

1. Introduction

Immunisation is a method where the person is protected against infectious diseases, by the guidance of vaccines. The process of vaccination is for administering and to remove the deadly harmful diseases which is considered to prevent two-three millions of deaths each year.

Vaccines helps to raise the levels of body's own immune system to defend against the harmful diseases. The program which was introduced in the year of 1978 called as universal immunization program which is called as the expanded program of the immunisation, which obtained a momentum in the year of 1985 which has to be executed in step by step or the phased manner to extend or to cover over all the districts in the country by the year of 1989-1990.

The immunization rate in India is about 58.5 percent for the rural areas and 67.4 percent for the urban areas. The universal program became an important part of the child and motherhood survival program in the year of 1992. In the year of 1997 the national reproductive and the child health program became an immunisation activity as one of the important areas under the national rural health mission. There are vaccines which are recommended based on age factor. The following tables shows the information of particular vaccines.

2018 VACCINATION SCHEDULE: 0–18 YEARS OF AGE

This schedule includes recommendations in effect as of February 1, 2018. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Consult full product labeling for detailed recommendations.

Range of recommended ages for all children		Range of recommended ages for catch-up immunization						Range of recommended ages for certain high-risk groups				Range of recommended ages for non-high-risk groups that may receive vaccine, subject to individual clinical decision making					
Vaccine	Birth 1 st dose	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos 3 rd dose	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Hepatitis B (HepB)																	
Rotavirus (RV)				1 st dose	2 nd dose	see footnote 2											
RSV (2-dose series)																	
Diphtheria, tetanus, & acellular pertussis (DTaP; <7 yrs)				1 st dose	2 nd dose	3 rd dose											
Haemophilus influenzae type b (Hib)				1 st dose	2 nd dose	see footnote 4			3 rd or 4 th dose see footnote 4								
Pneumococcal conjugate (PCV13)				1 st dose	2 nd dose	3 rd dose			4 th dose								
Inactivated poliovirus (IPV; <18 yrs)				1 st dose	2 nd dose		3 rd dose					4 th dose					
Influenza (IV)										Annual vaccination (ITV) 1 or 2 doses					Annual vaccination (ITV) 1 dose only		
Measles, mumps, rubella (MMR)							see footnote 8		1 st dose			2 nd dose					
Varicella (VAR)									1 st dose			2 nd dose					
Hepatitis A (HepA)									2 dose series see footnote 10								
Meningococcal (MenACWY-D ≥ 9mos; MenACWY-C ≥ 2mos)							see footnote 11					1 st dose		2 nd dose			
Human papillomavirus (HPV) Vaccine, (min age: birth)																	
At birth: • HBsAg-negative mother: administer 1 dose of monovalent HepB vaccine within 24hrs of birth for infants ≥2,000g. For infants <2000g, give 1 dose at chronological age 1 month or hospital discharge. • HBsAg-positive mother: administer 1 dose of monovalent HepB vaccine and 0.5mL of hepatitis B immune globulin (HBIG) within 12hrs of birth, regardless of birth weight. Test for HBsAg and antibody to HBsAg (anti-HBs) at age 9–12mos or 1–2mos after initial dose if the series was delayed. • At birth: If birth weight (add 0.5mL of HBIG for infants <2000g). Determine mother's HBsAg status as soon as possible and, if she is HBsAg-positive, also give HBIG for infants																	

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2018 VACCINATION SCHEDULE: ADULTS					
This schedule indicates the recommended age groups and medical indications for routine administration of currently licensed vaccines for persons ≥19yrs. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated.					
Recommended for all persons who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection	Recommended for persons with a risk factor (medical, occupational, lifestyle, or other indication)				
Vaccine	19–21yrs	22–26yrs	27–49yrs	50–64yrs	≥65yrs
Influenza ¹				1 dose annually	
Tetanus, diphtheria, pertussis (Tdap or Td) ²			1 dose Tdap, then Td booster every 10yrs		
Measles, mumps, rubella (MMR) ³		1 or 2 doses (if born in 1957 or later)			
Varicella (VAR) ⁴			2 doses		
Recombinant zoster (RZV) ⁵ [preferred] or Zoster vaccine live (ZVL) ⁵				2 doses RZV (preferred) or 1 dose ZVL	
Human papillomavirus (HPV) Female ⁶	2 or 3 doses				
Human papillomavirus (HPV) Male ⁶	2 or 3 doses				
Pneumococcal 13-valent conjugate (PCV13) ⁷				1 dose	
Pneumococcal polysaccharide (PPSV23) ⁷		1 or 2 doses			1 dose
Hepatitis A ⁸			2 or 3 doses		
Hepatitis B ⁹			3 doses		
Meningococcal conjugate (MenACWY) ¹⁰			1 or 2 doses, then booster every 5yrs if remains at risk		

The stakeholders who are involved in this process of immunization are doctors, families and the anganwadi workers. The anganwadi workers are the most important in maintaining of child malnourishment, protecting against the harmful diseases and the lack of child education. These anganwadi workers helps the children to protect against the dangerous diseases. These workers helps in providing services to poor families, villagers and the children who are suffering from the diseases throughout the country and these workers help the children to approach the health care centers, they also provide natural food hygiene, immunization and helps to access the children in healthy learning surroundings.

The roles and responsibilities of Anganwadi Workers are:

- Anganwadi workers are used to carry out a fast survey of the families, especially mothers and children in their respective areas where they are allotted once in a year.
- They are responsible to spread the information concerned to the birth rate that took place during the month with the village council or the gram sabha sewak who has been allotted as a sub registrar or a registrar to keep track of birth rate and death rate in their respective village.
- These workers also make visits to the respective homes to train the parents. They also provide instruction to mothers and helps to provide special care for their children and to keep track of growth of a child.
- These workers also maintain records and books for the use.
- They help in managing the pulse polio for immunizing the children.

The Mukhya sevika is the head of the anganwadi workers, this head is allotted for every ten anganwadi workers who provide jobs for these workers. This head has the following roles such as providing healthy and nutritious food, educational work. Other than these the following are the roles of the anganwadi head.

- These workers provide very efficient methods or the guidance for the anganwadi workers in maintaining the health, and in training the mothers to track the child's growth.
- They provide guidance to the anganwadi workers in weighing the children and to keep track of their growth rates and weights of a children in the form of charts.
- They also maintain the growth of the anganwadis.

Indian site for immunization is a web application which provides information related to all vaccines and recommends vaccine based on age factor. This web application will be developed using JSP and MySQL, which recommends vaccines for person who are registered in website and sends SMS and E-mail alerts a day before the vaccination.

The main goal of this application is to recommend vaccines for different age group like 0-5, 6-10, 11-18, 18-25, 26- 40, 41-60, and 61 above. It also provides registration process for Anganwadi Workers as well as they can generate a list about vaccinating a person, based on monthly schedule.

When a person/citizen registers in this application he/she can get schedule regarding his/her upcoming vaccines that needs to be taken. Even doctors can register in this application and can vaccinate a particular person who are registered in this particular application, and confirms to the system. This application will provide efficient data storage by providing data segregation based on age factor.

2. Literature survey

2.1 Existing System

In existing system only information regarding vaccines are provided, and these system does not recommend vaccines for person who are above eighteen years old. Currently there are no appropriate and full fledge websites available for citizens of India to track and record regarding immunization. And no registration process is maintained in some of the applications and are static which does not update day by day.

2.2 Problems in existing system

- In existing android applications only the information related to vaccines are listed.
- Some android applications are static which does not update day by day.
- Recommendation of vaccines since birth through age 18 years only.
- No vaccines are recommended for a person who is above 18 years old and system does not set reminder.
- No registration process is carried out for Aganwadi Workers who maintain information about immunized and to be immunized people.
- No precautions and preventions are recommended before vaccinating a child. i.e., a person should not suffer from fever or cold before vaccination.
- No registration process is carried out for doctors, vaccine confirmation about a particular person.

2.3 Available solutions and their features

Following are some android applications available which provides only information about vaccines.

1. Vaccines.gov

The vaccine.gov website gives information regarding vaccines and immunization, it also provides information to whom and when these vaccines should be used what are the conditions and precautions that need to be taken before vaccinating a person.

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vaccines.gov
your best shot at good health

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Search

Vaccine Basics	Vaccines by Disease	Who and When	Getting Vaccinated	Resources
Chickenpox (Varicella)	Hib (<i>Haemophilus Influenzae Type B</i>)	Mumps	Shingles (<i>Herpes Zoster</i>)	
Cholera	HPV (<i>Human Papillomavirus</i>)	Pneumococcal	Tetanus (<i>Lockjaw</i>)	
Diphtheria	Japanese Encephalitis (<i>JE</i>)	Polio	Typhoid Fever	
Flu (<i>Influenza</i>)	Measles	Rabies	Whooping Cough (<i>Pertussis</i>)	
Hepatitis A	Meningococcal	Rotavirus	Yellow Fever	
Hepatitis B		Rubella (<i>German Measles</i>)		

What to Expect - for Adults
family healthy.
In this section, you'll find answers to common questions about how to get vaccinated, like:

- Where do I go to get vaccinated?
- What can I expect when I take my child to get vaccinated?
- What can I expect when I go to get vaccinated?

[pay for vaccinations?](#)

How to Pay

Activate Windows
Go to Settings to activate Windows.

<https://www.vaccines.gov/diseases/index.html>

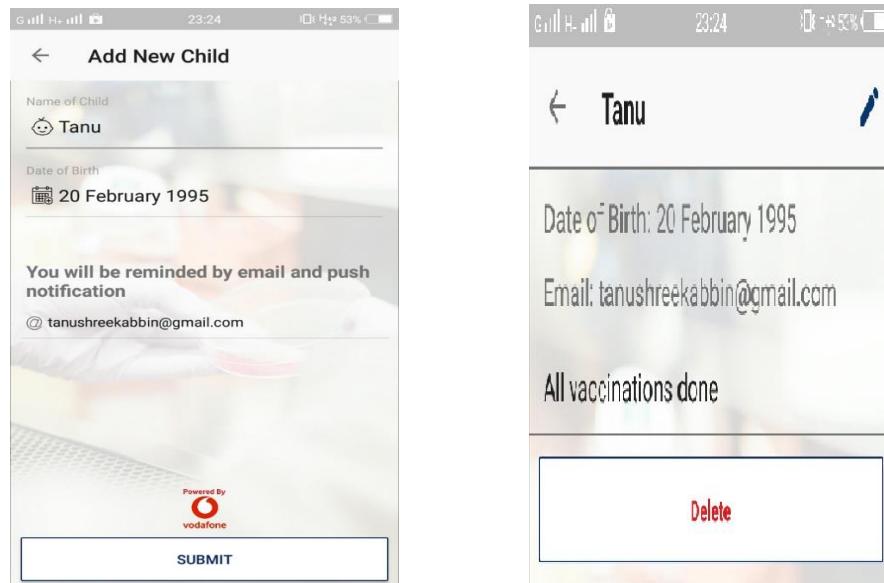
2. Child Vaccination Schedule: this helps you to keep track of a vaccination of the child

Features:

Insert child details.

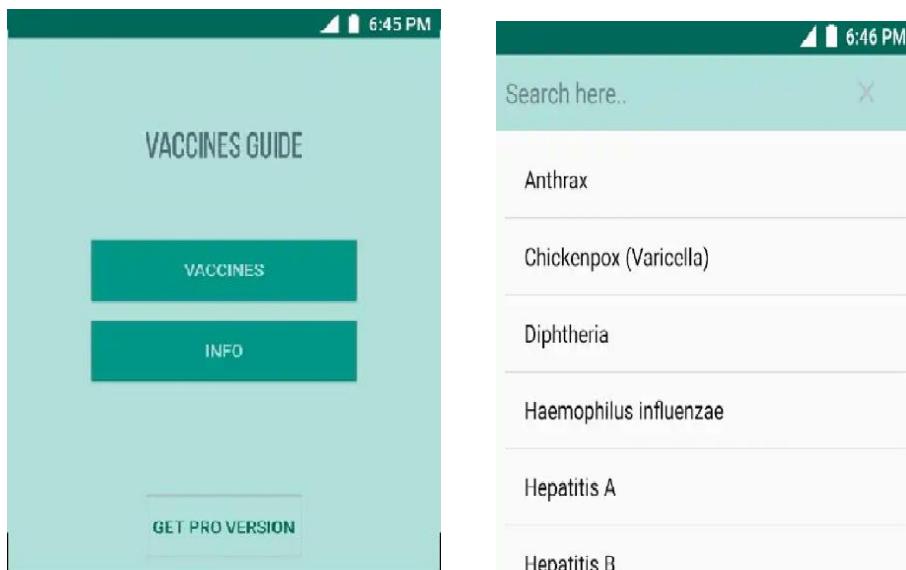
Keep track vaccination schedule.

Sets remainder alert about vaccine on schedule date.



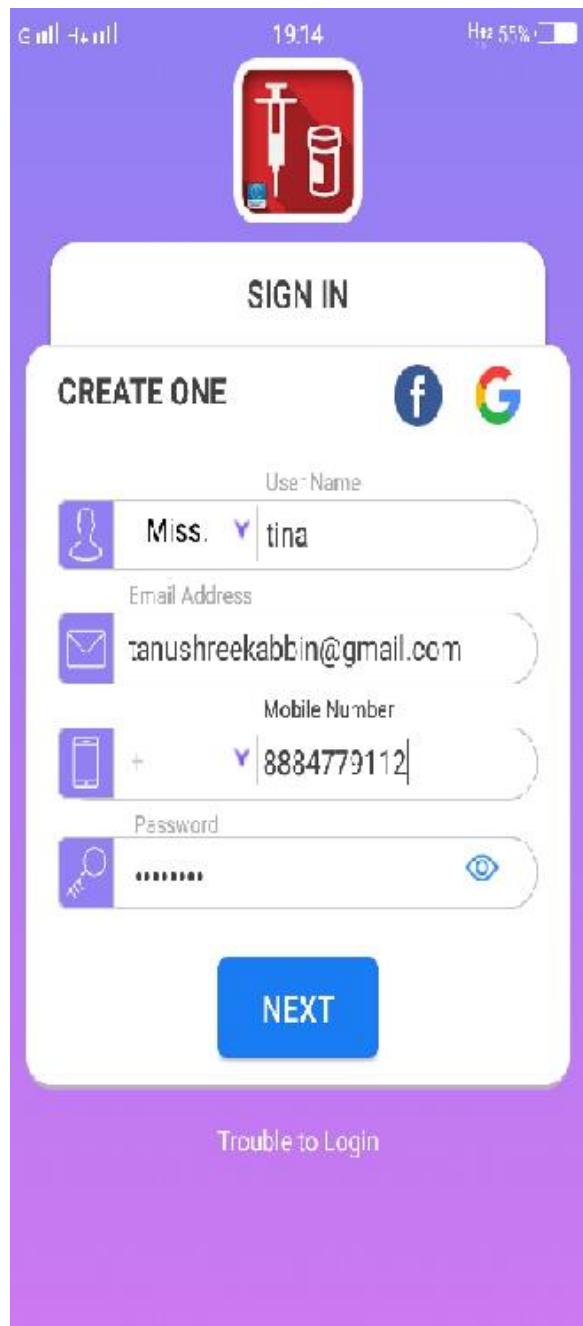
3. Vaccines Guide

This app consists of details regarding the types of vaccines, and their usages, contraindications of all the commonly used vaccine. Vaccines are recommended for particular groups of population.



4. Vaccine Reminder

This keeps the track of a schedule of a vaccine and sets reminder about the vaccines. It also provides to add the child details to get the schedule. This also used to manage the child information.





Select Date of Birth

14 15 16 17 18

December January February

2018 2019 1969





5. VDD Baby

This application which is called as vaccination reminder is to give push notifications who are registered in this app. In this parents are able to view the upcoming vaccines and can manage the due dates. It also used to provide the new vaccines and sets

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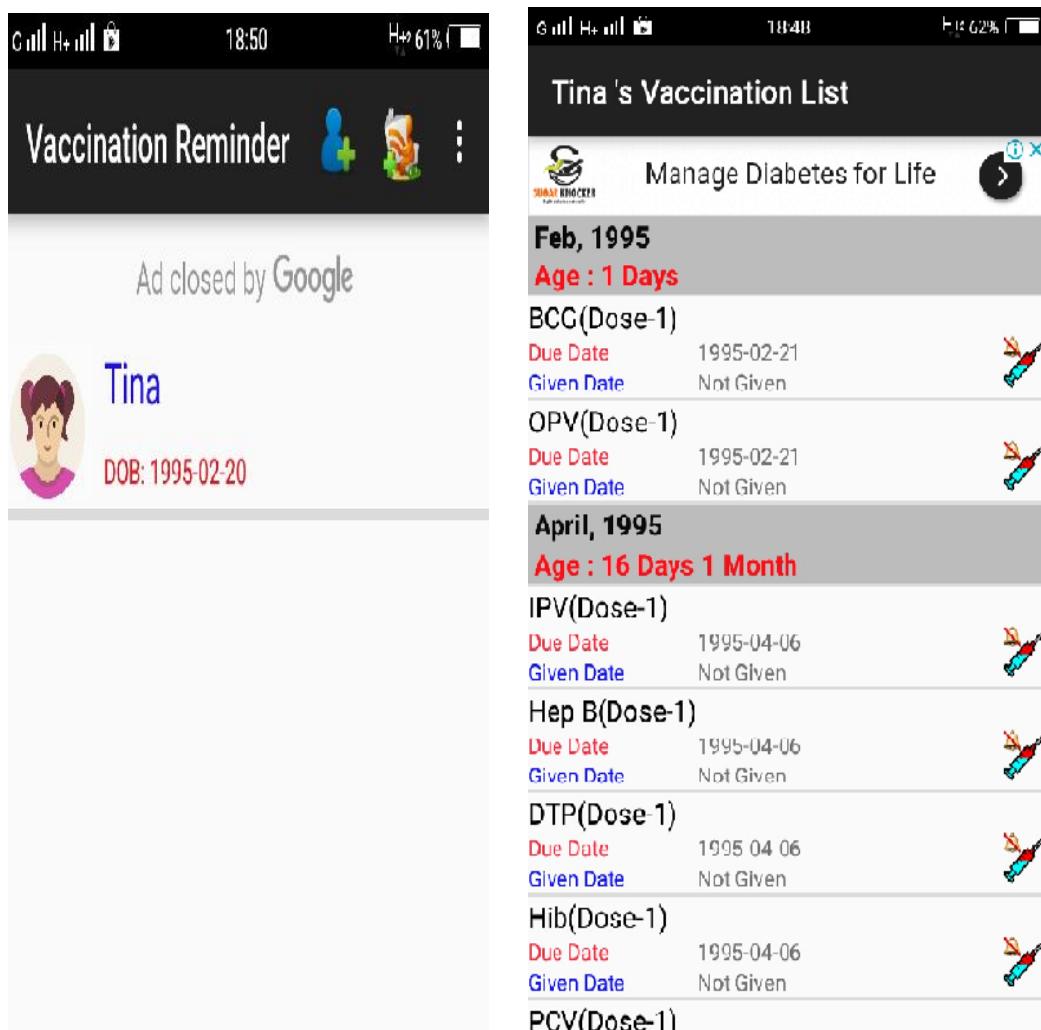
reminders which helps the guardians to consult the doctors to be updated against the vaccines.



