

VACCINATION MANAGEMENT SYSTEM

GROUP MEMEBERS:

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SRS(System Requirements Specifications)

1. INTRODUCTION:

This document provides a detailed Software Requirements Specification (SRS) for the Vaccination Management System. The system is designed to manage and track vaccination records for beneficiaries, including scheduling reminders and updating vaccination statuses based on age groups and reminders.

1.1 PURPOSE:

The Vaccination Management System aims to provide an integrated platform for managing beneficiary details, vaccination records, and vaccine reminders. It will support the following key functionalities:

- Managing beneficiary information.
- Tracking vaccination records and statuses.
- Setting vaccine reminders for beneficiaries.
- Identifying applicable vaccines based on the beneficiary's age group.
- Generating and maintaining relevant reports for users.

1.2 Scope

This system covers the following modules:

- **User Management:** Managing users and their login credentials.
- **Beneficiary Management:** Managing beneficiary details (name, date of birth, gender, phone number).
- **Vaccine Management:** Managing vaccine information, including vaccine name, description, and age group.
- **Vaccination Record Management:** Storing vaccination records for each beneficiary, including status and vaccination date.
- **Reminder Management:** Sending reminders for scheduled or pending vaccines to beneficiaries.
- **Age-based Vaccine Eligibility:** Determining applicable vaccines for a beneficiary based on their age.

The system is designed to work with a relational database (MySQL) and supports the CRUD operations for beneficiaries, users, vaccines, vaccine records, and reminders.

2. SYSTEM OVERVIEW:

The Vaccination Management System allows administrators or users to register beneficiaries, input vaccination records, schedule reminders, and check vaccine eligibility based on age. Beneficiaries will have their vaccination statuses updated automatically when reminders are triggered.

2.1 System Features

1. User Management:

- Store user details (phone number and password).
- Allow users to log in and access their dashboard.

2. Beneficiary Management:

- Register beneficiaries with personal details (name, date of birth, gender, phone number).
- Link beneficiaries with user accounts based on their phone number.

3. Vaccine Management:

- Store vaccine information such as name, description, and applicable age group.

4. Vaccination Record Management:

- Record vaccination events for beneficiaries, including status (completed, pending, scheduled).
- Update vaccination statuses when required (e.g., when a reminder is triggered).

5. Reminder Management:

- Set vaccination reminders for beneficiaries.
- Ensure reminders trigger the scheduling of vaccines for those who are overdue.

6. Age-based Vaccine Eligibility:

- Automatically calculate the age of a beneficiary and check if they are eligible for a vaccine based on the vaccine's age group.

7. Reports:

- Allow users to view their beneficiaries' vaccination records.
- Generate reports on pending, completed, and scheduled vaccinations.
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3. Functional Requirements

3.1 User Management

● Create User:

- Input: Phone number (10 digits), Password.
- Function: Add a new user to the system with a unique phone number.
- Output: Confirmation message of user creation.

- **Authenticate User:**
 - Input: Phone number, Password.
 - Function: Validate user login credentials.
 - Output: Access to user dashboard or an error message on invalid credentials.

3.2 Beneficiary Management

- **Create Beneficiary:**
 - Input: Beneficiary's name, date of birth, gender, phone number (linked to an existing user).
 - Function: Add a new beneficiary to the system.
 - Output: Confirmation message of beneficiary registration.
- **Update Beneficiary:**
 - Input: Updated beneficiary details.
 - Function: Modify details for an existing beneficiary.
 - Output: Confirmation message of beneficiary update.

3.3 Vaccine Management

- **Create Vaccine:**
 - Input: Vaccine name, description, and age group.
 - Function: Add a new vaccine to the system.
 - Output: Confirmation message of vaccine creation.
- **Update Vaccine:**
 - Input: Updated vaccine details.
 - Function: Modify details for an existing vaccine.
 - Output: Confirmation message of vaccine update.

3.4 Vaccination Record Management

- **Add Vaccination Record:**
 - Input: Beneficiary ID, Vaccine ID, vaccination date, status.
 - Function: Store vaccination record for a beneficiary.
 - Output: Confirmation message of vaccination record added.
- **Update Vaccination Record:**
 - Input: Beneficiary ID, Vaccine ID, new status (e.g., "Completed").
 - Function: Update the vaccination status of a beneficiary.
 - Output: Confirmation message of record update.

