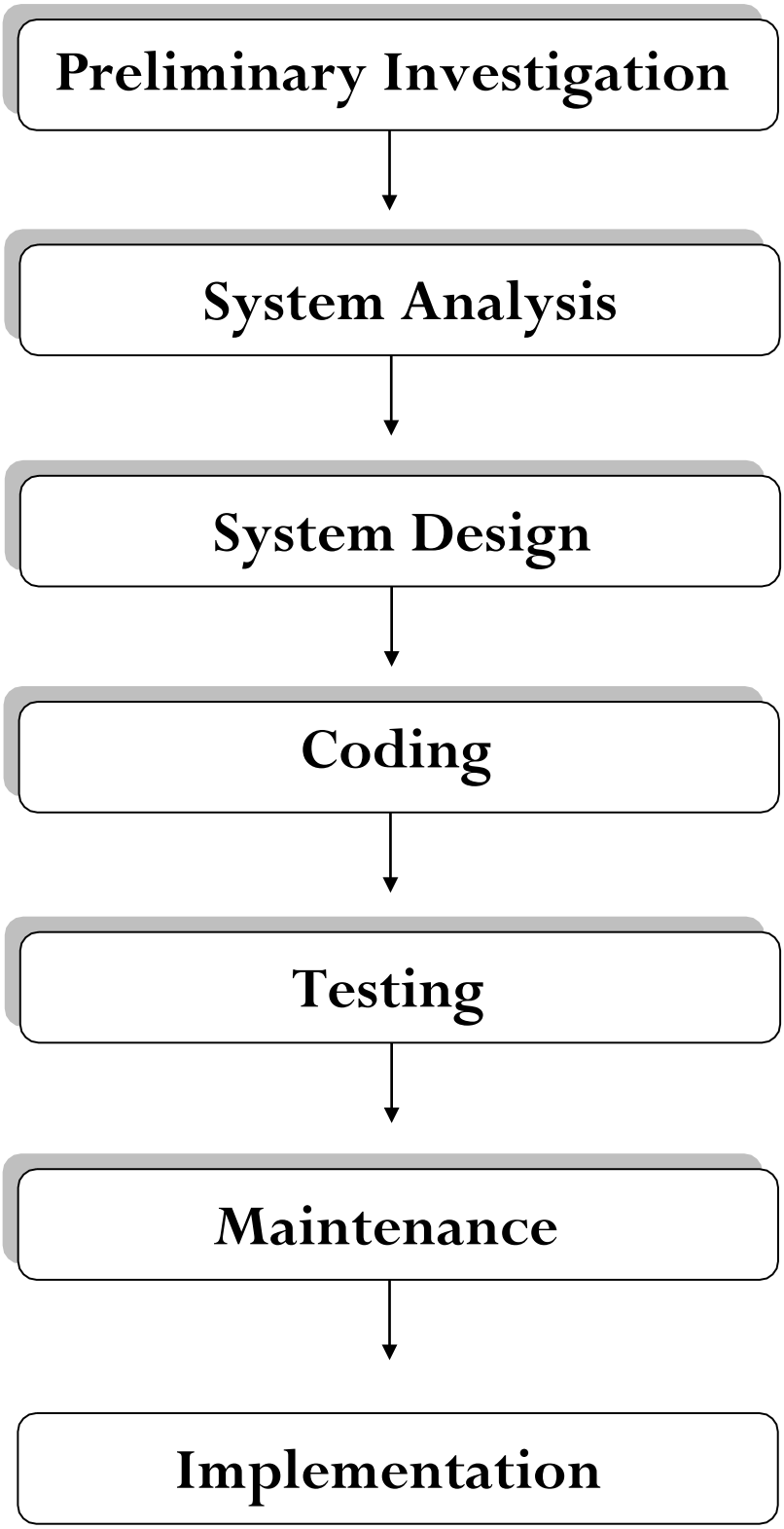
Software Requirement

- Operating System : Microsoft windows 7 & Microsoft windows 10
- Front End Tools : PHP ,HTML, CSS , Ajax , Visual Studio
- Back End Tools : PHP MySQL
- Documentation Tool : Microsoft word 2007
- Browser Specification : Google Chrome , Mozilla Firefox

Project Planning & Scheduling

Project planning is an aspect of Project Management, which comprises of various processes. The aim of these processes is to ensure that various Project tasks are well coordinated and they meet the various project objectives including timely completion of the project. Project Planning is an aspect of Project Management that focuses a lot on Project Integration. The project plan reflects the current status of all project activities and is used to monitor and control the project.

The Project Planning tasks ensure that various elements of the Project are coordinated and therefore guide the project execution. Project Scheduling is one of the most important task of Project Planning and also the most difficult tasks. In very large projects it is possible that several teams work on developing the project. They may work on it in parallel. However their work may be interdependent.


Preliminary Investigation
System Analysis
System Design
Coding
Testing
Maintenance
Implementation

System Analysis

System analysis is the process of identification of objectives and requirements, evaluation of alternative solutions and recommendation for a more feasible solution. In other words, system analysis is the step by step process of gathering, recording and interpreting facts. The main aim of analysis is to determine problem areas and to take solutions to reduce or eliminate them.

- **System analysis itself breaks into two stages:**

1. Preliminary analysis :

2. Detailed analysis :

During analysis, data are collected from the available files, decision points and transactions of the systems using various tools like Data Flow Diagram (DFD).

Feasibility Study

A purpose of feasibility study is to check out the possibility of a computerized solution to the organization's observed problem before very much money that has been spent on.

A feasibility study is carried out to select the best system that meets performance requirements. Only by spending the time to evaluate the feasibility do I reduce the chances for extreme embarrassment at later stage of the system project.

For the complete feasibility study I need to concentrate on following area:

- **They are three types of feasibility Study :**

1. Technical

2. Operational

3. Economical

❖ Technical

Technical feasibility considers whether the desired project can be completed within the framework of available technology. As our project was website designing, this was not much of a problem, as many advanced web-editing tools are available.

❖ Oprational

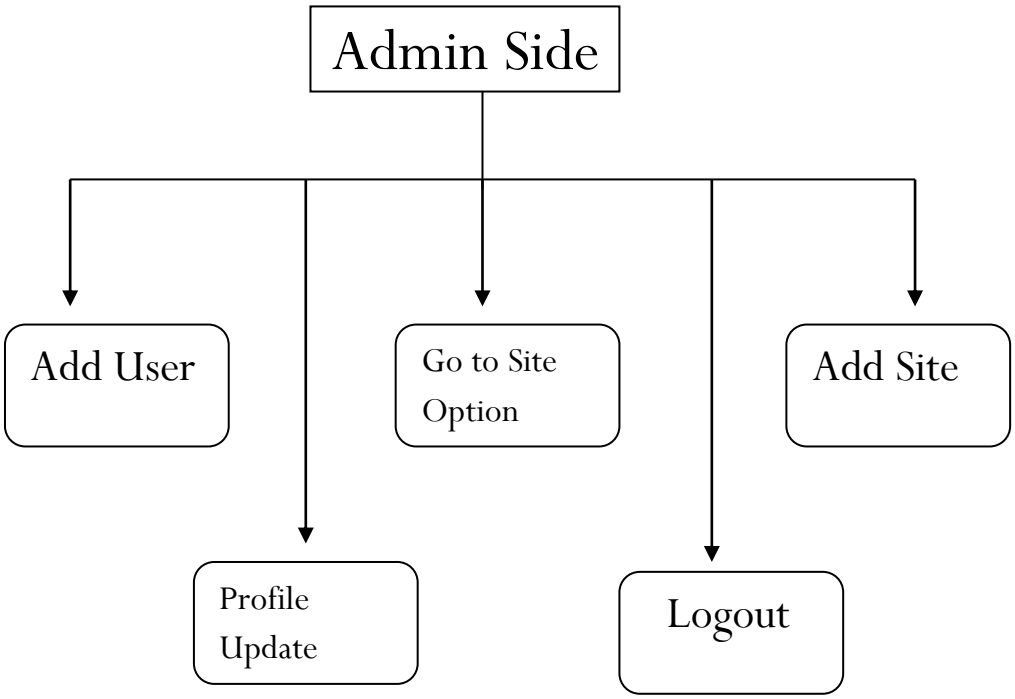
Operational feasibility was done to assure that the product that would be developed would be used. Since a cards and gifts have to have a website of its own sooner or later, that wasn't much of a problem.

❖ Economical

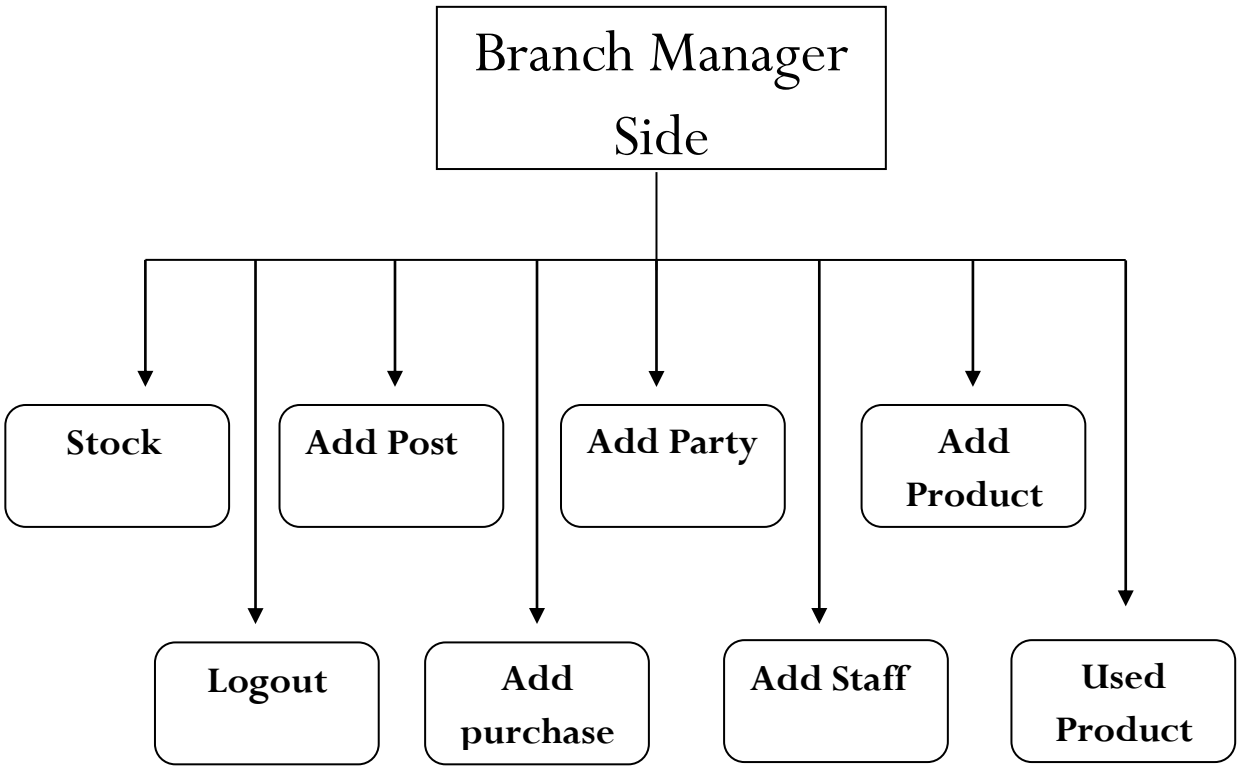
Our Commercial Website is Economically Feasible Because. We have developed this website only for one time. Only future enhancement is required on the other hand every client can view our site any time or many time as per their requirement. So the future economical expenses are null. So we can say that this website is totally economically feasible.