<input checked="" type="checkbox"/> Tdap / Td	Due Date: January 1, 1972	Recommended Age: 10-12 Years	MARK DONE
<input checked="" type="checkbox"/> Typhoid - 4	Due Date: December 31, 1972	Recommended Age: 11 Years	MARK DONE
<input checked="" type="checkbox"/> Typhoid - 5	Due Date: December 31, 1975	Recommended Age: 14 Years	MARK DONE
<input checked="" type="checkbox"/> Tdap	Due Date: December 30, 1977	Recommended Age: 16 Years	MARK DONE

6. Vaccination Reminder

This application doesn't need any registration process to know about the schedule of vaccines. In this schedule is generated automatically by entering the required fields and can get the notifications before one day of the scheduled vaccine date. In this parents gets the notification at morning 8 and can plan to get the vaccines. This app provides the parents to select the vaccines as not interested which they don't want to give to their child.





Vitamin A is essential for the functioning of the immune system and healthy growth and development of children, and is usually acquired through a healthy diet. It is estimated that globally, 190 million children under 5 years of age are affected by vitamin A deficiency. These children suffer an increased risk of visual impairment (night blindness), illness etc.

Minimum age: 6 months

Recommended Schedule:

Provision of Vitamin-A supplements every four to six months is an inexpensive, quick and effective way to improve vitamin-A status. Routine Vitamin-A supplementation is recommended in infants and children **6-59 Months of age on every 6 Months interval.**



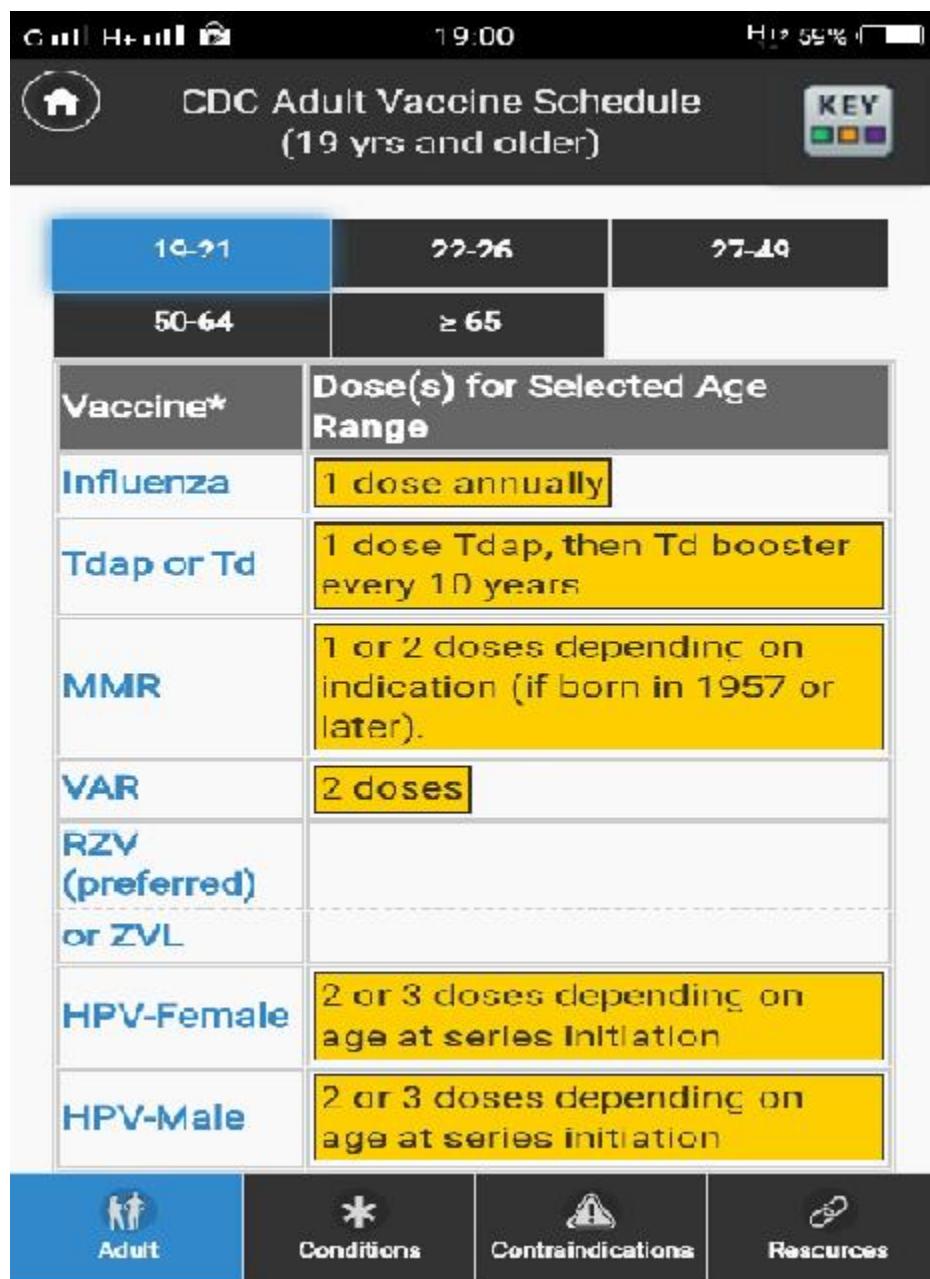
BCG vaccine is derived from the bovine tuberculosis strain and was first developed in 1921. The vaccine contains 0.1–0.4 million live viable bacilli per dose.

Recommended Schedule

At Birth or as early as possible within the first 3 days

7. CDC Vaccine Schedule.

This app is to provide information about the child and adult schedule, it also recommends vaccines since birth to the age eighteen years only. This also provides information about the vaccines such as precautions, conditions and the contraindications. It also lists the vaccines that need to be recommended for the adults.



The screenshot shows a mobile application interface for 'Adult Contraindications and Precautions'. At the top, there are icons for signal strength, battery level, and time (19:01). Below the header, there is a navigation bar with a home icon and the title 'Adult Contraindications and Precautions'.

The main content area is a list of vaccine types, each with a right-pointing arrow icon:

- Contraindications and precautions to commonly used vaccines in adults*
- All vaccines routinely recommended for adults
- Additional contraindications and precautions for vaccines routinely recommended for adults
- IIV
- RIV
- Tdap, Td
- MMR
- VAR
- ZVL
- HPV vaccine

At the bottom, there is a footer navigation bar with four items: 'Adult' (with a person icon), 'Conditions' (with a asterisk icon), 'Contraindications' (with a warning sign icon, highlighted in blue), and 'Resources' (with a link icon).

Limitations of available solutions

Currently there are no appropriate and full fledge websites available for citizens of India to track and record regarding immunization

- In existing android applications only the information related to vaccines are listed.

- No registration process is carried out for some applications and are static which does not update day by day.
- Recommendation of vaccines since birth through age 18 years only.
- No vaccines are recommended for a person who is above 18 years old and system does not set reminder.

2.4 Proposed Solution

Indian site for immunization application provides information related to all vaccines and recommends vaccines since birth till sixty five years of age. It also provides brief information about a particular vaccines that should be given to a person.

A person can register and can add his/her details, based on his/her details vaccines are recommended and sets reminder one day before the vaccination. This application also provides registration process for anganwadi workers who maintains list of immunized person. Even doctors can register in this application to vaccinate a person and can view his/her profile.

2.5 Advantages of proposed solutions

- Indian site for immunisation application provides registration process for citizens where he/she can register and get information related to a particular vaccines.
- This application recommends vaccines for a person since birth till sixty five years of age, and sends alert through SMS and E-mail the day before vaccination of a person.
- Anganwadi Workers can also register as well as generate about the person immunisation list based on monthly schedule.
- Application takes care of precautions and preventions before vaccinating a person and alerts about it.
- Doctors can also register in this web application, who are responsible for immunizing a person against infectious diseases and can view the vaccination list of a particular person.

3. Problem Definition

3.1 Problem definition

The system is to be designed for the citizens of India to get the information regarding the immunization and to keep the track of immunization schedule of a particular person based on his/her age factor.

3.2 Proposed solution

Indian site for immunisation application provides registration process for citizens where he/she can register and get information related to a particular vaccines. This application recommends vaccines for a person since birth till sixty five years of age, and sends alert through SMS and E-mail the day before vaccination of a person.

Anganwadi Workers can also register as well as generate about the person immunisation based on monthly schedule. This web application takes care of precautions and preventions before vaccinating a person and alerts about it. Doctors can also register in this website, who are responsible for immunizing a person against infectious diseases and can view the vaccination list of a particular person.

3.3 Development process

The development process used in this application is the evolutionary and iterative approach which is used to improve, the faster incremental to the existing systems.

The software involves the following modules.

Person Registration: This module is responsible for registration of new citizen/person by entering the required details. In this module a person can get his/her immunisation schedule based on age.

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Admin: Admin module is responsible for overall management of application by providing registration and login facility for citizens/person. This module gives information about the active and inactive users and also it provides information about the skipped immunisation and sends notification for citizens.

Doctors: This module is responsible to vaccinate a person based on his/her schedule and confirms the same through this system. And can able to update his/her profile.

Anganwadi Workers: This module is responsible to create a list about person immunization schedule and can generate a report based on monthly schedule.

4. Software Requirements Specification

4.1 Purpose

INdian Site for ImmuniSaTion is an application developed to look after about the immunisation process of a person/citizen. It provides information related to all vaccines and recommends vaccines since birth till sixty five years of age. This application not only involves registration process for citizens but also allows doctors and anganwadi workers to register, and get all the information related to person's immunisation process.

4.2 Scope

The domain where INdian Site for ImmuniSaTion application can be used by the citizens of India and even it can be used in hospitals to refer doctors about the immunisation schedule about his/her respective patients. And also anganwadi workers can also use this application to provide information related to immunisation and also maintain list about vaccinating a person.

4.3 Product Overview

INdian Site for ImmuniSaTion is a web application used to create awareness about the vaccines to the citizens. This application provides information regarding all the vaccines and recommends vaccines since birth till sixty five years of age. The application consist of four modules such as admin, doctor, citizen and the anganwadi workers. The admin is used to create vaccines and can view list of people registered in this application. Citizen is used to create his/her profile by registering into this application. Once the citizen registers based on his/her age vaccines are recommended, the citizen can also add his/her dependent information to know the vaccines which is to be taken by the dependent. The doctor can also register in this application to provide vaccines to the citizens and the dependent. Even the doctor can also register the citizen who consults him/her. The anganwadi workers are responsible to keep the track of records of citizen and they can also generate the citizen's monthly schedule.

4.4 Functional Requirements

The following are the modules that are used in this application

- 1. Citizen.**
- 2. Admin.**
- 3. Doctor.**
- 4. Anganwadi Workers.**

Person Registration Module: This module is responsible for registration of new citizen/person by entering the required details. In this module a person can get his/her immunisation schedule based on age factor, and SMS and E-mail alert are sent a day before the vaccination.

A person can get all the immunisation report and can also know his/her upcoming vaccines that need to be taken. He/she can be able to add the dependent information to get the immunisation information. Even if the person has missed his/her immunisation schedule, he/she can get through catch-up schedule. If a person is not interested to know about the immunisation he can also unsubscribe from this website.

Input: The following are the inputs that are required to fill during the registration of a person. Name, Date Of Birth (DOB), Aadhar Number, E-mail id, Mobile number, address, Dependent Name. Once the person/citizen fills the required input his/her registration process is completed.

Process: when person/citizen is registered in this website by filling all the required details, he/she can view his/her immunisation schedule based on his/her age factor. Based on age, vaccines are recommended and SMS or email alerts are sent to respective mobile number a day before the vaccination of person. He/she can also update his/her profile and can also register his/her dependent name and can also view and update his/her dependent information about the immunisation schedule.

Output: a person can see his/her complete information of an immunisation schedule which is stored in a table format. He/she can get all the information related to immunisation and that is

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stored in a person table in a database, when fetched the information of a person the system must produce the output related to a person only.

Sub Functions: Immunised, to be immunized, add dependent/child, unsubscribe. Immunized is a sub function which provides information regarding all the vaccination that person has completed and can take print out of it. To be immunized is sub function which provides information regarding about the upcoming vaccinations and can able to view the schedule. Add dependent is a sub function where a person can add his/her family member like child to know the immunization schedule of his/her dependent. Unsubscribe is sub function where a person can unsubscribe from this website as he/she is not interested to know about the immunization information.

Admin Module: Admin module is responsible for overall management of application by providing registration and login facility for citizens/person. This module gives information about the active and inactive users and also it provides information about the skipped immunisation and sends notification for citizens. The admin is responsible to create a list of new vaccinations that are released.

Input: Login id and password are inputs required to login for the admin.

Process: once the admin is logged in to the system, he can be able to view the number of person registered in this application, and can view the profile of the anganwadi workers and also can view about the person/citizen profile. The admin is responsible to send notifications to the person/citizen about the skipped immunization. Admin is also responsible to create a list of new vaccinations that are released.

Output: all the information related to person, doctor, anganwadi workers and about vaccines are stored in their respective columns into the database. Once the data is stored, the admin can fetch the information and can be able to identify about the skipped immunization of a person easily.

Doctor Module: This module is responsible to vaccinate a person based on his/her schedule and confirms the same through this system. And can able to update his/her profile.

Input: Doctor Name, designation, mobile number, email id, address, aadhar number of person are the following inputs that should be provided by the doctor while registering to this application.

Process: once the doctor registers in this application, he/she is responsible to vaccinate a person based on his/her schedule, and he confirms the same through this system. If the doctor can also update his/her profile. If the person is not registered in this application, the doctor can create/add the person in this application based on his/her aadhar number.

Anganwadi Workers Module: This module is responsible to create a list about person immunization schedule and can generate a report based on monthly schedule. Workers can also update profile.

Input: Aadhar number, name, age, address, city, district, state are the inputs provided by the anganwadi workers while registering to this application.

Process: once the anganwadi worker is registered in this web application, they are responsible to generate a list of person who are registered in this application based on monthly schedule about the vaccination. If the person is not registered, the anganwadi workers create/add a person based on aadhar number to vaccinate the person. They are also able to update their profile.

4.5 Exception Handling

Exception handling is to avoid abnormal terminations of the application. If the application has any error or wrong inputs, these will be taken care through exception handling. It will handle all the bugs or errors to run the application without any abnormal termination.

- Name fields must have character data type only.
- Phone numbers must have only integer data type of numbers.

- E-mail, phone numbers must enter in a proper data format.
- All the * or mandatory fields must be filled with proper data.
- A person should mention his/her aadhar number.
- Invalid inputs are also handled.

4.6 Performance Requirements

Performance is measured by the output of the application. Requirement specification plays a major role in analyzing the system. When the requirements are clear it is possible to design a system which will suitable for the required environment. In this web application with respect to database design, at least third normal form is accepted.

4.7 Design hints and guidelines

Design acts as association among the requirement specification and final solution for the satisfying requirements. The design is also called as outline of the system or a representation of the system.

- In this application forms are designed using the textbox, labels, buttons, images, drop down list, radio buttons, text area etc.
- Textbox is used to read the inputs from the user. It enables to add alphanumeric values with length of 255 characters.
- Labels are the tokens of a user interface which are used to indicate the heading.
- Images are added to improve the look and feel of the design.
- Tooltips are added to provide information about the textbox when the cursor is moved on the textbox.

4.8 Technology Requirements

Software Requirements:

- Operating System: Windows 7 or Above.
- Web Server : IIS version 7.5

- Web Technologies: HTML, CSS, JavaScript.
- IDE: NetBeans 8.0.2
- Server Scripting: JSP
- Database: MySQL 5.0.20

Hardware Requirements:

- Processor: core i3 or above.
- Memory: 4GB or above.
- Hard Disk: 500GB or above

5 System Design

5.1 Use case

Use case diagram is representation of the application. Actors and use cases are the building blocks of use case model. The use case diagram shows interaction between use cases along with their actors.

The following are the notations used in the use case:



Use case



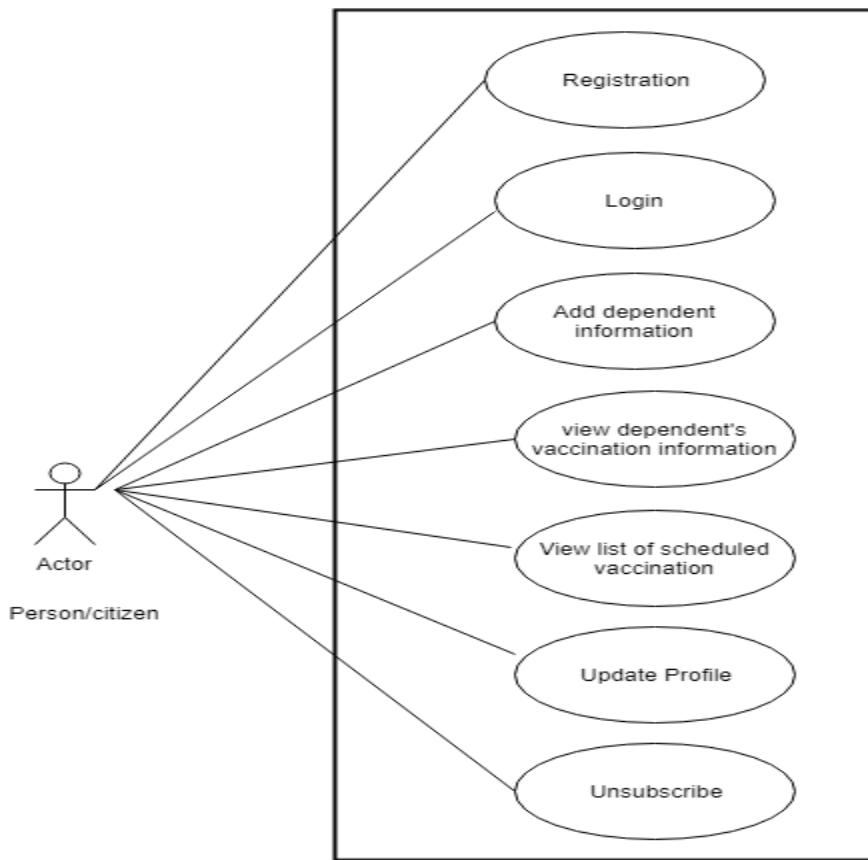
Actor



Connector

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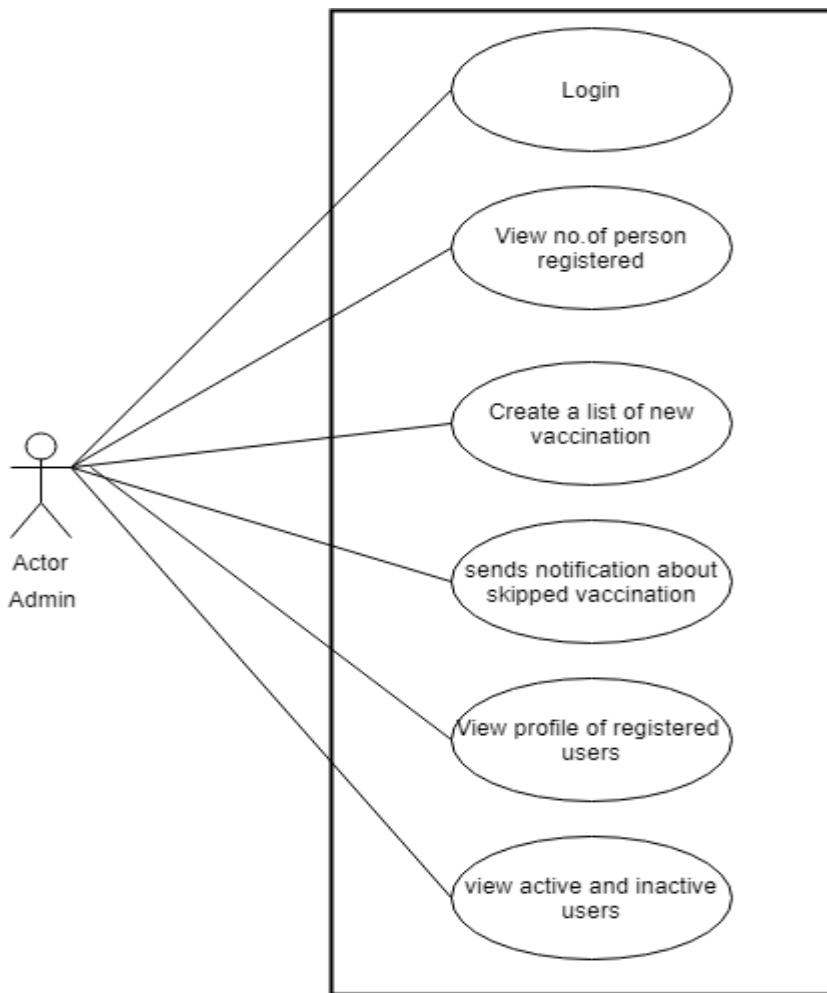
Use case for Person/Citizen



The person/citizen is one of the actors, who has ability to view his/her immunization schedule. The person is also responsible to add/create his/her dependent to get the information regarding their immunization schedule. The person can update his/her profile and can view his upcoming vaccination that he/she has to be taken.

