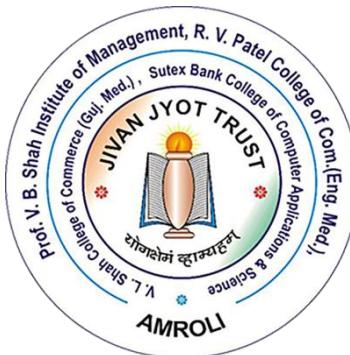


**Prof.V.B.Shah Institute of Management & R.V.Patel College of Commerce (Eng.Med.)
&V.L.Shah College of Commerce (Guj.Med.) &**

Sutex Bank College of Computer Applications & Science, Amroli

(Accredited 'B' (CGPA 2.55) by NAAC Dec.-2009)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT



PROJECT REPORT ON Vaccination Center System

**AS A PARTIAL REQUIREMENT FOR THE DEGREE
OF
BACHELOR OF COMPUTER APPLICATION
(B.C.A.)**

**SUBMITTED BY:
BY:
Tejani Rutvik B.
Vaghasiya Jaydip M.
Zalavadiya gaurav R.**

**GUIDED
Dr. Shalini A. Mali**



Managed By: Jivan Jyot Trust, Amroli
Prof. V.B. Shah Institute of Management, R. V. Patel College of Commerce(E.M.), V. L. Shah College of Commerce (G.M.) &
Sutex Bank College of Computer Applications & Science, Amroli
Self Financed B.B.A.- B. Com. (Eng. Med. & Guj. Med.) - B.C.A. Programme(Affiliated to VNSGU, Surat)
Accredited By : National Assessment & Accreditation Council with 'B' Grade
Address: College Campus, Amroli, Surat - 394107. Ph: 0261 - 2496478, 2495643,+91 - 6354626492
E-Mail: sbccas.amroli@gmail.com Website: www.amrolicollege.org

Certificate

This is to certify that the project titled “Marriage Stuff on Rent” is the bonafide work carried out by **Tejani Rutvik B., Vaghasiya Jaydip M., Zalavadiya**

Gaurav R. Students of TYBCA Sem-VI of Sutex Bank College of Computer Application and Science, Amroli, Surat affiliated to Veer Narmad South Gujarat University. He/She has successfully completed his/her project work in partial fulfillment of the requirements for the award of the degree of **“Bachelor of Computer Application”** during the academic year 2021-2022. And that the project has not formed the basis for the award previously of any other degree, diploma, fellowship or any other similar title.

Dr. Shalini A Mali

Project Guide

Dr. Mukesh Goyani

Principal

Date:

Place: Amroli, Surat.

ACKNOWLEDGEMENT

Accomplishment Requires the effort of many people and this work is no different. As we stride towards the completion of our 6 semester training project, we would like to grab this opportunity to express our deep sense of gratitude towards each and every institution and person who knowingly or unknowingly was part of this project and contributed to its success.

Also, we would like to express our heartfelt gratitude towards our internal guide **Dr. Shalini A Mali** for her invaluable help, critical suggestions and key directions throughout the course of the project. Their in-depth knowledge and experience has always been a constant of inspiration.

We take rather special privilege of thanking our respected principal **Dr. Mukesh Goyani**.

All the faculties for making the resource available within the institute for the project work.

Our special thanks go to our parents, Friends, Colleagues, Batch mates and well-wishers for providing the much needed support and constant motivation for working dedicatedly over this project. Finally we would like to especially thank all those who contributed directly or indirectly to the accomplishment of this project in some way or the other.

Thank You to All.

Tejani Rutvik B.

Vaghasiya Jaydip M

Zalavadiya Gaurav R.

INDEX

Chapter	Page No.
1. Introduction 1.1 Project description 1.2 Project Profile	3-5
2. Environment Description 2.1 Hardware and Software Requirements 2.2 Technologies Used	6-13
3. System Analysis and Planning 3.1 Existing System and its Drawbacks 3.2 Feasibility Study 3.3 Requirement Gathering and Analysis	14-18
4. Proposed System 4.1 Scope 4.2 Project modules 4.3 Module vise objectives/functionalities Constraints 4.4 Expected Advantages	19-23
5. Detail Planning 5.1 Data Flow Diagram / UML 5.2 Process Specification / Activity Flow Diagram 5.3 Data Dictionary 5.4 Entity-Relationship Diagram / Class Diagram	24-44
6. System Design 6.1 Database Design 6.2 Directory Structure 6.3 Input Design 6.4 Output Design	45-68
7. Software Testing	60-70
8. Limitations and Future Scope of Enhancements References	71-72

1

Chapter

Introduction

1.1 Project Description

1.2 Project Profile

1.1 Project Description

- Vaccination is a simple, safe, and effective way of protecting you against harmful diseases, before you come into contact with them. It uses your body's natural defenses to build resistance to specific infections and makes your immune system stronger.
- We have created a vaccination website for our project in which the user can get the vaccine from the vaccine appointment.
- In which the service is provided to the user to get the vaccine from the number of Aadhar card and from the location of his chosen vaccine center.
- Vaccine distribution in the state and city are determined by the admin and also admin and staff who can add and manage the vaccine.
- The staff has indicated that the vaccine user should get his appointment dates.

Field	Description
Project Title :	Vaccination center System
Team Members:	Tejani Rutvik B. Zalavadiya Gaurav R. Vaghasiya Jaydip M.
Description :	We developed vaccination center system to provide hustle free services to the end user.
Front-End :	HTML,CSS,BootStrap,Javascript,jquery,,Ajax
Back-End :	ASP.NET Core MVC
Technology :	Window 10
Tools :	Visual Studio 2019
Internal Guide :	Dr. Shalini A. Mali

2

Chapter

Environment Description

2.1 Hardware & Software Requirements

2.2 Technologies Used

2.1 Hardware & Software Requirements

Hardware Requirement

1. Development side:

- 4GB RAM
- Window 10 pro
- Hard disk 1TB

2. Server side:

- 4GB RAM
- Window 10 pro
- Hard disk 1TB

3. Client side:

- 4GB RAM
- Window 10 pro
- Hard disk 1 TB

Software Requirement

1. Development side:

- Window 10 pro

2. Server side:

- SQL Server 2014

Operating System:

- Window 10 pro

3. Client side:

- Google Chrome, Mozilla Firefox

2.2 Technologies Used

- **Front End :**

- **CSS:**

Cascading style sheets (CSS) is a W3C standard for defining the presentation of web document. Presentation refers to the way a document is displayed or delivered to the user, whether it is on a computer monitor, a cell phone display, or read aloud by a screen reader. This book focuses primarily on the visual aspects of presentation, such as typography, colors, alignment, layout, and so on. CSS is the mechanism for providing these types of style instructions to elements in a document that has been marked up with XHTML, HTML, or any XML language. Most important, CSS keeps these presentations separate from the content and its structural and semantic markup.

- **The Benefits Of CSS:**

- **Greater typography and page layout controls**

With style sheets, you can specify traditional typography features that you could never do with HTML alone (even with its presentational extensions).

- **Less Work**

Not only can format all similar elements in a document with a single style rule, external style sheets make it possible to edit the appearance of an entire site at once with a single style sheet edit.

- **Potentially smaller documents**

Redundant font tags and nested tables make for bloated documents. Stripping Presentational HTML out of the document save on file size

- **JQuery:**

JQuery is a cross-browser JavaScript library designed to simplify the Client side scripting of HTML. It was released in January 2006 at Bar Camp NYC by John Resig. Used by over 55% of the 10,000 most visited website, JQuery is the most popular JavaScript library in use today.

JQuery is free, open source software, dual-licensed under the MIT License or the GNU General Public License, Version 2. jquery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. The modular approach to the JQuery library allows the creation powerful dynamic web pages and web application.

● JAVA SCRIPT

Java script is a programming language that can be included on web pages to make them more interactive. You can use it to check or modify the content of forms, change images. Open new windows and write dynamic page content. You even use it with CSS to make DHTML. This allows you make parts of your web pages appear or disappear or move around on the page.

JavaScript is a client side, interpreted, object oriented, high level scripting language, while Java is a client side, compiled, object oriented high level language.

● AJAX :

The term Ajax is used to describe a set of technology that allows browsers to provide users with a more natural browsing experience. Before Ajax, Web sites forced the users into the submit/wait/redisplay paradigm, where the user's action were always synchronized with the server's "think time". Ajax provides the ability to communicate with the server asynchronously, thereby freeing the user experience from the request/response cycle. With Ajax, when a user clicks a button, you can use JavaScript and DHTML to immediately update the UI, and spawn an asynchronous request. When the request returns, you can then use JavaScript and CSS to update the UI accordingly without referencing the entire page. Most importantly, the user doesn't even know your code is communicating with the server, the web site feels like it's instantly responding.

● BOOTSTRAP

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web. It would be easy to send you over to their Getting Started page and call it a day. Their setup guide is indeed a host of useful information - links to CDNs, explanations on how to install with Bower, npm, and Composer, information on integration with Autoprefixer and LESS, a bunch of templates, licenses, and translations.

● **HTML**

HTML (HyperText Markup Language) is **the code that is used to structure a web page and its content**. For example, content could be structured within a set of paragraphs, a list of bulleted points, or using images and data tables. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages.

❖ **Extra Technologies :**

● **Visual studio 2019 :**

Visual Studio 2019 was released on April 2nd, 2019. There are so many advanced features. Visual Studio is one of the most famous IDE's has been using for the last few years. Microsoft developed it. It is used to create a computer program, web applications, and EXE files, etc. The first version of its kind was launched in 1997.

Visual Studio 2019 introduces exciting improvements and new features aimed at optimizing developer productivity and team collaboration.

ASP .NET supports three major development models: web pages, web forms, and MVC (model view controller). ASP .NET MVC frame-work is a lightweight, highly testable presentation framework that is integrated with the existing ASP .NET features, such as master pages, authentication, etc. Within NET this framework is defined in the System. Web. MVC assembly. The latest version of the MVC framework is 5.0. We use visual studio to crate ASP NET MVC application which can be added as template in visual studio.

- **Back End :**

- **Overview of SQL Server 2014 :**

SQL Server 2014, the latest complete information platform from Microsoft, embodies the new era of Microsoft's Cloud OS, which provides organizations and customers with one consistent platform for infrastructure, apps and data that span customer data centres, hosting service provider data centres and Microsoft public cloud. The benefits that customer experience with a consistent platform includes common development, management, data, identity, and virtualization, no matter where an application is being run.

- **Asp.net core MVC :**

ASP.NET Core MVC is a rich framework for building web apps and APIs using the Model-View-Controller design pattern.

The Model-View-Controller (MVC) architectural pattern separates an application into three main groups of components: Models, Views, and Controllers. This pattern helps to achieve separation of concerns. Using this pattern, user requests are routed to a Controller which is responsible for working with the Model to perform user actions and/or retrieve results of queries. The Controller chooses the View to display to the user, and provides it with any Model data it requires.

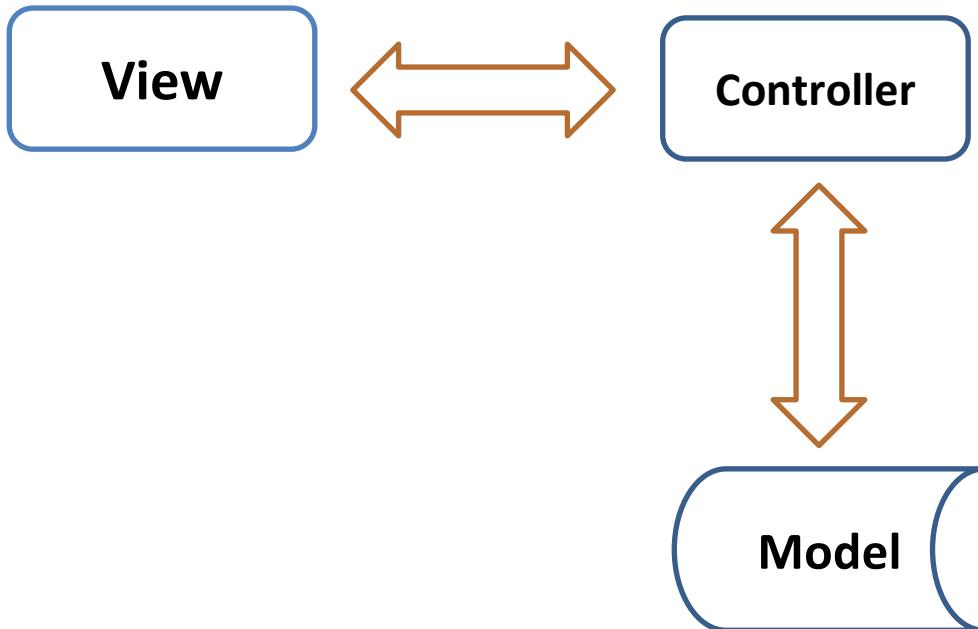
The ASP.NET Core MVC framework is a lightweight, open source, highly testable presentation framework optimized for use with ASP.NET Core.