Project Page Structure

Admin Side :-



Branch Manager Side :-



Data Dictionary

The Data Dictionary is a set of table . MySQL uses it to maintain information about this own database.

- **Data dictionary contains the following information:**
  - ✓ Name of the table of database.
  - ✓ User information such as privileges.
  - ✓ Name and data-type of all columns in database table.

- **Database Name : con_site**

1. Admin_tbl_user :- This Table is used to store admin user information.

Field Name	Data Type	Size	Attribute
a_id	Int	11	Primary Key
a_name	Varchar	50	-
a_pass	Varchar	50	-
a_date	Timestamp	-	-
a_image	Text	-	-

2. brach_user :- This Table is used to store branch user information.

Field Name	Data Type	Size	Attribute
br_id	Int	11	Primary Key
a_id	Int	11	Foreign Key
b_name	Varchar	50	-
b_pass	Varchar	50	-
b_site	Varchar	50	-
b_date	Timestamp	-	-

3. brach_staff :- This Table is used to store all the staff detail information.

Field Name	Data Type	Size	Attribute
bs_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
bs_name	Varchar	100	-
bs_doj	Varchar	50	-
bs_address	Varchar	300	-
bs_num	Varchar	50	-
bs_post	Varchar	70	-

4.purchase_tbl :- This Table is used to store all the Purchase detail information.

Field Name	Data Type	Size	Attribute
p_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
site_name	Varchar	50	-
party_name	Varchar	100	-
p_name	Varchar	80	-
p_quantity	Int	11	-
p_price	Int	11	-
p_bill	Varchar	200	-

4. post :- This Table is used to store all the Post information.

Field Name	Data Type	Size	Attribute
pos_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
pos_name	Varchar	50	-

5. product_tbl :- This Table is used to store all the Product information.

Field Name	Data Type	Size	Attribute
pro_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
pro_name	Varchar	100	-

6. site :- This Table is used to store all the site name.

Field Name	Data Type	Size	Attribute
s_id	Int	11	Primary Key
a_id	Int	11	Foreign Key
s_name	Varchar	50	-

7. balance_tbl :- This Table is used to store balance amount of each site.

Field Name	Data Type	Size	Attribute
b_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
b_amount	Varchar	50	-

8. party_tbl : This Table is used to store party name of each site.

Field Name	Data Type	Size	Attribute
par_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
par_name	Varchar	100	-

10.used_product :- This Table is used to store product which are used site.

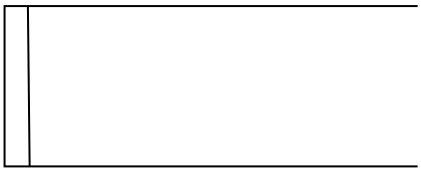
Field Name	Data Type	Size	Attribute
up_id	Int	11	Primary Key
br_id	Int	11	Foreign Key
up_name	Varchar	50	-
up_quantity	Int	50	-

Data Flow Diagram

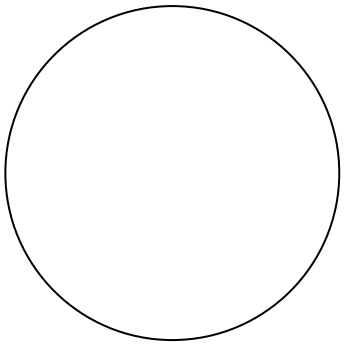
The DFD gives brief idea on how the designed system is working. It also suggests to us the type of users who using this system and the process involved in the system.