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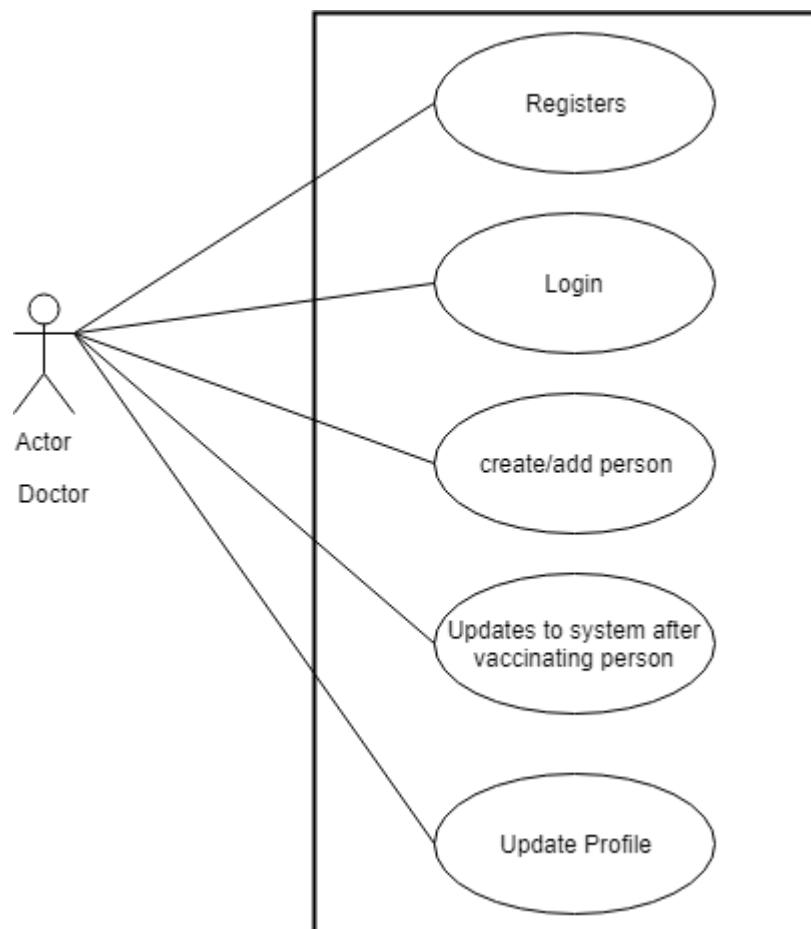
Use case for Admin



The admin is one of the actors in the application, who is responsible to handle overall management of application. The admin creates a list of new vaccines and sends notification to registered person about the skipped immunization. Admin can keep the record of active and inactive users. He can view the profile of number of person registered in this application.

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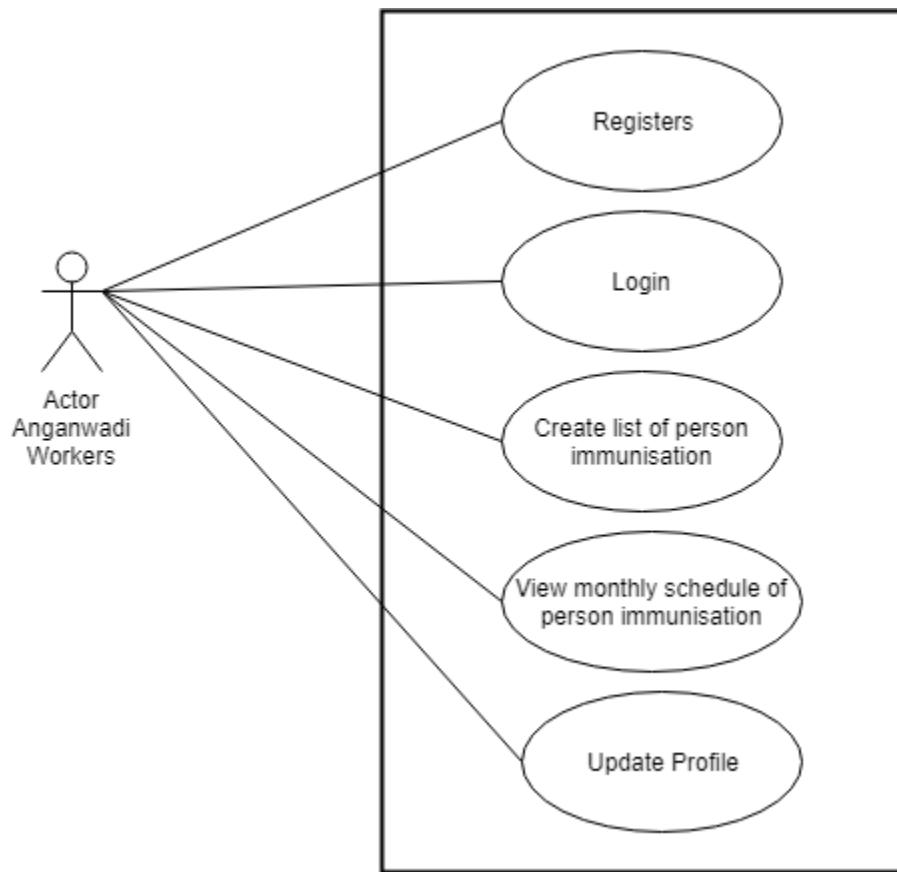
Use case for Doctor



The doctor is responsible to vaccinate a person and updates to the system after vaccinating. The doctor creates/add the person if he/she has not yet registered in this application to get the schedule about immunization.

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Use case for Anganwadi Workers



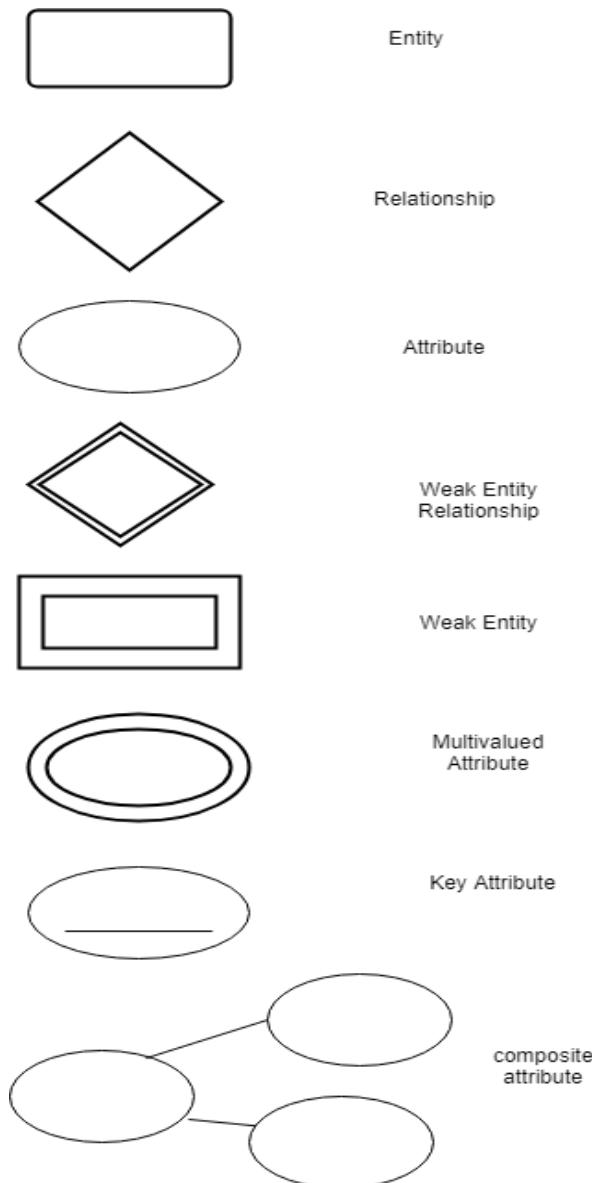
Anganwadi workers are the actor who is responsible to create a list of person immunization schedule and she can view monthly schedule about the immunization. If the person is not registered in this application the anganwadi worker creates/add person to get the immunization schedule.