ASP.NET Core MVC provides a patterns-based way to build dynamic websites that enables a clean separation of concerns. It gives you full control over markup, supports TDD-friendly development and uses the latest web standards.

ASP.NET Core MVC is built on top of ASP.NET Core's routing a powerful URL-mapping component that lets you build applications that have comprehensible and searchable URLs. This enables you to define your application's URL naming patterns that work well for search engine optimization (SEO) and for link generation, without regard for how the files on your web server are organized. You can define your routes using a convenient route template syntax that supports route value constraints, defaults and optional values.

Microsoft SQL Server 2014 is the next generation of Microsoft's information platform, with new features that deliver faster performance, expand capabilities in the cloud, and provide powerful business insights.

➤ Component of MVC :



3

Chapter

System Analysis and Planning

3.1 Existing System and its Drawback

3.2 Feasibility Study

3.3 Requirement Gathering and Analysis

3.1 Existing System and its Drawback

- **Existing System:**

Managing all the vaccine data with the help of paper will include a lot of paper work. Earlier systems manually add the inventory of particular vaccines which was making complex job and it leads to create mismanagement and due to this phenomenon, number of vaccine shot expired without uses which were waste of money.

In earlier system, people who want to take a vaccine, it was necessary to go at the particular vaccine center and book an appointment. Sometime vaccine slot was finish and people don't able to take vaccine shot after book an appointment, which was time consuming for them.

It is also true that many website are available to book an appointment for vaccine but it works in limited vaccine type.

- **Drawback/limitation of existing system :**

Each and every system has certain drawbacks that lead them into improper working or the same traditional manual system of keeping all paper based record system and it can be more tedious to use in some way.

- Following are the drawbacks of the existing system that are observed and which forced us to design new system.
 - Data Maintaining
 - Security of Data
 - Time Consuming
 - Lots of Registration
 - Lack of immediate Retrievals
 - Lack of immediate information storage
 - Lack of prompt Updating
 - Preparation of accurate and prompt reports

3.2 Feasibility Study

Introduction:

A feasibility study is one of the significant pillars of project because the company and their management want to ensure that any system they plan to develop is actually "feasible" or not. It also helps to introduce necessary equipment and services so we can arrange all of it before the timeline and do work without hustle.

- **Technical Feasibility**
- **Economical Feasibility**
- **Operational Feasibility**
- **Time Feasibility**

• Technical Feasibility :

- This Website Does Require That Much of Higher & Advanced Technology. It requires Database interaction and it also requires to be accessed via web or Internet.
- Technical feasibility study is the complete study of the project in terms of input, processes, output, fields, programs and procedures

• Economical Feasibility:

- In This Project, We Will Require To Have An Internet Connection For Better Online Website.
- Such at the developer end It needs the good server with high capacity of RAM and CPU Processors So can It handle lots of members at time Online Communications , But as It will be Web - enabled We do not have any extra cost of setting up a network.

• Operational Feasibility:

- Test of operational feasibility asks if the website will work where it is developed and installed.
- As well as this website does not cause any harm to the other application, and can also be implemented in - phase with the other website.

- System provides the users friendly interface which helps new users to book an appointment in the website.
- The proposed system made best efforts in achieving necessary function and performance as required by the user and keep in mind some infrastructure constraints.

- **Time Feasibility:**

- Time feasibility describes the time cost for converting the existing system to new system.
- As an aspect of time feasibility our system takes Two months for completion.
- This system is Develop under the time period of just Two months with proper validation so we can say that this system is time feasible.

3.3 Requirement Gathering and Analysis

- **Requirement Gathering :**

- Different types before developing an elegant software, best way to identify basic needs and functionality for proposed application. By analysing the information we understand following process requirement for system.
- Vaccine in available City, center, and state information can be obtained through the available stock and Staff profiles are added delete and update details by admin.
- Maximum user appointment book of the day is done so that systems overload stops on Websites Lake and provide reliable services.
- Allocate the same dose as the appointment booked by the staff.

- **Requirement Analysis :**

- We analyse our gathered information and we have decided our system should have following functionalities:
 - ✓ **It creates patient account**
 - ✓ **It deletes patient account**
 - ✓ **Authorization of patient Account**
 - ✓ **Update patient account**
 - ✓ **Download vaccination certificate**

4

Chapter

Proposed System

4.1 Scope

4.2 Project Modules

4.3 Module wise objectives / functionalities constraints

4.4 Expected Advantages

4.1 Scope

- **Scope of system :**

The current project Vaccination centers have the corresponding Scope of which is as follows:

- Information about Patients is done by just writing the Patient aadhar card number. Whenever the Patient comes up his information is stored freshly.
- Diagnosis information to patients is generally recorded on the document, which contains Patient information. It is destroyed after some time period to decrease the paper load in the office.
- Information about various diseases is not kept as any document. Doctors themselves do this job by remembering various medicines.
- Certificate of vaccine is generated on the dose of the patient. Certificate is generated when the dose is given by the staff.

- **Aims :**

- Our mission is to bring saving the time of patients and he can take vaccine from the designated location centre.
- To bring more creativity into the Vaccination Centre System.
- Admin who can comfortably view available vaccine and allocate vaccine.

4.2 Project Modules

- The vaccination center system has web based applications and in an efficient and convenient way the patient takes the vaccine appointment and allocates the specified location.
- We have developed a system in which different states have their cities and centers so that the patient can easily decide where to get vaccine.
- The certificate of the patient receiving the vaccine shows the location centers and where the staffs is given in the certificate and the record of the patient receiving the vaccine is maintained in the system.

• **Module**

1. **Admin :**

In this module, admin can add, modify, delete and update the Details, Location and various other attributes. Admin Update Profile.

2. **Staff :**

In this module, the staff can see the appointment of the day and the available doses. They have the details of the patient.

3. **Patient/User :**

In this module, User who can book appointment and centers location can determine and download the vaccine certificate.

4.3 Module wise objectives/functionalities Constraints

There are various objectives which are both handled on user side as well as on staff side and it became more user friendly as for it also. Allows admin with some specific features .

- **Admin**

- Log In
- Manage User
- Manage Staff
- Allocate Vaccine
- Manage Contact
- Manage Vaccine inventory
- Manage Profile
- Manage Role

- **Staff**

- Login
- Register
- Update Profile
- Give Vaccine based on appointment date
- Notify User
- Authenticate Valid Proof

- **User**

- Login
- Register
- Update Profile
- Contact
- Check Vaccination Status
 - Book Appointment
 - Download Certificate

4.4 Expected Advantages

- **High Security :**

There is high security mechanism provided by the proposed system. No unauthorized person can make change in the data those are stored in website. Only authorized person can change and can make login.

- **Less Time Required :**

In our website, all the processes are carried by computer so obviously it will require less time than traditional inventory system and in that sense; it will require less time to complete transaction and can process data very fast.

- **High Amount of Accuracy :**

In our web system there are less amount of human activities are involved in that case it will have less effect in our accounts. The website will perform all calculation and manipulation automatically; In that case the data that we receive will be accurate and much more reliable than the generated previously.

- **Easy Registration :**

Users can easily register from this website. Users can easily sign in and out. Admin can easily login and get user or staff details.

5

Chapter

Detail Planning

5.1 Data Flow Diagram

5.2 Process Specification / Activity Flow Diagram

5.3 Data Dictionary

5.4 Entity-Relationship Diagram / Class Diagram

5.1 Data Flow Diagram

Introduction

Also known as DFD, Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation.

Data flow diagrams can be divided into logical and physical. The logical data flow diagram describes flow of data through a system to perform certain functionality of a business. The physical data flow diagram describes the implementation of the logical data flow.

○ Symbols used in DFD

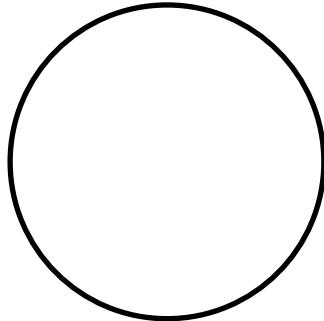
- **External Entity**
- **Process**
- **Data Store**
- **Data Flow**

1. External Entity :



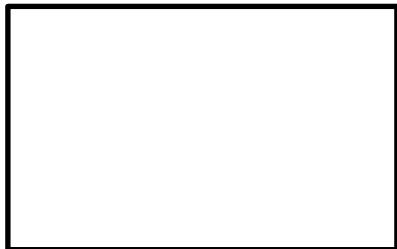
An outside system that send or receive data, communicating with the system being diagrammed. They are the sources and destinations of information entering or leaving the system. They might be an outside organization or person, a computer system or a business system. They are also known as terminators, sources and sinks or actors. They are typically drawn on the edges of the diagram.

2. Process:



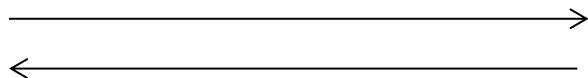
Any process that changes the data, producing an output. It might perform computations, or sort data based on logic, or direct the data flow based on business rules. A short label is used to describe the process, such as “Submit payment.”

3. Data Store:



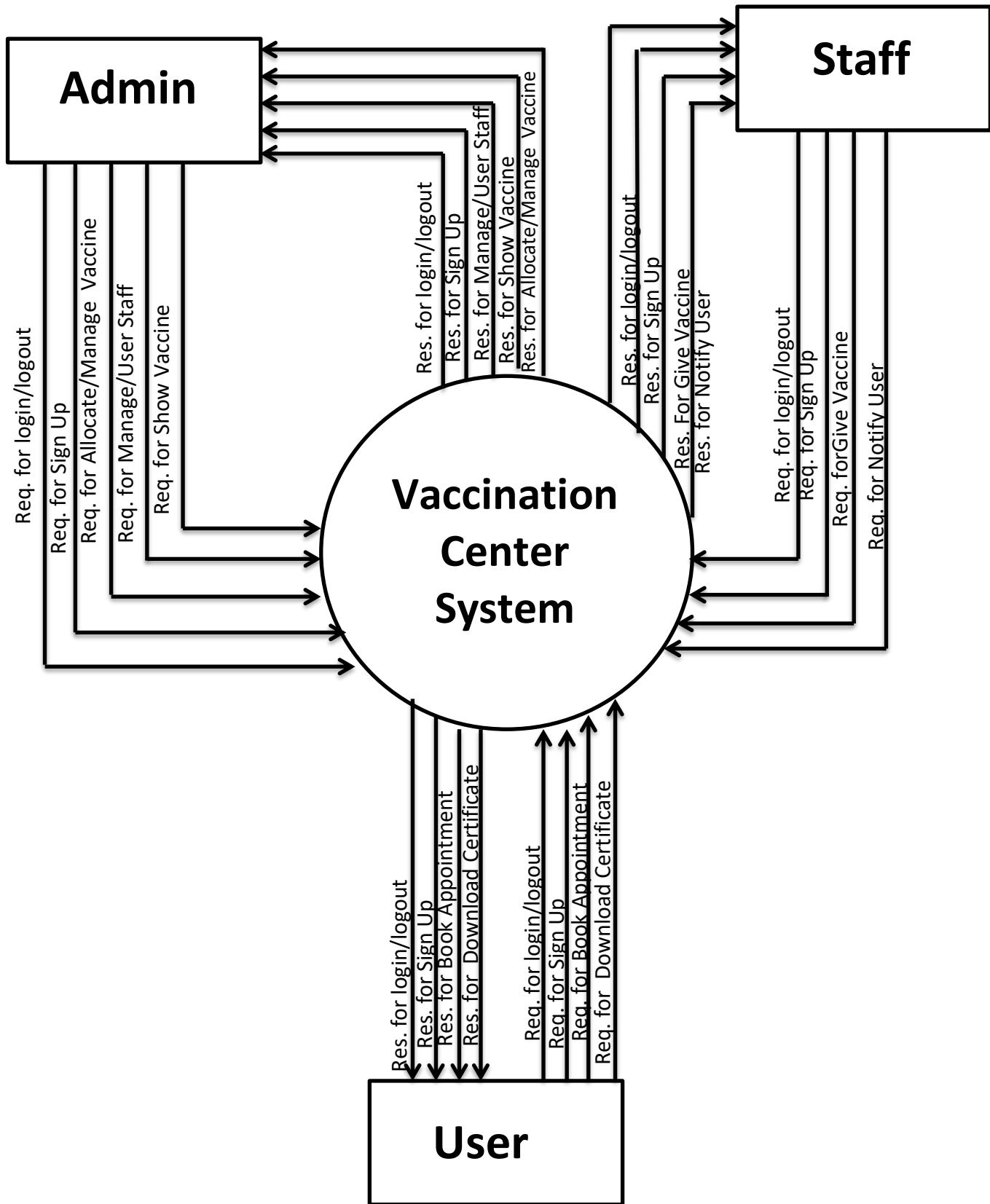
Files or repositories that hold information for later use, such as a database table or a membership form. Each data store receives a simple label, such as “Orders.”