Represent data flow

Represent an Entity



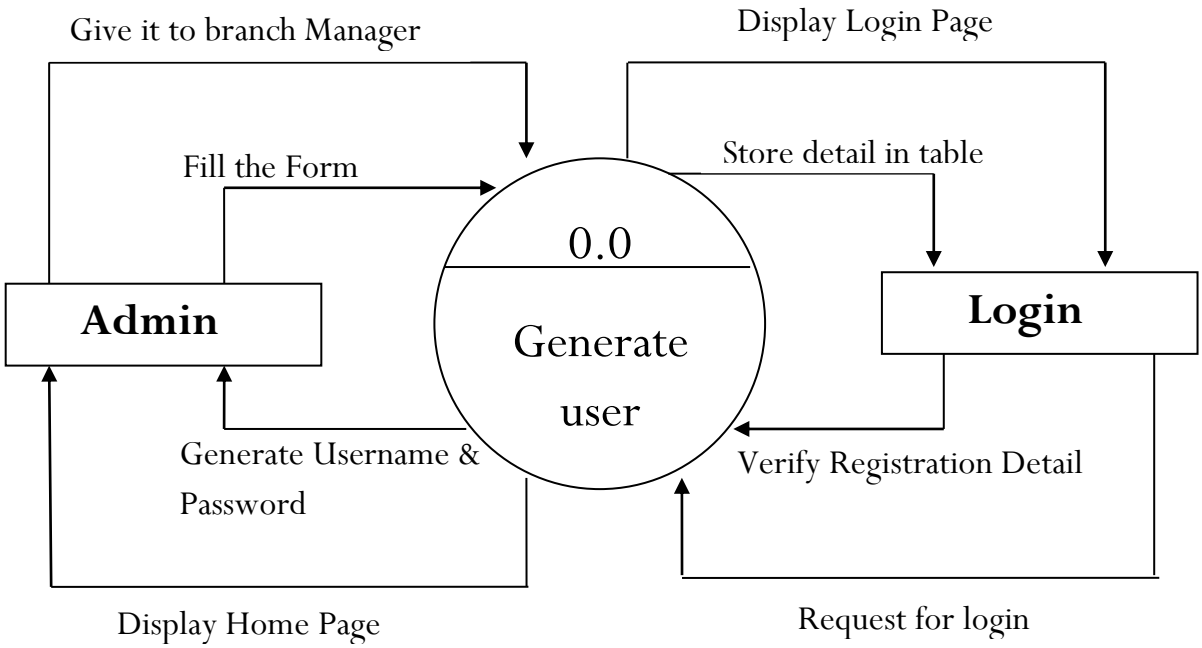
Represent a data table



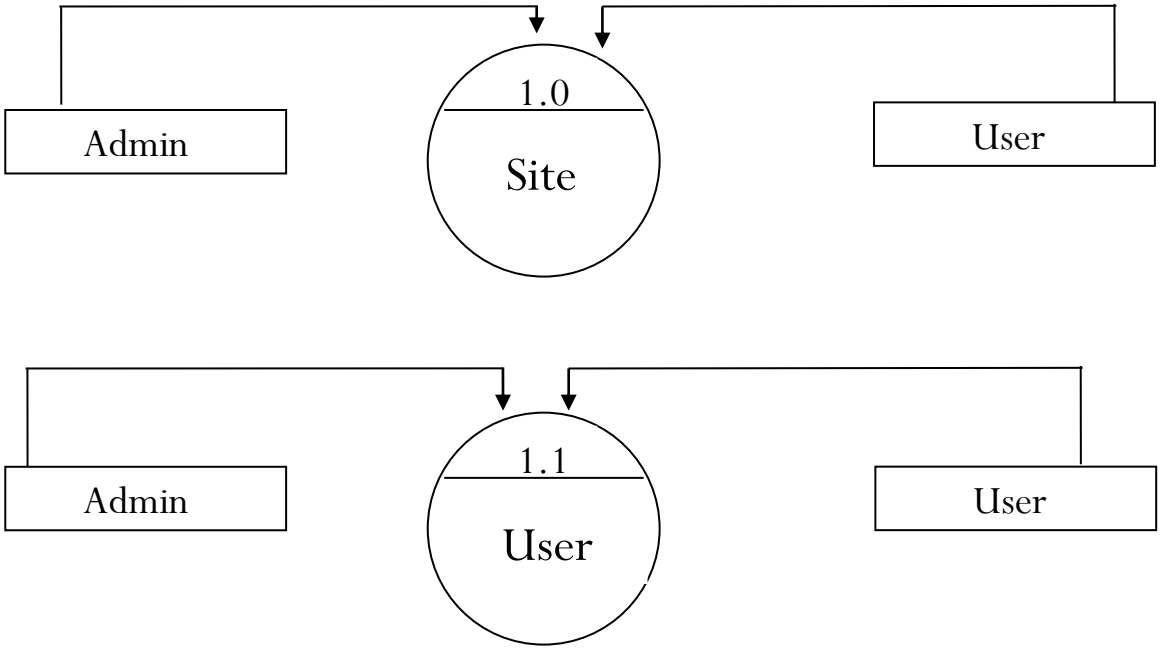
Represent a processing

Context Level Diagram

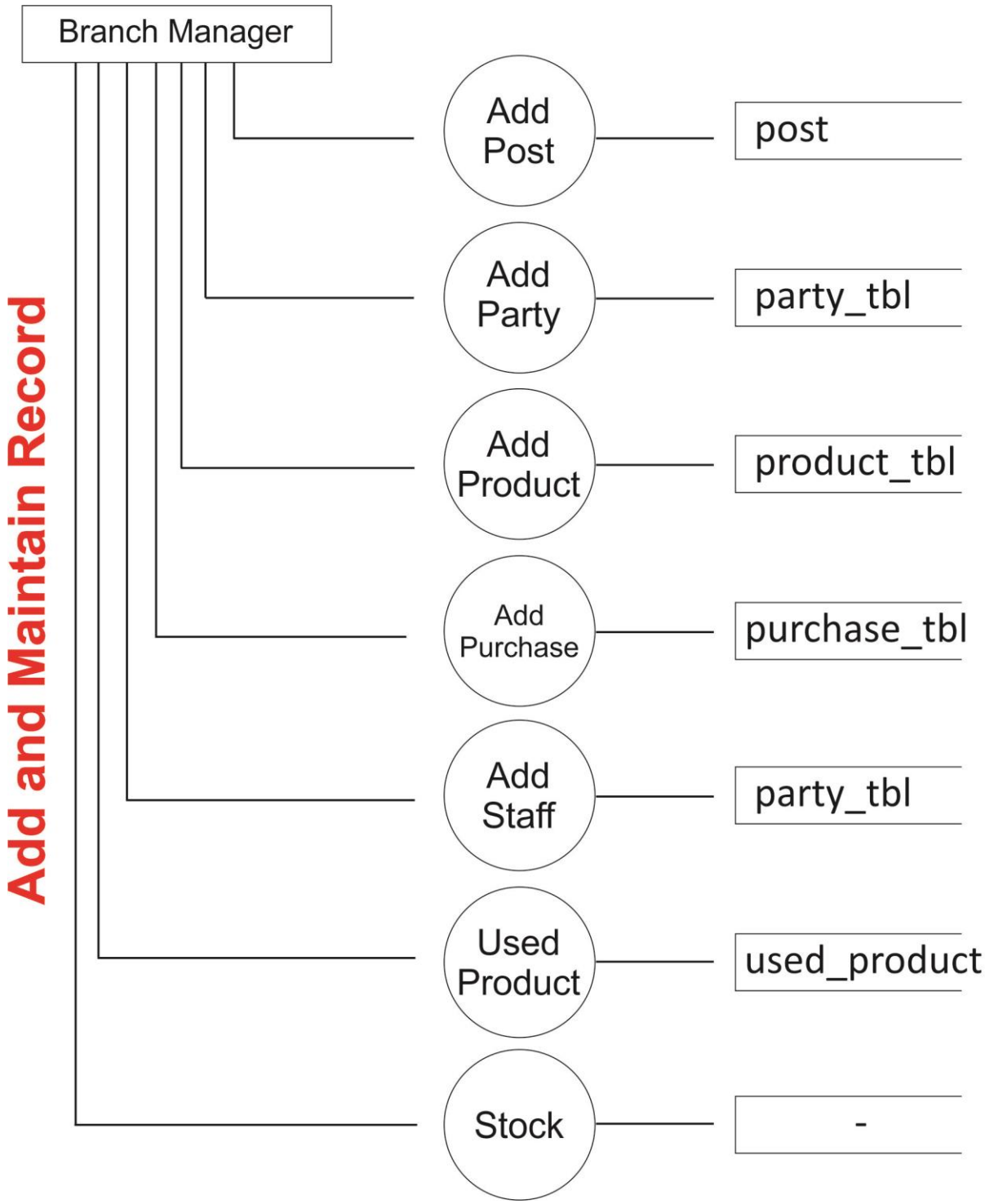
0th Level :-



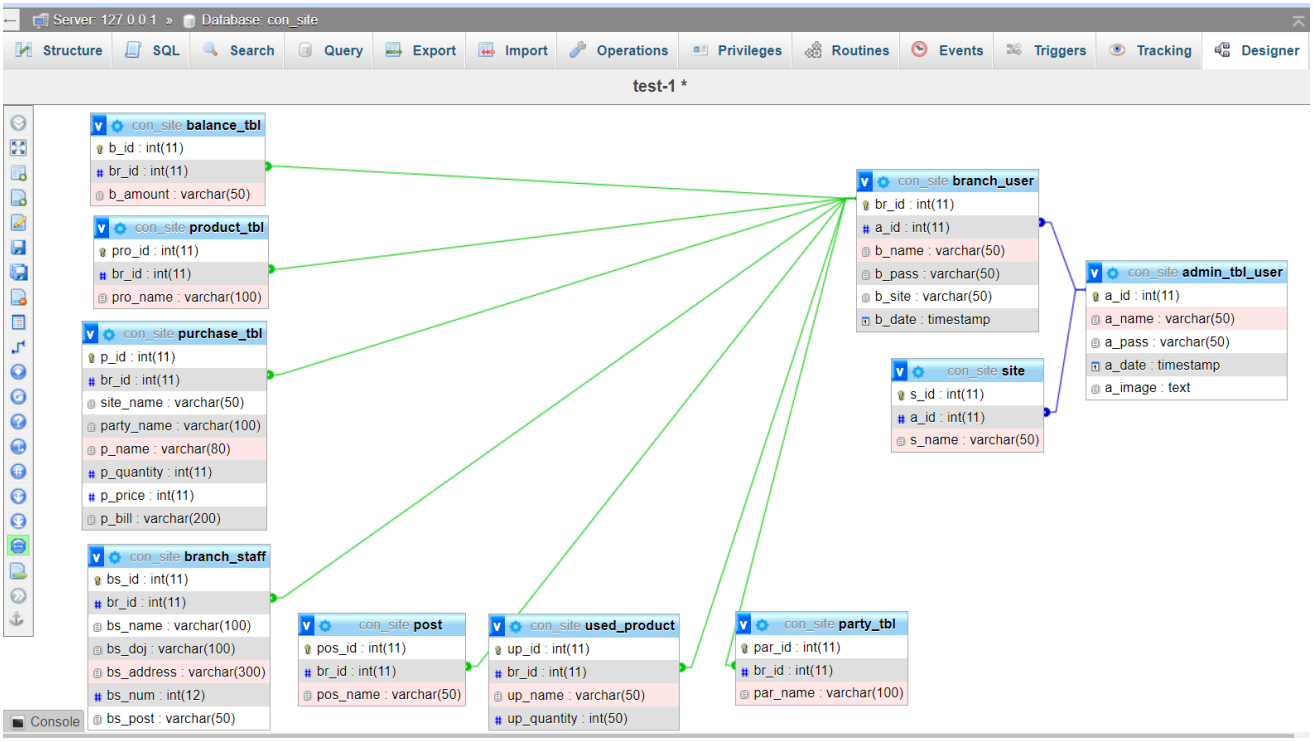
1th Level for Admin Side/Owner Side :-



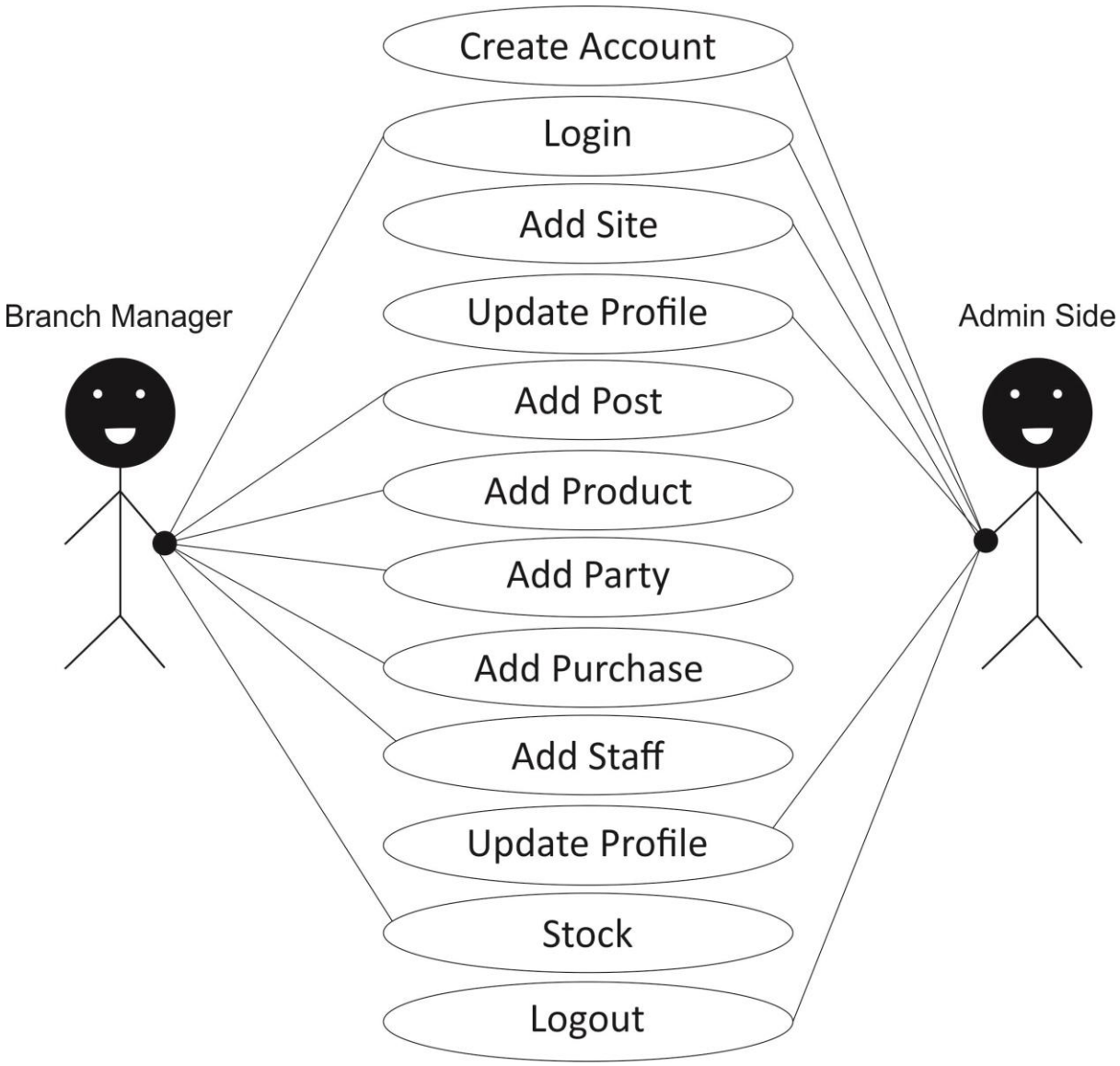
1th Level for Branch Manager Side :-



ER Diagram

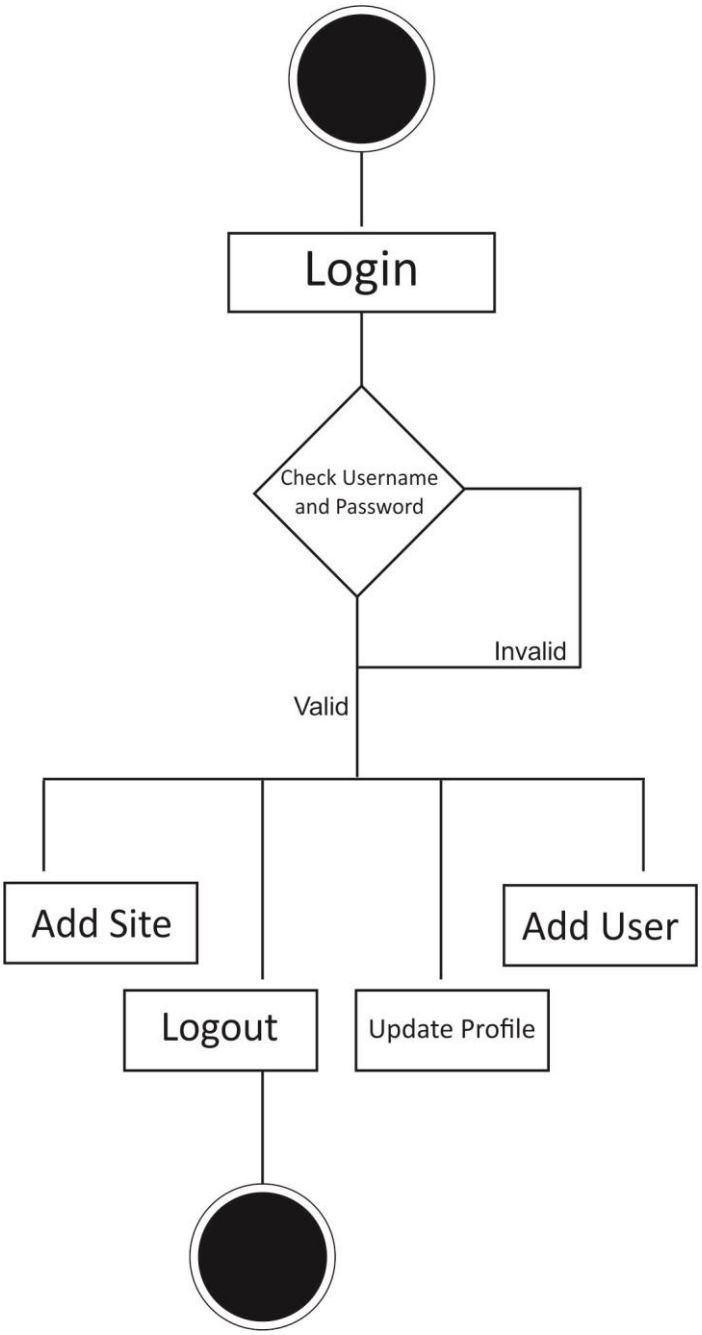

Server: 127.0.0.1 » Database: con_site
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Routines
Events
Triggers
Tracking
Designer
test-1 *
con_site balance_tbl
b_id : int(11)
br_id : int(11)
b_amount : varchar(50)
con_site product_tbl
pro_id : int(11)
br_id : int(11)
pro_name : varchar(100)
con_site purchase_tbl
p_id : int(11)
br_id : int(11)
site_name : varchar(50)
party_name : varchar(100)
p_name : varchar(80)
p_quantity : int(11)
p_price : int(11)
p_bill : varchar(200)
con_site branch_staff
bs_id : int(11)
br_id : int(11)
bs_name : varchar(100)
bs_doj : varchar(100)
bs_address : varchar(300)
bs_num : int(12)
bs_post : varchar(50)
con_site post
pos_id : int(11)
br_id : int(11)
pos_name : varchar(50)
con_site used_product
up_id : int(11)
br_id : int(11)
up_name : varchar(50)
up_quantity : int(50)
con_site party_tbl
par_id : int(11)
br_id : int(11)
par_name : varchar(100)
con_site branch_user
br_id : int(11)
a_id : int(11)
b_name : varchar(50)
b_pass : varchar(50)
b_site : varchar(50)
b_date : timestamp
con_site site
s_id : int(11)
a_id : int(11)
s_name : varchar(50)
con_site admin_tbl_user
a_id : int(11)
a_name : varchar(50)
a_pass : varchar(50)
a_date : timestamp
a_image : text
Console