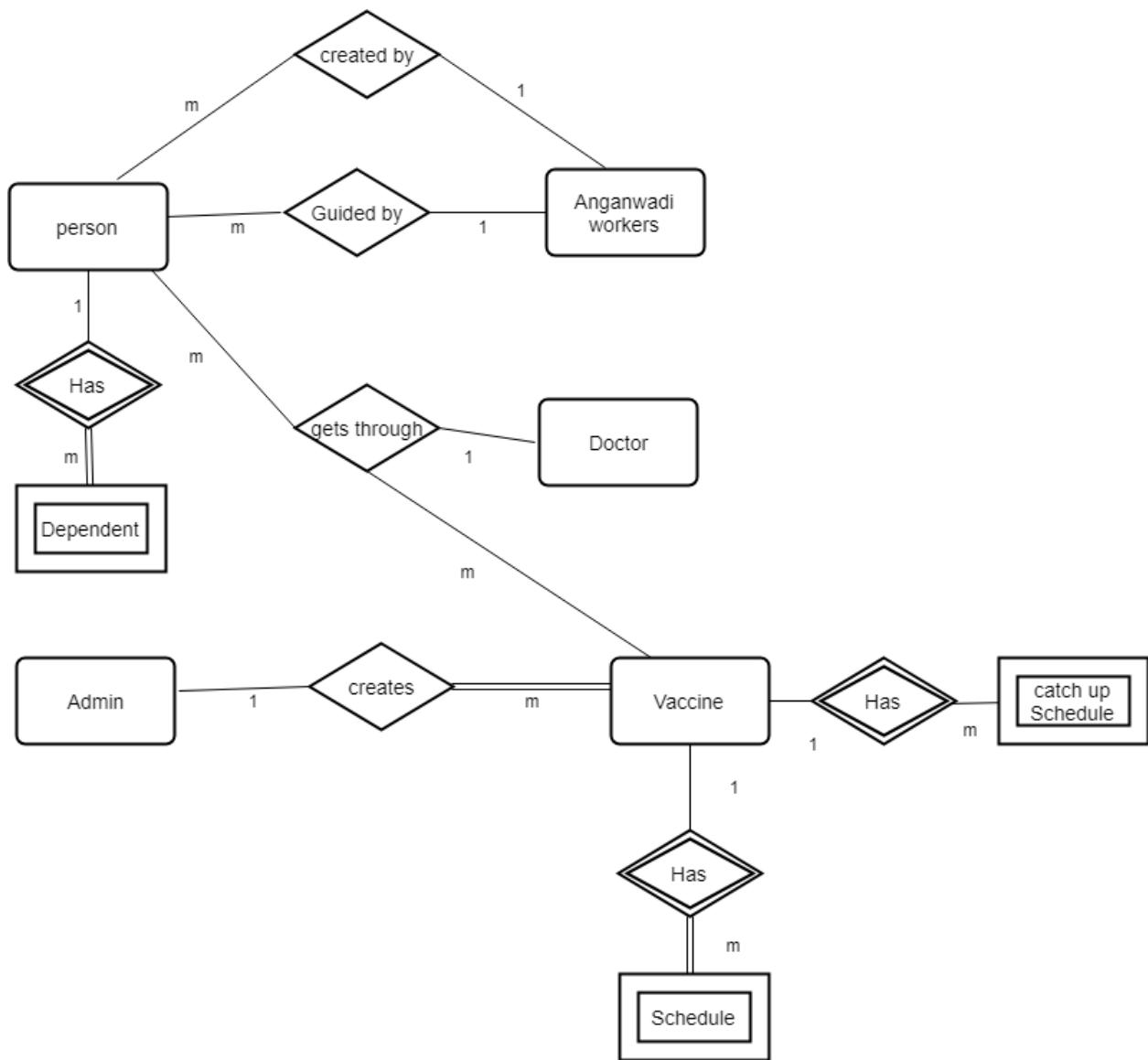
6 Detailed Design

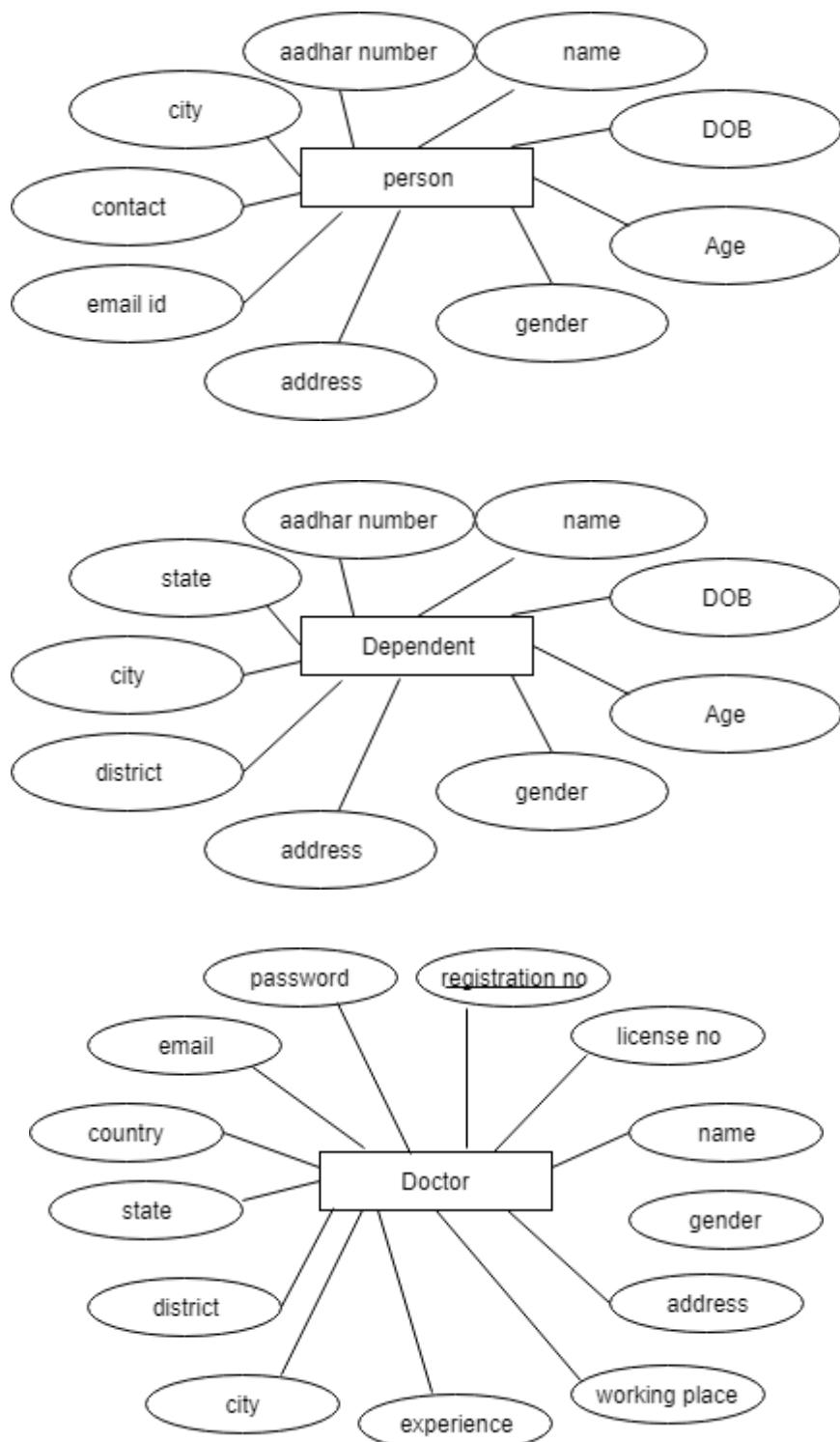
6.5 High level Design

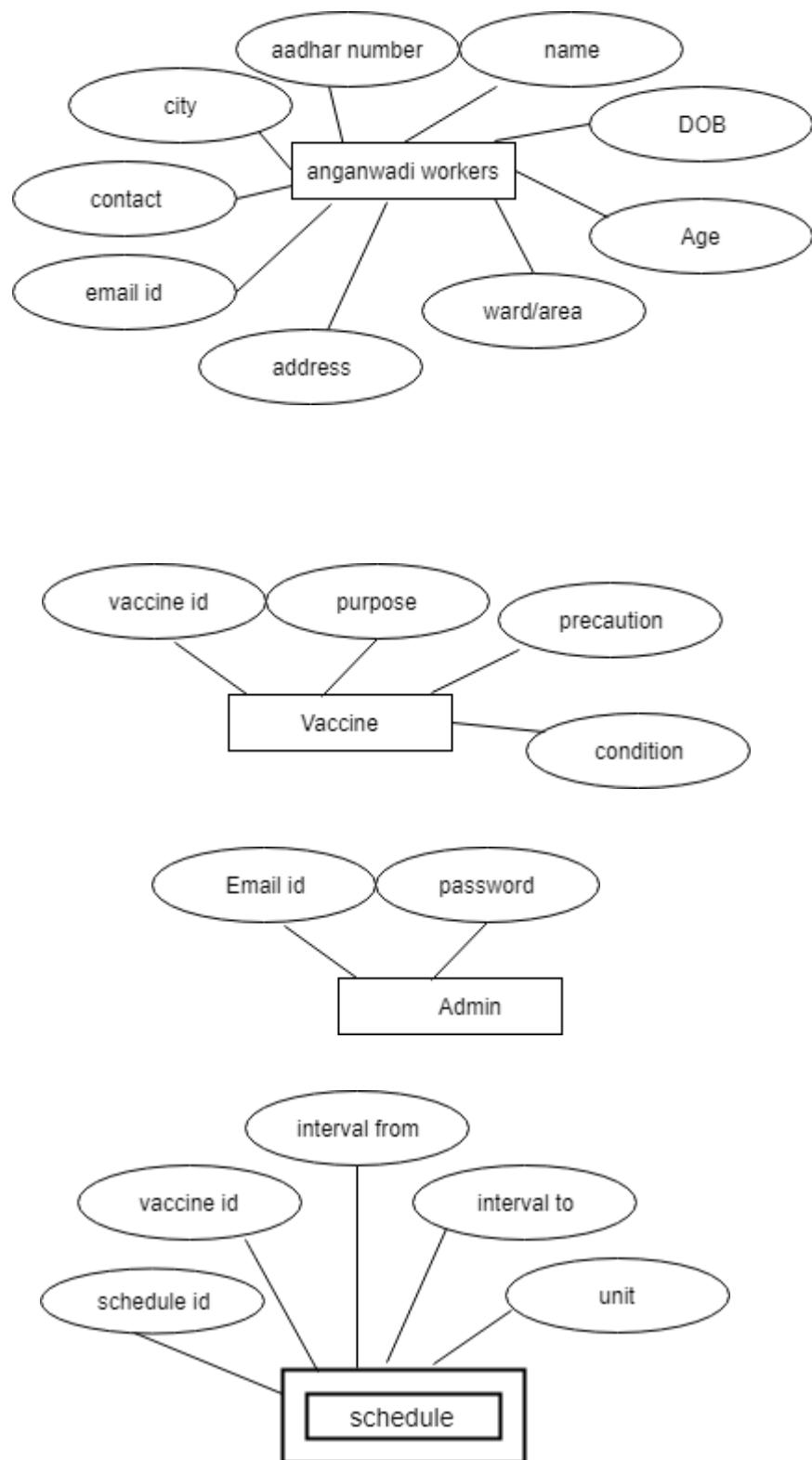
- **ER-Diagram**

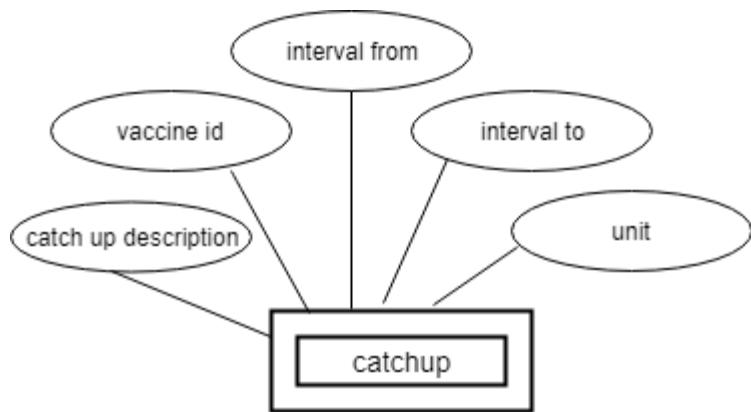
ER-Diagram is one of the data modelling method which is used to provide information of the system and the entities which gives relation between these entities. The following are the notations used in ER-Diagram,



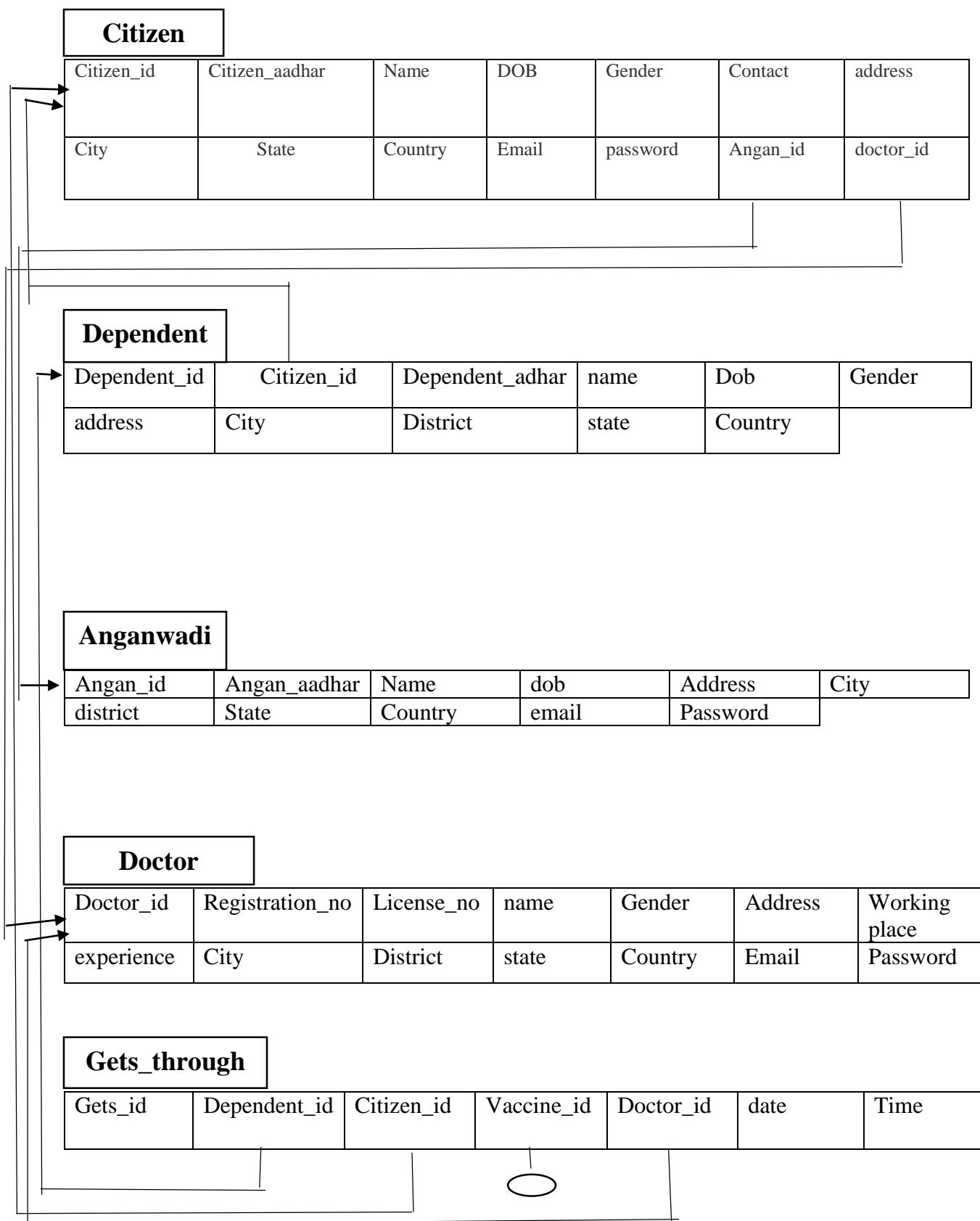
INdian Site for ImmuniSaTion

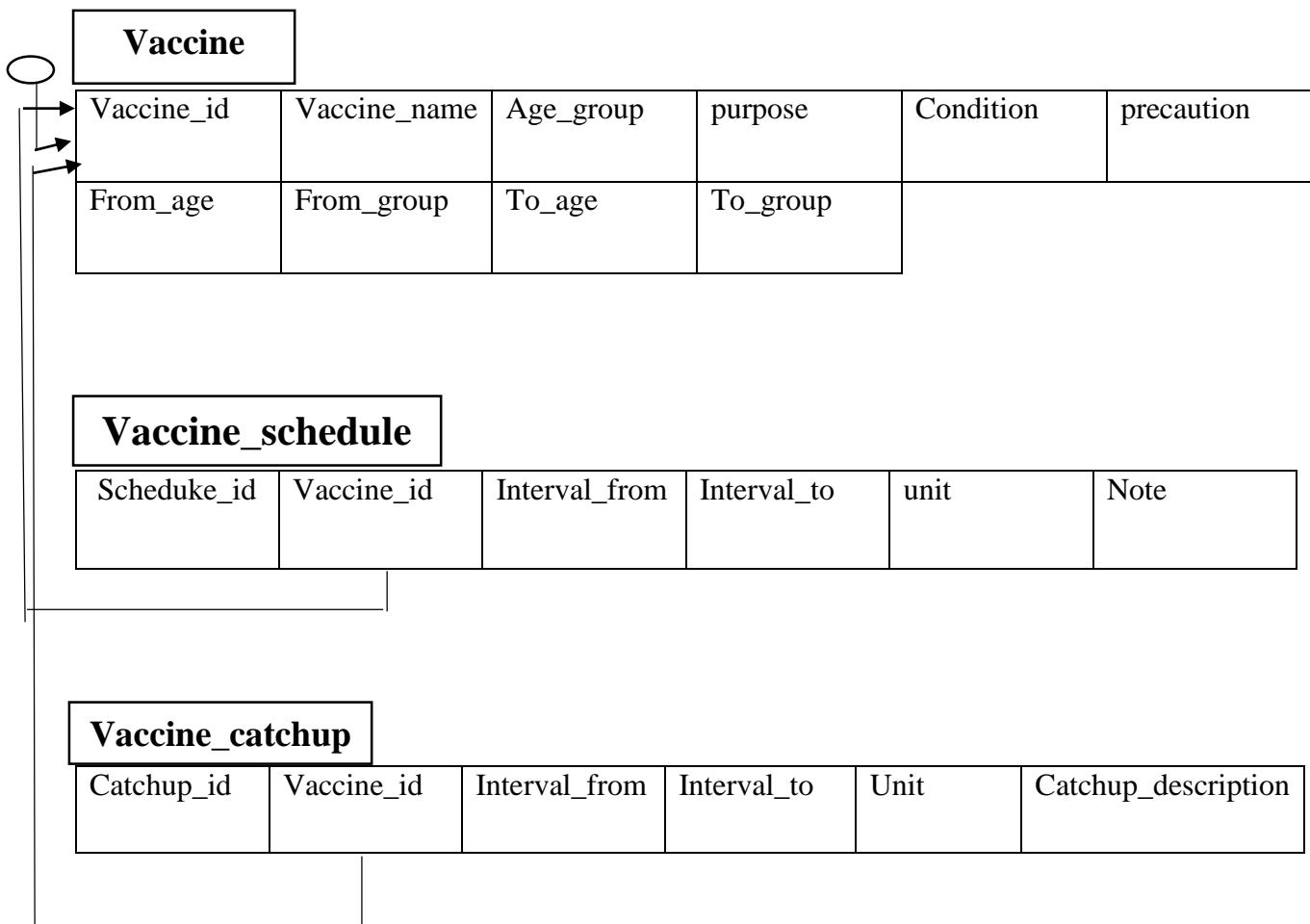


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6.2 Low Level Design





6.2.1 Pseudo code

Pseudo code for Citizen

Step 1: Start

Step 2: Read the citizen id, name, DOB.

Step 3: View immunization schedule.

Step 4: Store all the citizen's related data.

Step 5: Add dependents details.

Step 6: View dependents immunization list.

Step 7: Store all the dependent's related data.

Step 8: Take the printout of vaccine list.

Step 9: End.

Pseudo code for Doctor

Step 1: Start

Step 2: Read Doctor Id, name

Step 3: Add Citizen

Step 4: Generate immunization schedule

Step 5: Store all doctor's related data

Step 6: End

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Pseudo code for Admin

Step 1: Start

Step 2: Read Username and password

Step 3: Create list of vaccines

Step 4: Create a schedule for vaccines

Step 5: Edit and update the vaccine and schedule

Step 6: View the vaccines and schedule

Step 7: Store all the admin related data.

Step 8: View list of people registered

Step 9: End.

7 Implementation

Creation of Database: Database is used to store the information related to data in a systematic way. This is used in storing and manipulating the data in an easy way. To develop this web application we need to use RDBM which is used to store the data in different tables where the table consists of a primary key and a foreign key in the database tables. By using this relational database management system we can implement the database with the tables, columns and by the indexes, which allows the coordination between the rows and to the variety of database tables.

Following are the terms which are used for designing the database of the application

- **Database** – It is the group of associated data in the form of the tables.
- **Tables**– Tables which are called as the relations that are used to store the proper data in the forms of rows and the columns.
- **Column** – Columns are called as data element which are used to identify the field names in the tables.
- **Row** – This consists of relatable data for the application. The data which is stored in the table is called as tuple. Row is called as a collection of a data which points to different columns of the same table.
- **Primary key** – The table must consists of only one primary key which is always be unique in the table. Tables which consists of records must be always unique.
- **Foreign key** - This key is used as a reference to the other table i.e., when two tables are connected the foreign key plays an important role in establishing the connection between these tables to provide link for the database.

Creation of Database tables

Table	Action	Records ¹	Type	Collation	Size	Overhead
admin		0	MyISAM	latin1_swedish_ci	1.0 KiB	-
anganwadi		3	MyISAM	latin1_swedish_ci	3.4 KiB	-
citizen_register		10	MyISAM	latin1_swedish_ci	4.4 KiB	-
dependent		0	MyISAM	latin1_swedish_ci	1.0 KiB	-
doctor		3	MyISAM	latin1_swedish_ci	3.3 KiB	-
gets_through		0	MyISAM	latin1_swedish_ci	1.0 KiB	-
state		0	MyISAM	latin1_swedish_ci	1.0 KiB	-
vaccine		4	MyISAM	latin1_swedish_ci	4.4 KiB	-
vaccine_catchup		0	MyISAM	latin1_swedish_ci	1.0 KiB	-
vaccine_schedule		1	MyISAM	latin1_swedish_ci	2.3 KiB	96 B
10 table(s)	Sum	21	MyISAM	latin1_swedish_ci	22.7 KiB	96 B

[Check All](#) / [Uncheck All](#) / [Check tables having overhead](#)

[Print view](#) [Data Dictionary](#)

[Create new table on database insist](#)

Name: Number of fields:

INdian Site for ImmuniSaTion

- Citizen table

localhost/phpmyadmin/index.php?db=insist&token=1229104b417c88a3dbff4823dc14f703&phpMyAdmin=qjnn5asnd5s7t4n1kve17mhtn4tgc

Structure

Field	Type	Collation	Attributes	Null	Default	Extra	Action
cid	int(3)			No	None	auto_increment	
aadhar	varchar(12)	latin1_swedish_ci		No	None		
name	varchar(25)	latin1_swedish_ci		No	None		
dob	date			No	None		
gender	varchar(20)	latin1_swedish_ci		No	None		
contact	varchar(10)	latin1_swedish_ci		No	None		
address	varchar(75)	latin1_swedish_ci		No	None		
city	varchar(20)	latin1_swedish_ci		No	None		
district	varchar(20)	latin1_swedish_ci		No	None		
state	varchar(20)	latin1_swedish_ci		No	None		
country	varchar(20)	latin1_swedish_ci		No	None		
email	varchar(75)	latin1_swedish_ci		No	None		
password	varchar(15)	latin1_swedish_ci		No	None		
angan_id	int(3)			Yes	NULL		
doc_id	int(3)			Yes	NULL		

- Dependent table

localhost / localhost / ir X + ▾

localhost/phpmyadmin/index.php?db=insist&token=1229104b417c88a3dbff4823dc14f703&phpMyAdmin=qjnn5asnd5s7t4n1kve17mhtn4tgctcv

Structure

✓ Table dependent has been altered successfully

```
ALTER TABLE `dependent` CHANGE `aadhar` `cid` INT( 12 ) NOT NULL
```

Field	Type	Collation	Attributes	Null	Default	Extra	Action
did	int(3)			No	None	auto_increment	
d_aadhar	int(12)			No	None		
name	varchar(25)	latin1_swedish_ci		No	None		
dob	date			No	None		
gender	varchar(20)	latin1_swedish_ci		No	None		
address	varchar(25)	latin1_swedish_ci		No	None		
city	varchar(25)	latin1_swedish_ci		No	None		
district	varchar(25)	latin1_swedish_ci		No	None		
state	varchar(25)	latin1_swedish_ci		No	None		
country	varchar(25)	latin1_swedish_ci		No	None		
cid	int(12)			No	None		

- Anganwadi table

The screenshot shows the phpMyAdmin interface for the 'insist' database. The 'Structure' tab is selected for the 'anganwadi' table. The table has 12 columns:

Field	Type	Collation	Attributes	Null	Default	Extra	Action
angan_id	int(3)			No	None	auto_increment	
angan_aadhar	varchar(12)	latin1_swedish_ci		No	None		
name	varchar(25)	latin1_swedish_ci		No	None		
dob	varchar(20)	latin1_swedish_ci		No	None		
address	varchar(50)	latin1_swedish_ci		No	None		
city	varchar(25)	latin1_swedish_ci		No	None		
district	varchar(25)	latin1_swedish_ci		No	None		
state	varchar(25)	latin1_swedish_ci		No	None		
country	varchar(25)	latin1_swedish_ci		No	None		
email	varchar(75)	latin1_swedish_ci		No	None		
password	varchar(15)	latin1_swedish_ci		No	None		

Below the table structure, there are buttons for 'Check All / Uncheck All With selected:' and a toolbar with various icons. At the bottom, there is a search bar and a 'Go' button.

- Doctor table

The screenshot shows the phpMyAdmin interface for the 'insist' database. The 'Structure' tab is selected for the 'doctor' table. The table has 12 columns:

Field	Type	Collation	Attributes	Null	Default	Extra	Action
doc_id	int(3)			No	None	auto_increment	
register_no	varchar(15)	latin1_swedish_ci		No	None		
license_no	varchar(15)	latin1_swedish_ci		No	None		
name	varchar(25)	latin1_swedish_ci		No	None		
gender	varchar(25)	latin1_swedish_ci		No	None		
address	varchar(25)	latin1_swedish_ci		No	None		
working_place	varchar(25)	latin1_swedish_ci		No	None		
experience	varchar(10)	latin1_swedish_ci		No	None		
city	varchar(25)	latin1_swedish_ci		No	None		
district	varchar(25)	latin1_swedish_ci		No	None		
state	varchar(25)	latin1_swedish_ci		No	None		
country	varchar(25)	latin1_swedish_ci		No	None		
email	varchar(75)	latin1_swedish_ci		No	None		
password	varchar(15)	latin1_swedish_ci		No	None		

Below the table structure, there are buttons for 'Check All / Uncheck All With selected:' and a toolbar with various icons. At the bottom, there is a search bar and a 'Go' button.

- Gets through

The screenshot shows the phpMyAdmin interface for the 'insist' database. The left sidebar lists databases (admin, insist), tables (Browse, userparent, doctor, gets_through, state, vaccine, vaccine_catchup, vaccine_schedule), and a search bar. The main area shows the 'Structure' tab for the 'gets_through' table. The table has columns: gets_id (int(3)), cid (int(3)), vaccine_id (int(3)), doc_id (int(3)), date (date), time (time), and due_date (date). The 'Extra' column indicates auto_increment for gets_id. Below the table structure is a SQL query: `SELECT * FROM `gets_through` LIMIT 0 , 30`. The status bar at the bottom shows 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 sec)'.