4. Data Flow



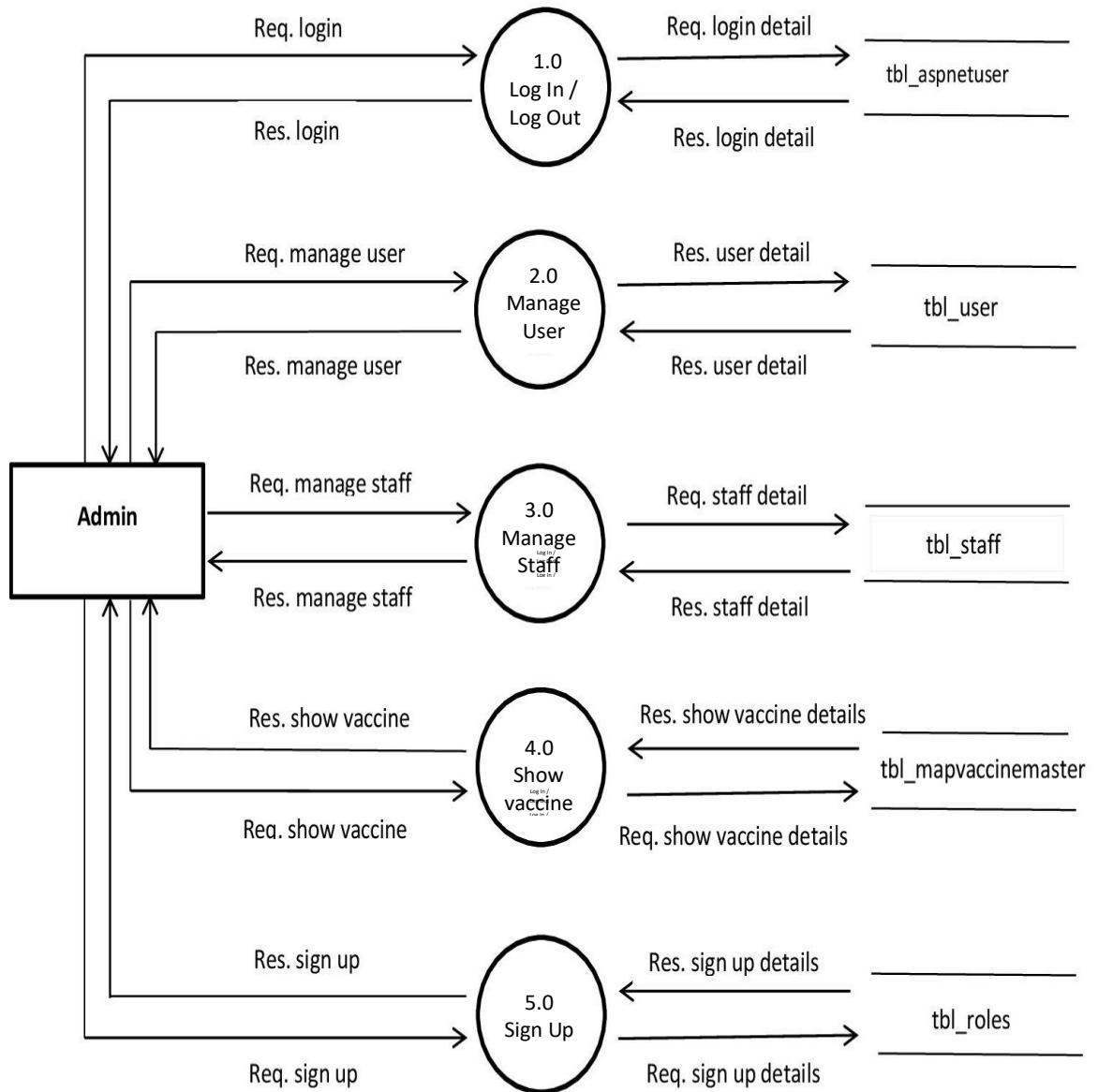
The route that data takes between the external entities, processes and data stores. It portrays the interface between the other components and is shown with arrows, typically labelled with a short data name, like “Billing details.”