Usecase Diagram

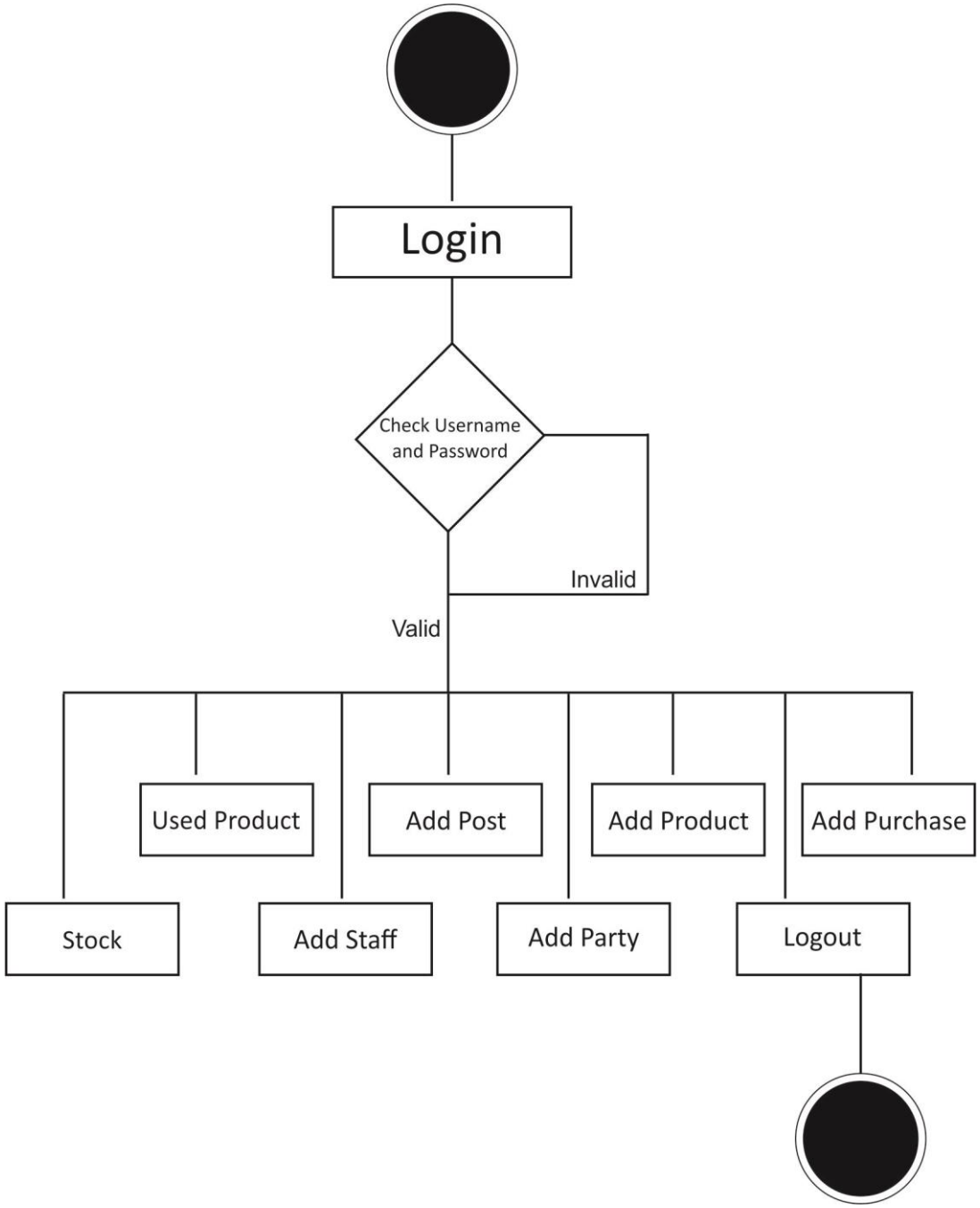


Activity Diagram

Admin Side



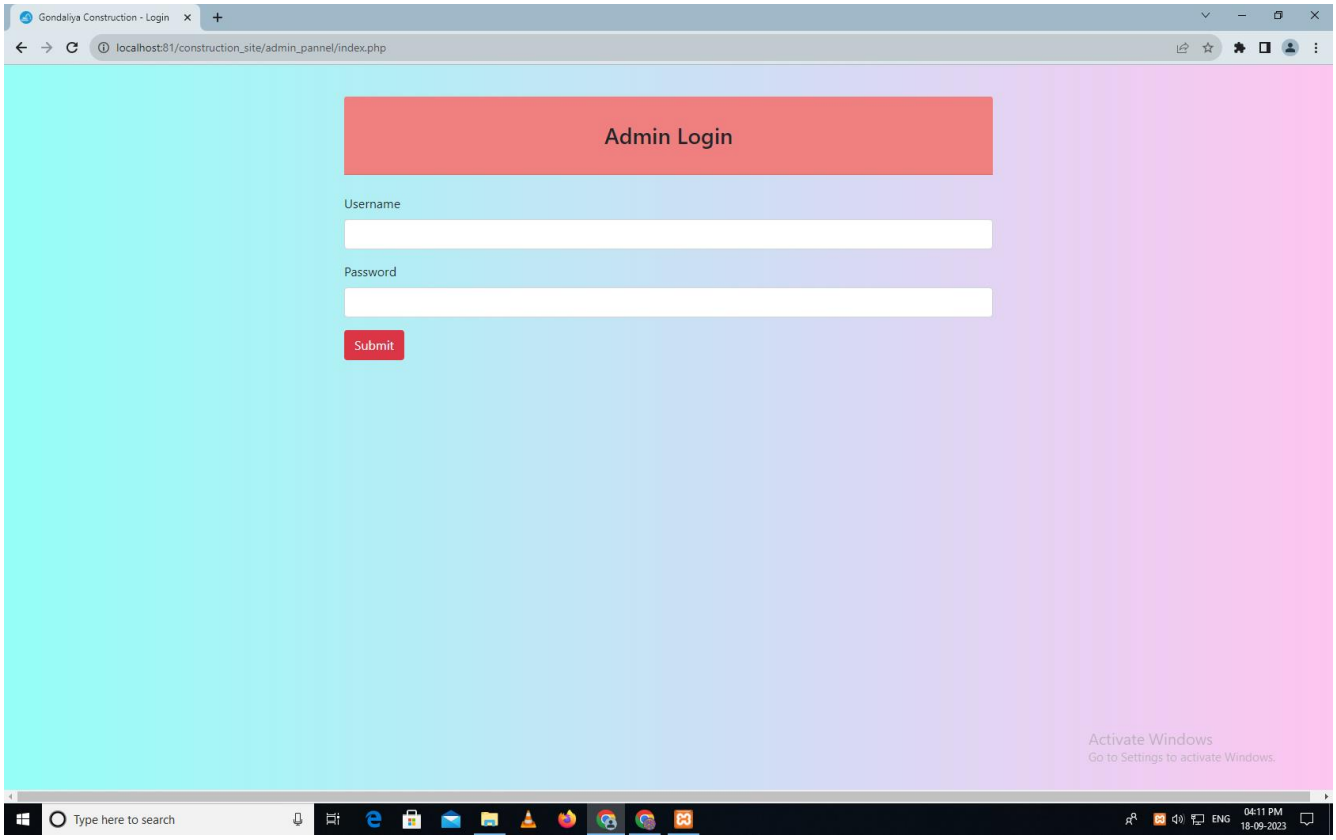
Branch Manager Side



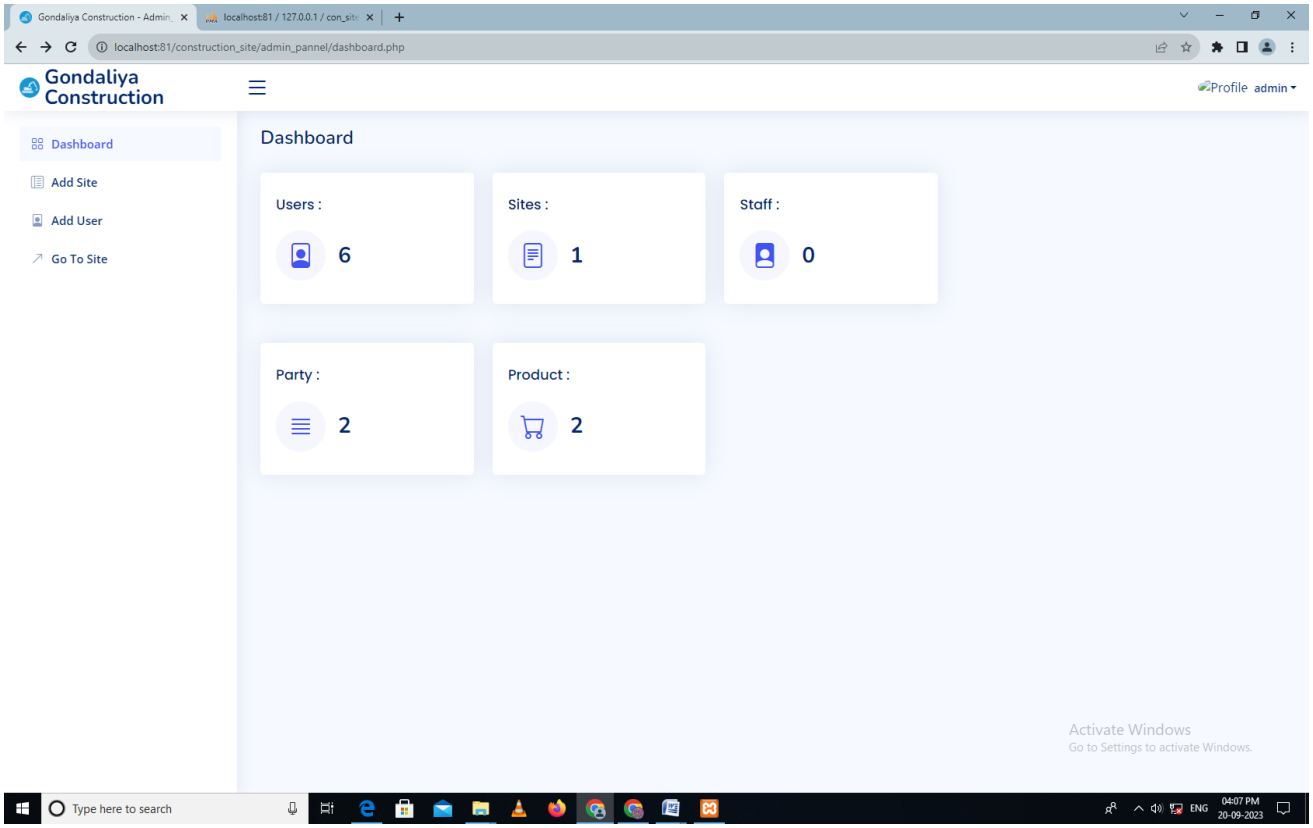
ScreenShots

Admin Side

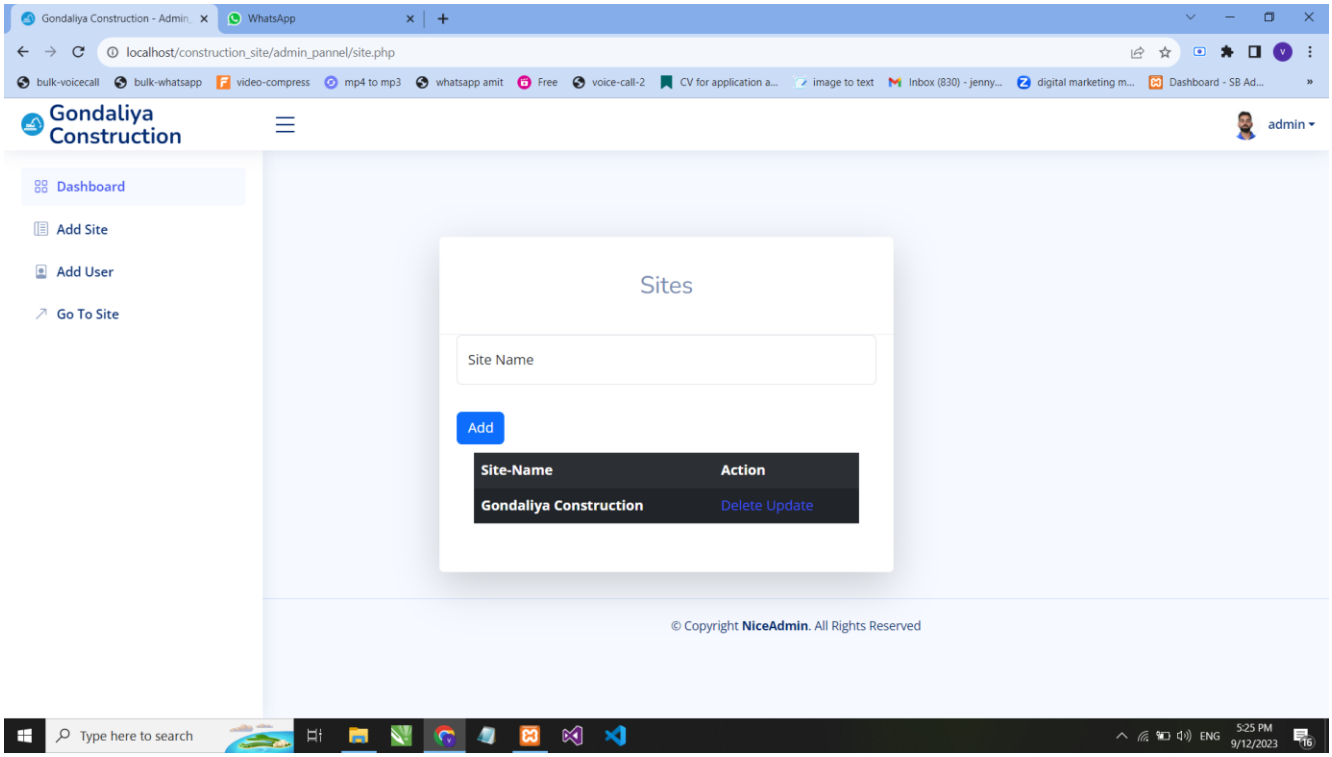
1.Admin Login Page :-