- Vaccine table

- Schedule table

The screenshot shows the phpMyAdmin interface for the 'vaccine_schedule' table in the 'insist' database. The table has the following structure:

Field	Type	Collation	Attributes	Null	Default	Extra	Action
schedule_id	int(3)			No	None	auto_increment	
vaccine_id	int(3)			No	None		
interval_from	int(2)			No	None		
interval_to	int(2)			No	None		
unit	varchar(10)	latin1_swedish_ci		No	None		
Note	varchar(400)	latin1_swedish_ci		No	None		

Below the table structure, there is a SQL query result:

```
SELECT * FROM `vaccine_schedule` LIMIT 0 , 38
```

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 sec)

- Catchup table

The screenshot shows the phpMyAdmin interface for the 'vaccine_catchup' table in the 'insist' database. The table has the following structure:

Field	Type	Collation	Attributes	Null	Default	Extra	Action
catchup_id	int(3)			No	None	auto_increment	
vaccine_id	int(3)			No	None		
interval_from	int(2)			No	None		
interval_to	int(2)			No	None		
unit	varchar(10)	latin1_swedish_ci		No	None		
catchup_description	varchar(100)	latin1_swedish_ci		No	None		

Below the table structure, there is a SQL query result:

```
SELECT * FROM `vaccine_catchup` LIMIT 0 , 38
```

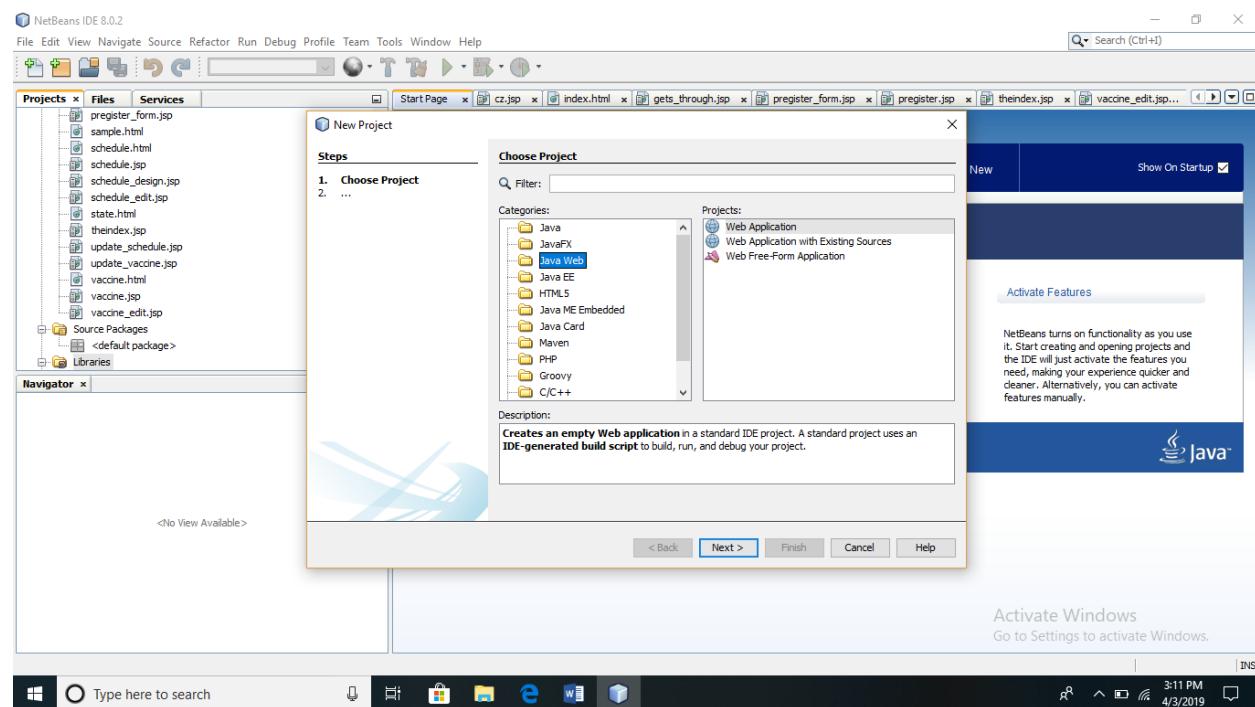
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 sec)

How to Create Forms

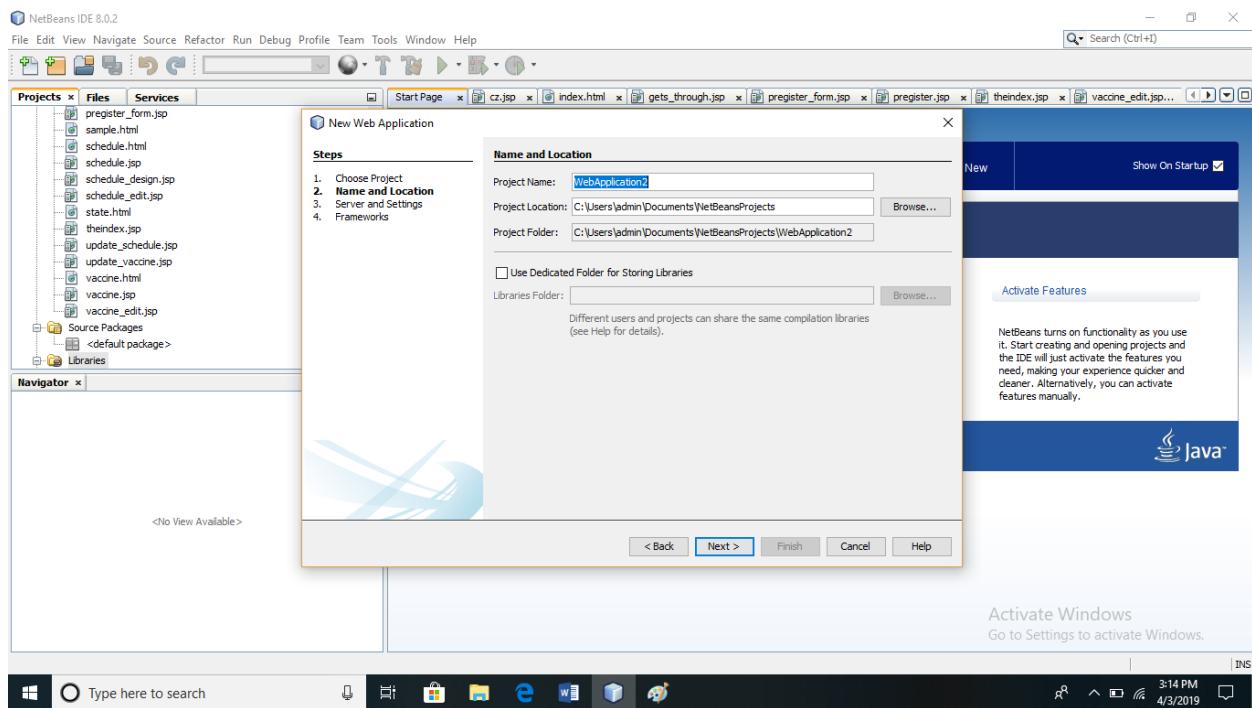
1. Open NetBeans IDE 8.0.2
2. Click on File, then select New Project

The new dialog box will open.

3. Choose the Java Web application.
4. Enter your project name and click the Next button.

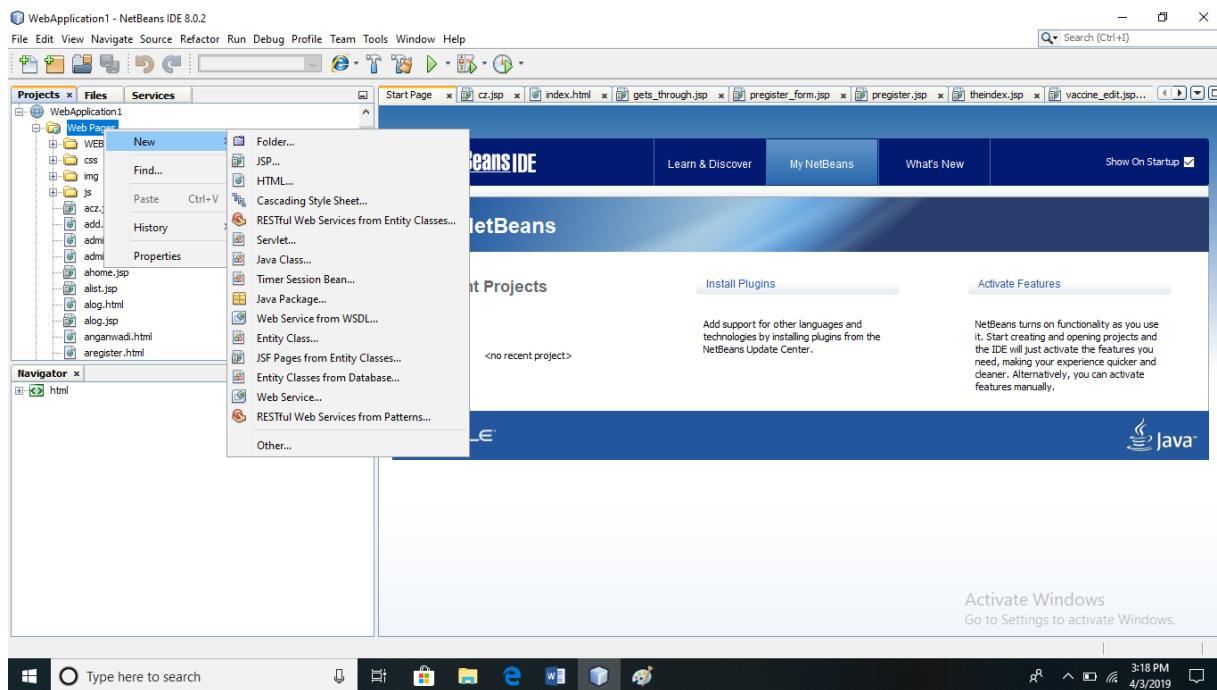


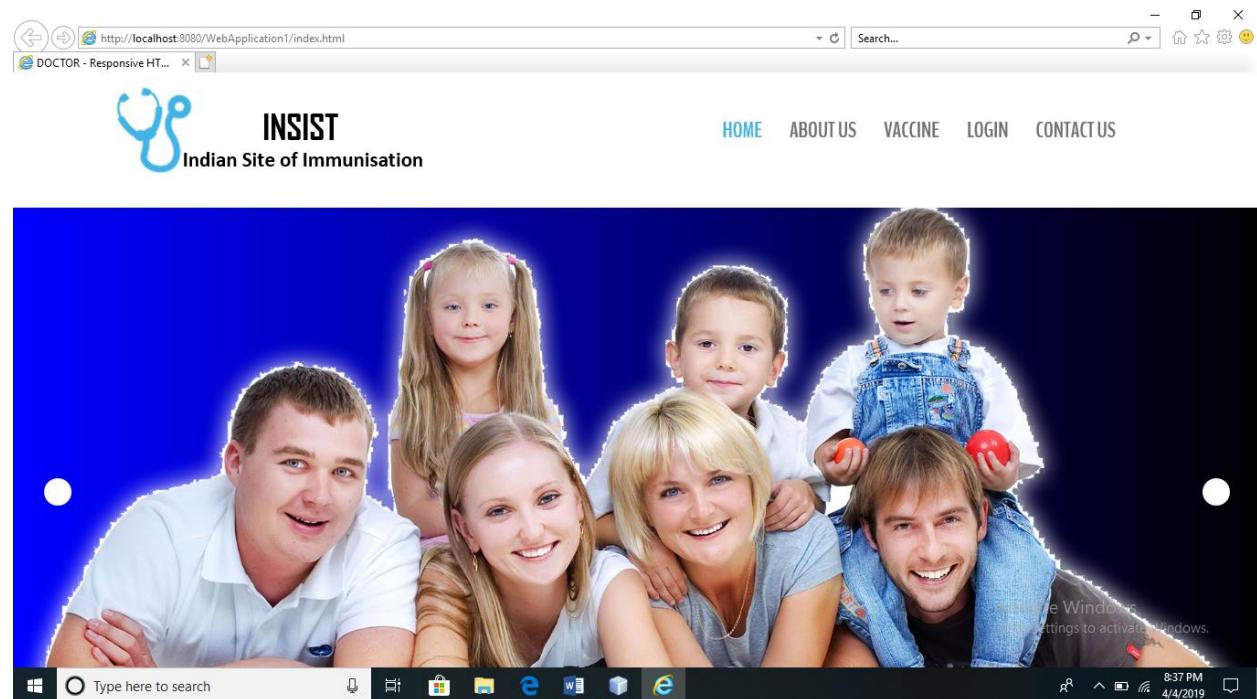
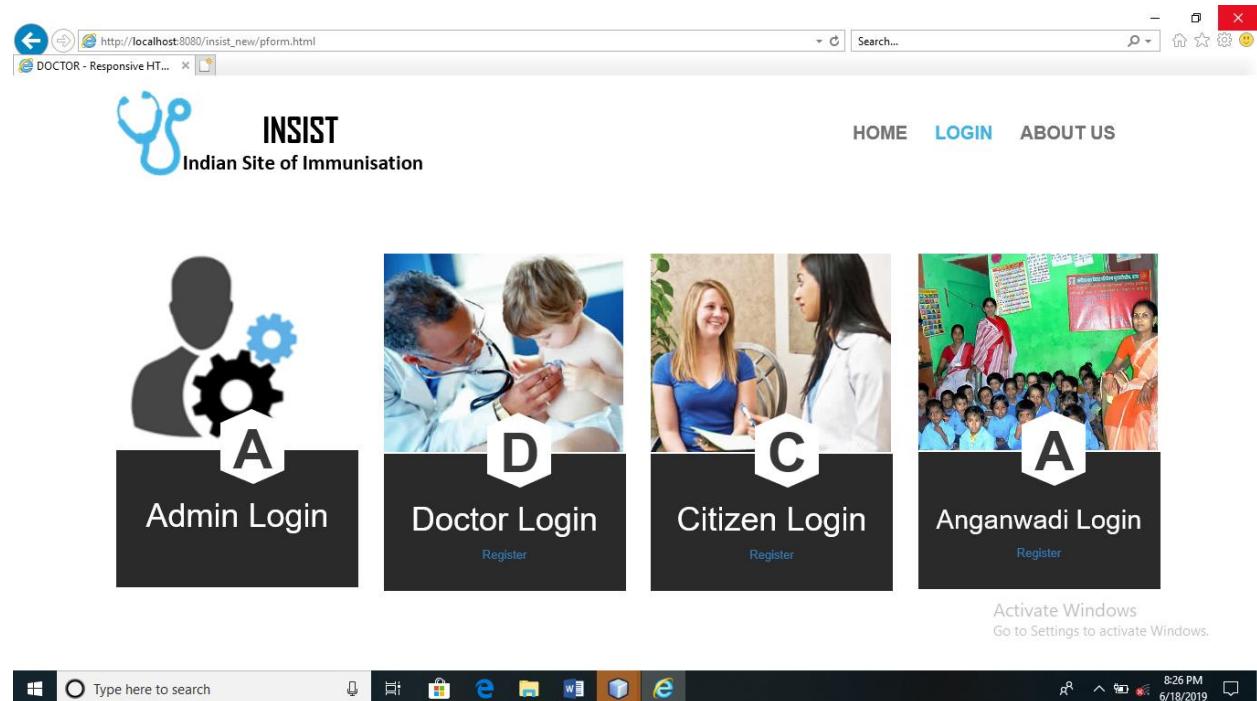
INdian Site for ImmuniSaTion



5. In NetBeans, double click on project name, and then all the sub folders will display, such as Web Pages, WEB-INF, JS, source packages, libraries and configuration files.

6. Then, right click on web pages and select HTML/JSP/CSS file you want to create.



INdian Site for ImmuniSaTion**Home Page****Login Page**

Citizen Registration Page

The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/preregister_form.jsp. The page title is "INSIST Indian Site of Immunisation". The main content area is titled "FILL DETAILS" and contains the following fields:

- Aadhar Number: A text input field.
- Name: A text input field with a note "(max 15 characters)".
- DOB: A text input field.
- Gender: Radio buttons for Male and Female.
- Contact Number: A text input field with a note "(10 digit number)".
- Address: A large text input field.

On the right side of the page, there is a message: "Activate Windows Go to Settings to activate Windows." The status bar at the bottom shows the date and time as 6/18/2019 8:27 PM.

Admin Login Page

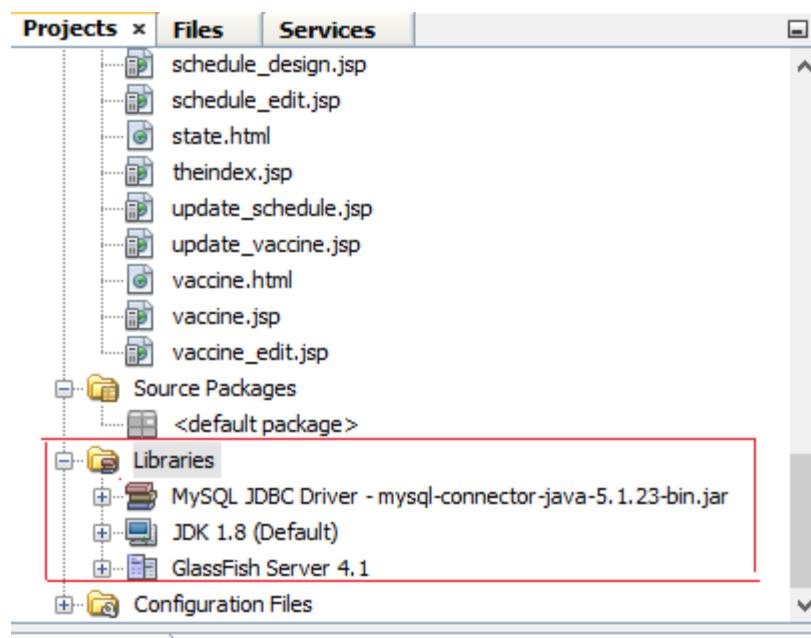
The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/admin.html. The page title is "INSIST Indian Site of Immunisation". The main content area is titled "Login" and contains the following fields:

- Email: A text input field.
- Password: A text input field.
- Submit: A button labeled "SUBMIT".

On the right side of the page, there is a message: "Activate Windows Go to Settings to activate Windows." The status bar at the bottom shows the date and time as 6/18/2019 8:28 PM.

Connection of forms to Database

Netbeans which is installed in the MySQL connector, which is called as a JAR file that is used to enable the application to connect with the MySQL database. The MySQL database is used to connect with the MySQL database where we add libraries which is called as MySQL JDBC Driver as shown below.