- 0th Level Diagram

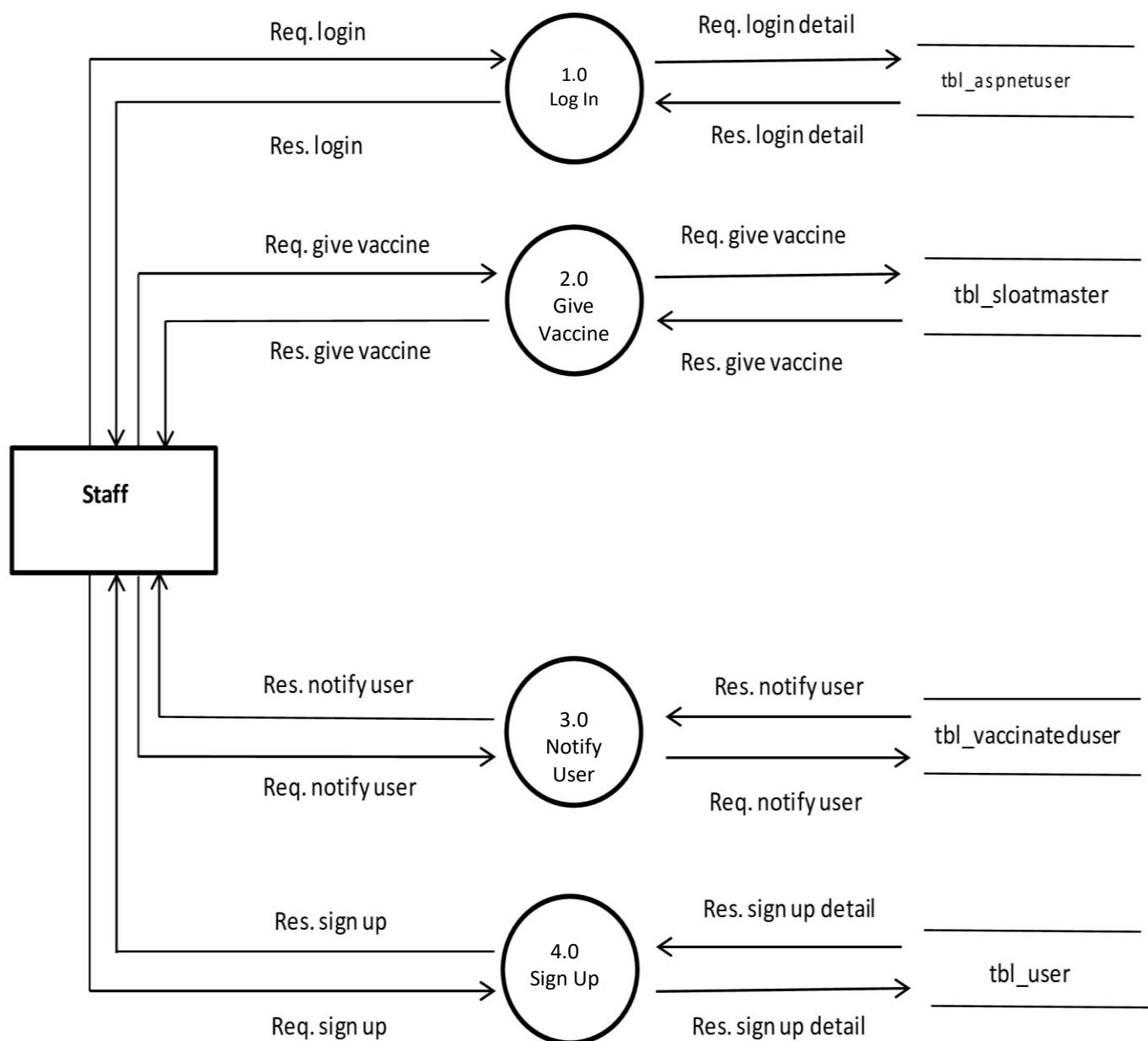


- **1st Level Diagram**

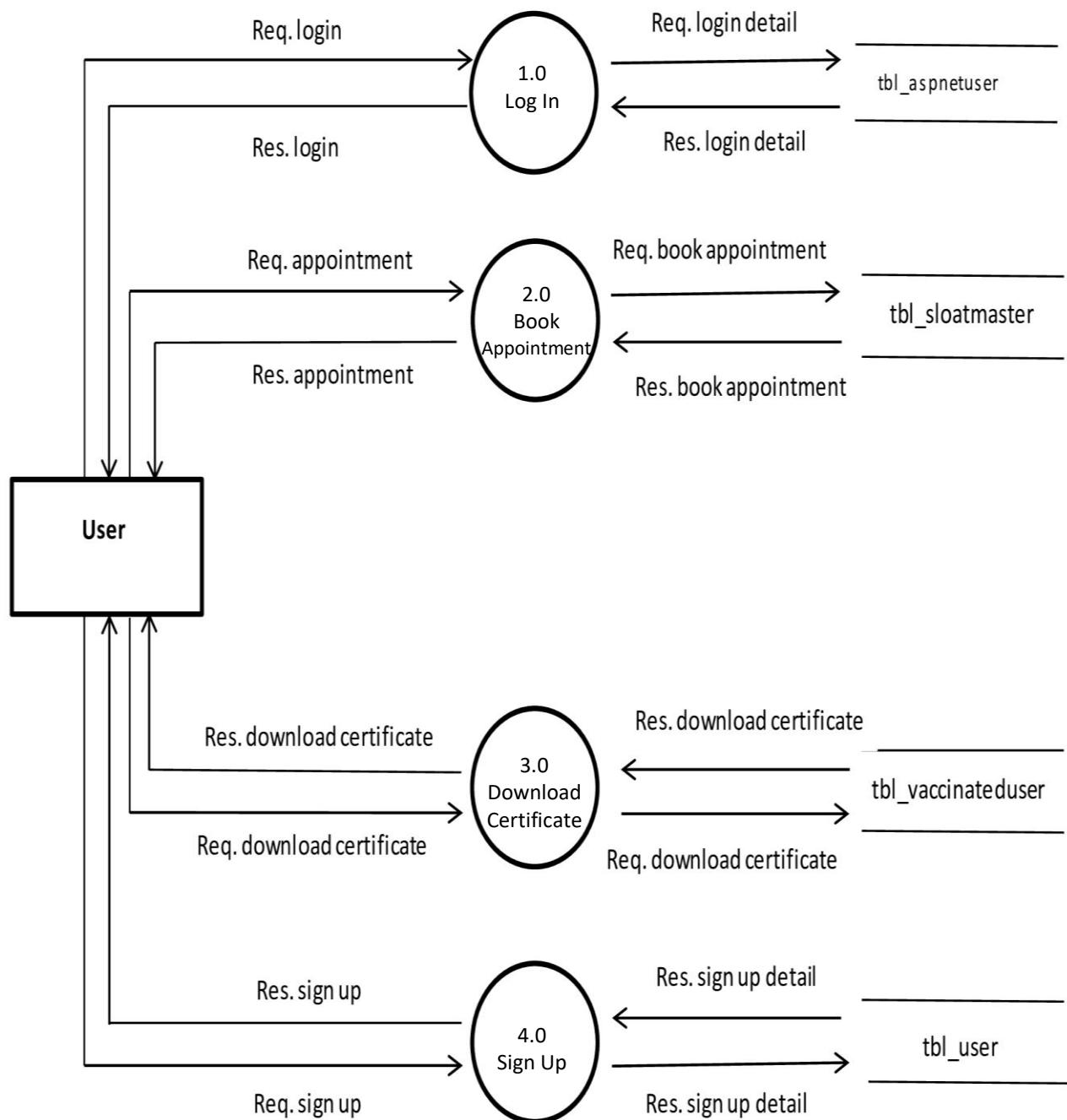
- **Admin**



- Staff

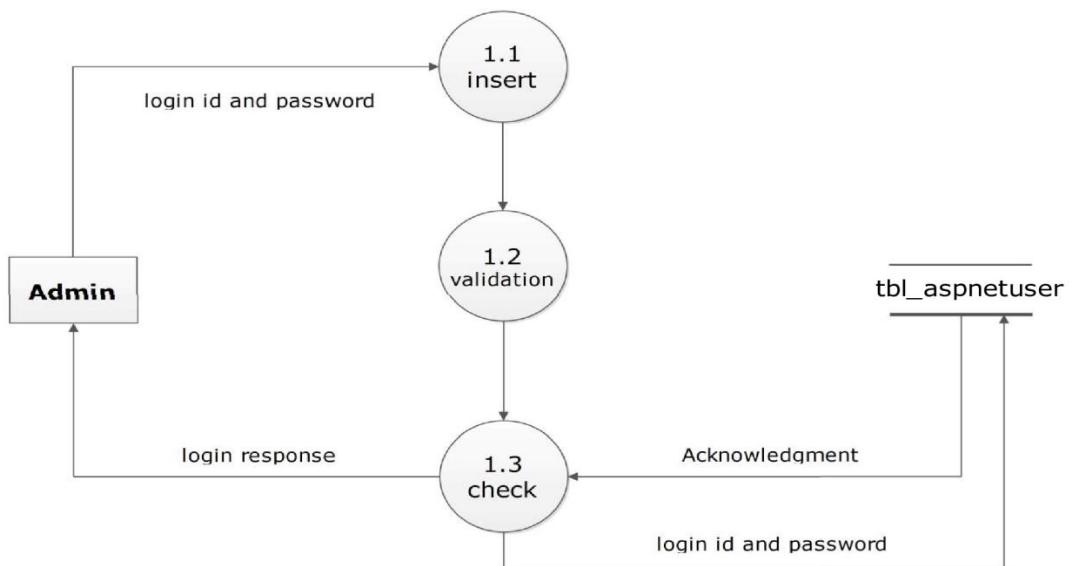


- **User**

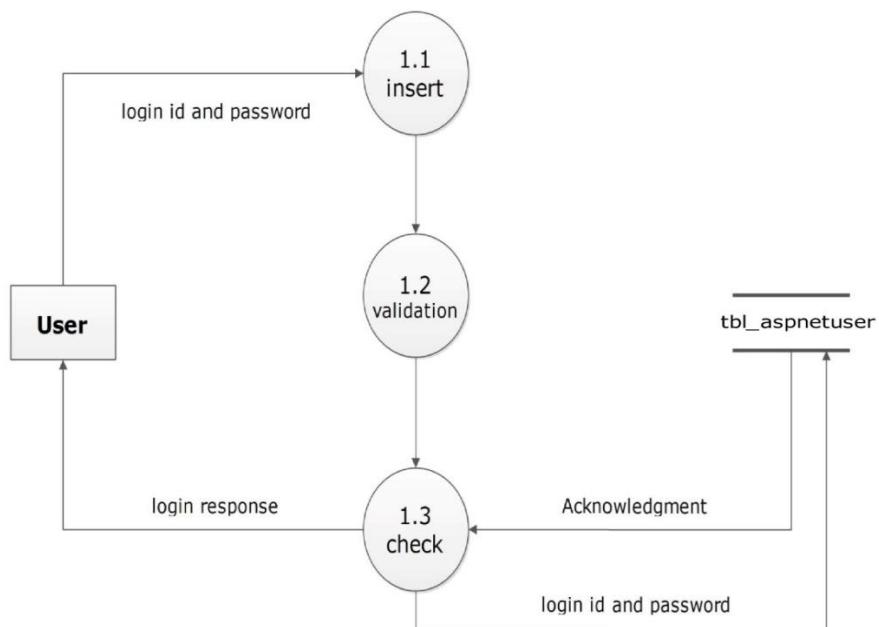


- **2nd Level Diagram**

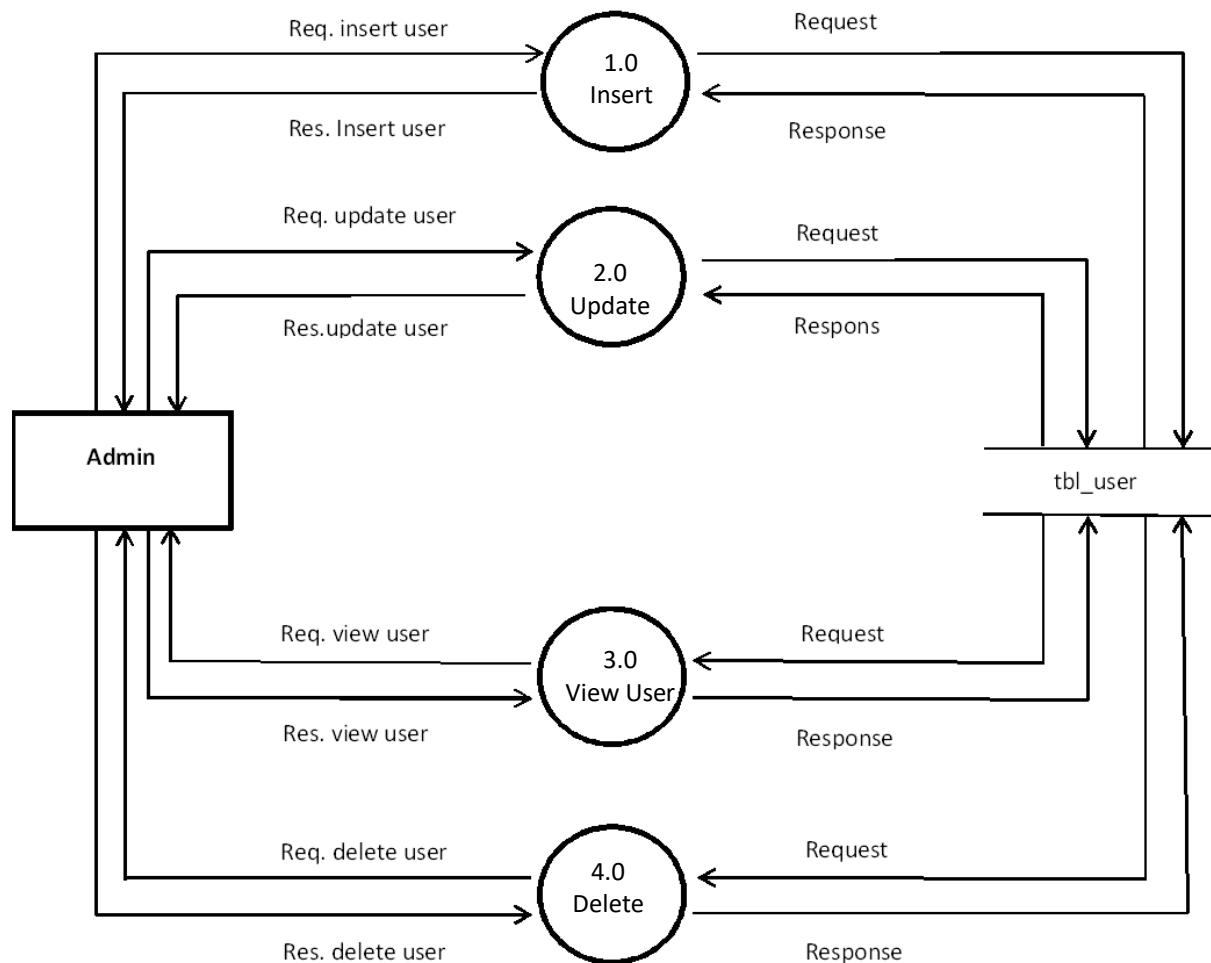
- **Admin**



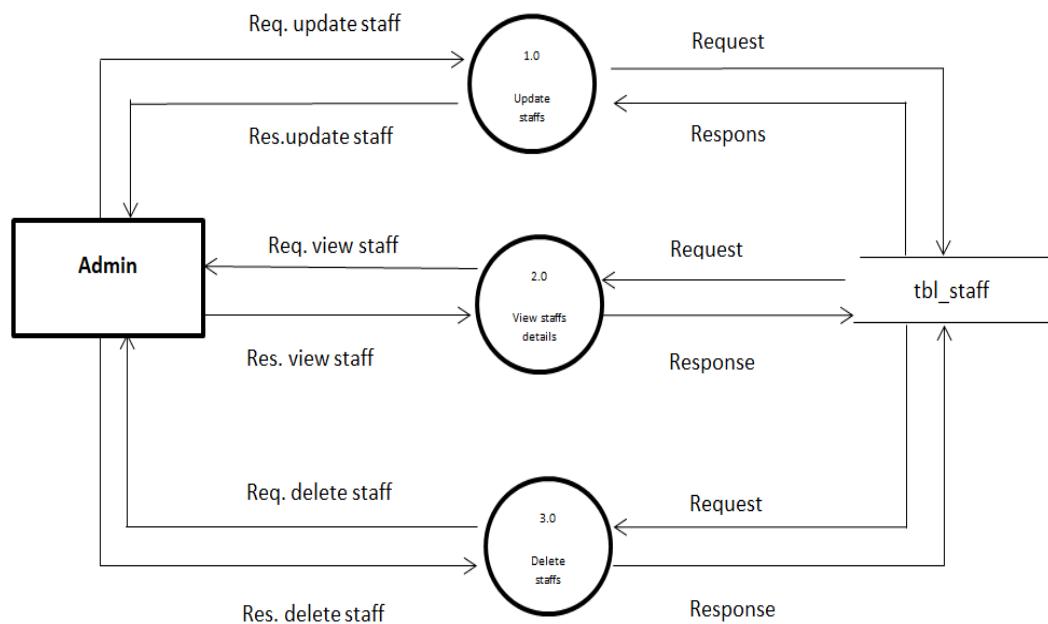
- **User**



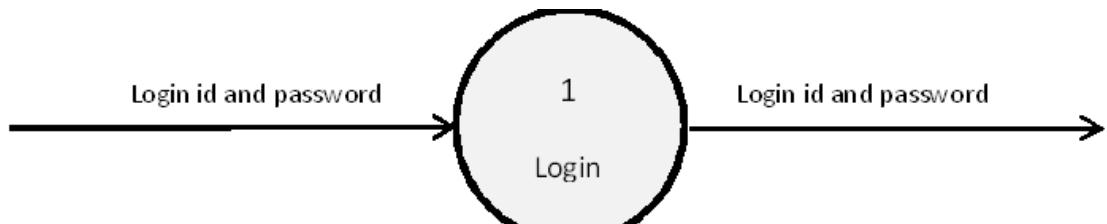
- Manage User



