1. ABSTRACT

As a part of Project we are going to create the software that helps in vaccination. In this project we are trying to implement the software that will help both the doctor, government and the citizens to get the information about the vaccination data.

This project is basically created to handle all the data related to vaccination. In this project we are also trying to record the information about the person who has registered for vaccination in the system. This project will also hides Details about the records and will display only the essential information to the registered person.

2. INTRODUCTION

“VACCINATION MANAGEMENT SYSTEM” is the software that handles all the data related vaccination.

The data contains the name of the persons who have taken the vaccine and also tells the current status of vaccine availability. Previously the task of handling the vaccination data was very difficult, so there was a need for software that can handle all the vaccination data.

Some people are enormously believed that computers can only work on arithmetic operations. The use can work on any kind of data – text, numeric, images, sound and video clipping etc.

The computer is characterized by incredible speed, great accuracy, high consistency and high amount of storage capacity.

Therefore the Vaccine Management System was designed. After the release of this system, the stress and workload of employees were absolutely finished. It was also time-wasting for the employees to handle the whole vaccination data with the help of a notebook. But now it hardly takes 5 to 10 minutes to search the vaccination status of a particular person.

2.1 MOTIVATION

1. This system is fully computerized
2. It is user friendly
3. Provide quickly report
4. Highly efficient and accurate
5. Prevention of unauthorized access of data
6. It reduce manual work
7. Easy access of patient records

2.2PROBLEM STATEMENTS

1. When the world health assembly launched the corona virus it was widely acknowledged I that would be one of the most challenging countries for pandemic.
2. In previous it was difficult to maintain the records of vaccination in and also difficult to store it.
3. The process of COVID vaccination held by government of India the medical nurse visit to each and every home in villages for searching infected patients, so this takes more time.

2.3 PURPOSE/OBJECTIVE & GOALS

1. To interrupt transmission of wild virus as soon as possible
2. To contribute to health system development and strengthen routing immunization and surveillance for communicable
3. To implement the corona virus end game program of work, including containment of wild virus
4. Everyone can easily schedule to take their vaccine in home or any place.

2.4 LITERATURE SURVEY

Various case studies have highlighted the problems faced while working pen-paper mode. Some of the problems found during the survey in the existing system are listed below.

1. In India some of the villages didn't had information about vaccination, since they didn't get vaccination at that time.
2. In survey we saw that many villages didn't have knowledge.

2.5 PROJECT SCOPE AND LIMITATIONS

Scope:

1. The application is easy to handle and manage.
2. No formal knowledge is needed to use the application.
3. User friendly.
4. Manual work is reduced.
5. Cost of paper work is saved.

Limitations:

1. Vaccination report can't send on mobile number. Due date of vaccination is not calculated in project.

3. SYSTEM ANALYASIS

3.1EXISTING SYSTEM

Today The Immunization Program for kids is carried out through paper work and there is no centralized system to maintain a record of the same. The Government maintains a record of how many kids are born every year but fails to monitor how many amongst them are vaccinated and have completed their respective immunization programme. Due to lack of computerization system, The Ministry of Health fails to reach out all the kids and thus could not make them immune from the unavoidable diseases.

3.2 DRAWBACKS OF EXISTING SYSTEM

1. Use of humans handling the vaccination reports may lead to misplacing of reports, which once lost then it would be difficult to identify how many vaccines have been taken or left to be taken by a child.

1. Human carelessness can cause delay for the on-time vaccination doses.
2. Increased amount of paperwork.
3. NO centralized system.
4. Cannot generate an overall report of India's vaccination programme.

3.3 PROPOSED SYSTEM

The project “Immune India” will help the government to a greater extend in maintaining records of the vaccination program. Through this computerization system the government can reach out all the kids by subsequent alerts sent to their parents regarding the vaccination. This can avoid the later adverse effect on child’s health. Even the parents can stay updated as they can get their child’s vaccination report on click by logging in to their respective accounts.

The project will definitely help in reaching out maximum kids and will lead to the success of The National Immunization Programme of our country and contribute in making India stronger.

3.4 BENEFITS OF PROPOSED SYSTEM

1. Operational Feasibility :-

1.1 The Application is easy to handle and manage.

1.2 No formal knowledge is needed to use the application.

2. User friendly.

3. Economic Feasibility :-

3.1 Manual work is reduced.

3.2 Cost of paper work is saved.

4. Technical Feasibility :-

4.1 The technical feasibility study compares the level of technology available in the software development firm and the level of technology required for development of project or product

4.2 The level of technology consists of the programming language (C#), hardware resources, other software tools etc.

3.5 PROJECT PERSPECTIVE

The online immune India management system application is a web based system. It can be accessed through internet browsers on PC, Laptop etc.

System Module:

1. Admin Module: Admin will maintain all the patient details, vaccination slot, vaccination records in the database.
2. Patient Module: In this module patient will get access to check their vaccination date, time, and slot.

3.6 STAKHOLDERS

Key stakeholders of an online immune India system are :

1. Admin
2. Patient

3.7 REQUIREMENT ANALYSIS

A. Functional requirements

The Objective of the Immune System is to manage the vaccination of covid 19. The following are the business requirements and classified as different modules for this project.

1 User Management:

a. Registration :

- The user has to register by using a username and password.
- Username should be the id number.

a. Login:

- Admin can login by entering username and password and manage their work on website.

2. Add the new patient:

- Add the details of new patient.
- Display the patient details.

3. Logout:

- Admin after performing the processes exit from the page using logout.

B. Performance requirement:

a. Operation done within few seconds.

b. User friendly website.

c. Highly customizable.

d. Appropriate operation output will be displayed to within a few seconds.

C. Security requirement:

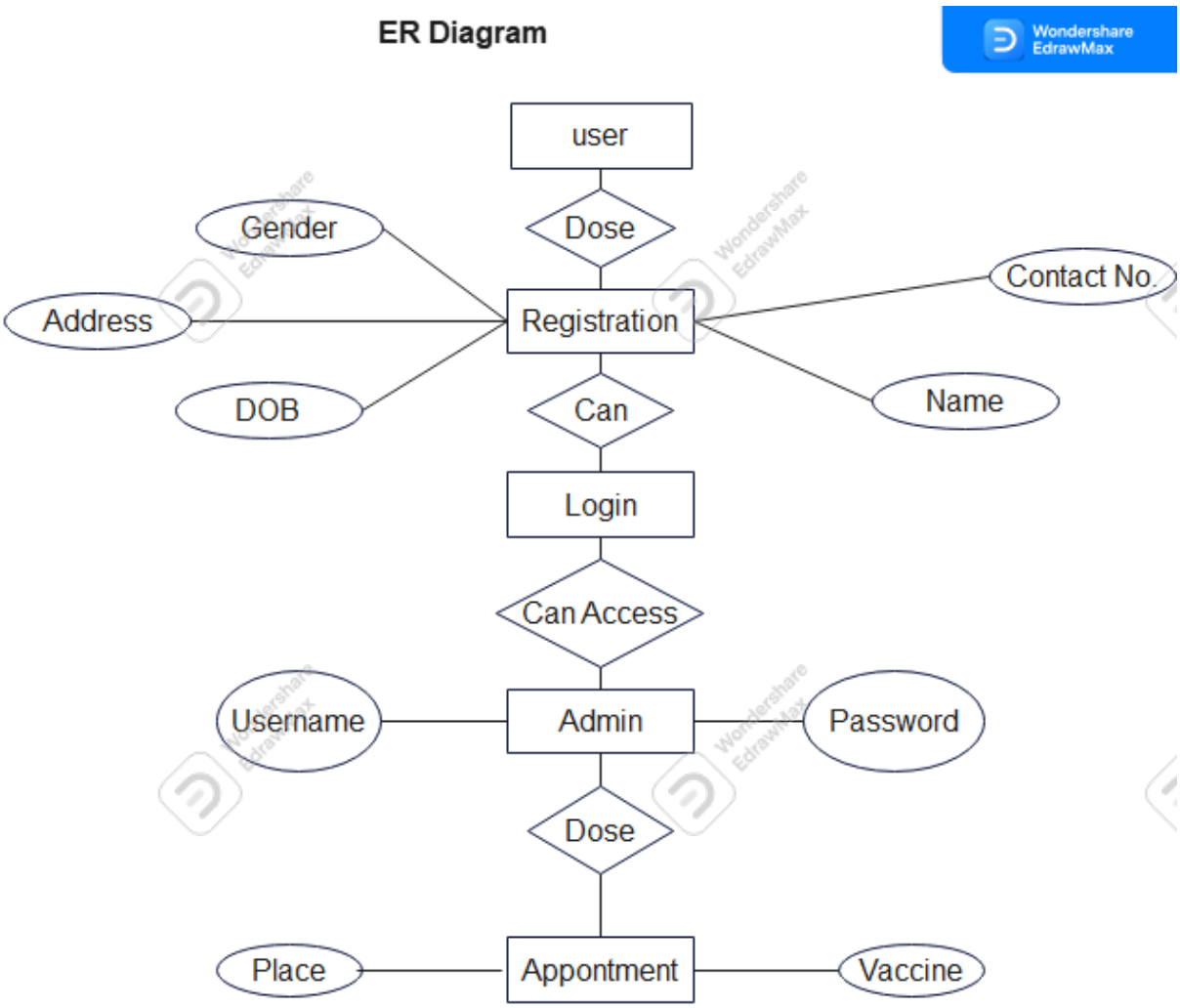
a. Pages of the website must be access in the way they were intended to be accessed.

b. Included files shall not be accessed outside of their parent file.

c. The admin should use their username and password for login into the system.