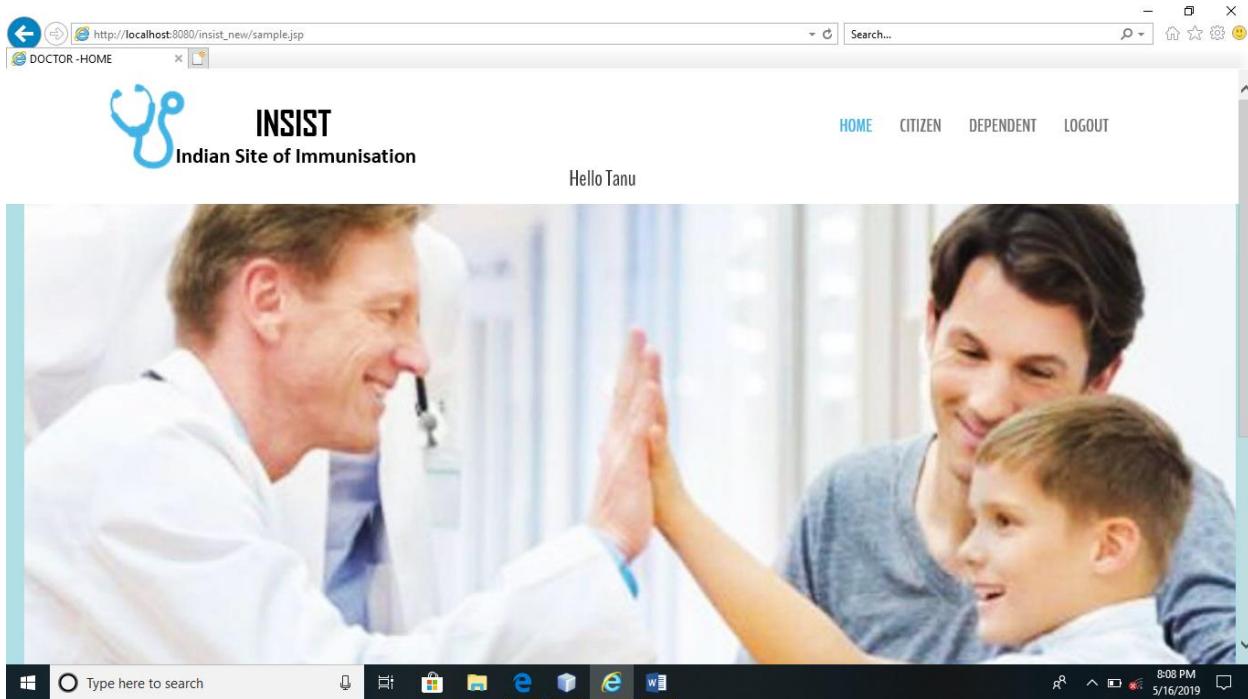


- **Driver Class** – The `com.mysql.jdbc.Driver` is the driver class for MySQL database. In this driver. Class file is going to load at the runtime into the memory.
- **Create Statement ()** - after providing the link between application and the database the JDBC statement controls the database communication by sending SQL commands.
- **Execute Query ()** – This is used to perform database query for insertion, updating, retrieval, deletion operations on a data in the MySQL Database. This also used to return the result set operation.
- **Close Connection ()** – This method helps to close statement and the database result set objects.

8 Testing and Results

Test case 1: If both username and password of doctor is correct, then login will be successful and it will navigate to doctor's home page for further activity.

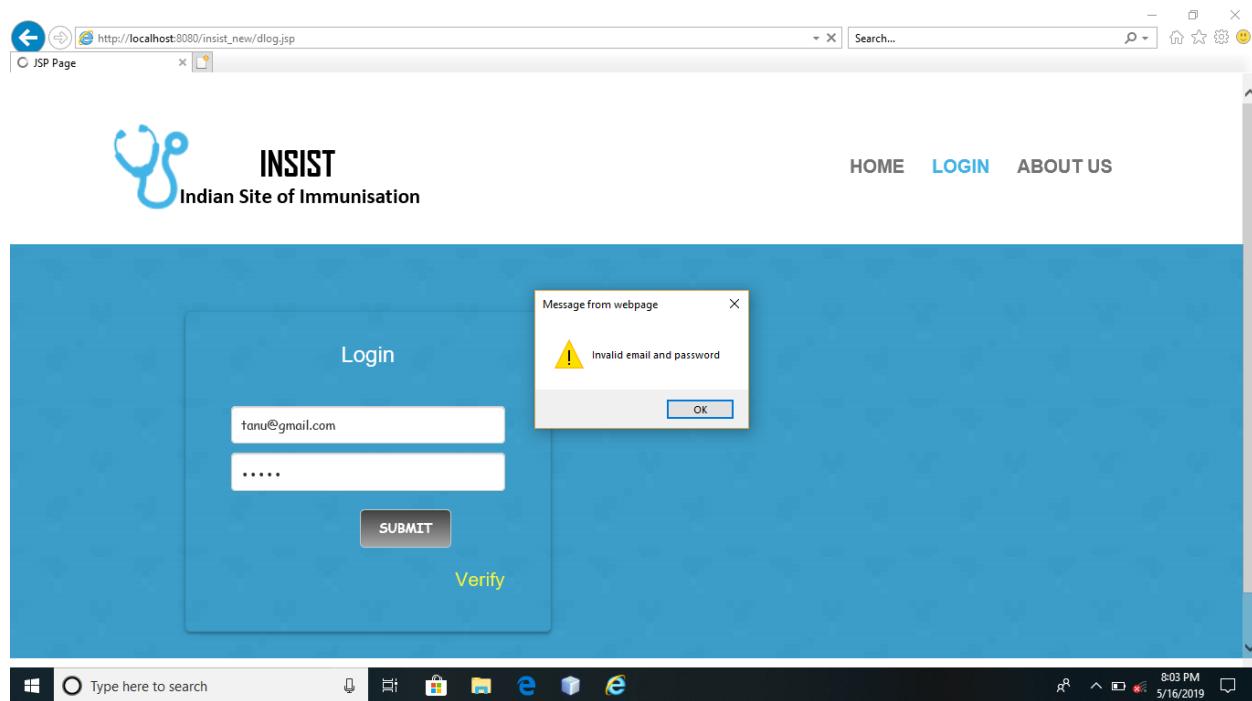
Testcase No	1
Module	Doctor
User form	Login Form
Input	Valid user id and Valid Password
Expected Output	Successful login to doctor home page.
Observed Output	Successful login to doctor home page.
Remark	PASS



Test case 2: If username is correct and password is wrong then login will be unsuccessful and it will show an alert message showing invalid email and password.

INdian Site for ImmuniSaTion

Testcase No	2
Module	Doctor
User form	Login Form
Input	Valid User id and Invalid Password
Expected Output	Invalid User id and Password.
Observed Output	Invalid User id and Password.
Remark	FAIL



Test case 3: If both username and password are wrong then login will be unsuccessful and it will show an alert message showing invalid email and password.

INdian Site for ImmuniSaTion

Testcase No	3
Module	Doctor
User form	Login Form
Input	Invalid User id and Invalid Password
Expected Output	Invalid User id and Password.
Observed Output	Invalid User id and Password.
Remark	FAIL

The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/dlog.jsp. The page has a blue header with the INSiST logo and navigation links for HOME, LOGIN, and ABOUT US. Below the header is a 'Login' form with two input fields and a 'SUBMIT' button. A yellow warning dialog box titled 'Message from webpage' is displayed, stating 'Invalid email and password' with an 'OK' button. At the bottom of the page, there is a Windows taskbar with various icons and a system status bar indicating 'Activate Windows'.

Test case 4: If all the fields of registration form are correct then registration will be successful and it will show an alert message successful registration.

INdian Site for ImmuniSaTion

Testcase No	4
Module	Doctor
User form	Registration Form
Input	All the registration fields are valid
Expected Output	Successfully Registered
Observed Output	Successfully Registered
Remark	PASS

The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/doctorreg.jsp. The page is titled "INSIST Indian Site of Immunisation". It features a navigation menu with links to HOME, ABOUT US, OUR SERVICES, LOGIN, and CONTACT US. On the left, there is a form for entering address details: Working Place (Private), Experience (4), City (Bagalkot), District (Bagalkot), State (Karnataka), and Email ID (tanushreekabbin@gmail.com). Below the form are two buttons: "submit" (green) and "reset". A modal dialog box titled "Message from webpage" displays the message "Successfully Registered" with an OK button. In the bottom right corner of the page, there is a watermark-like text: "Activate Windows Go to Settings to activate Windows." The browser's taskbar at the bottom shows various pinned icons.

Test case 5: If all the fields of registration form are blank then it will show message then it will display fill the required fields

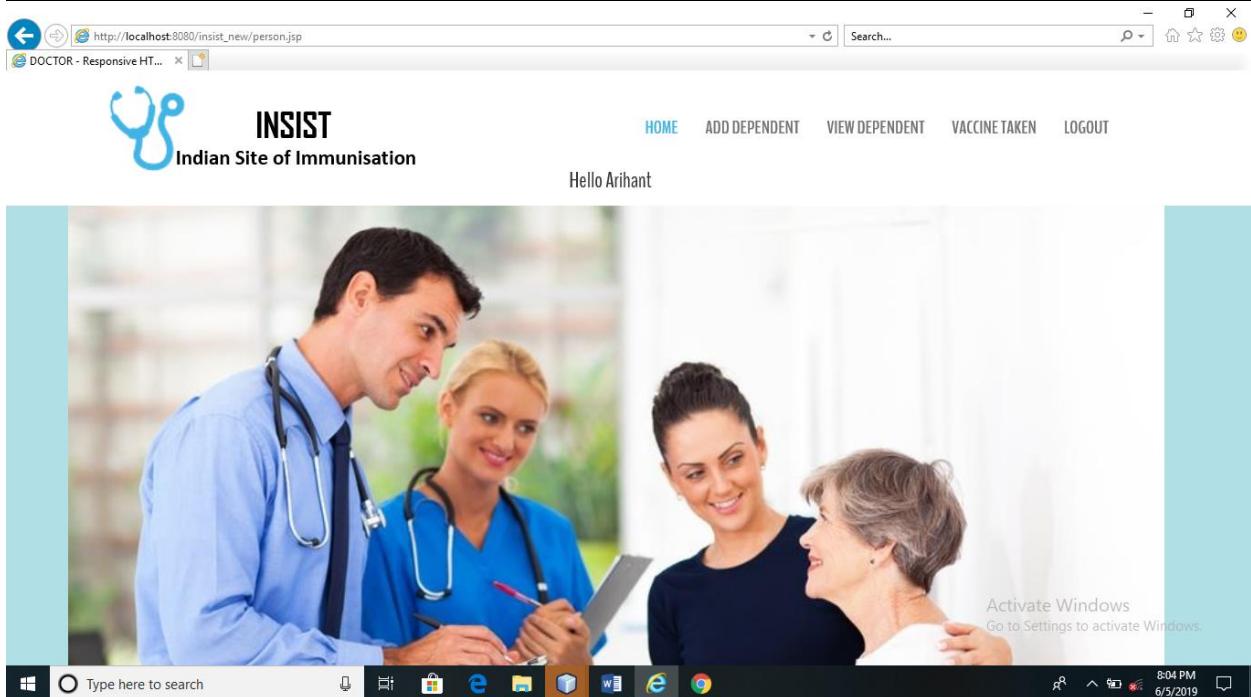
INdian Site for ImmuniSaTion

Testcase No	5
Module	Doctor
User form	Registration Form
Input	All the registration fields are blank
Expected Output	Fill the required fields
Observed Output	Fill the required fields
Remark	FAIL

Test case 6: If both username and password of citizen is correct, then login will be successful and it will navigate to citizen's home page for further activity.

INdian Site for ImmuniSaTion

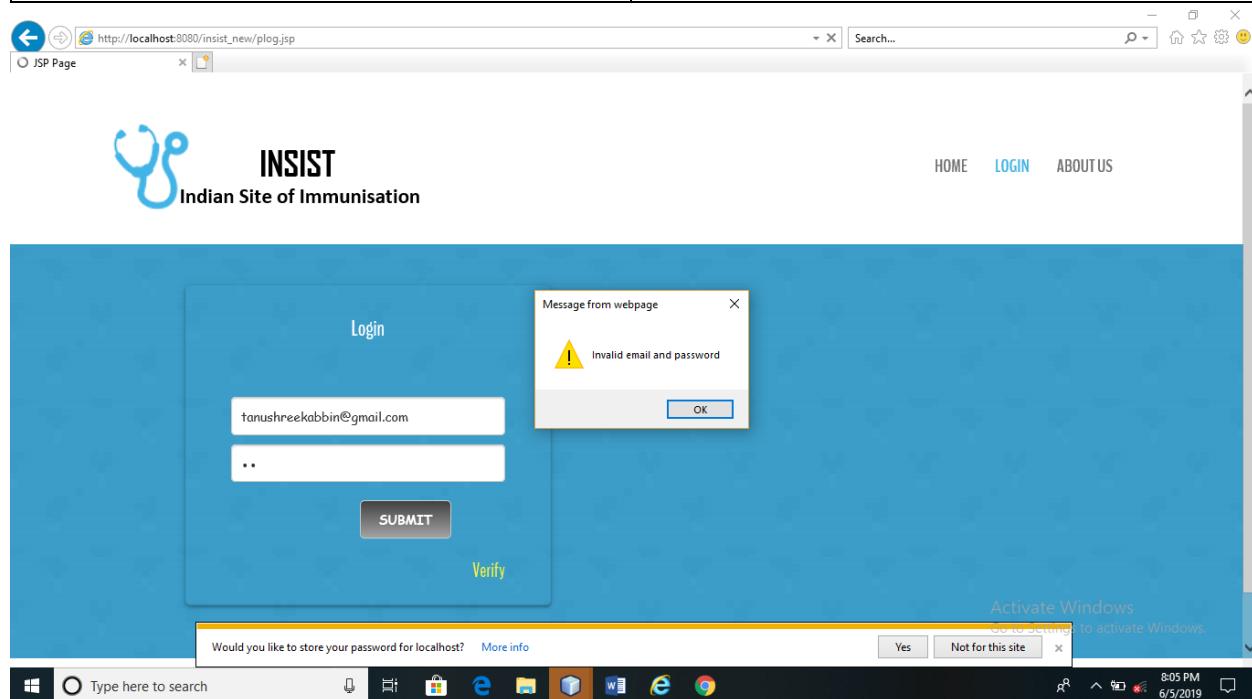
Testcase No	6
Module	Citizen
User form	Login Form
Input	Valid user id and Valid Password
Expected Output	Successful login to doctor home page.
Observed Output	Successful login to doctor home page.
Remark	PASS



Test case 7: If username is correct and password is wrong then login will be unsuccessful and it will show an alert message showing invalid email and password.

INdian Site for ImmuniSaTion

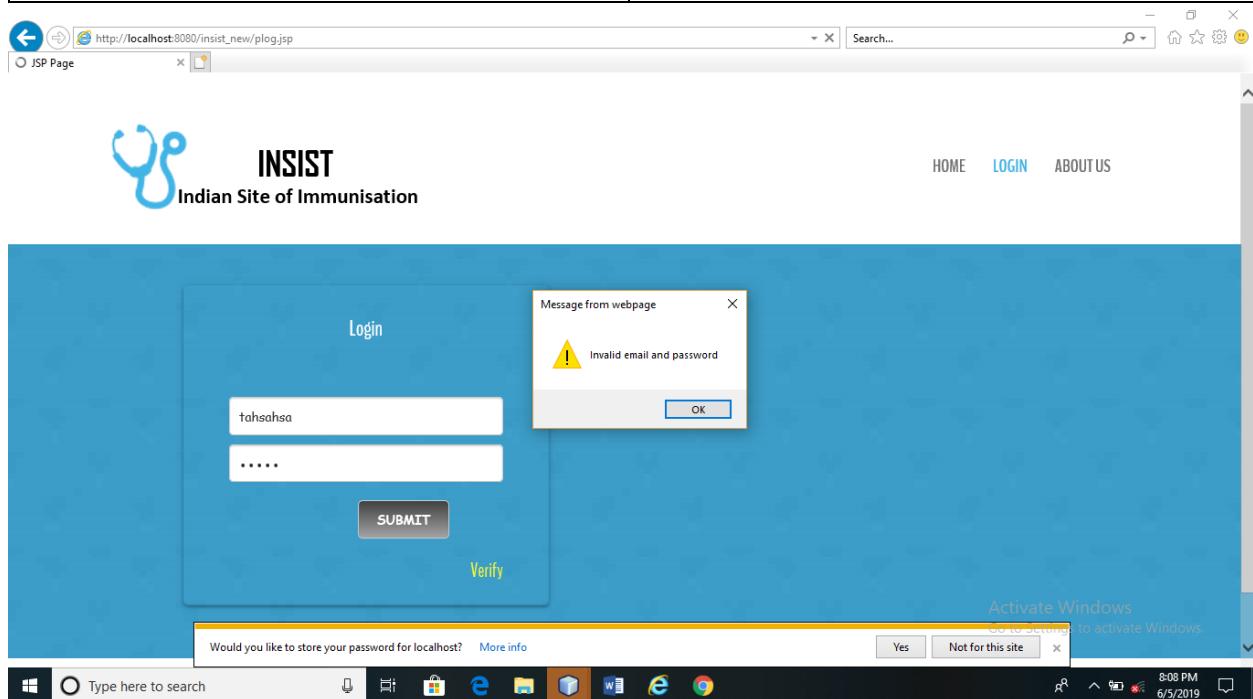
Testcase No	7
Module	Citizen
User form	Login Form
Input	Valid User id and Invalid Password
Expected Output	Invalid User id and Password.
Observed Output	Invalid User id and Password.
Remark	FAIL



Test case 8: If both username and password are wrong then login will be unsuccessful and it will show an alert message showing invalid email and password.

INdian Site for ImmuniSaTion

Testcase No	8
Module	Citizen
User form	Login Form
Input	Invalid User id and Invalid Password
Expected Output	Invalid User id and Password.
Observed Output	Invalid User id and Password.
Remark	FAIL



Test case 9: If all the registration fields of citizen are blank then it will display a message as fill the required fields.

INdian Site for ImmuniSaTion

Testcase No	9
Module	Citizen
User form	Registration Form
Input	All the registration fields are blank
Expected Output	Fill the required fields
Observed Output	Fill the required fields
Remark	FAIL

The screenshot shows a web browser displaying the INSiST registration form at the URL http://localhost:8080/insist_new/preregister_form.jsp. The page title is "INSIST Indian Site of Immunisation". The main heading is "FILL DETAILS". The form contains several input fields, all of which are highlighted with a red border, indicating they are required. The fields are: Aadhar Number, Name, DOB, Gender (radio buttons for Male and Female), Contact Number, and Address. A tooltip message "This is a required field" is visible next to the Name field. Below the form, a Windows taskbar is visible with various icons and a search bar. A watermark-like message "Activate Windows Go to Settings to activate Windows." is present in the bottom right corner of the page.

Test case 10: If all the registration fields of citizen are correct except the aadhar number is not valid then it will display a message as invalid aadhar number.

INdian Site for ImmuniSaTion

Testcase No	10
Module	Citizen
User form	Registration Form
Input	Invalid Aadhar number
Expected Output	Invalid Aadhar number
Observed Output	Invalid Aadhar number
Remark	FAIL

The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/preregister_form.jsp. The page is titled "INSIST Indian Site of Immunisation". It contains a registration form with fields for District (Bijapur), State (Karnataka), Email ID (Tanushreekabbin@gmail.com), Password (redacted), doctor id (Tanu), and anganwadi id (Self). Below the form are "submit" and "reset" buttons. A modal dialog box titled "Message from webpage" displays the error message "Invalid Aadhar Number" with an exclamation mark icon. At the bottom of the browser window, there is a password storage prompt: "Would you like to store your password for localhost? More info" with "Yes" and "Not for this site" buttons, and a system status bar showing "Activate Windows Go to settings to activate Windows.", "8:21 PM", and "6/5/2019".