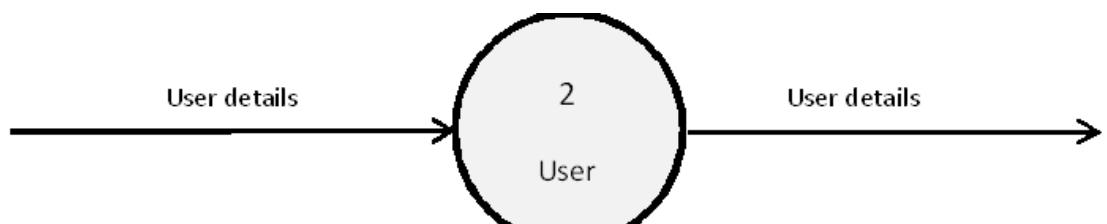
- Manage Staff



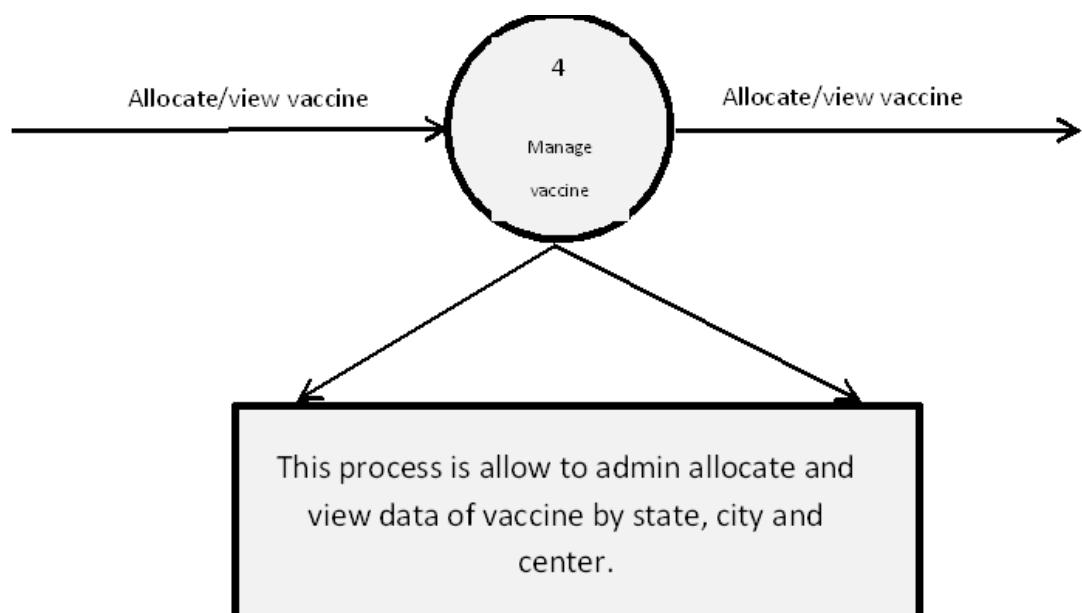
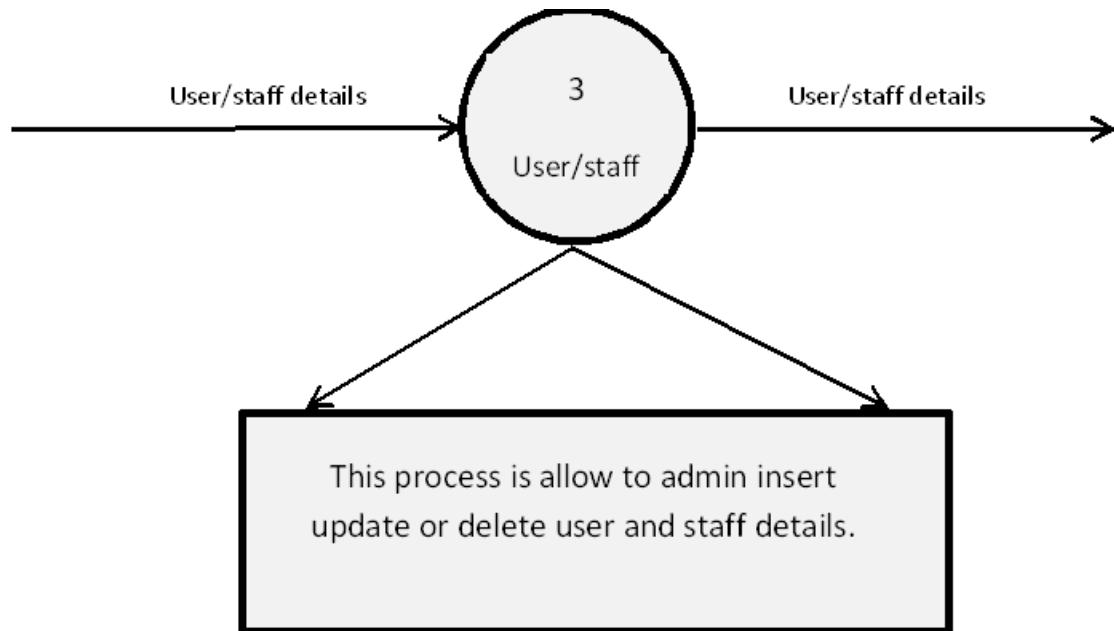
5.2 Process Specification

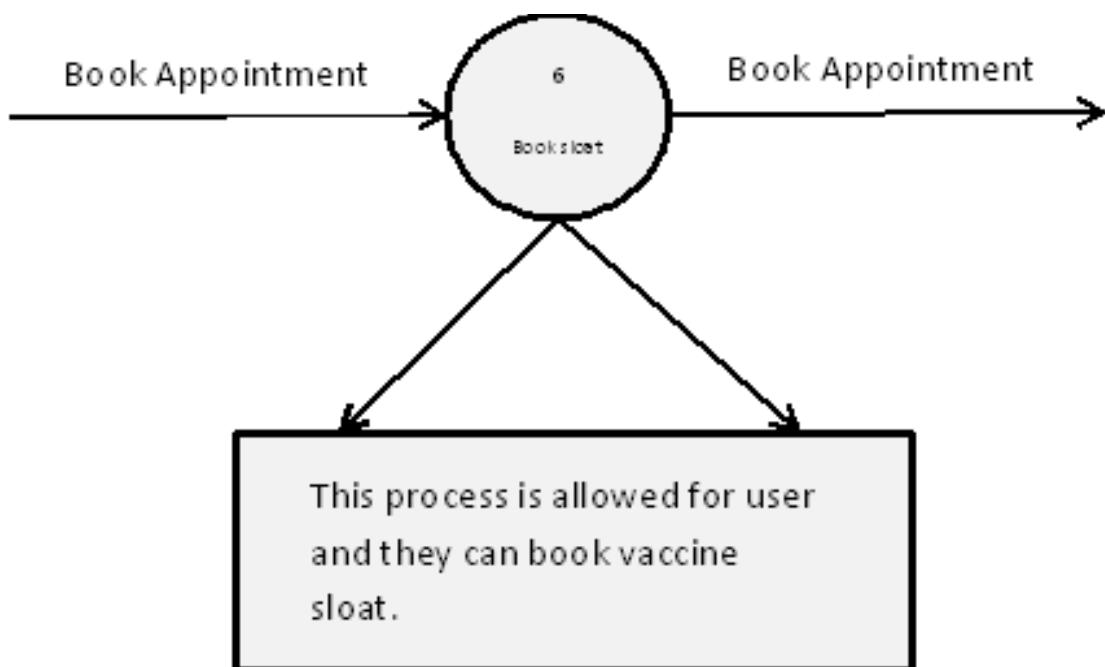
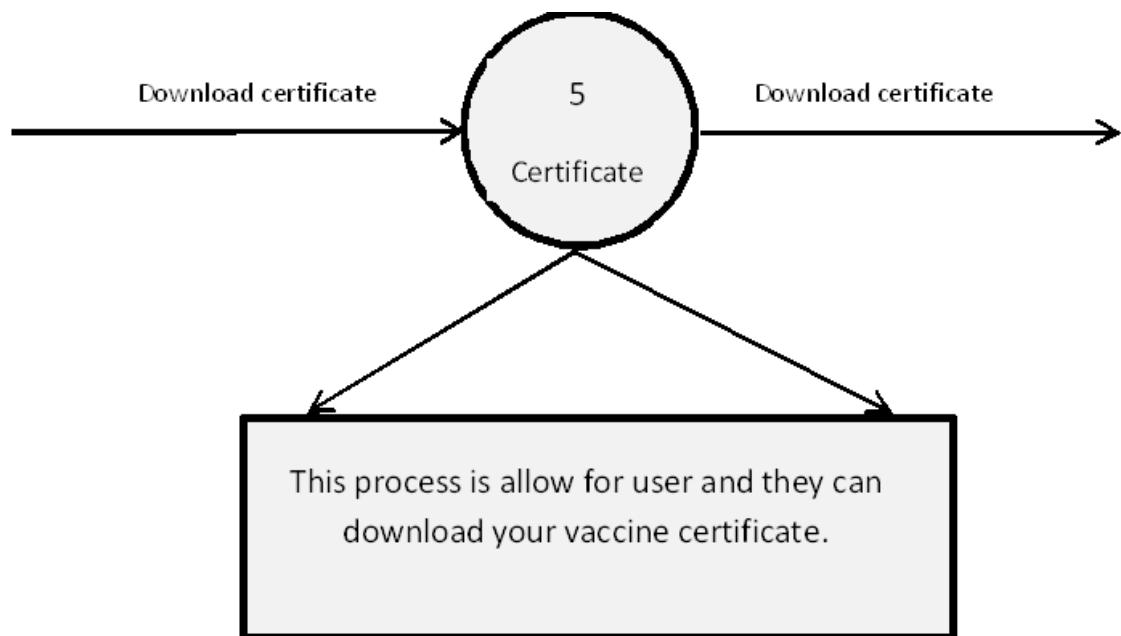


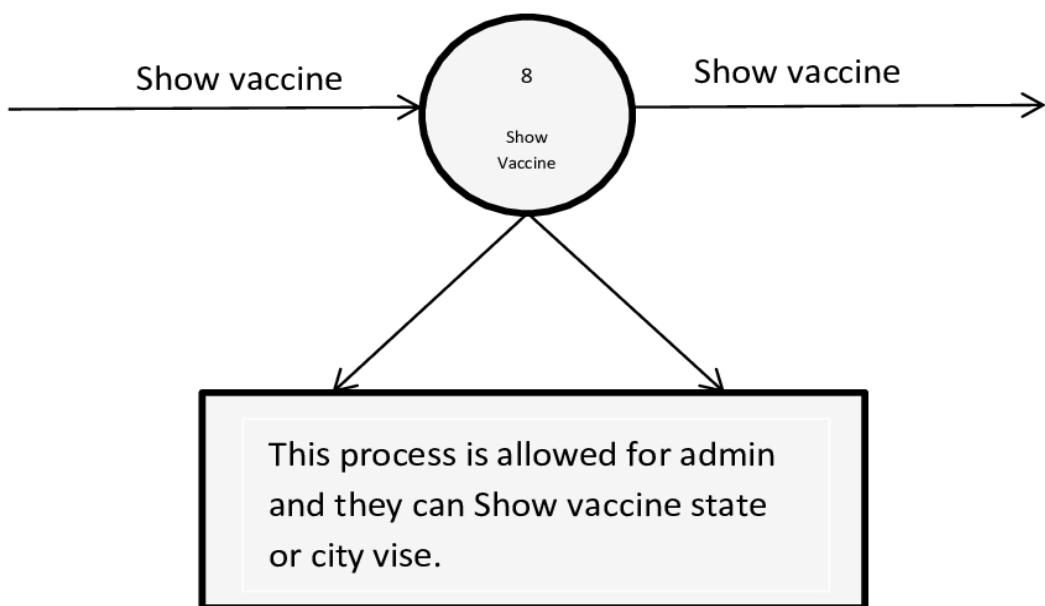
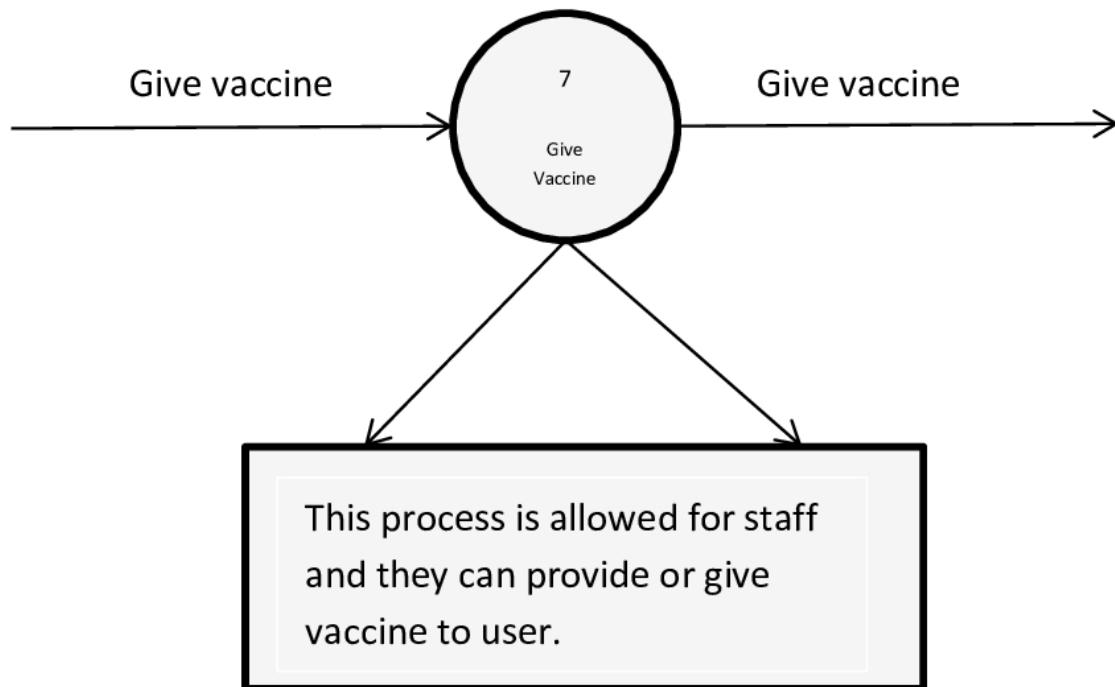
This process allows data given by the user in order to login in the system for book appointment.