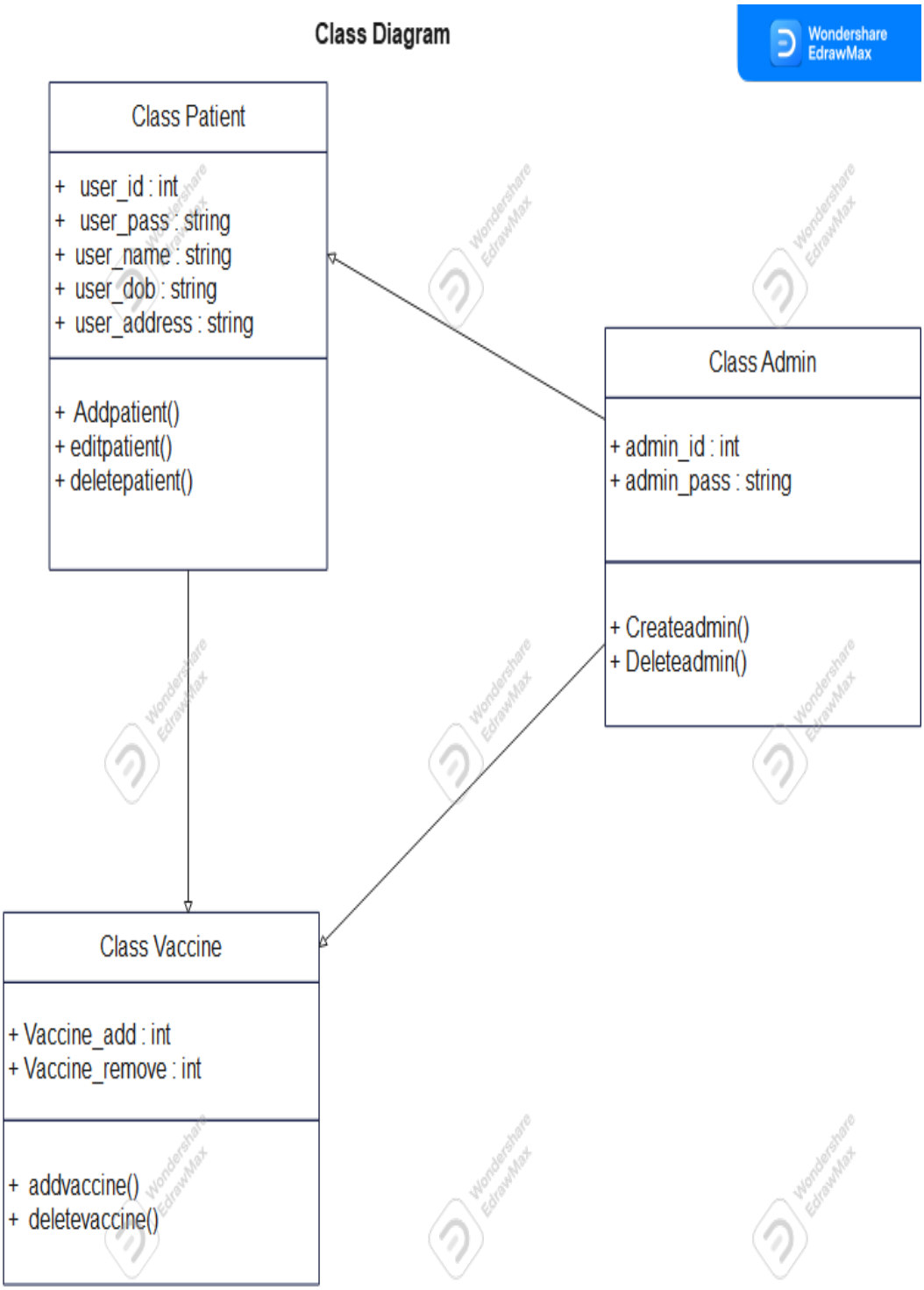
1. SYSTEM DESIGN

4.1 Design Constraints:

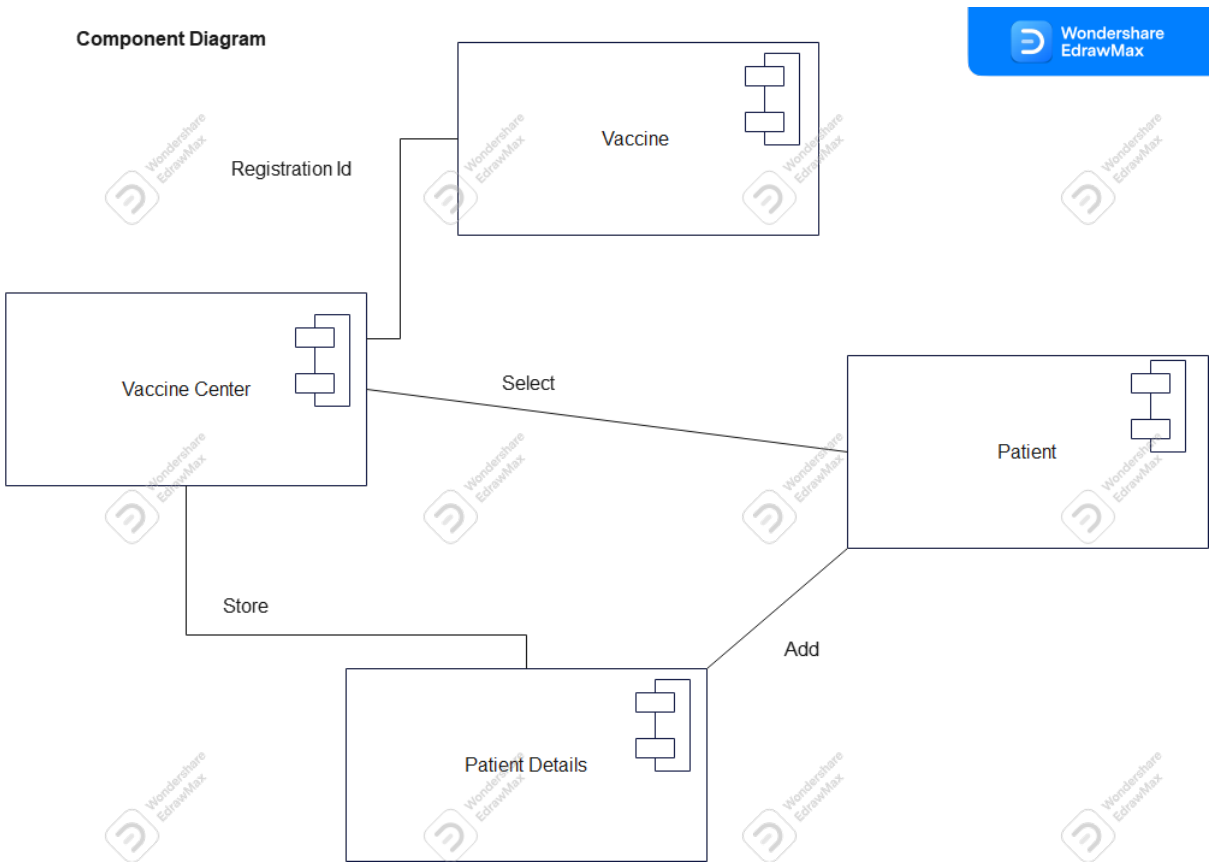

ER Diagram
Wondershare EdrawMax
user
Dose
Gender
Address
DOB
Registration
Contact No.
Name
Can
Login
Can Access
Username
Admin
Password
Dose
Place
Appontment
Vaccine

4.2 system Model: Using OOSE

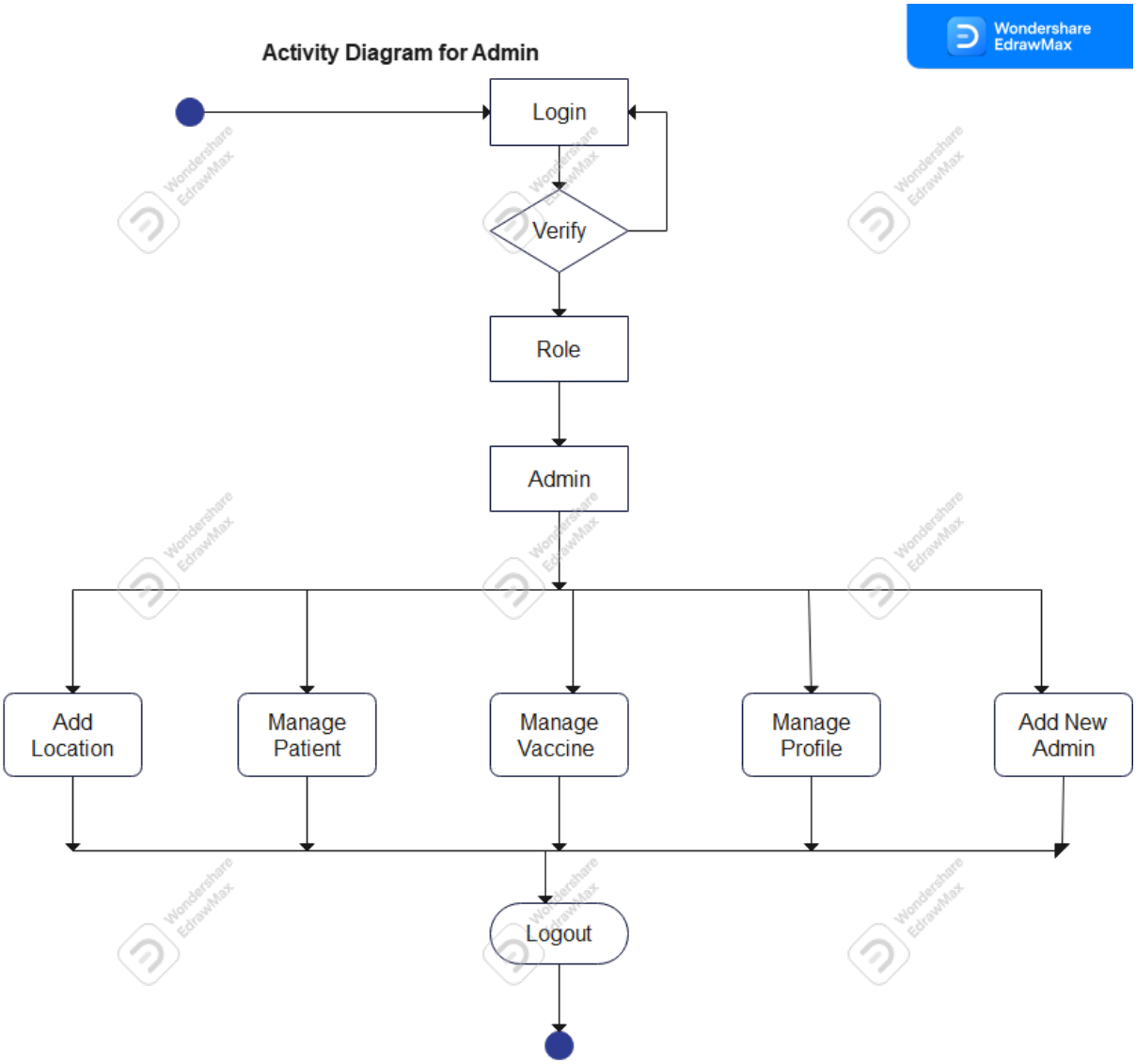
Structure Diagram:



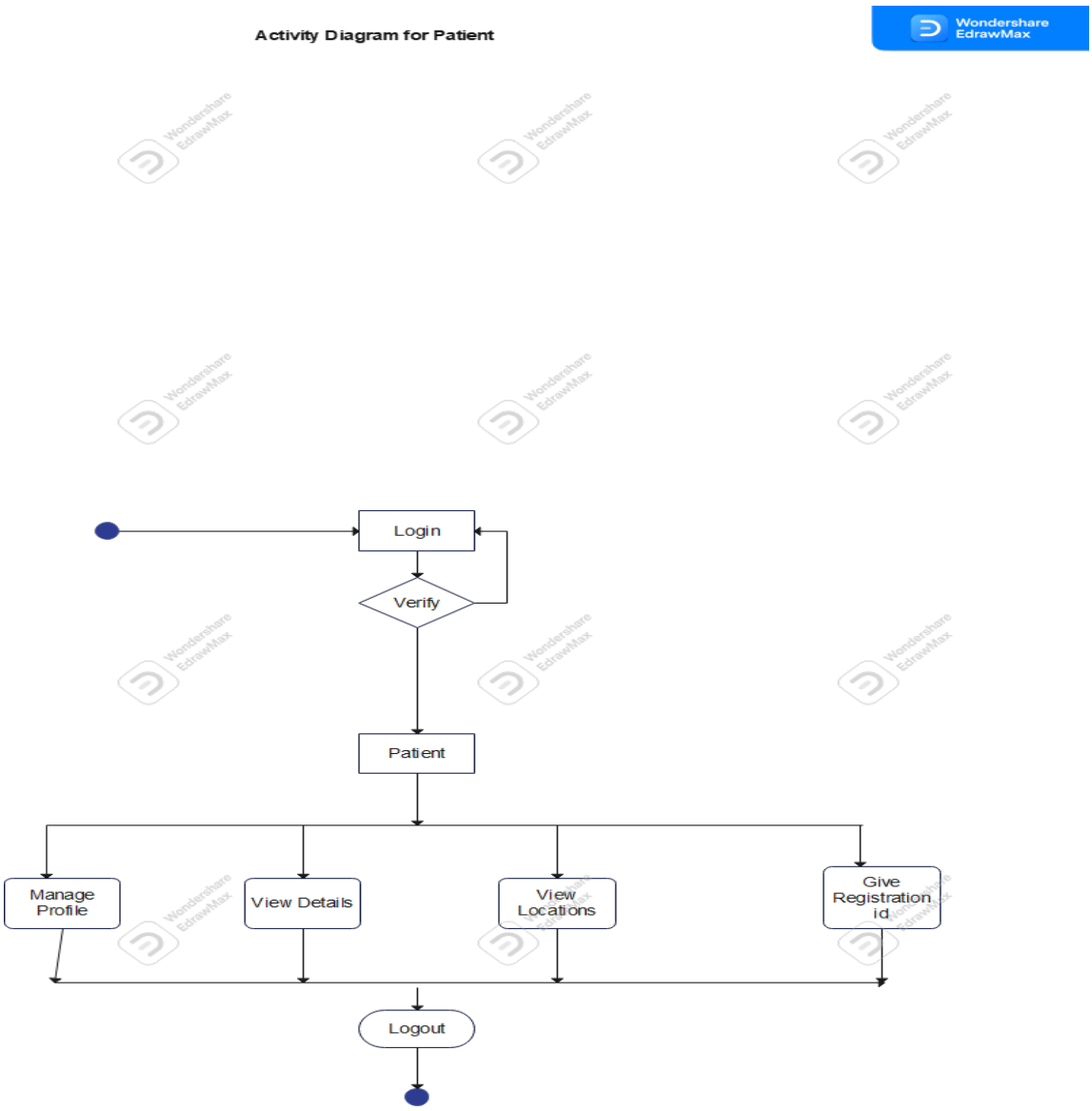
4.3 Component Diagram:



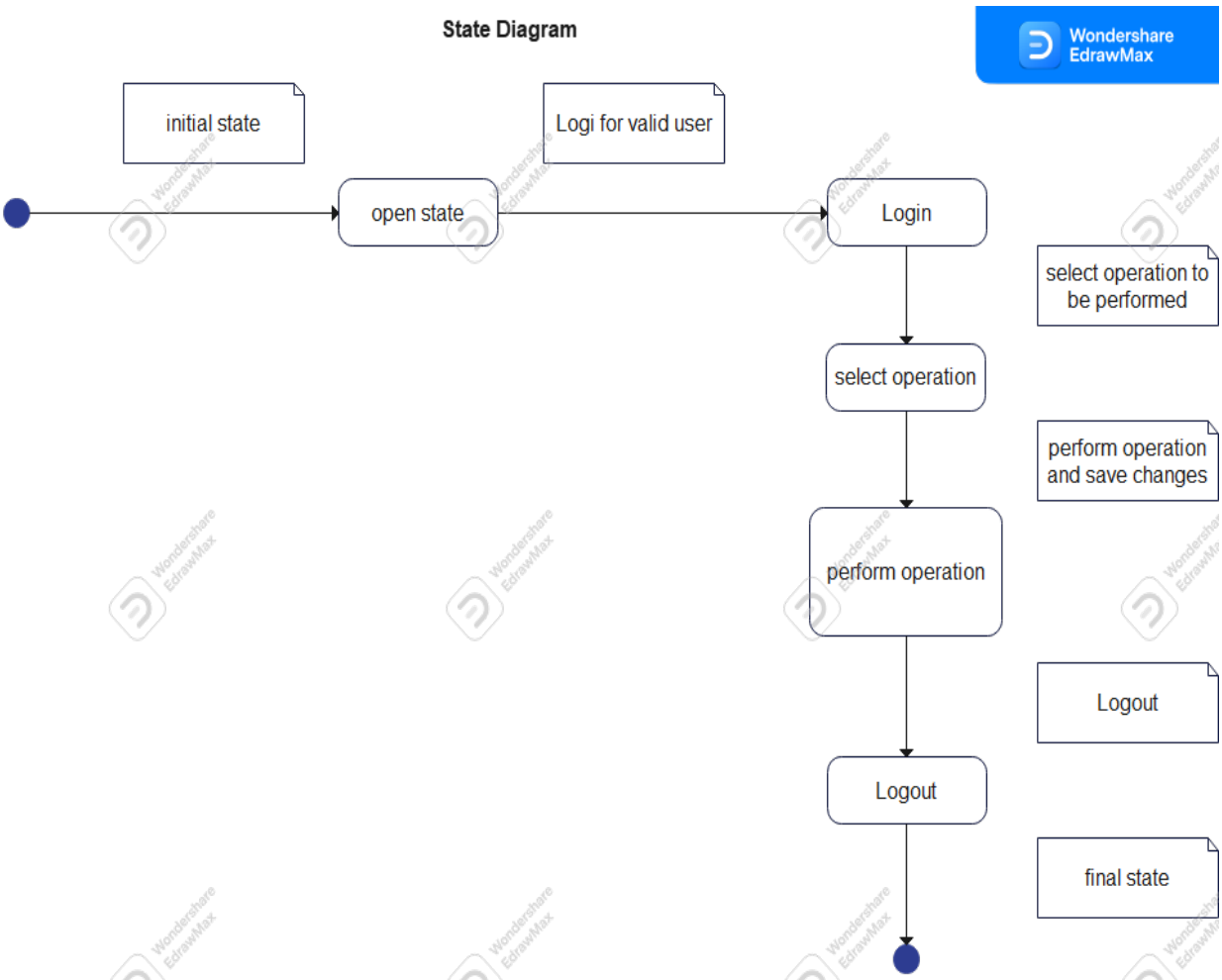
4.4 Behavior Diagram:



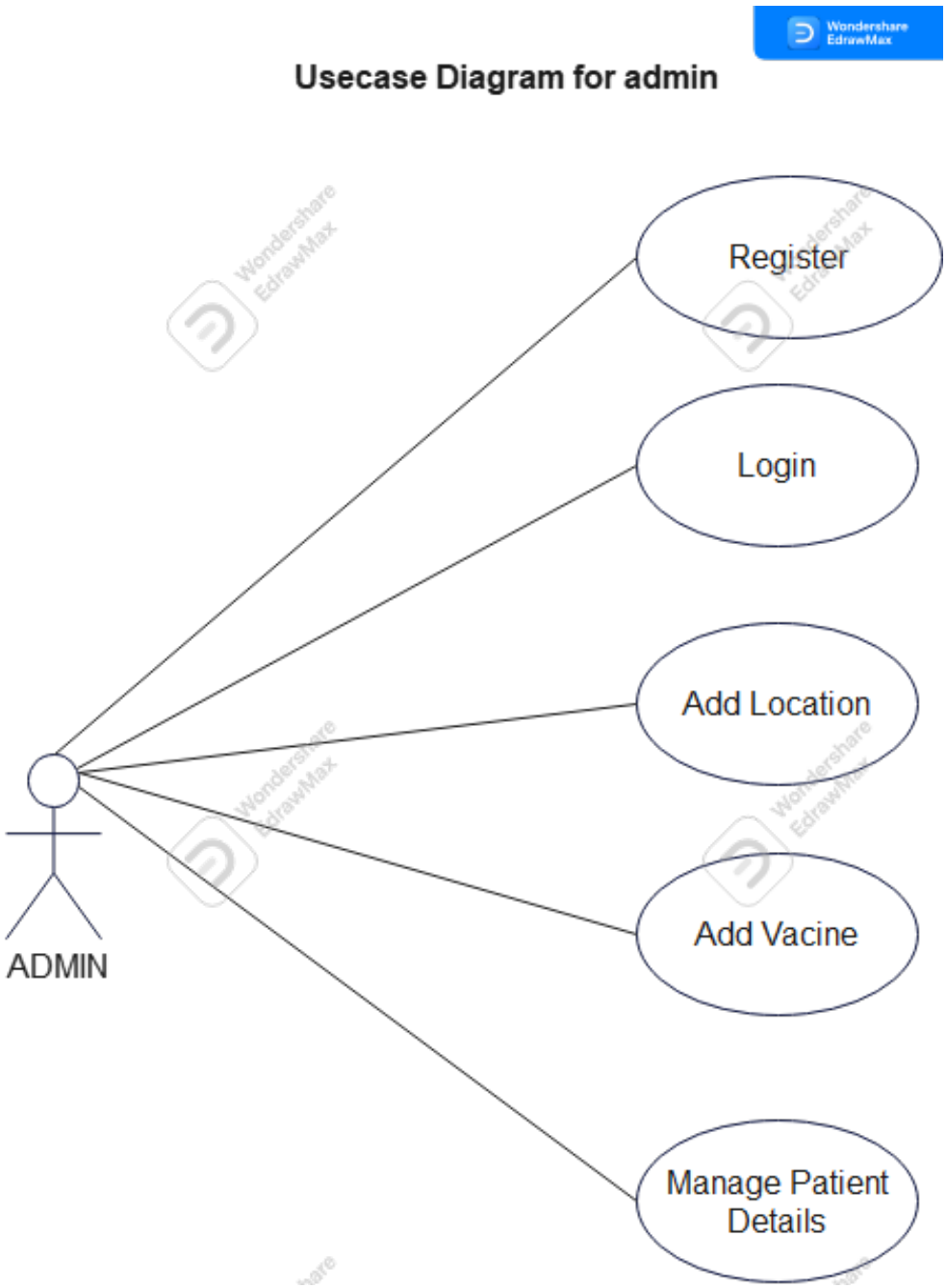
4.4.1 Behavior Diagram:



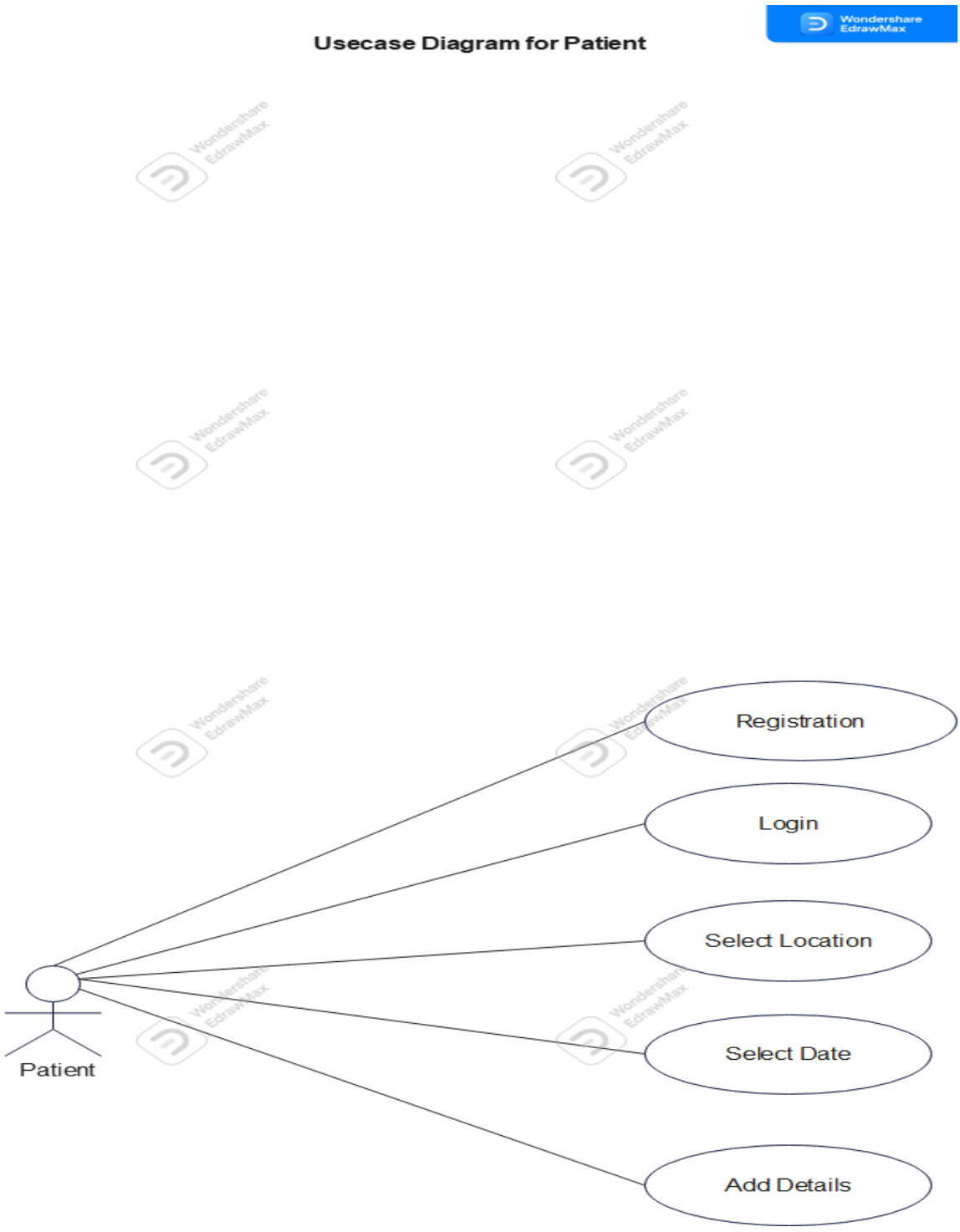
4.5 Behavior Diagram



4.6 Use case Diagram:

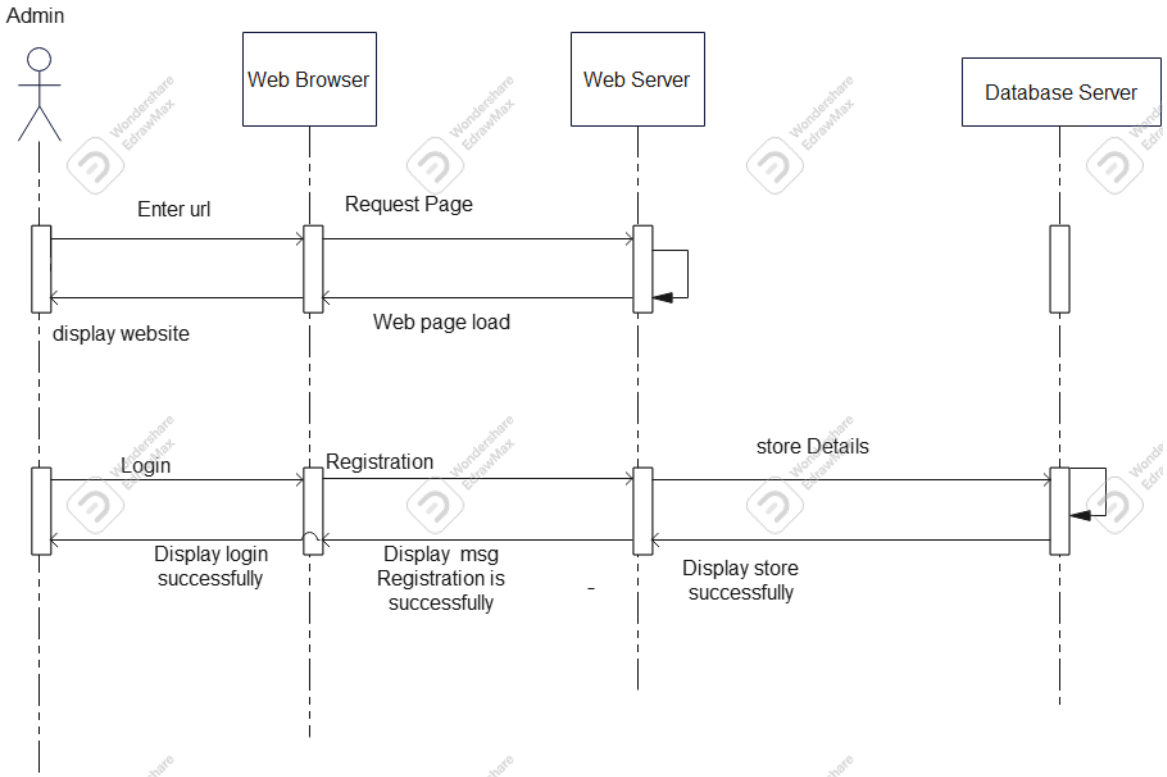


4.6.1 Use Case diagram for Patient:

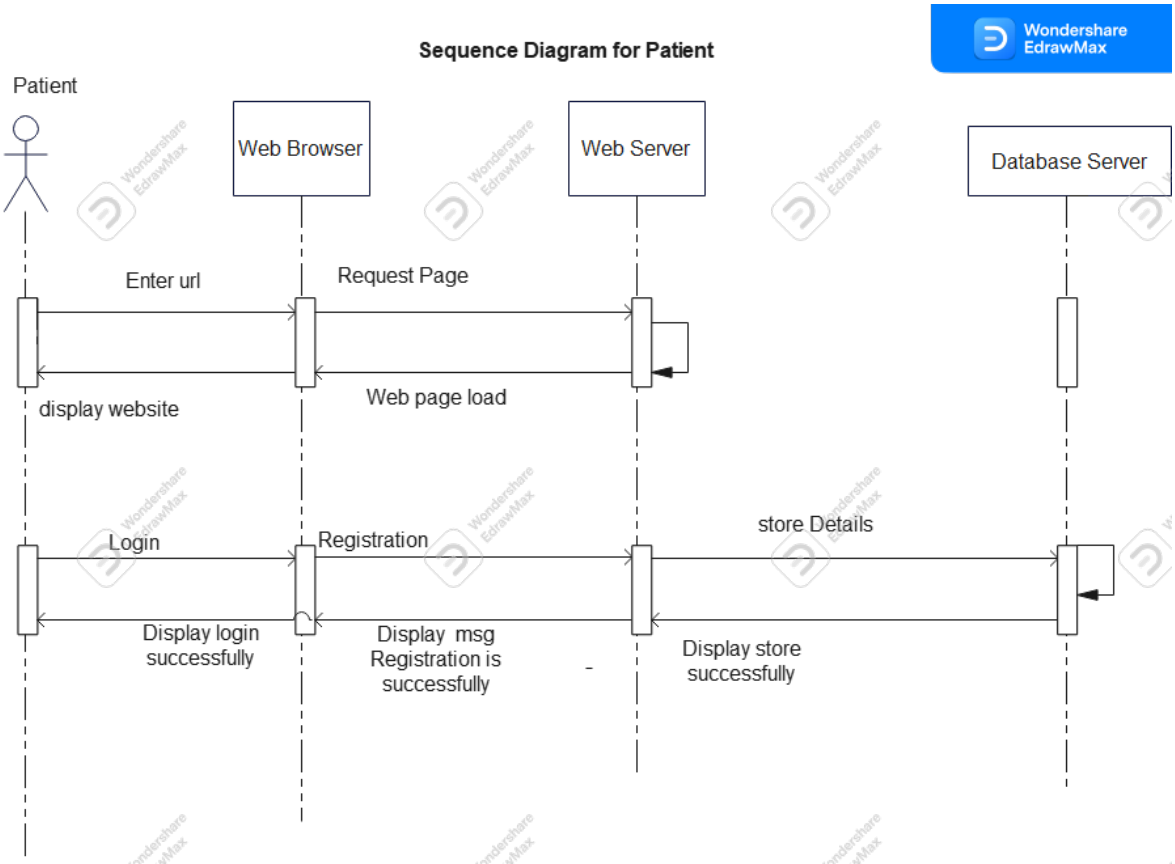


4.7 Sequence Diagram for admin:

Sequence Diagram for Admin



4.7.1 Sequence diagram for patient:



4.3 DATA MODEL

4.2.1 DATA DIRECTORY

4.2.1.1 Table Name: Patient

Field Name	Data Type	Description	Constraints
P_ID	Integer	Unique no of Patient	Primary key
P_Name	Varchar(15)	Name of Patient	Not Null
P_Address	Varchar(15)	Residential Address	Not Null
Age	Integer	Age of Patient	Not Null
Birthdate	Integer	Date of Birth	Not Null
Gender	Varchar(15)	Type of Gender	Not Null
Aadhar no	Integer	Aadhar number	Unique

4.2.1.1 Table Name: Login

First Name	Data type	Description	Constraints
Login ID	Int	Unique no of Login	Primary key
Patient Name	Varchar(15)	Name of Patient	Not Null
Patient type	Varchar(20)	Type of Patient	Not Null