Test case 11: If all the fields of registration form are correct then registration will be successful and it will show an alert message successful registration.

INdian Site for ImmuniSaTion

Testcase No	11
Module	Citizen
User form	Registration Form
Input	All the registration fields are valid
Expected Output	Successfully Registered
Observed Output	Successfully Registered
Remark	PASS

The screenshot shows a web browser window for the 'INSIST' website at http://localhost:8080/insist_new/preregister.jsp. The page displays a registration form with fields for District, State, Email ID, Password, doctor id, and anganwadi id. The 'Email ID' field contains 'tanushree.kabbin20@gmail.com'. The 'Password' field is masked with dots. The 'doctor id' field contains 'Shrinivas' and the 'anganwadi id' field contains 'Self'. Below the form are 'submit' and 'reset' buttons. A modal dialog box titled 'Message from webpage' with a yellow exclamation icon displays the message 'Successfully Registered'. At the bottom of the browser, a password storage prompt asks 'Would you like to store your password for localhost?' with options 'Yes', 'Not for this site', and 'x'. The system tray shows the date and time as 6/5/2019, 8:37 PM.

Test case 12: If both username and password of Admin are blank then it will display alert message as Email should not be blank.

INdian Site for ImmuniSaTion

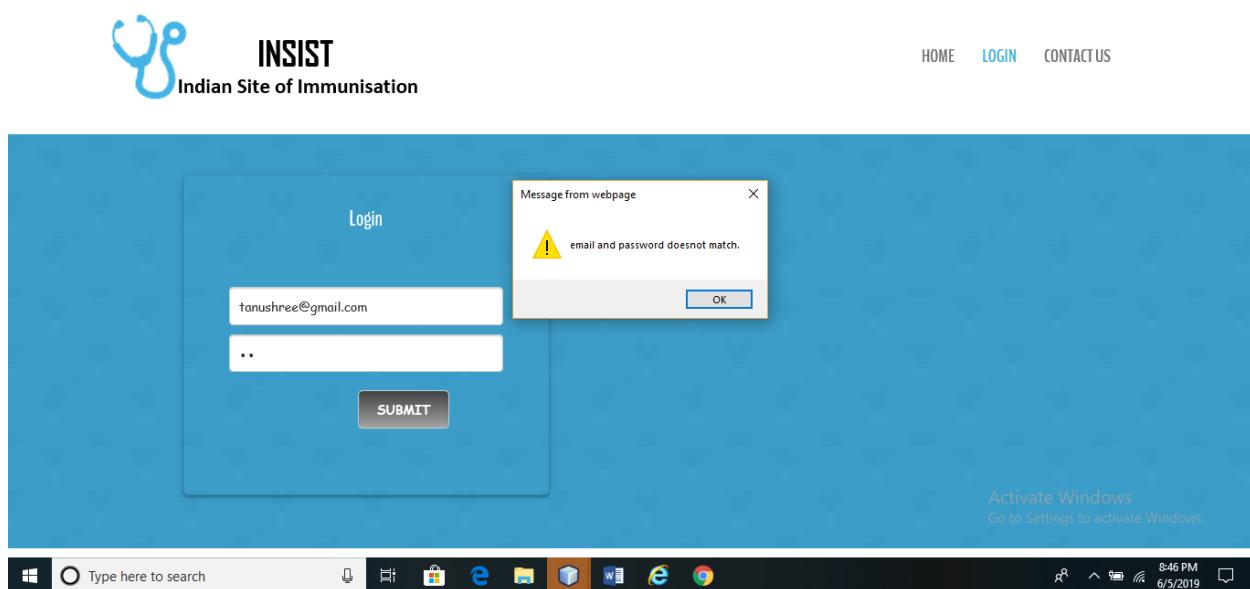
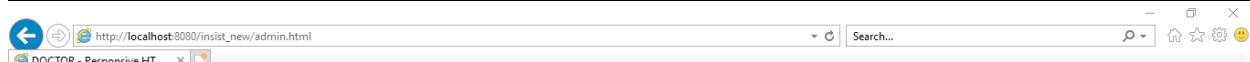
Testcase No	12
Module	Admin
User form	Login form
Input	Blank Userid and Password
Expected Output	Email should not be blank
Observed Output	Email should not be blank
Remark	FAIL



Test case 13: If username is correct and password is wrong then login will be unsuccessful and it will show an alert message showing email and password doesn't match

INdian Site for ImmuniSaTion

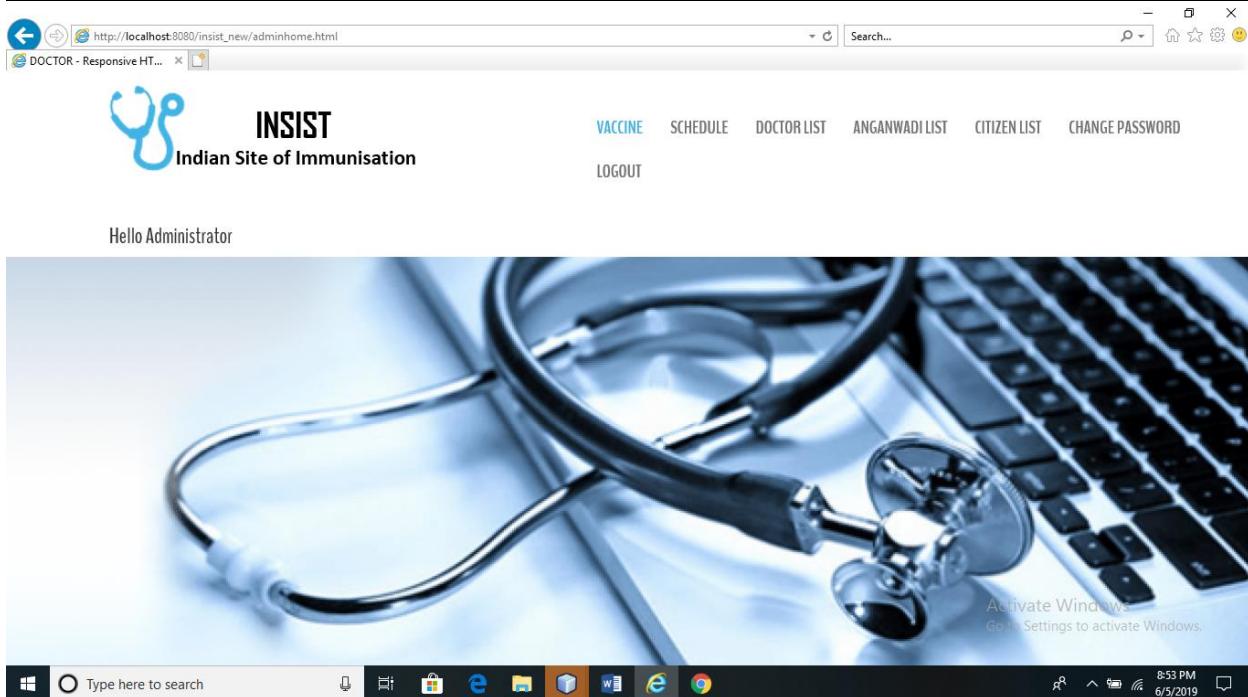
Testcase No	13
Module	Admin
User form	Login Form
Input	Valid User id and Invalid Password
Expected Output	Email and password doesnot match
Observed Output	Email and password doesnot match
Remark	FAIL



Test case 14: If both username and password of Admin is correct, then login will be successful and it will navigate to Admin's home page for further activity.

INdian Site for ImmuniSaTion

Testcase No	14
Module	Admin
User form	Login Form
Input	Valid user id and Valid Password
Expected Output	Successful login to Admin home page.
Observed Output	Successful login to Admin home page.
Remark	PASS



Test case 15: If all the fields of registration form are blank then it will show message then it will display fill the required fields

INdian Site for ImmuniSaTion

Testcase No	15
Module	Anganwadi
User form	Registration Form
Input	All the registration fields are blank
Expected Output	Fill the required fields
Observed Output	Fill the required fields
Remark	FAIL

The screenshot shows a web browser window displaying the 'INSIST' website at http://localhost:8080/insist_new/aregister.html. The page title is 'INSIST - Indian Site of Immunisation'. The registration form includes fields for Aadhaar Number, Name, Date, Address, City, and District. All these fields are highlighted with red boxes and contain validation error messages: 'This is a required field' for Name, 'Address is required' for Address, and 'City is required' for City. The District field also has a red box around it. The browser's status bar shows 'Activate Windows Go to Settings to activate Windows.' The taskbar at the bottom includes icons for File Explorer, Edge, and other system tools.

Test case 16: If all the fields of registration form are correct then registration will be successful and it will show an alert message successful registration.

INdian Site for ImmuniSaTion

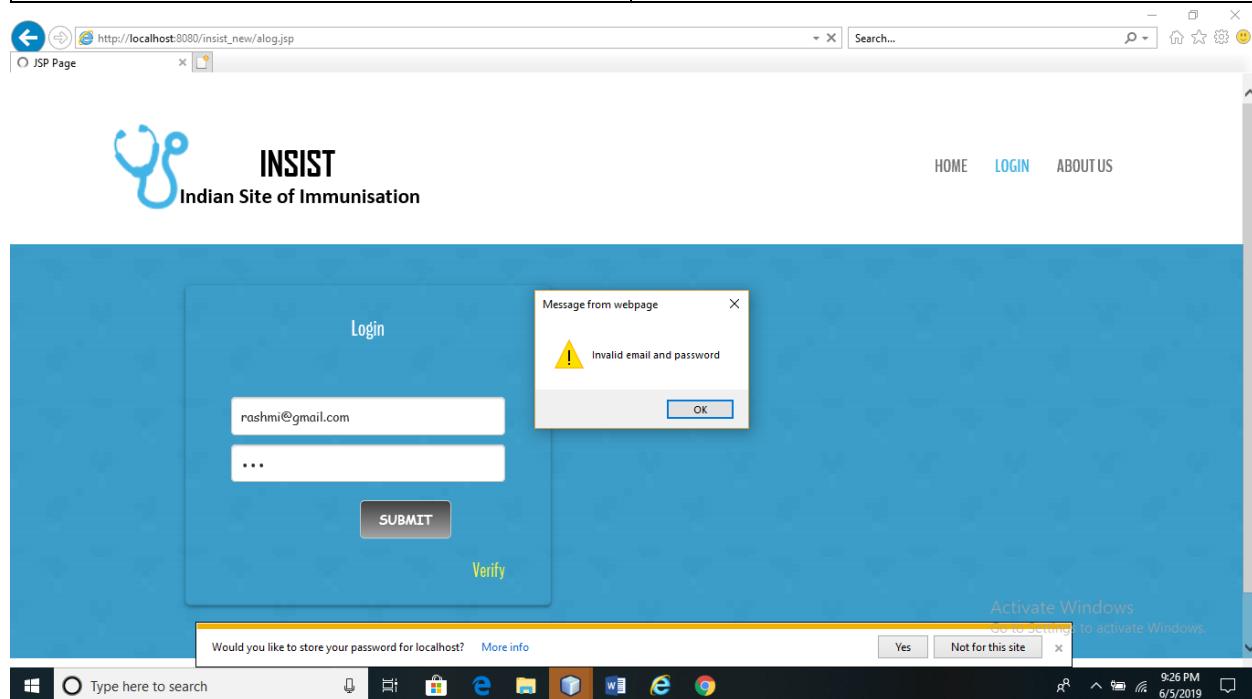
Testcase No	16
Module	Anganwadi
User form	Registration Form
Input	All the registration fields are valid
Expected Output	Successfully Registered
Observed Output	Successfully Registered
Remark	PASS

The screenshot shows a web browser window with the URL http://localhost:8080/insist_new/aregister.jsp. The page displays a registration form with fields for Address, City, District, State, and Email ID. All fields are populated with 'Bijapur'. A green 'submit' button is at the bottom. An 'OK' button is visible on a modal dialog titled 'Message from webpage' which says 'Successfully Registered'. The browser's address bar shows 'JSP Page'. The taskbar at the bottom includes icons for File Explorer, Edge, and other applications.

Test case 17: If username is correct and password is wrong then login will be unsuccessful and it will show an alert message showing invalid email and password.

INdian Site for ImmuniSaTion

Testcase No	17
Module	Anganwadi
User form	Login Form
Input	Valid User id and Invalid Password
Expected Output	Invalid User id and Password.
Observed Output	Invalid User id and Password.
Remark	FAIL



9. Conclusion

Indian site for immunisation application provides registration process for citizens where he/she can register and get information related to a particular vaccines. This application recommends vaccines for a person since birth till sixty five years of age. This web application also provides registration process for doctors where they can vaccinate a particular person based on his/her age. Citizens can view the upcoming vaccines and can take printout these vaccines

10. Future Enhancement

- Vaccines are very important for the animals for their healthy living so in this web application we can also generate the vaccine schedules for the pets.

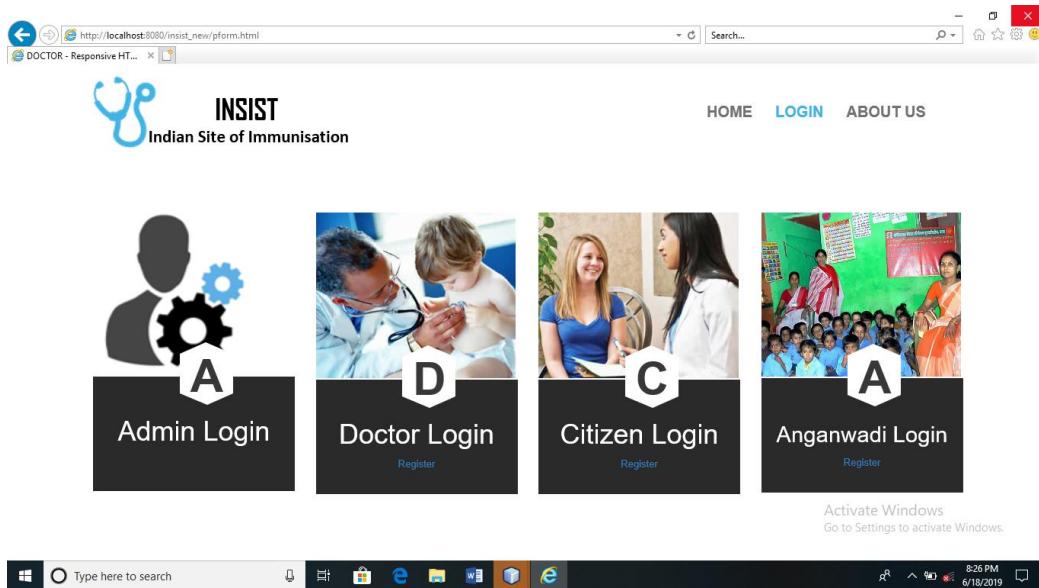
11. References

- Centers for Disease and Control and Prevention (CDC). Parent Guide to Childhood immunizations. <http://www.cdc.gov/vaccines/pubs/parents-guide/default.html>.
- CDC Vaccines and immunizations. Vaccines and preventable Diseases. Meningococcal who needs to be vaccination? <http://www.cdc.gov/vaccines/vpd-vac/mening/whovaccinate.htm>.
- Pediatrics Supersite Heightened awareness, renewed commitment needed to eradicate polio. <http://www.pediatricsupersite.com/view.aspx?rid=40566>.
- <http://www.mayoclinic.com/health/vaccines/CC00014>.

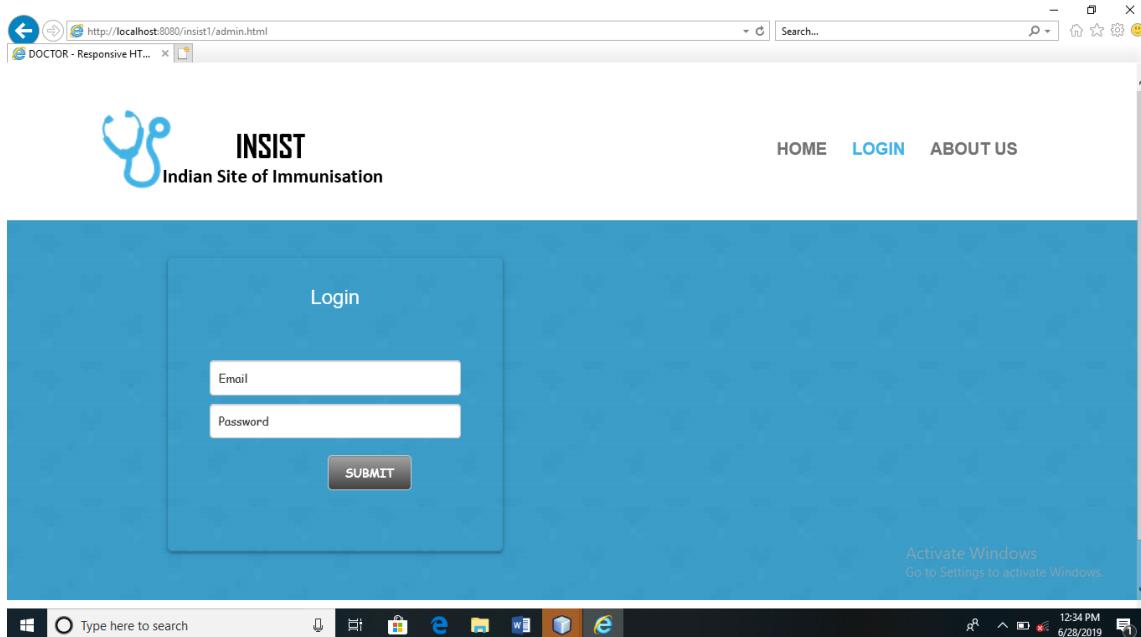
11. Appendices

User Manual

- Login page

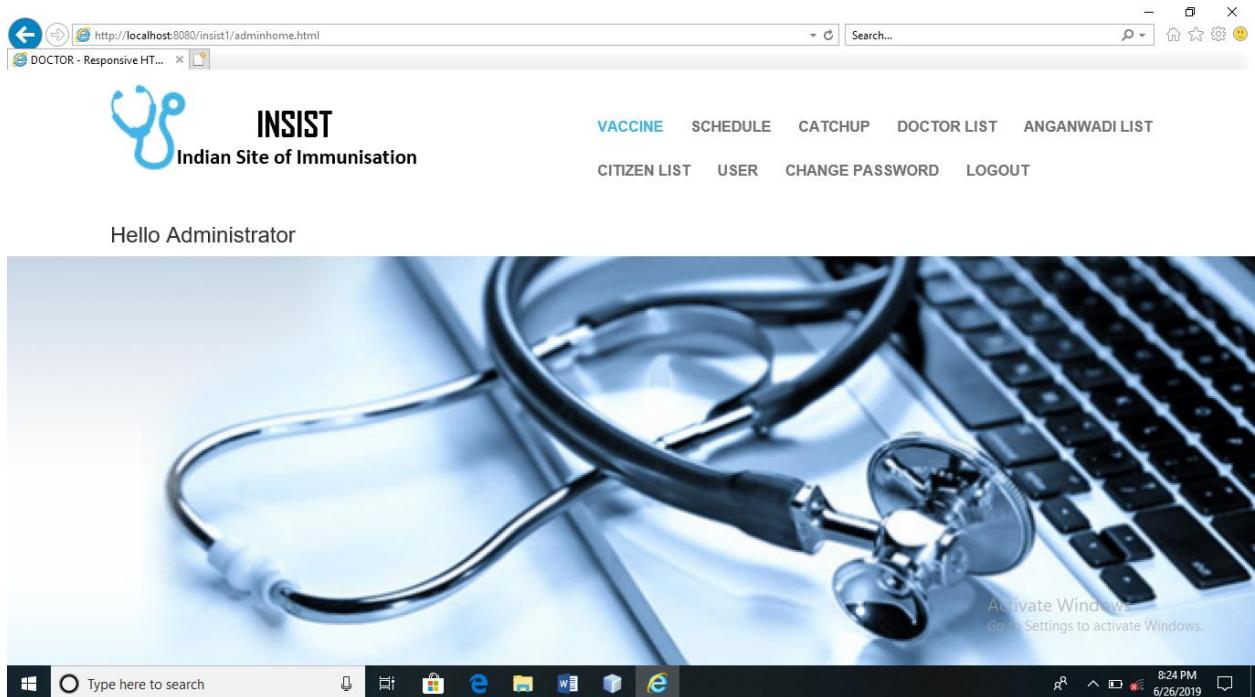


- Admin Login



- **Admin Home Page**

This is the home page of admin where admin can add, delete, and update vaccines and their schedules and can view the list of doctors, citizens and anganwadi and even he can block the inactive users.