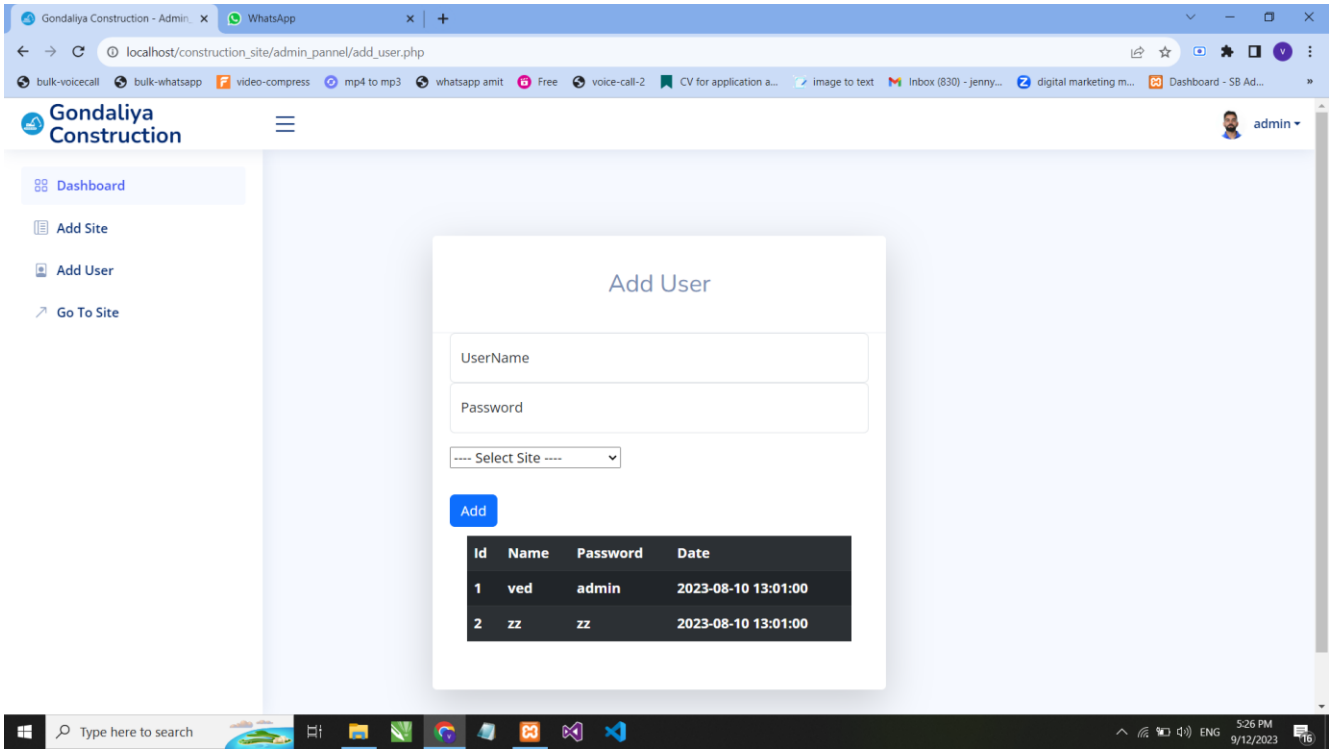
2.Dashboard Page :-



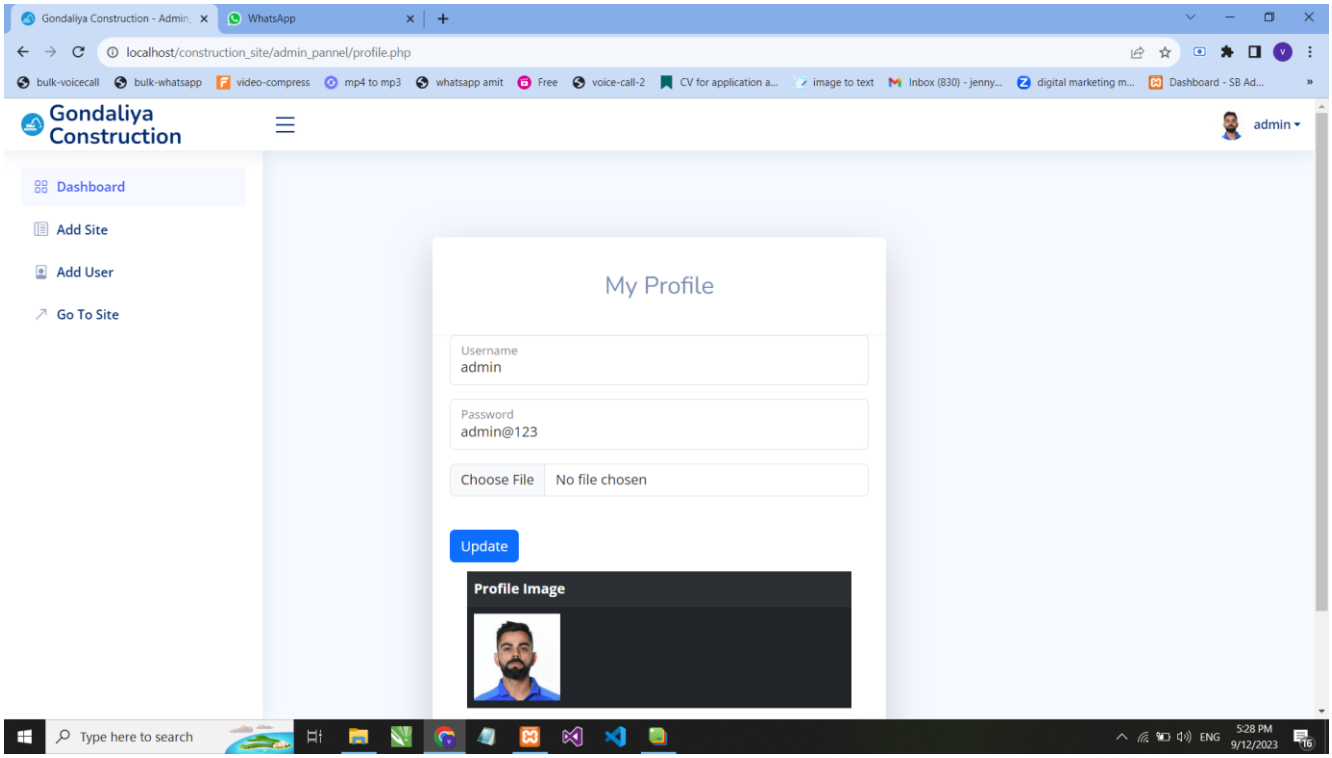
3.Add Site Page :-



4.Add User Page :-

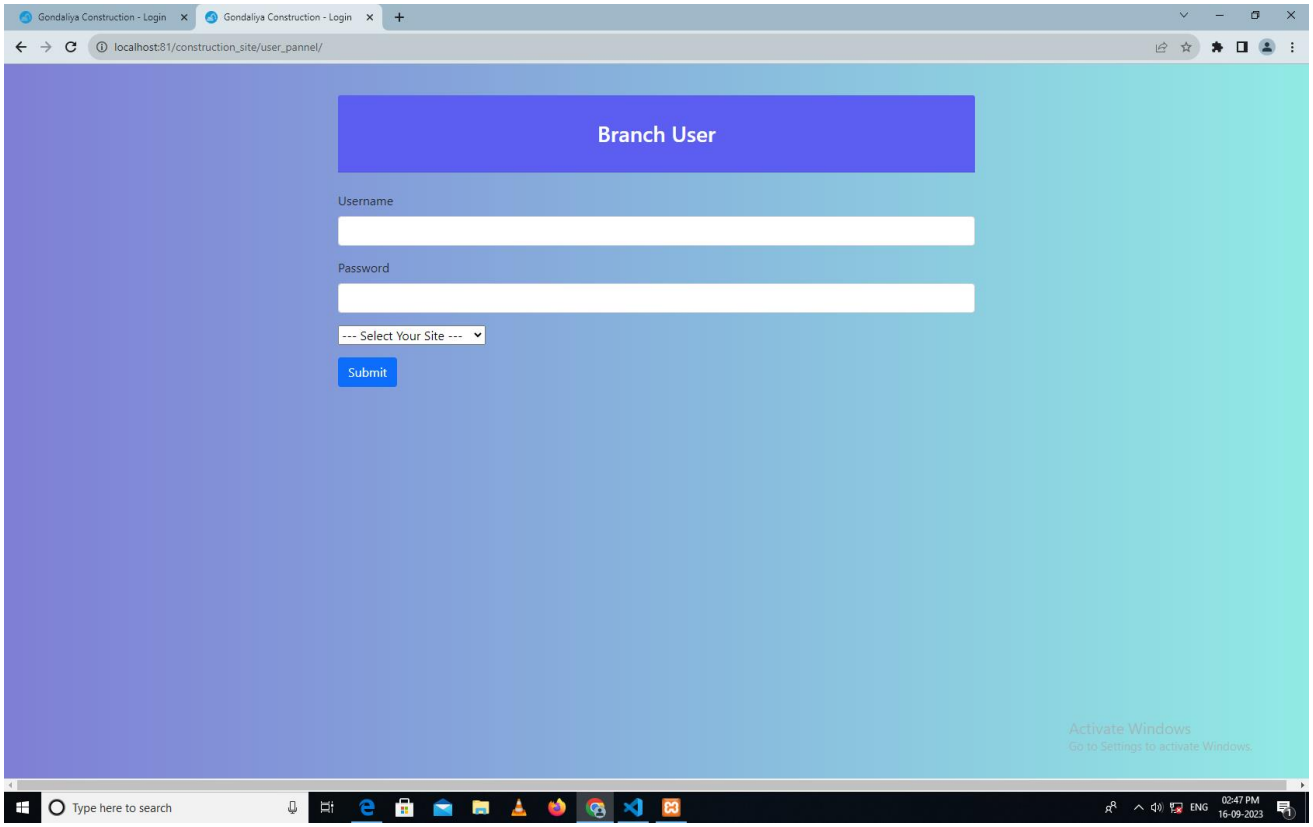


5.Profile edit Page :-

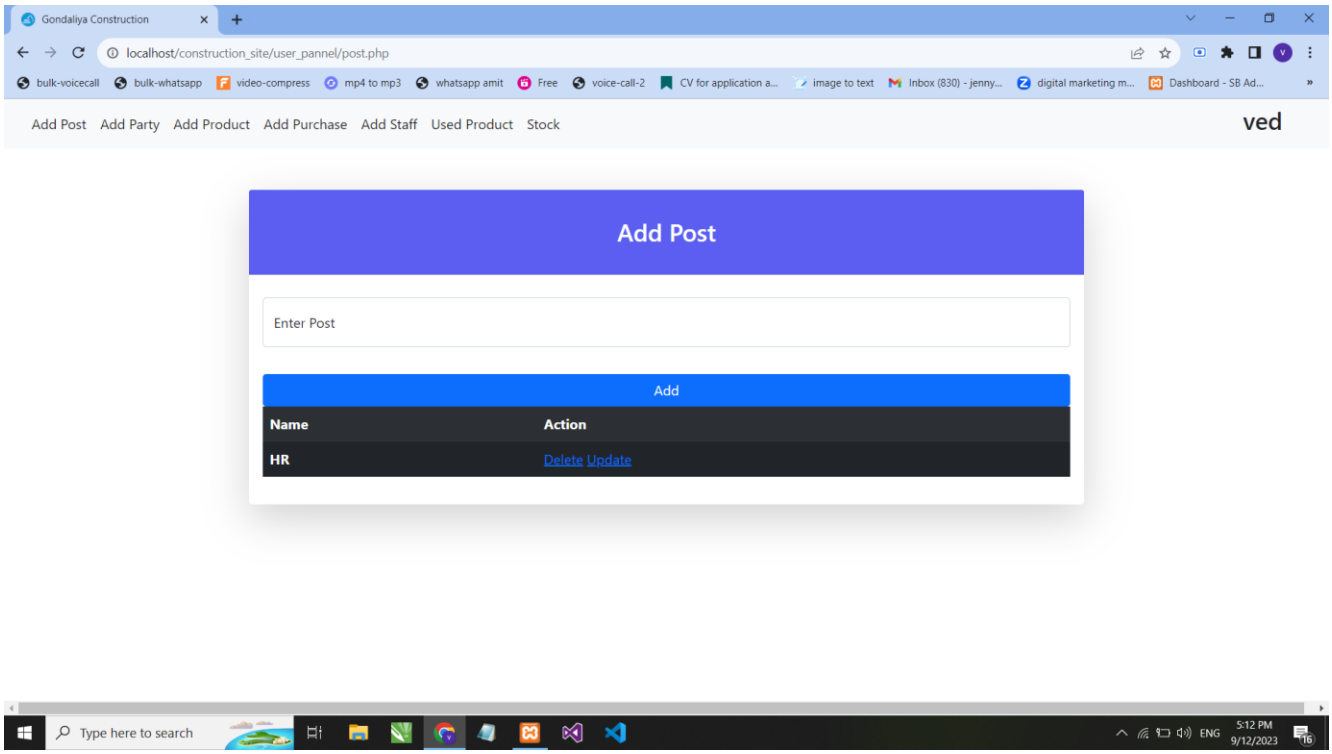