Address	Varchar(20)	Address of Patient	Not Null

4.2.1.1 Table Name: Doctor

First Name	Data type	Description	Constraints
Doctor Name	Varchar(15)	Name of User	Not Null
Password	Varchar(10)	Password	Not Null

4.2.1.1 Table Name: Slot

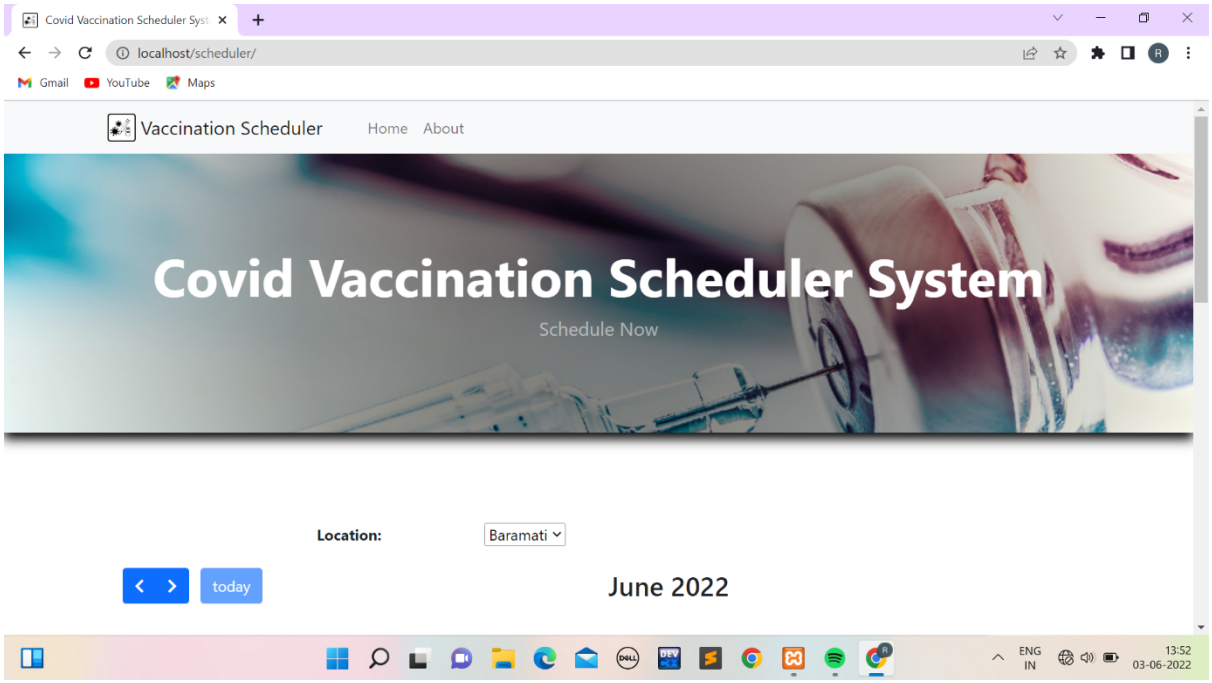
Slot Name	Data type	Description	Constraints
Slot ID	Int	Unique no of Slot location	Foreign key
Login ID	Int	Unique no of Login	Primary key
Patient Name	Varchar(15)	Name of Patient	Not Null
location	Varchar (15)	location	Not Null

4.2.1.1 Table name: Schedule

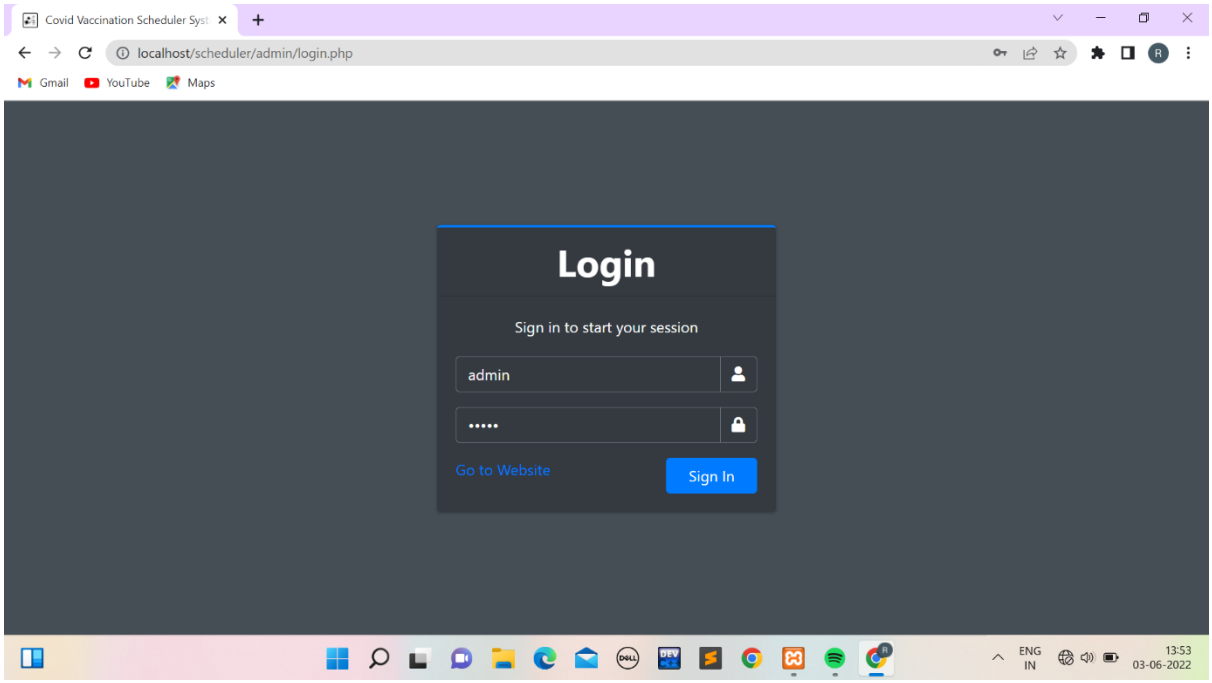
Field Name	Data Type	Description	Constraints
P_ID	Integer	Unique no of Patient	Primary key
P_Name	Varchar(15)	Name of Patient	Not Null
P_Address	Varchar(15)	Residential Address	Not Null
Schedule Date	Integer	Available Date for Schedule	Not Null
Birthdate	Integer	Date of Birth	Not Null
Gender	Varchar(15)	Type of Gender	Not Null
Schedule Time	Integer	Available Time for vaccine	Not Null