INdian Site for ImmuniSaTion

- This is the vaccine form in which admin can add the new vaccines.

The screenshot shows a web browser window with the URL <http://localhost:8080/insist1/vaccine.html>. The page has a header with the logo 'INSIST Indian Site of Immunisation'. On the right, there are navigation links: HOME, EDIT, VIEW, and LOGOUT. The main content area is titled 'FILL DETAILS' and contains four input fields: 'Vaccine Name', 'Age group', 'Purpose', and 'Condition'. Below the input fields, there is a note: 'Activate Windows Go to Settings to activate Windows.' At the bottom, there is a search bar and a taskbar with various icons.

- This is the page in which admin can view the vaccines.

The screenshot shows a web browser window with the URL <http://localhost:8080/insist1/view.jsp>. The page has a header with the logo 'INSIST Indian Site of Immunisation'. On the right, there are navigation links: HOME, EDIT, PRINT, and LOGOUT. The main content area displays a table with five rows, each representing a vaccine. The columns are labeled: vaccine_id, vaccine_name, age_group, purpose, condition, and precaution. The table shows the following data:

vaccine_id	vaccine_name	age_group	purpose	condition	precaution
1	Anthrax	18-65years	anthrax is a serious condition caused by bacillus anthracis a spore forming gram positive rod	it is not routinely used. it is recommended for certain people who are at risk of exposure to B anthracis or unvaccinated	paitents who had severe allergic reaction to pervious dose of the vaccine
2	chickenpox	12months-12years	chickenpox is caused by varicella zoster virus a DNA virus of the herpesviridae family	vaccine should not be used in pregnant women. Women should wait atleast 28days after vaccination	paitents who had severe allergic reaction to previous dose of the vaccine.
3	Hepatitis B	6-18months	Hepatitis B is caused by virus a DNA virus of the hepadnaviridae family. It is a serious condition which can become chronic and lead to liver cirrhosis.	it should be vaccinated during pregnancy because of high risk of chronic hepatitis in newborns due to vertical transmission.	paitents who had severe allergic reaction to previous dose of the vaccine or anyone who is severely allergic to yeast.
4	Meningococci	0-10Years	It is a gram-negative bacteria is a common cause of meningitis and septicemia outbreaks of this will occur in persons living in close contact like college students living in dormitories and army recruits	Routine vaccination for children 10years or younger is not currently recommended. children aged 2months-10years should be immunized with a conjugated vaccine if they are at increased risk of this infection	A person who as severe allergic reaction to a previous dose or who is allergic to any component of the vaccine
5	RotaVirus	2-8Months	It is an importan severe gastroenteritis in infants and young children it is an RNA virus of the reoviridae family transmitted by oral fecal route	All children should be vaccinated against Rotavirus using either RV5 or RV1 children who have or had rotavirus infection should still receive the complete course	It may not be suitable for some immunocompromised children child with mild acute illness including mild gastroenteritis can be vaccinated

At the bottom, there is a search bar and a taskbar with various icons.

INdian Site for ImmuniSaTion

- Schedule Form

FILL DETAILS

vaccine id	chickenpox
interval from	
interval to	
unit	
Note	

Submit

Activate Windows
Go to Settings to activate Windows.

- Admin can add, delete and update the schedule of a vaccines.

Schedule_id	Vaccine_id	Interval_from	Interval_to	Unit	Note	Edit	Delete
2	Anthrax	0	18	months	5 doses schedule is currently practiced given as 0 4 weeks 6 12 and 18 months. an annual booster dose for those who continue to be at risk.antimicrobial therapy as per recommendations is to be used	Edit	Delete
3	Meningococci	2	15	months	A 4-dose schedule 2,4,6,12-15months is recommended when vaccination is started at 2months age.	Edit	Delete
4	RotaVirus	2	6	month	A 3-dose schedule is used given at 2 4 and 6 months of age. vaccination should be completed before the end of the 8th month of life	Edit	Delete

Activate Windows
Go to Settings to activate Windows.

INdian Site for ImmuniSaTion

- List of Citizens and Doctors**

Admin can view the number of people registered in this web application such as doctors, citizens, anganwadi.

The screenshot shows the homepage of the INdian Site for ImmuniSaTion. At the top, there is a header with a search bar and various icons. Below the header, the logo 'INSIST Indian Site of Immunisation' is displayed. On the right side of the header, there are 'HOME' and 'LOGOUT' links. The main content area is titled 'Citizen List' and contains a table with three rows of data. The table columns are: cid, aadhar, name, dob, gender, contact, address, city, and email.

cid	aadhar	name	dob	gender	contact	address	city	email
13	984571236485	rani	1990-08-29	female	8856478963	near mvp bijapur	Bijapur	goturranicpcap@gmail.com
14	984512478545	arihant	1991-10-08	male	8954612354	near jain mandir bagalkot	Bagalkot	tanushreekabbin@gmail.com
15	984512458965	leena	1987-11-01	female	6363458964	near keshewpur chennai	Chennai	leena.arul27@gmail.com

The screenshot shows the homepage of the INdian Site for ImmuniSaTion. At the top, there is a header with a search bar and various icons. Below the header, the logo 'INSIST Indian Site of Immunisation' is displayed. On the right side of the header, there are 'HOME' and 'LOGOUT' links. A message 'Activate Windows Go to Settings to activate Windows.' is visible. The main content area is titled 'Doctor List' and contains a table with five rows of data. The table columns are: doc_id, register_no, license_no, name, gender, address, working_place, experience, city, and email.

doc_id	register_no	license_no	name	gender	address	working_place	experience	city	email
1	111	333	Tanu	on	Bagalkot	Private	4	Bagalkot	tanu@gmail.com
2	4545	5555	rosy	on	Vidyanagar banglore	private	4	Banglore	rosy@gmail.com
3	789	48965	Abhishek	on	Ahemdabad	Private	4	Ahemdabad	abhishek.pirale@gmail.com
4	1245	7895	rashmi	female	jain peth bgk	private	4	Bagalkot	rashmikundaragi7305@gmail.com
5	2556	7789	Dhanush	male	near MVP bagalkot	private	3	Bagalkot	tanushreekabbin@gmail.com

The screenshot shows the homepage of the INdian Site for ImmuniSaTion. At the top, there is a header with a search bar and various icons. Below the header, the logo 'INSIST Indian Site of Immunisation' is displayed. On the right side of the header, there are 'HOME' and 'LOGOUT' links. A message 'Activate Windows Go to Settings to activate Windows.' is visible. The main content area is titled 'Doctor List' and contains a table with five rows of data. The table columns are: doc_id, register_no, license_no, name, gender, address, working_place, experience, city, and email.

doc_id	register_no	license_no	name	gender	address	working_place	experience	city	email
1	111	333	Tanu	on	Bagalkot	Private	4	Bagalkot	tanu@gmail.com
2	4545	5555	rosy	on	Vidyanagar banglore	private	4	Banglore	rosy@gmail.com
3	789	48965	Abhishek	on	Ahemdabad	Private	4	Ahemdabad	abhishek.pirale@gmail.com
4	1245	7895	rashmi	female	jain peth bgk	private	4	Bagalkot	rashmikundaragi7305@gmail.com
5	2556	7789	Dhanush	male	near MVP bagalkot	private	3	Bagalkot	tanushreekabbin@gmail.com

INdian Site for ImmuniSaTion

- **Catchup vaccine Form**

In this form admin can add catchup vaccine schedule.

- Admin can update his password.

INdian Site for ImmuniSaTion

- **Citizen Login Form**

Citizen can login by entering the userid and the password.

The screenshot shows a web browser window with the URL <http://localhost:8080/insist1/pleg.html>. The page title is "DOCTOR - Responsive HT...". The main content is a "Login" form with fields for "Email" and "Password", a "SUBMIT" button, and a "Verify" link. The top right corner of the page displays "Activate Windows Go to Settings to activate Windows". The Windows taskbar at the bottom includes the Start button, a search bar, and icons for File Explorer, Edge, and other system tools.

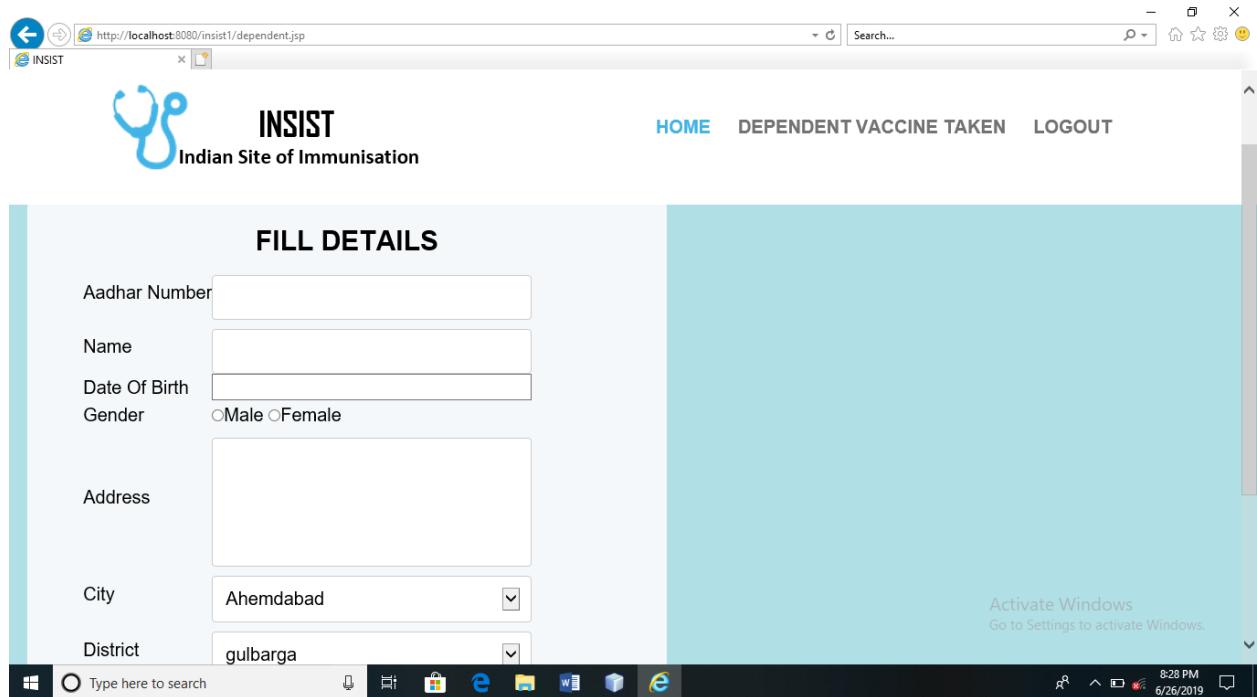
- In this form citizen can view the list of vaccines taken

The screenshot shows a web browser window with the URL http://localhost:8080/insist1/cz_taken.jsp. The page title is "DOCTOR - Citizen". The main content is a table titled "Vaccine Taken List" with one row of data. The table columns are Sno, Doctor, Vaccine, Date, and Due Date. The data in the table is: Sno 1, Doctor Tanu, Vaccine chickenpox, Date 25-Apr-2019, and Due Date 31-Dec-2019. The Windows taskbar at the bottom includes the Start button, a search bar, and icons for File Explorer, Edge, and other system tools.

- **Dependent Form**

INdian Site for ImmuniSaTion

After citizen login, citizen can add his/her dependent by filling all the required fields and can view the dependent's vaccine schedule.



The screenshot shows a web browser window with the URL <http://localhost:8080/insist1/dependent.jsp>. The page title is "INSIST Indian Site of Immunisation". The main content area is titled "FILL DETAILS" and contains fields for Aadhar Number, Name, Date Of Birth, Gender (Male/Female), Address, City (Ahmedabad), and District (gulbarga). The browser toolbar at the top includes standard icons for back, forward, search, and refresh. The taskbar at the bottom shows the Windows logo, a search bar, and several pinned application icons.



The screenshot shows a web browser window with the URL http://localhost:8080/insist1/view_dependent.jsp. The page title is "DOCTOR - Citizen". The main content area is titled "Dependent Vaccine Details" and displays a table with the following data:

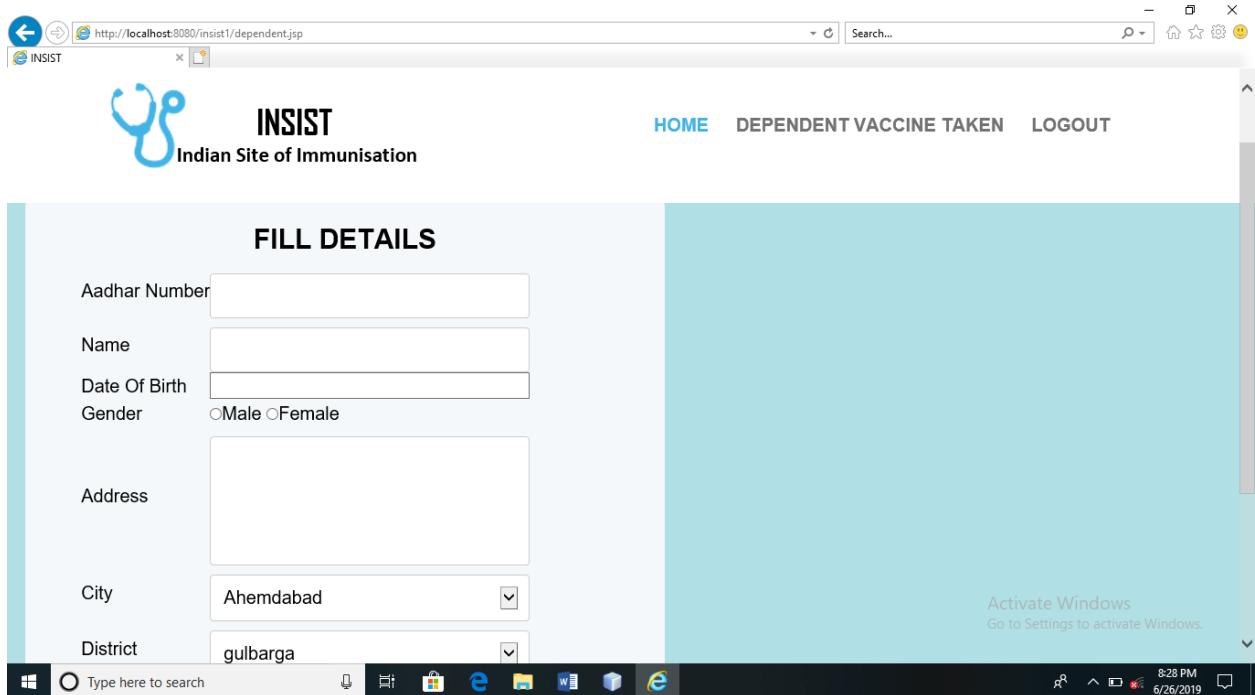
Sino	Citizen	Aadhar	Name	Date of Birth	Gender	Vaccine		
						Vaccine	Vaccine Taken	Vaccine Schedule
1	14	965481230124	Pihu	03-Feb-2008	female	Vaccine	Taken	Schedule

The browser toolbar and taskbar are visible at the top and bottom of the screen respectively.

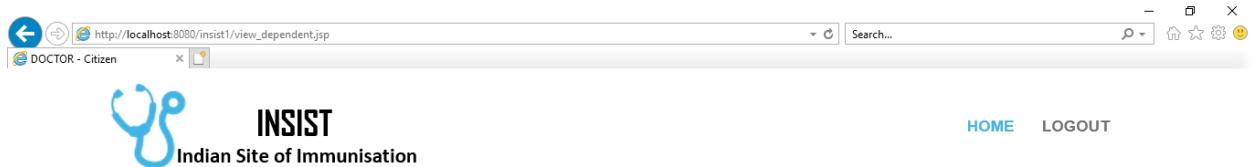
INdian Site for ImmuniSaTion

- **Dependent Form**

Citizen can register his/her dependent in this web application and can view the dependent schedule.



The screenshot shows a web browser window with the URL <http://localhost:8080/insist1/dependent.jsp>. The page title is "INSIST Indian Site of Immunisation". The main content area is titled "FILL DETAILS" and contains fields for Aadhar Number, Name, Date Of Birth, Gender (Male/Female), Address, City (Ahemdabad), and District (gulbarga). A sidebar on the right says "Activate Windows Go to Settings to activate Windows." The browser's address bar shows "DOCTOR - Citizen". The taskbar at the bottom includes icons for File, Home, Start, Task View, Microsoft Edge, File Explorer, Word, Excel, and a search bar.



The screenshot shows a web browser window with the URL http://localhost:8080/insist1/view_dependent.jsp. The page title is "INSIST Indian Site of Immunisation". The main content area is titled "Dependent Vaccine Details" and displays a table of vaccine information. The table has columns for Sno, Citizen, Aadhar, Name, Date of Birth, Gender, and three rows under the "Vaccine" section: Vaccine, Vaccine Taken, and Vaccine Schedule. The table shows one row of data: Sno 1, Citizen 14, Aadhar 965481230124, Name Pihu, Date of Birth 03-Feb-2008, Gender female, Vaccine Vaccine, Vaccine Taken Taken, and Vaccine Schedule Schedule. A sidebar on the right says "Activate Windows Go to Settings to activate Windows." The browser's address bar shows "DOCTOR - Citizen". The taskbar at the bottom includes icons for File, Home, Start, Task View, Microsoft Edge, File Explorer, Word, Excel, and a search bar.