This is applying for user and they can insert, update and delete their details.







5.3 Data Dictionary

- **Vaccine**

Name	Vaccine
Alias	Null
Where used/How used	Type of vaccine
Content Description	Id,Name,Disease
Supplementary Information	To show types of Vaccine

- **Vaccinated User**

Name	VaccinatedUserMaster
Alias	Null
Where used/How used	See next dose Date and download Certificate
Content Description	Id,Userid,Sloatid,Staffid,DoseDate,Next Dose,DoseNo
Supplementary Information	To show Details of Vaccinated Users

- User

Name	User
Alias	Null
Where used/How used	Store User Registration Data
Content Description	Id,Userid,FirstName,MiddleName, LastName,Gender,AdharNo,dob,ProfilePic,Age
Supplementary Information	To show Details of Users

- Staff

Name	Staff
Alias	Null
Where used/How used	Store staff Registration Data
Content Description	Id,Userid,FirstName,MiddleName, LastName,Gender,PhNo,dob,ProfilePic,Address,Degree,Specialist
Supplementary Information	To show Details of Staff

- StateMaster

Name	StateMaster
Alias	Null
Primary Key	State id
Where used	State's Vaccine Data
Content Description	Id,Name
Supplementary Information	To show Details of States

- **TokenMaster**

Name	TokenMaster
Alias	Null
Primary Key	Token id
Where used	Reset Password
Content Description	Id,UserId,Tokens,GenerateTime,ExpireTime
Supplementary Information	To use of forgot password

- **SloatMaster**

Name	SloatMaster
Alias	Null
Primary Key	Sloat id
Where used	Book Vaccine Appointment
Content Description	Id,UserId,stateId,cityId,CenterId,vaccineId,Doseno,Appointmentdate,Sloatscount
Supplementary Information	To Store User Id , Name, Appointment Date, Dose No. in table

- **AspNetUserRoles**

Name	AspNetUserRoles
Alias	Null
Primary Key	UserId,RoleId
Where used	Assign Role
Content Description	UserId,RoleId
Supplementary Information	To assign role to Admin, staff, and user.

- **CityMaster**

Name	CityMaster
Alias	Null
Primary Key	City id
Foreign Key	Stateid
Where used	City's Vaccine Data
Content Description	Id, StateId, Name
Supplementary Information	To show Details of Cities

- **CenterMaster**

Name	CenterMaster
Alias	Null
Primary Key	Centerid
Foreign Key	Cityid
Where used	Centre's Vaccine Data
Content Description	Id,CityId,Name,Location
Supplementary Information	To show details of Centers

- **MapVaccineMaster**

Name	MapVaccineMaster
Alias	Null
Primary Key	Userid
Where used	Data of available Vaccine in Centre
Content Description	Id,StateId,CityId,CenterId,vaccineId,State TotalVaccine, StateAvailableVaccine,CityTotalVaccine, CityAvailableVaccine, CenterTotalVaccine, CenterAvailableVaccine,Date,
Supplementary Information	To Use Of collect data Vaccination center

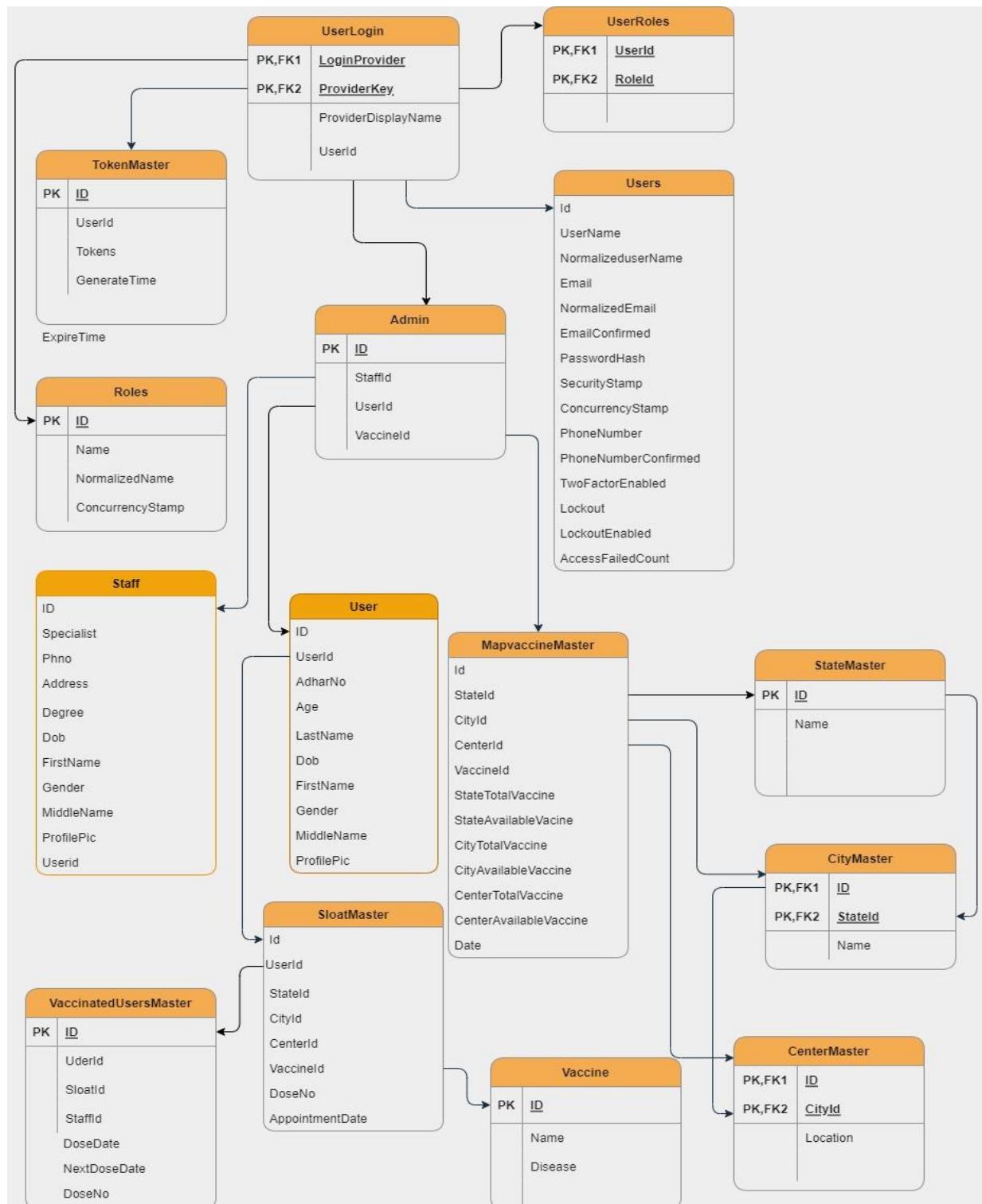
- **AspNetUsers**

Name	AspNetUsers
Alias	Null
Primary Key	UserId
Where used	Manage User Data and Access
Content Description	Id,UserName,NormalizedUserName,Email,NormalizedEmail,EmailConfirmed,PasswordHash,SecurityStamp,ConcurrencyStamp,phoneNumber,phoneNumberConfirmed,TwoFactorEnabled,LockoutEnd,LockoutEnabled,AccessFailedCount
Supplementary Information	For user Information

- **AspNetRoles**

Name	AspNetRoles
Alias	Null
Primary Key	RoleId
Where used	For specific Role
Content Description	Id,Name
Supplementary Information	To assign user specify roles

5.4 Entity-Relationship Diagram



6

Chapter

System Design

6.1 Database Design

6.2 Directory Structure

6.3 Input Design

6.4 Output Design

6.1 Database Design

Table : Vaccine

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique Vaccine ID.
2	Name	Nvarchar[MAX]	Null	Vaccine of User.
3	Disease	Nvarchar[MAX]	Null	Disease of vaccine

Table : Vaccinated User

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique Vaccine ID.
2	UserID	Nvarchar[450]	Null	UserID
3	SloatID	Nvarchar[MAX]	Null	SloatID
4	DoseDate	Datetime2(7)	Null	Date of user get vaccine
5	StaffID	Nvarchar[MAX]	Null	SloatID
6	NextDoseDate	Datetime2(7)	Null	Date of Next vaccine dose
7	DoseNo	Int	Not null	Dose no which user get

Table : TokenMaster

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique ID
2	UserID	Nvarchar[450]	Null	UserID
3	Tokens	Nvarchar[MAX]	Null	Token for reset password
4	Generatetime	Datetime2(7)	Not Null	Token generate time
5	Expiretime	Datetime2(7)	Not Null	Token expire time

Table : MapVaccine

Sr No.	Field Name	Data Type	Constraint s	Description
1	ID	Int	PK	Unique Admin ID.
2	StateId	Int	Not Null	State
3	CityId	Int	Not Null	City
4	CenterId	Int	Not Null	Centre
5	VaccineId	Int	Not Null	Id of Vaccine
6	StateTotalVaccine	Int	Not Null	State Vice total Vaccine
7	StateAvailableVaccine	Int	Not null	State Vice Available vaccine
8	CityTotalVaccine	Int	Not Null	City Vice Total vaccine
9	CityAvailabeVaccine	Int	Not Null	City Vice Available vaccine
10	CenterTotalVaccine	Int	Not Null	Center Vice Total vaccine
11	CenterAvailabeVaccine	Int	Not Null	Center Vice Available vaccine

12	Date	DateTime2(7)	Not Null	Date

Table : CenterMaster

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique Center ID
2	CityId	Int	Not Null	Id of city
3	Name	Nvarchar[MAX]	Null	Name of center
4	Location	Nvarchar[MAX]	Null	Location of center

Table : User

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique ID
2	UserId	Nvarchar[450]	Null	Unique user ID
3	FirstName	Nvarchar[MAX]	Not Null	First Name
4	LastName	Nvarchar[MAX]	Not Null	Last Name
5	MiddleName	Nvarchar[MAX]	Not Null	Middle Name
6	Dob	Datetime2(7)	Not Null	Date of Birth
7	AdharNo	Nvarchar[MAX]	Not null	Adhar number
8	Gender	Nvarchar[MAX]	Not Null	Gender
9	Age	Int	Not Null	Age
10	ProfilePic	Nvarchar[MAX]	Null	Picture of user