Branch Manager Side

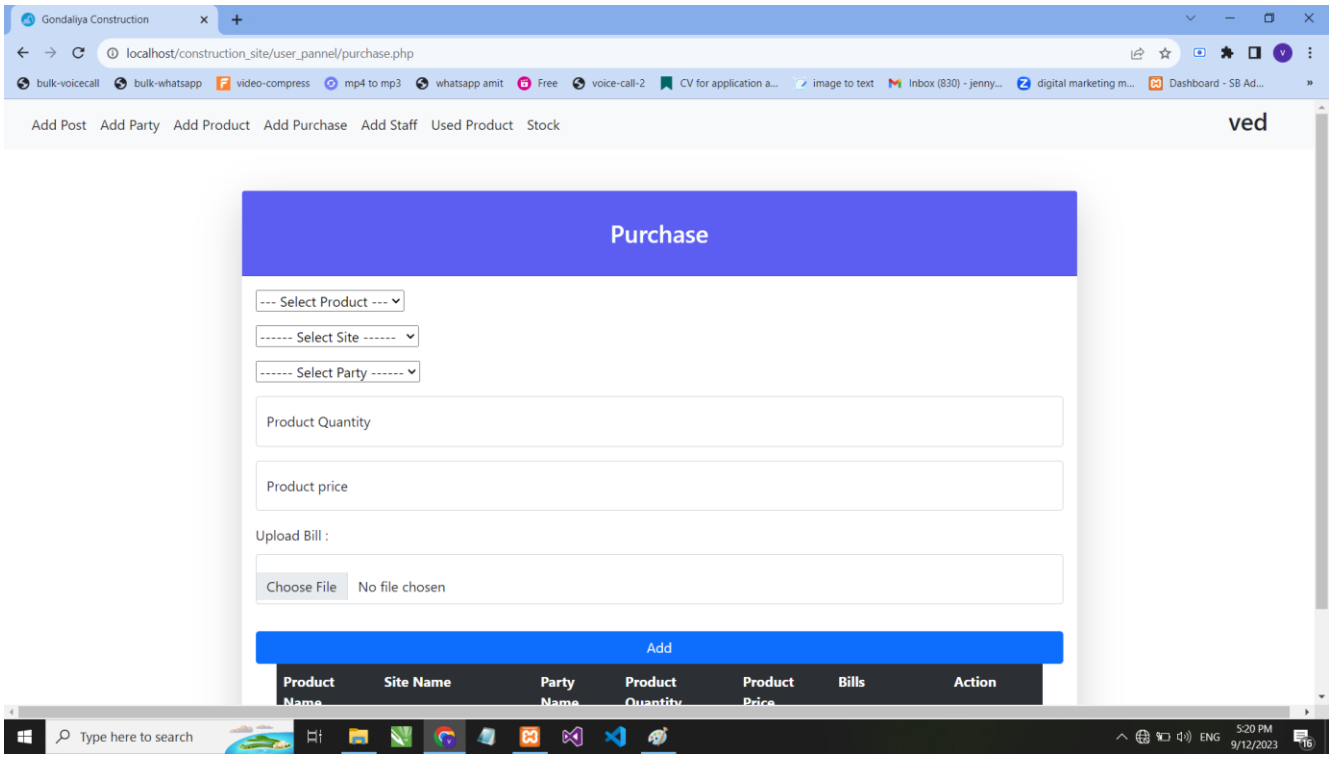
1.Login Page :-



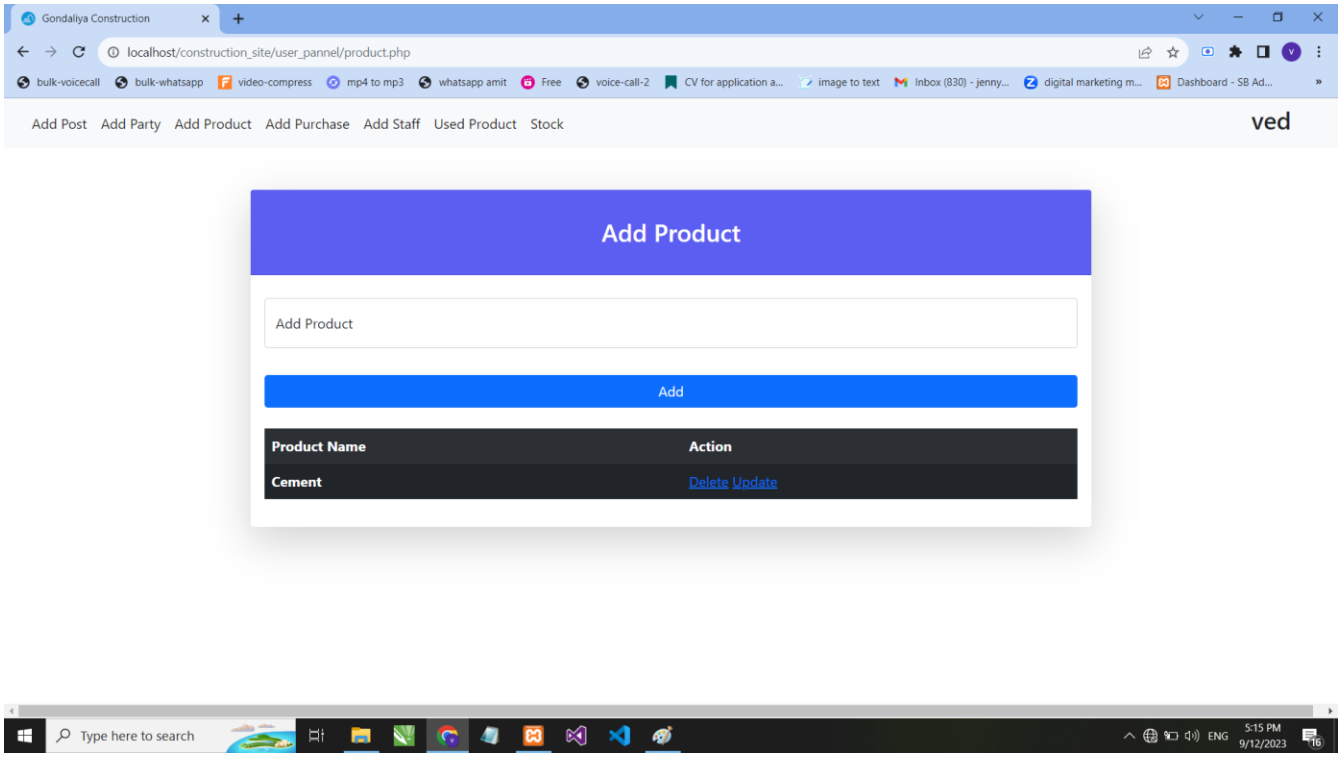
2.Add Post Page :-



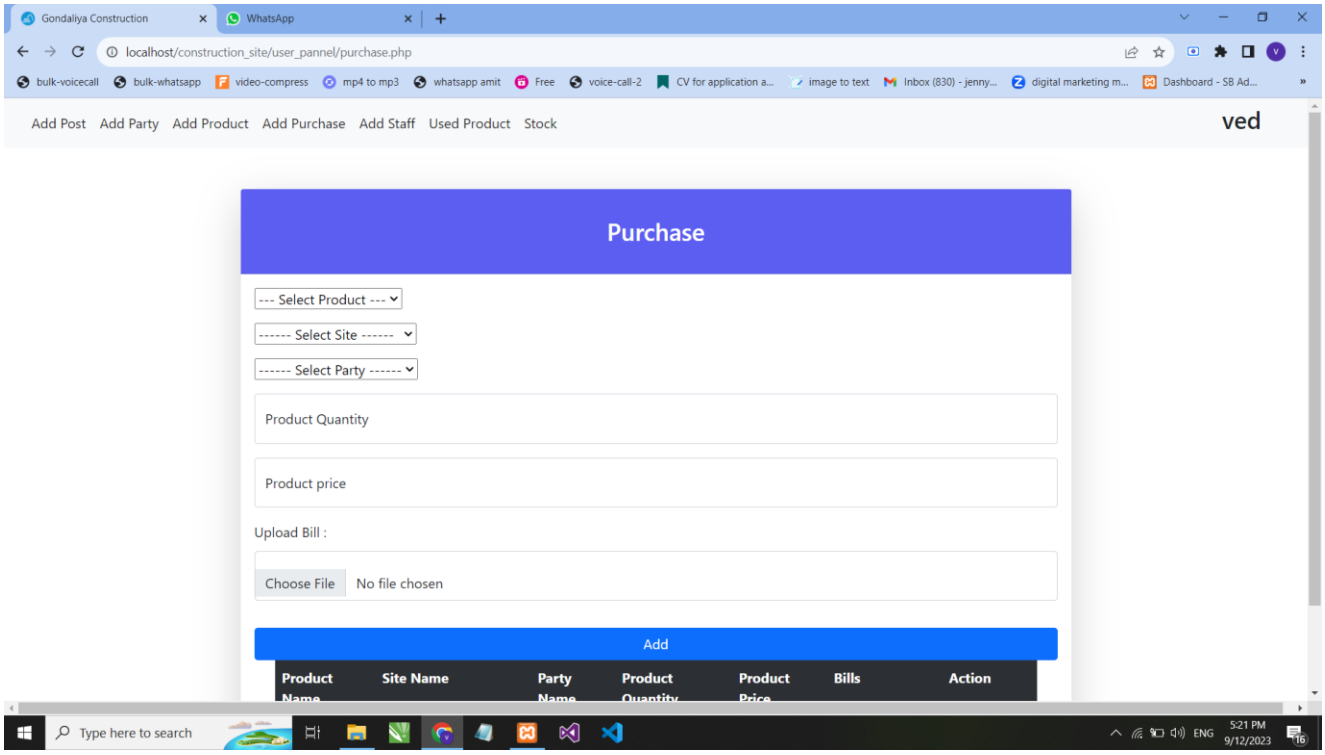
3.Add Party Page :-



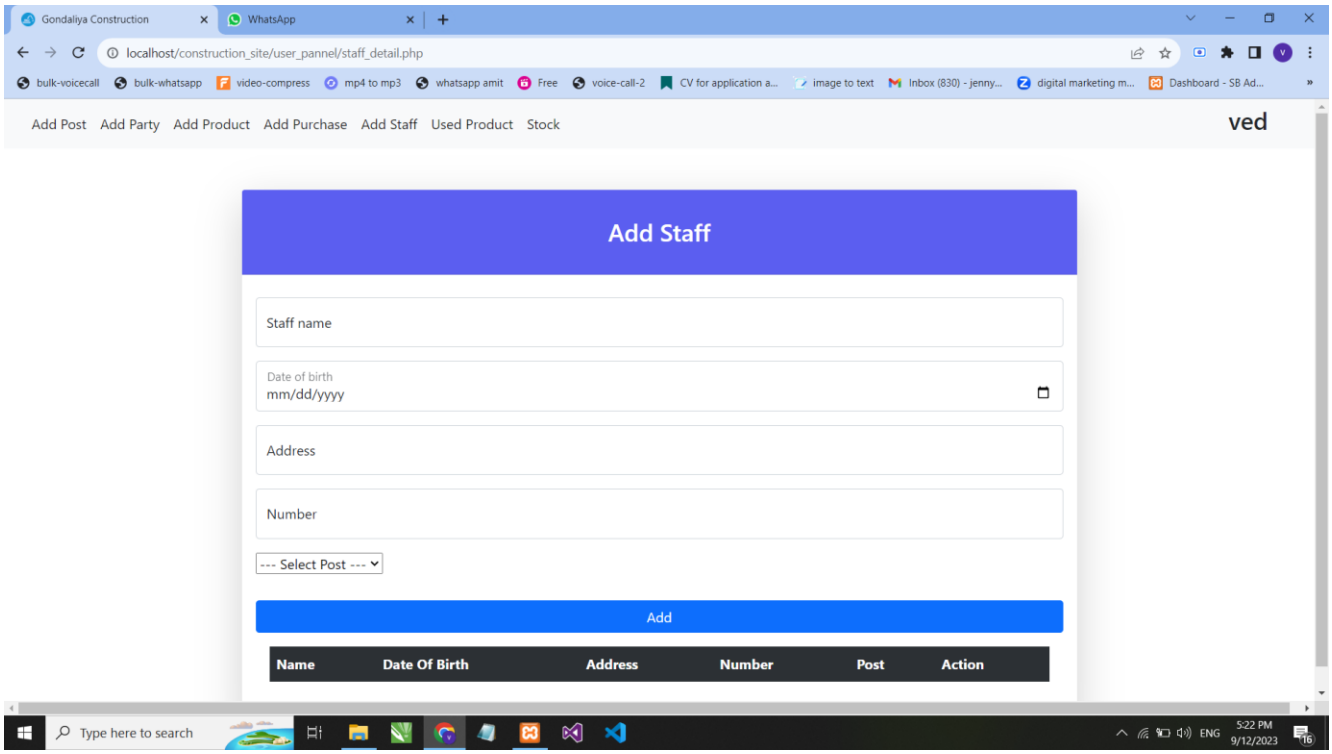
4.Add Product Page :-