4.4USER INTERFACE

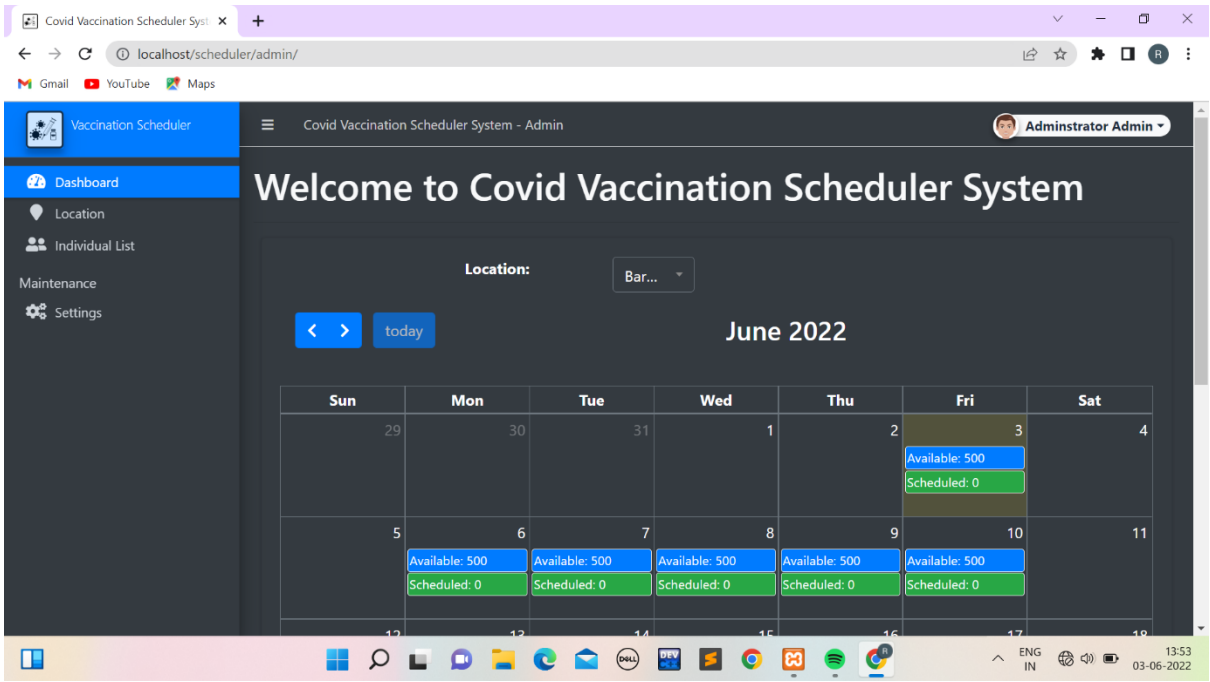
4.4.1 HOME PAGE



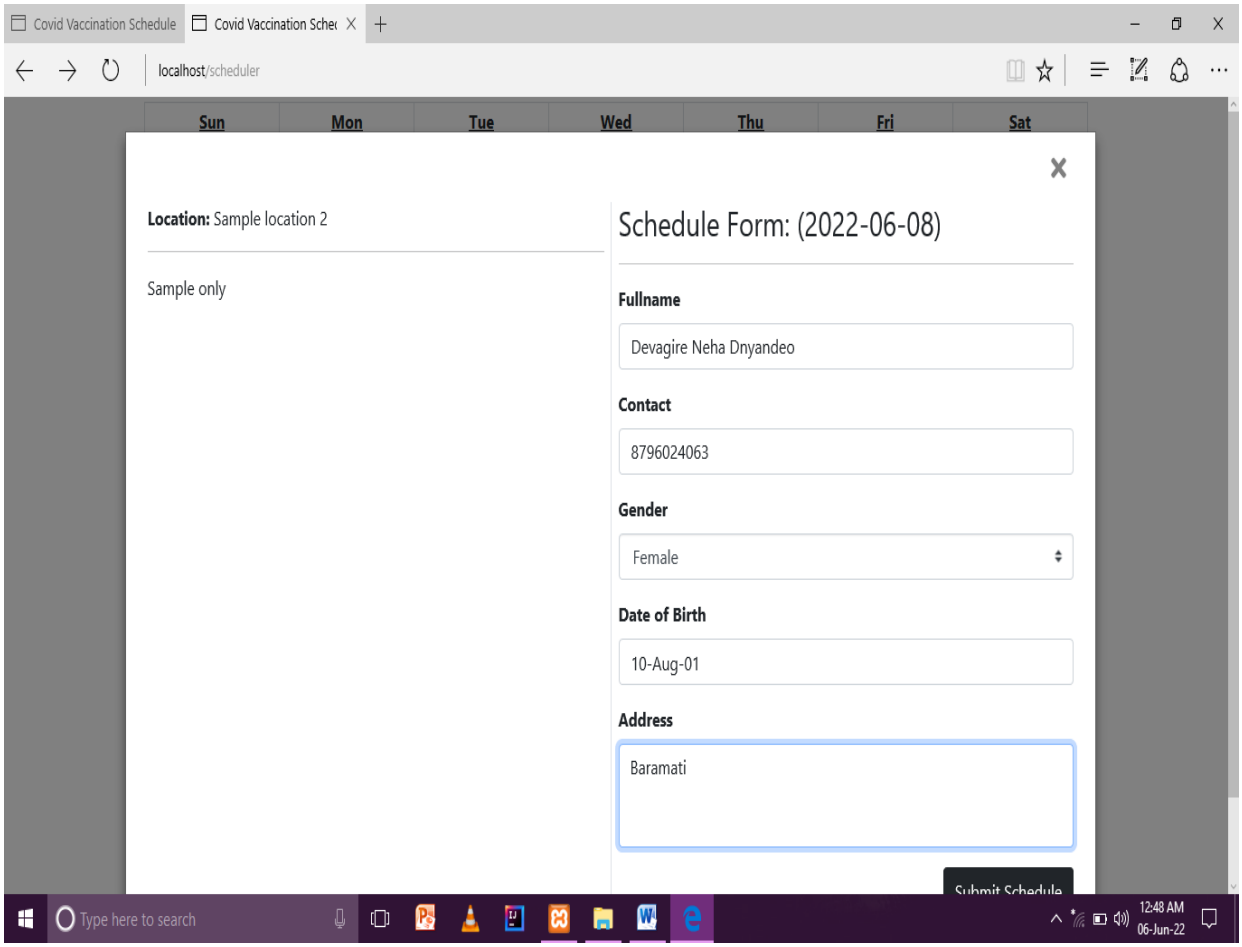
4.4.3 LOGIN PAGE



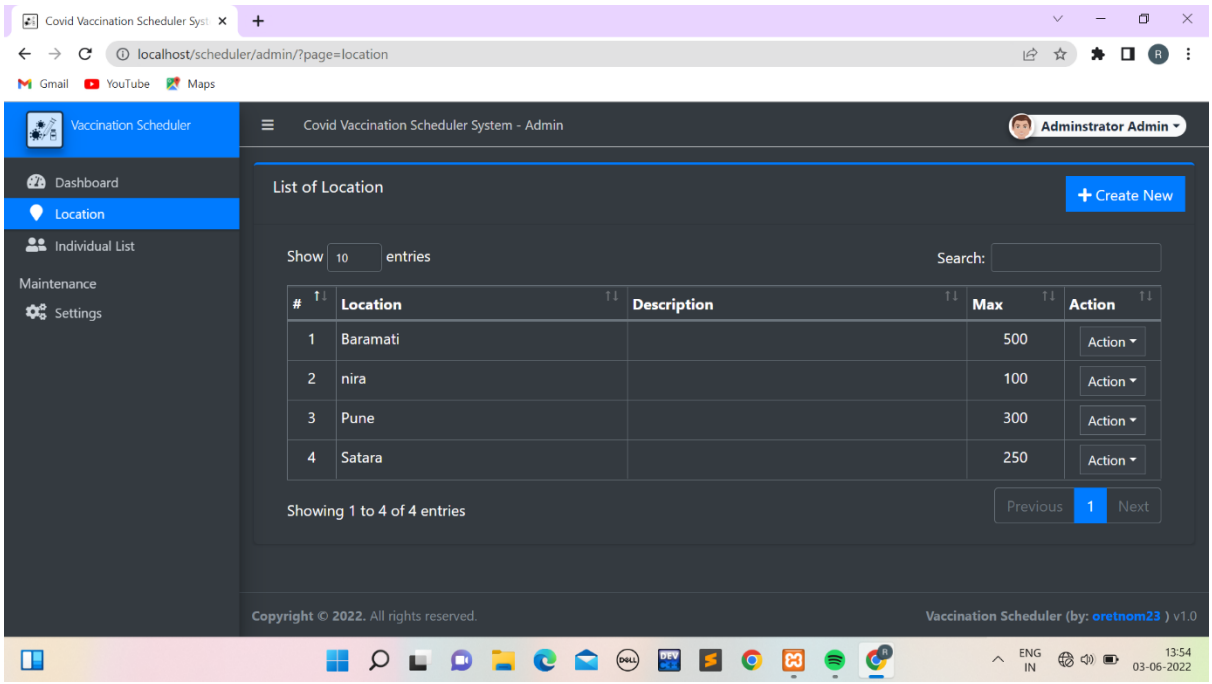
4.4.4 DASHBORD


Covid Vaccination Scheduler Syst
localhost/scheduler/admin/
Gmail
YouTube
Maps
Vaccination Scheduler
Covid Vaccination Scheduler System - Admin
Adminstrator Admin
Dashboard
Location
Individual List
Maintenance
Settings
Welcome to Covid Vaccination Scheduler System
Location:
Bar...
today
June 2022
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Available: 500
Scheduled: 0
ENG
IN
13:53
03-06-2022

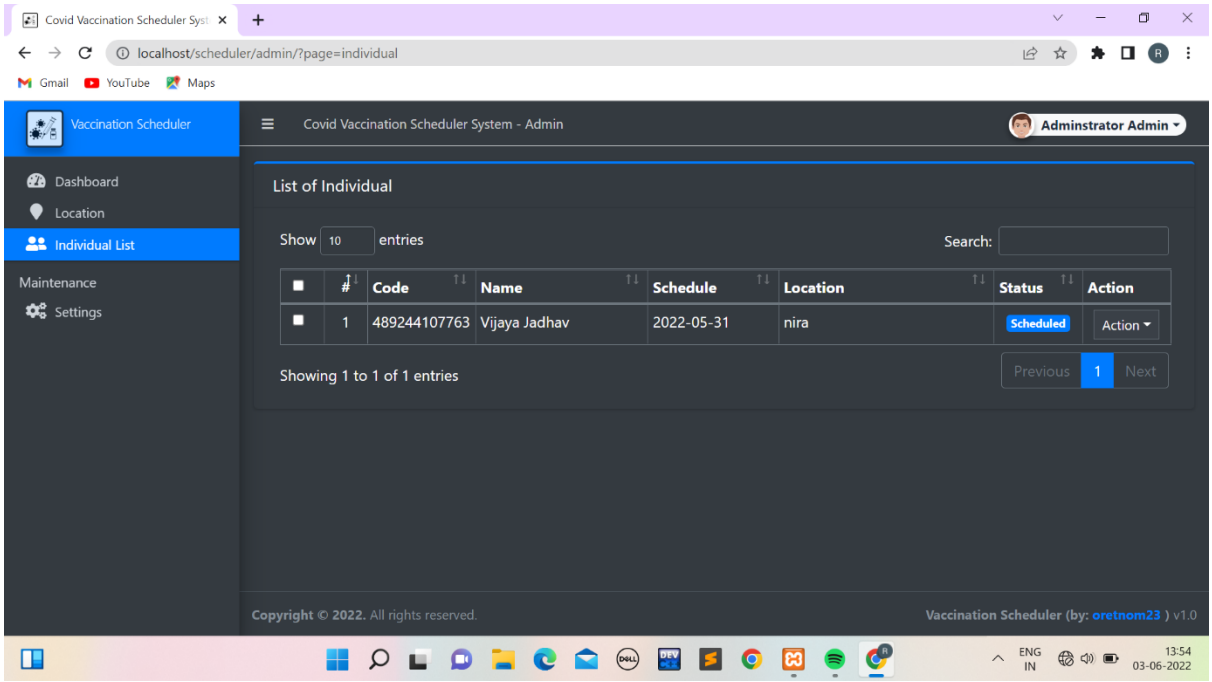
4.4.5 Schedule Form:



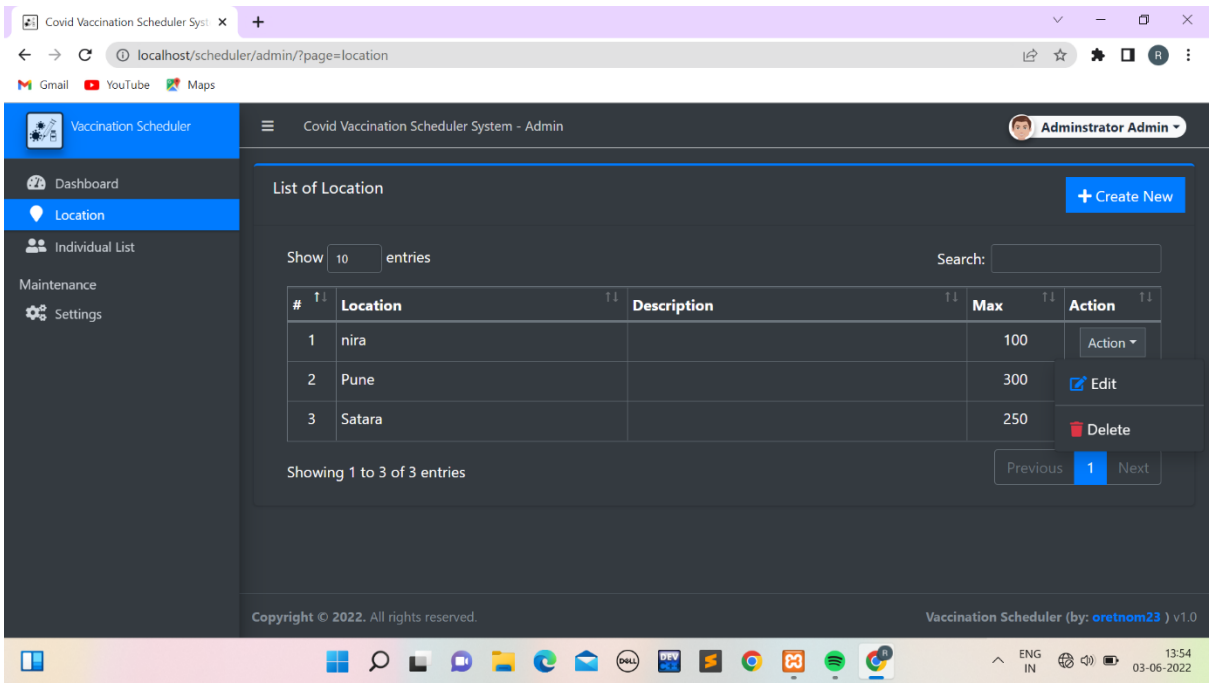
4.4.6 Location



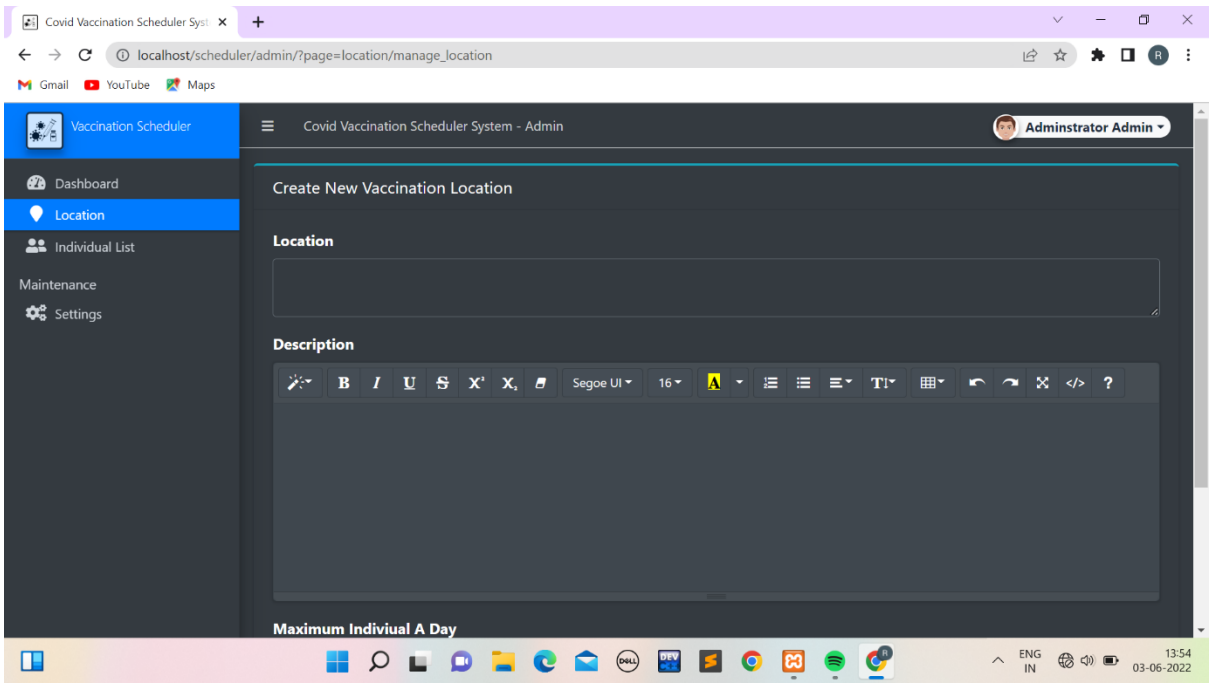
4.4.7 Patient Details



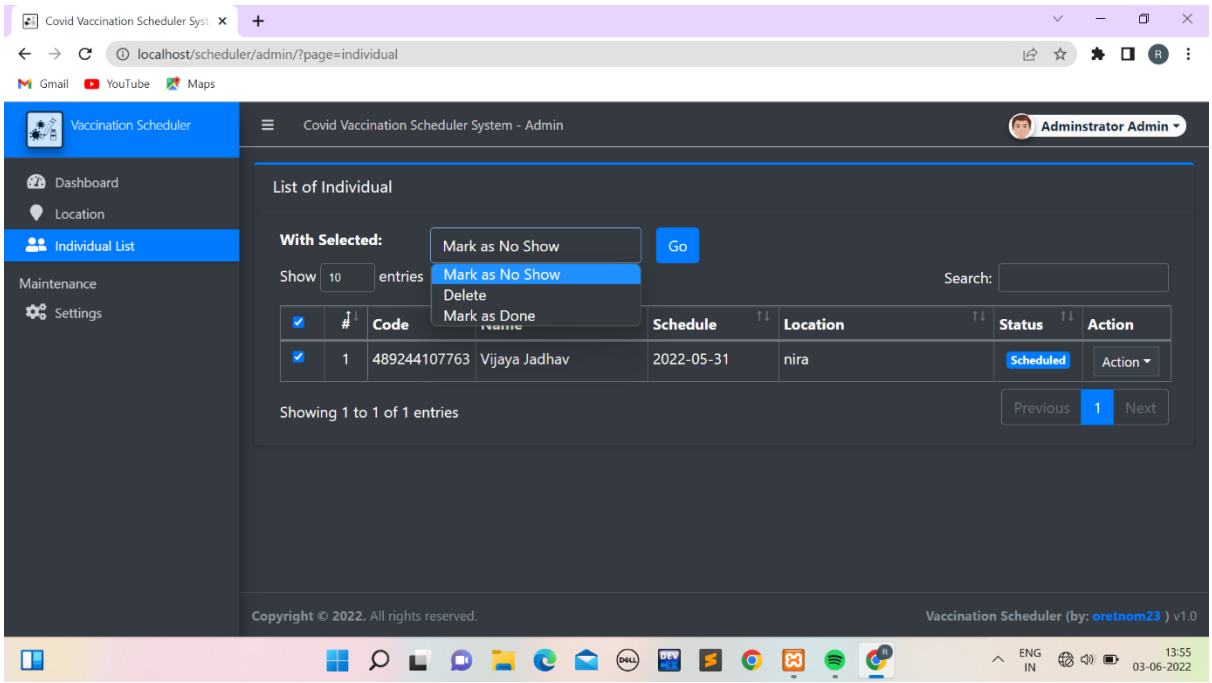
4.4.8 Location Edit



4.4.9 Create Location Page



4.4.9 Edit Patient Details



5. IMPLEMENTATION DETAILS

5.1 SOFTWARE Requirements:

IDE	Sublime text
Server	Localhost
Front End	PHP
+Back End	MySQL, PLSQL
Web Browser	Google Chrome
Framework	Angular

5.2 HARDWARE Requirements:

Processor	Intel(R)CORE(TM)i5
RAM	8.00GB
HDD	10GB(minimum)

6. Outputs and Report Testing:

Testing Procedure and implementation

Testing is the method of checking whether the software is performing the given task successfully as expected or not. The expected speed, performance, accuracy and expected time should be taken into consideration while testing.

A system should always be tested thoroughly before implementing it, as regards its individual programs, the system as a whole user acceptance etc. This is because implementing a new system is a major job, which requires a lot of man-hour and a lot of other resources, so an error not detected before implementation may cost a lot. Effective testing early in the process translates directly into long term cost savings from reduced number of errors. This is also necessary because in some cases, a small error is not detected and corrected before installation, which may explode into much larger problem.

Programming and testing is followed by the stage of installing the new system. Actual implementation of the system can begin at this point either using a parallel or a direct change over plan or some blend of two.

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. The purpose of product testing is to verify and validate the various work products viz. units, integrate units, final product to ensure that they meet their respective requirements.

Testing Objectives

The testing objectives are summarized in the following three steps:

1. Testing is a process of executing a program with the intent of finding an error.
2. A good test case is one that has a high probability of finding an as yet undiscovered error.

3. A successful test is the one that uncover an as yet undiscovered error.

Our objective is to design tests that systematically uncover different classes of errors and do so with a minimum amount of time and effort.

TEST PLAN

Testing is the last stage of s/w development before we release the s/w product to customer. During testing we have to make sure that the s/w does exactly what it supports. Test data was feed to the program and test result where compared with the expected result. Testing plan focuses on the logical internal of the software, ensuring that the statement has been tested and conducting test to uncover the errors.it is the process of the executing a program with the intention of finding errors. As one of the main requirements of the system was it should be user friendly nests user interface was carefully tested.

Testing Methods

1. Unit Testing:

Unit testing is a software development process in which test the smallest testable parts of an application, called units. Unit testing can be time-consuming.

In unit testing test the particular module in project and find out errors and bugs in this particular module.

Unit testing is a method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures are tested to determine if they are fit for use.

2. Integration Testing:

Integration testing is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing. Each module is verified individually during modules testing, it is important to determine if the modules are working properly when linked together.

This is referred to as integration testing or also as interfacing. In this step output is compared with the manually calculated output. This comparison gives the result of system testing. This finally ensures that the system is functioning properly.

3. Validation Testing:

In validation testing test the range, outside the range and values at the boundaries.

Validation checks that the product design satisfies or fits the intended use(high - level checking)i.e., the software meets the users requirements.

- Faults: - wrong or missing function in the code.

- Failure: – the manifestation of a faults during execution.

4. System Testing:

System testing of software or hardware is testing conduced on a complete, integrated system to evaluate the systems compliance with its specified requirements. In system testing no need of knowledge of the inner design of the code or logic.

2. GUI Testing:

Graphical user interface testing is the process of testing a producer graphical user interface to ensure it means its written specifications. GUI testing is a process to test applications user interface and to detect if application is functionally correct.

GUI testing involves carrying set of tasks and comparing the results of same with the expected output and ability to repeat same set of tasks multiple times with different data input and same level of accuracy.

6.1 Test Data for user name and Password text box

Test Case Id – TC001

Test case Title– Test case for Login Form.

Test Data for User Name and Password text box

Test Case Description	Test Data	Expected Result	Actual Result	PASS/FAIL
Enter valid Username And password	Username: Ram Password: Nehaa123	Profile page Should be displayed	Profile page Displayed	PASS
Enter Invalid Username And password	Email_id : Ram Password : Nehaa123	Error Message Should be displayed	Error Message is displayed	FAIL
Enter Blank Username And password	Username: Password :	Error Message Should be displayed	Error Message Is displayed	FAIL
Enter Valid Username And invalid password	Username: Ram Password :Nehaa123	Error Message Should be displayed	Error Message Is displayed	FAIL

6.2 Test Case Id - TC002

Test case Title- Test case for profile Form.

Test Data for Member id, Name, Gender, Age, Mobile Number, Pan no., Address, Login id, Gmail id, Yahoo id text box

Test Case Description	Test Data	Expected Result	Actual Result	PASS/FAIL
Enter Valid Fields	Member Id : 101 Name: Ram Gender: - male Age:-24 Mobile Number:-8421848319 Pan Number:-abc123 Address:- Baramati Photo:- 02112-265000 Loginid:- Neha Gmailid:-Neha@gmail.com Yahoold:-Neha@yahoo.com	Success Message Should be displayed	Success Message Displayed	PASS
Enter	Member Id : abc	Error	Error	FAIL

Invalid Registration Fields	Name: Neha Gender: - Female Age:-twenty four Mobile Number:-8421848319 Pan Number:-abc123 Address:- Baramati Photo:- 02112-265000 Loginid:-Ram Gmailid:- Ram Yahoold:- Ram	Message Should be displayed	Message is displayed	
Enter Blank Registration Fields	Member Id : Name: Gender: - Age:- Mobile Number:- Pan Number:- Address:- Photo:- Loginid:- Gmailid: Yahoold:-	Error Message Should be displayed	Error Message Is displayed	FAIL

Change Password:-

The change password form is must in every application. Because of change password give the way to change the password of the user.

The change password form is given to login user only because after login he had old password and able to enter new password.

Test Case Description	Test Data	Expected Result	Actual Result	PASS/ FAIL
Enter Valid Fields	Registration_number: 101 Old password : ram New password: Neha@gmail.com	Success Message Should be displayed	Success Message Displayed	PASS
Enter Invalid old password	Old password: ram	Error Message Should be	Error Message is	FAIL

		displayed	displaye d	
Enter Blank old password	Old password:	Error Message Should be displayed	Error Message Is displaye d	FAIL
Enter invalid registration number.	Registration number:11	Error Message Should be displayed	Error Message displaye d	FAIL

7. Conclusion:

We designed this package to the best of my ability.

After the development of VACCINATION MANAGEMENT SYSTEM

Working of the system showed that it deal with

Following aspects:

1. Create logins for admin as well as user modules
2. Storing these logins (username and passwords)
3. User being able to enter personal details.
4. Admin login being able to handle and access user's information.
5. User being able to book their appointment for vaccination as per convenience.
6. Admin being able to view the booked slots for vaccination.
7. Being able to store, handle, and retrieve data.

8. FUTURE SCOPE

The leaves that have not been availed by the staff in the given session can be automatically carried forward to the next working session depending on the clerk policy of the college.

9. Bibliography and reference:

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6. www.Covid.ncdhhs.gov