Table : statemaster

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique state ID
2	Name	Nvarchar[MAX]	Null	Name of State

Table : CityMaster

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique City ID.
2	StateId	Int	Not Null	Id of state.
3	Name	Nvarchar[MAX]	Null	Name of city

Table : Staff

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique ID.
2	Specialist	Nvarchar[MAX]	Not Null	Special
3	Phno	Nvarchar[MAX]	Not Null	Phone number
4	Address	Nvarchar[MAX]	Not Null	Address
5	Degree	Nvarchar[MAX]	Not Null	Degree of Staff
6	Dob	Datetime2(7)	Not Null	Date of Birth
7	FirstName	Nvarchar[MAX]	Not null	First Name
8	LastName	Nvarchar[MAX]	Not Null	Last Name
9	MiddleName	Nvarchar[MAX]	Not Null	Middle Name

10	ProfilePic	Nvarchar[MAX]	Null	Picture of staff
11	User ID	Nvarchar[450]	Null	Id of user

Table :AspNetUser

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique ID.
2	UserName	Nvarchar[450]	Null	User name
3	NormalizedUserName	Nvarchar[256]	Null	User Name valid
4	Email	Nvarchar[256]	Null	Email
5	NormalizedEmail	Nvarchar[256]	Null	Email Valid
6	EmailConfirmed	Bit	Not Null	Email Confirm
7	PasswordHash	Nvarchar[MAX]	Null	First Name
8	SecurityStamp	Nvarchar[MAX]	Null	Security
9	ConcurrencyStamp	Nvarchar[MAX]	Null	Concurrency
10	PhoneNumber	Nvarchar[MAX]	Null	Phone number
11	PhoneNumberConfirmed	Bit	Not Null	Phone no. confirm
12	TwoFactorEnabled	Bit	Not Null	Two Factor
13	Lockout	DateTimeoffset(7)	Null	Logout
14	LockoutEnabled	Bit	Not Null	Logout Access
15	AccessFailedCount	Bit	Not null	Access Failed

Table : AspNetUserRole

Sr No.	Field Name	Data Type	Constraints	Description
1	UserId	Nvarchar[450]	PK	Unique user ID
2	RoleId	Nvarchar[450]	PK	Unique role ID

Table : SloatMaster

Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Int	PK	Unique ID
2	UserId	Nvarchar[450]	Null	Unique user ID
3	StateId	Int	Not Null	StateId
4	CityId	Int	Not Null	CityId
5	CenterId	Int	Not Null	CenterId
6	VaccineId	Int	Not Null	Id of vaccine
7	DoseNo	Int	Not null	Dose No
8	AppointmentDate	Datetime2(7)	Not Null	Date of appointment
9	SloatCount	Bit	Not Null	Count sloats

Table : AspNetRoles

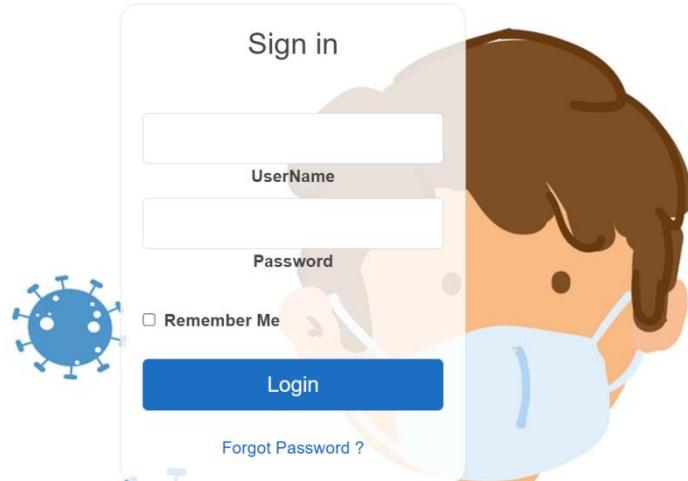
Sr No.	Field Name	Data Type	Constraints	Description
1	ID	Nvarchar[256]	PK	Unique ID.
2	Name	Nvarchar[256]	Null	User name
3	NormalizedName	Nvarchar[256]	Null	User Name valid
4	ConcurrencyStamp	Nvarchar[MAX]	Null	Concurrency

6.2 Input Design

❖ Customer Side

Sign In

[Home](#) [Contact](#) [Register](#) [Sign In ↗](#)



Forgot Password

[Home](#) [Contact](#) [Register](#) [Sign In ↗](#)

Enter Email Address :

[Forgot Password](#)

© Copyright Vaccination Center System. All Rights Reserved

User Registration

[Home](#) [Contact](#) [Register](#) [Sign In](#)

Registration Form Fields:

- FirstName: Enter First Name
- MiddleName: Enter Middle Name
- LastName: Enter Last Name
- Gender: -- Select Gender -- (dropdown menu)
- AdharNo: Enter Adhar No
- Dob: 05-04-2022 (date input field)

[Home](#) [Contact](#) [Register](#) [Sign In](#)

Registration Form Fields:

- Img: Choose file (No file chosen)
Upload your Image in .jpg or .png Format Only
- Email: Enter Email Address
- Password: Enter Password
- Confirm Password: Enter Confirm Password
- Are You Staff?: Radio button group (options not visible)
- Register: Blue button

Update Profile

[Home](#) [Contact](#) [Vaccination Status](#) [Update Profile](#) Logout jdpatel21@gmail.com ↗

First Name

Middle Name

Last Name

Adhar Card No

Gender

DOB 

[Home](#) [Contact](#) [Vaccination Status](#) [Update Profile](#) Logout jdpatel21@gmail.com ↗

DOB 



No file chosen

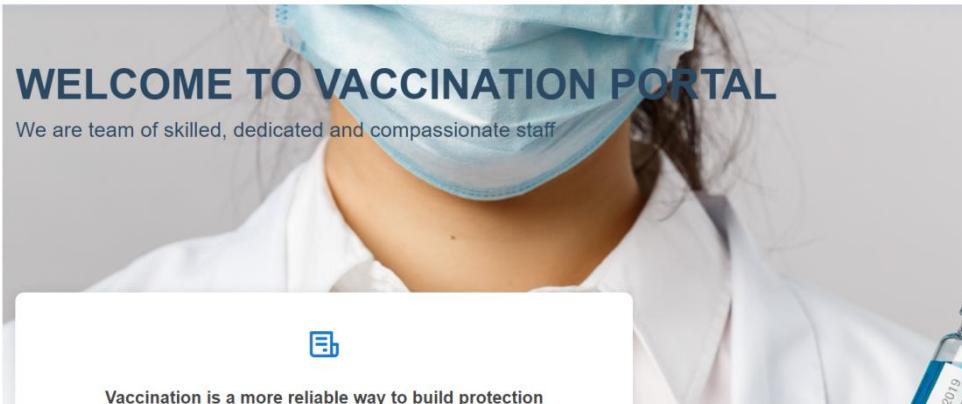
Enter UserName

Home

[Home](#) [Contact](#) [Register](#) [Sign in](#)

WELCOME TO VACCINATION PORTAL

We are team of skilled, dedicated and compassionate staff



E

Vaccination is a more reliable way to build protection

The level of protection people get from having COVID-19 (sometimes called natural immunity) may vary depending on how mild or severe their illness was, the time since their infection, and their age; and there is still not an antibody test available that can reliably determine if a person is protected from further infection.

[Home](#) [Contact](#) [Register](#) [Sign in](#)



How to protect yourself from coronavirus?

- Maintain a safe distance from others (at least 1 metre), even if they don't appear to be sick.
- Wear a mask in public, especially indoors or when physical distancing is not possible.
- Choose open, well-ventilated spaces over closed ones. Open a window if indoors
- Clean your hands often. Use soap and water, or an alcohol-based hand rub.
- Get vaccinated when it's your turn. Follow local guidance about vaccination.
- Stay home if you feel unwell.

[Home](#) [Contact](#) [Register](#) [Sign in](#)

5 Staffs

9 Total Users

12 Total States

51 Total Cities

132 Total Centers

Frequently Asked Questions

What are the benefits of getting vaccinated?

Getting vaccinated could save your life. COVID-19 vaccines provide strong protection against serious illness, hospitalization and death. There is also some evidence that being vaccinated will make it less likely that you will pass

[Home](#) [Contact](#) [Register](#) [Sign in](#)

Frequently Asked Questions

What are the benefits of getting vaccinated?

Do the COVID-19 vaccines protect against virus variants?

What are the side effects of COVID-19 vaccines?

Could getting vaccinated against COVID-19 disrupt my menstrual cycle?

There have been some reports of people experiencing disruption to their menstrual cycle after being vaccinated against COVID-19. There is not yet enough data available to know whether there is a connection between the vaccines and this disruption. Several large studies researching the impact of vaccines on menstrual cycles are ongoing. WHO will continue to monitor any new evidence regarding menstrual cycles.

Is it safe to drink alcohol after getting a COVID-19 vaccine?

Vaccination Center System | 2022

[Home](#) [Contact](#) [Register](#) [Sign In](#)

Staff



Vraj Maheshbhai Diyora
DENTALIST Specialist

“ Vraj Maheshbhai Diyora has Qualification of BDS And DENTALIST Specialist ”



Rutvik Bharatbhai Tejani
HEART Specialist

“ Rutvik Bharatbhai Tejani has Qualification of MBBS And HEART Specialist ”

○ ○ ○ ○ ●

↑

[Home](#) [Contact](#) [Register](#) [Sign In](#)

Users







↑

Appointment

[Home](#) [Contact](#) [Vaccination Status](#) [Update Profile](#) Logout jdpatel21@gmail.com

Get Vaccinated in 3 Easy Steps

Step 1



Book Your Appointment.

Step 2



Get Your Vaccination Safely at Time of Your Appointment.

Step 3



Download Your Vaccination Certificate.

[Book Appointment](#)

Download Certificate

[Download Certificate For Dose 1](#) 

[Home](#) [Contact](#) [Vaccination Status](#) [Update Profile](#) Logout jdpatel21@gmail.com

Welcome To Appointment Page

Select State :

Andaman and Nicobar (UT)

Select City :

Calicut

Select Date :

05-04-2022

Your Dose No :2

Check For Sloat



Please Select Sloat For Book

[Home](#) [Contact](#) [Vaccination Status](#) [Update Profile](#) Logout jdpatel21@gmail.com

Center : Meitra Hospital

📍 Location : No.38/2208 B, Kunduparamba By Pass Road, Edakkadu, Kozhikode - 673005

💉 Vaccine : COVISHIELD

📅 Available: 83

Book

Center : Vims Hospital

📍 Location : Pipline Road, Kallachi, Kozhikode - 673506, Near Kallachi Post Office

💉 Vaccine : COVISHIELD

📅 Available: 83

Book

Contact

[Home](#) [Contact](#) [Register](#) [Sign In](#)

Name

Email

Subject

Message

A background illustration featuring numerous black-outlined envelope icons of various sizes, some with arrows pointing outwards, creating a sense of a large volume of messages or emails.