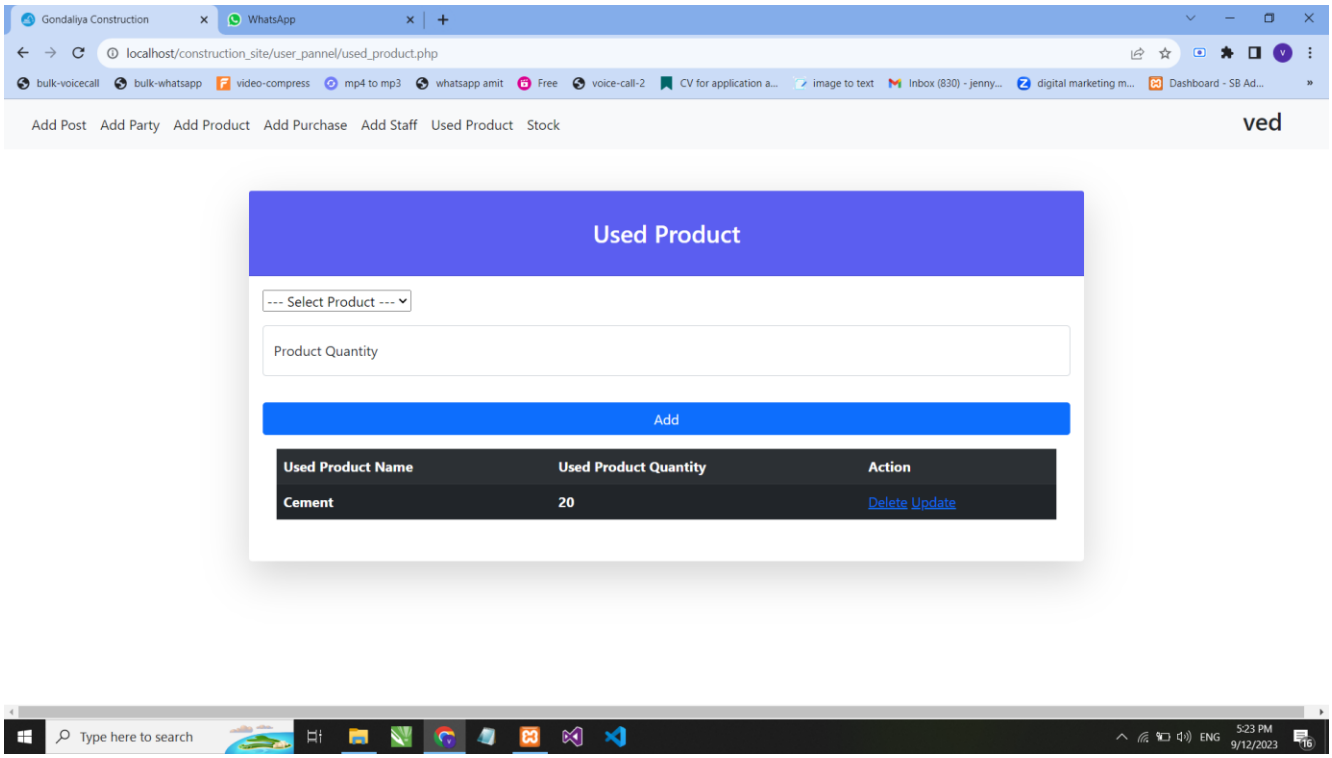
5. Purchase Page :-



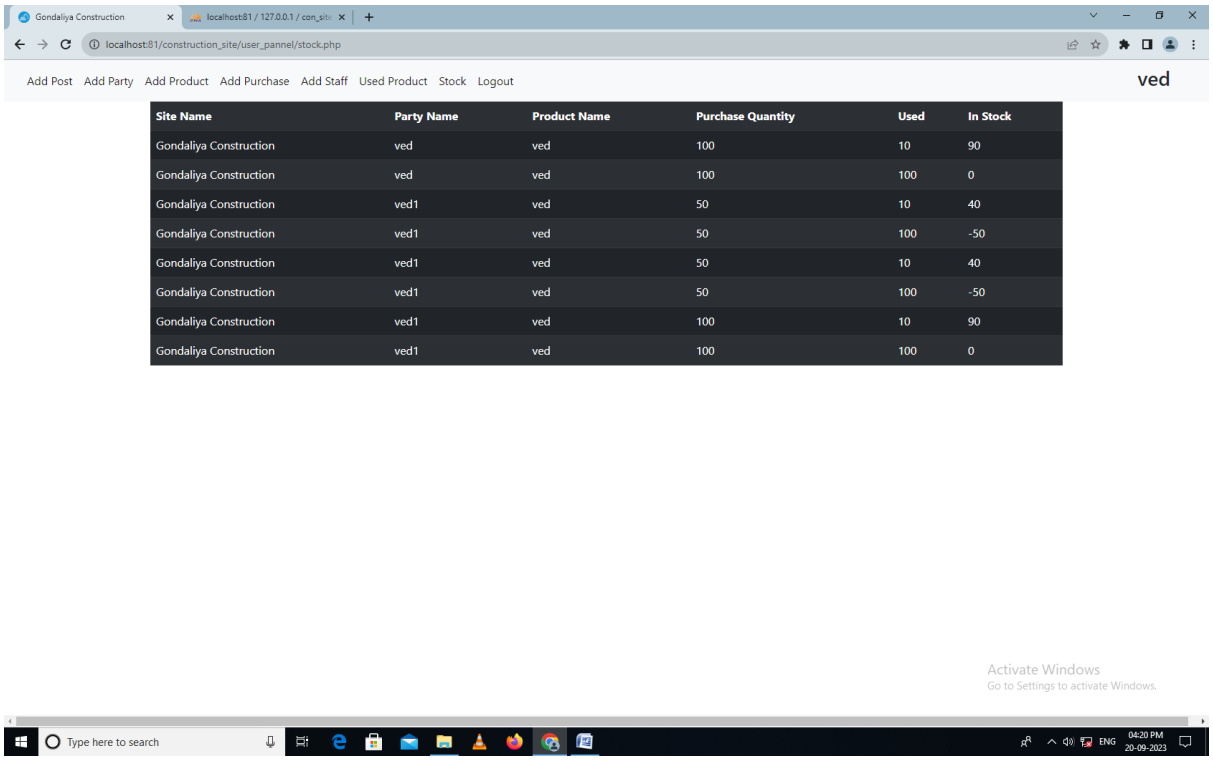
5. Add Staff Page :-



6. Used Product Page :-



7. Stock Left Page :-



CD/DVD

Below are the items that are include in CD/DVD:-

- Project
- Database
- Documentation
- Screenshots