Send ➤

© Copyright Vaccination Center System. All Rights Reserved

❖ Staff Side

Registration

[Home](#) [Contact](#) [Register](#) [Sign In](#)

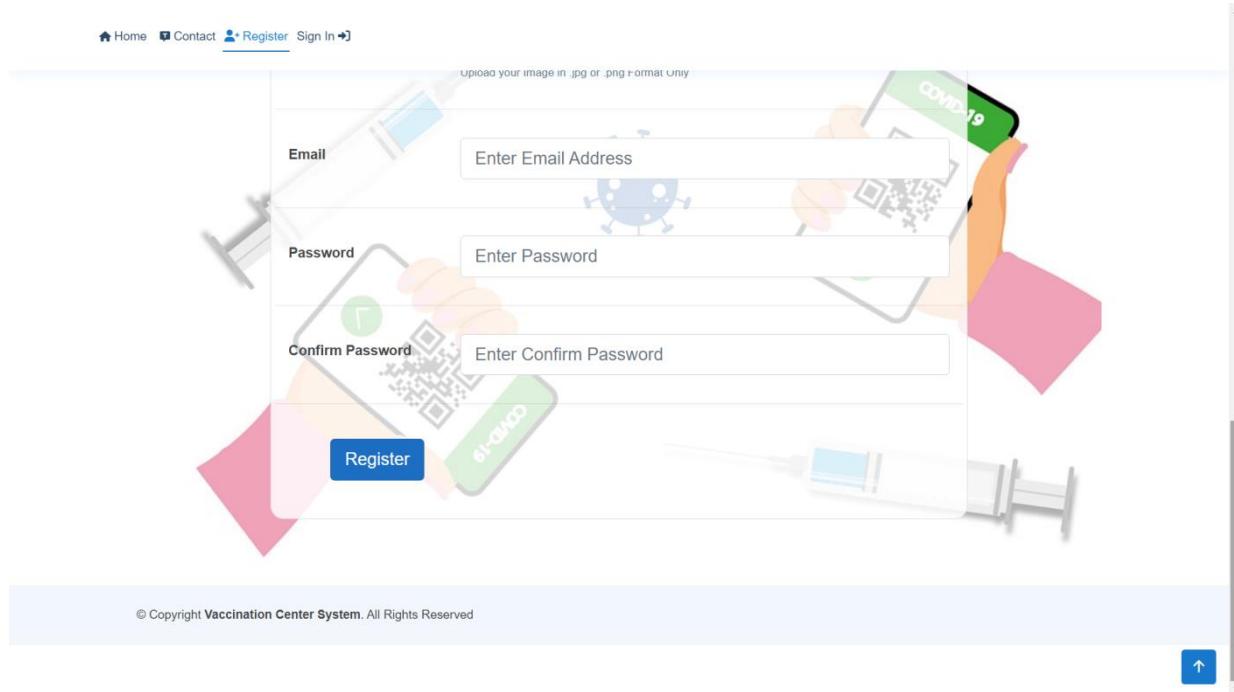
This image shows a registration form for staff members. The background features a collage of medical and COVID-19 related icons, including a syringe, a mask, a COVID-19 test kit, and a virus cell. The form fields are as follows:

- FirstName: Enter First Name
- MiddleName: Enter Middle Name
- LastName: Enter Last Name
- Gender: -- Select Gender -- (dropdown menu)
- Dob: 05-04-2022 (date input field)
- Degree: Enter Degree Name

[Home](#) [Contact](#) [Register](#) [Sign In](#)

This image shows a registration form for staff members. The background features a collage of medical and COVID-19 related icons, including a syringe, a mask, a COVID-19 test kit, and a virus cell. The form fields are as follows:

- Specialist: Enter Specialist Name
- Phno: Enter Phone Number
- Address: Enter Address
- Img: Choose file No file chosen
Upload your Image in jpg or png Format Only
- Email: Enter Email Address
- Password: Enter Password



Give Vaccine

The 'Give Vaccine' page has a header with links for Home, Contact, Give Vaccines (underlined), Update Profile, and Logout (with an email address). A green box contains a note: 'Note : it is necessary to verify the valid proof and ask their health because vaccination are not allowing for patients who are suffering from serious desease.' Below the note is a form with 'Select Date : 05-04-2022' and a 'Get User' button. The next section is 'Select User Adhar No : 122222279015' with a dropdown arrow. At the bottom is a green 'Give Vaccine' button with a heart icon. The background features a blurred image of medical pills and a stethoscope.

© Copyright Vaccination Center System. All Rights Reserved

6.3 Output Design

Download Certificate (User)

Home Contact Vaccination Status Update Profile Logout jdpatel21@gmail.com



Beneficiary Details :

Beneficiary Name : Jaydip Manubhai Vaghasiya
Age : 22
Gender : Male
ID Verified : 122222289015

Vaccination Details :

Vaccine Name : COVISHIELD
Date Of 1st Dose : 05-04-2022 00:00:00
Next due date : 28-06-2022 00:00:00
Vaccinated By : Rutvik Bharatbhai Tejani
Vaccination at : County Aalo Nyingchi, West Siang, Arunachal Pradesh 791001

Activate Windows
Go to Settings to activate Windows.

[Download Certificate](#)

❖ Admin

Allocate Vaccine

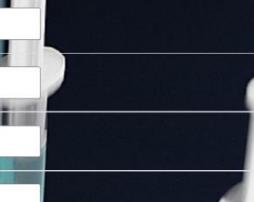
[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123@gmail.co

Note :

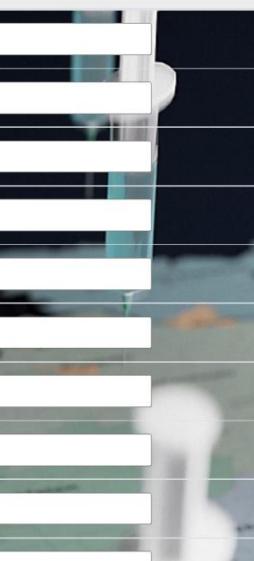
- Allocation to States will be based on Population,disease burden,the progress of Vaccination and Wastage of vaccines.
- Good vaccination coverage will draw a higher number of doses.
- State Governments will also aggregate the demand of private hospitals keeping in view quaitable distribution.

Select Vaccine Name :

Select Date : 

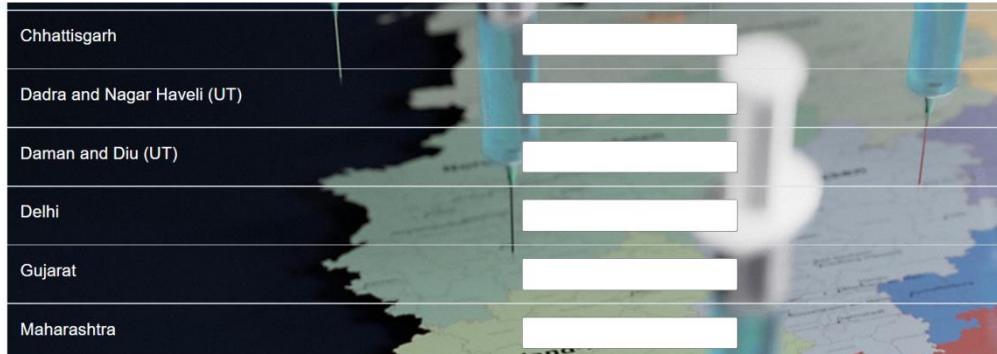
States	No Of Vaccine
Andaman and Nicobar (UT)	
Andhra Pradesh	
Arunachal Pradesh	
Assam	

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123@gmail.co

States	No Of Vaccine
Andaman and Nicobar (UT)	
Andhra Pradesh	
Arunachal Pradesh	
Assam	
Bihar	
Chandigarh (UT)	
Chhattisgarh	
Dadra and Nagar Haveli (UT)	
Daman and Diu (UT)	
Delhi	

Vaccination Center System | 2022

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123@gmail.co



© Copyright Vaccination Center System. All Rights Reserved



Get Available Vaccine

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123

Here Table Displays Total Available Vaccines State wise

State Name	Total Available Vaccine
Andaman and Nicobar (UT)	7085
Andhra Pradesh	7700
Arunachal Pradesh	2601
Assam	2813
Bihar	4701
Chandigarh (UT)	4301
Chhattisgarh	2700

Vaccination Center System | 2022

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123

Bihar	4701
Chandigarh (UT)	4301
Chhattisgarh	2700
Dadra and Nagar Haveli (UT)	2401
Daman and Diu (UT)	2401
Delhi	2401
Maharashtra	7200
Gujarat	24316

© Copyright Vaccination Center System. All Rights Reserved



Manage Role

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123@gmail.com

Welcome To Role Management Panel

Select Role :

[Assign Role](#)

Show entries

Search:

User Name	Select
vraj@gmail.com	<input checked="" type="checkbox"/>
staff123@gmail.com	<input type="checkbox"/>
rutviktejani24024@gmail.com	<input type="checkbox"/>
rutviktejani2424@gmail.com	<input type="checkbox"/>
admin123@gmail.com	<input type="checkbox"/>

Showing 1 to 5 of 5 entries

Previous Next

© Copyright Vaccination Center System. All Rights Reserved

Assign Role

Vaccination Center System | 2022

[Home](#) [Contact](#) [Allocate Vaccine](#) [Manage Users](#) [Manage Staff](#) [Get Available Vaccine](#) [Assign Role](#) [Update Profile](#) Logout admin123@gmail.com

Welcome To Role Management Panel

Select Role :

[Assign Role](#)

Show entries

Search:

User Name	Select
vraj@gmail.com	<input checked="" type="checkbox"/>
staff123@gmail.com	<input type="checkbox"/>
rutviktejani24024@gmail.com	<input type="checkbox"/>
rutviktejani2424@gmail.com	<input type="checkbox"/>
admin123@gmail.com	<input type="checkbox"/>

Showing 1 to 5 of 5 entries

Previous Next

© Copyright Vaccination Center System. All Rights Reserved

7

Chapter

Software Testing

- Testing is the process of examining an application to ensure it fulfils the requirements for which it was designed and meets quality expectations. In short, Testing is software quality assurance activity.
- The main objective of testing is to find yet an undiscovered error and at the same time checking the quality and reliability of system. More importantly, testing ensure that the application meet customers' expectations.
- Testing accomplished a variety of things, but most importantly it measures the quality of websites you are developing.
- This view presupposes there are defect in your website waiting to be discovered and this view is rarely disproved or even disputed.
- System testing makes logical assumptions that if all the part of the system is correct so that the goal will be successfully achieved. The system should be checked logically.
- Validations and cross checks should be implemented, avoiding duplications of records, which cause redundancy of data.

- **Unit Testing :**

- The primary goal of unit testing is to take the smallest piece of testable web site in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as you expect.
- Each unit was tested separately before integrating them into modules to test the interfaces between modules for that prepare case.
- It allows automation of the testing process, reduces difficulties of discovering error contained in more complex pieces of the application, and test coverage is often enhanced because attention is given to each unit.

- In the web based application smallest testable unit is web page itself. So the web Pages of the site are to be unit tested. Each web page contains content, navigational links, and processing elements (script, event handlers, etc.). The testing will be driven by the content processing, and links contained in the site.

- **Integration Testing :**

- Integration testing is logical extension of unit testing. Integration testing takes its input modules that have been checked out by unit testing, group them in large aggregates, applied test define in an integration test plan to those aggregates, and delivers as its output the integration system ready for Web site testing.
- Integration testing is done for checking whether all modules are worked properly or not after integration.
- Purpose of Integration testing is to verify functional, performance and reliability requirements placed on major design items.
- Using dummy web pages it is checked that whether output of page will redirect to specific web page. After that regression testing strategy helps us to ensure that changes do not introduce unintended behaviour or additional errors.

- **Validation Testing :**

- After integration testing, web site is completely assembled as a package, interfacing error has been uncovered and corrected and the final series of the web site is tested. The validation succeeds when the web site functions in a manner that can be reasonably accepted by the client.
- Validation tests provide assurance that the web site as written meets all the requirements.
- In validation testing, requirement established as part of software requirements analysis are validated against the software that has been constructed.
- All validation criteria are tested. Validation testing provides the final assurance that software meets all functional, behavioural and performance requirements.
 - In date entry user cannot insert incorrect date format, if user enter wrong date then it will display the error message.
 - In numeric field only enter numeric data otherwise display error message.
 - In text field only enter text data otherwise display error message.

8

Chapter

Limitation and Future Scope of Enhancements References

Limitation

Data security –provide high security to secure user data,like aadhar no,phno.

FUTURE ENHANCEMENT

We can enhance our services and try to available many type of vaccine in short time.

In Future, We can provide more medical field related service to make smart and speedy services.

References

All the needed information related to my project “**Vaccination Centre System**” was being culled from the following sources:

CSS

<https://www.w3schools.com/w3css>

Bootstrap

<https://getbootstrap.com/>

jQuery

<http://jquery.com/>

<https://cdn.datatables.net/>

Javascript

<https://www.javascript.com/>