3.5 Reminder Management

- **Create Reminder:**
 - Input: Beneficiary ID, Vaccine ID, reminder date.
 - Function: Set a reminder for a beneficiary to get vaccinated.
 - Output: Confirmation message of reminder creation.
- **Trigger Vaccine Reminder:**
 - Input: Reminder for a specific beneficiary and vaccine.
 - Function: Update vaccination record status to "Scheduled" when a reminder is set.

3.6 Age-based Vaccine Eligibility

- **Get Applicable Vaccines:**
 - Input: Beneficiary ID.
 - Function: Check the beneficiary's age and display all applicable vaccines based on their age group.
 - Output: List of applicable vaccines with their details (name, description, age group).

6. System Design

6.1 User Table

Column Name	Data Type	Constraints	Description
user_id	INT	PRIMARY KEY , AUTO_INCREMENT	Unique identifier for each user.
phone_number	VARCHAR(15)	NOT NULL , UNIQUE	Phone number, used for login.
password	VARCHAR(255)	NOT NULL	Encrypted password for authentication.
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP	Timestamp of user creation.
updated_at	DATETIME	DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP	Timestamp of last update.

6.2 Beneficiary Table

Column Name	Data Type	Constraints	Description
beneficiary_id	INT	PRIMARY KEY , AUTO_INCREMENT	Unique identifier for each beneficiary.
user_id	INT	NOT NULL , FOREIGN KEY (user_id) REFERENCES User(user_id)	Links the beneficiary to a user.
name	VARCHAR(255)	NOT NULL	Beneficiary's full name.
dob	DATE	NOT NULL	Date of birth of the beneficiary.
gender	ENUM('M', 'F', 'O')	NOT NULL	Gender of the beneficiary (M=Male, F=Female, O=Other).
phone_number	VARCHAR(15)	NOT NULL	Beneficiary's phone number.
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP	Timestamp of beneficiary registration.
updated_at	DATETIME	DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP	Timestamp of last update.

6.3 Vaccine Table

Column Name	Data Type	Constraints	Description
vaccine_id	INT	PRIMARY KEY , AUTO_INCREMENT	Unique identifier for each vaccine.
name	VARCHAR(255)	NOT NULL	Name of the vaccine.
description	TEXT	NOT NULL	Description of the vaccine.
age_group	VARCHAR(50)	NOT NULL	Age group eligible for the vaccine.
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP	Timestamp when the vaccine was added.
updated_at	DATETIME	DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP	Timestamp of last update.

6.4 Vaccination Record Table

Column Name	Data Type	Constraints	Description
record_id	INT	PRIMARY KEY , AUTO_INCREMENT	Unique identifier for each vaccination record.
beneficiary_id	INT	NOT NULL , FOREIGN KEY (beneficiary_id) REFERENCES Beneficiary(beneficiary_id)	Links the record to a beneficiary.
vaccine_id	INT	NOT NULL , FOREIGN KEY (vaccine_id) REFERENCES Vaccine(vaccine_id)	Links the record to a specific vaccine.
vaccination_date	DATE	NOT NULL	Date when the vaccination was administered.
status	ENUM('Pending', 'Completed', 'Scheduled')	NOT NULL	Current vaccination status.
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP	Timestamp when the record was created.
updated_at	DATETIME	DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP	Timestamp of last update.

6.5 Reminder Table

Column Name	Data Type	Constraints	Description
reminder_id	INT	PRIMARY KEY , AUTO_INCREMENT	Unique identifier for each reminder.
beneficiary_id	INT	NOT NULL , FOREIGN KEY (beneficiary_id) REFERENCES Beneficiary(beneficiary_id)	Links the reminder to a beneficiary.
vaccine_id	INT	NOT NULL , FOREIGN KEY (vaccine_id) REFERENCES Vaccine(vaccine_id)	Links the reminder to a specific vaccine.
reminder_date	DATE	NOT NULL	Date when the reminder should trigger.
status	ENUM('Pending', 'Triggered')	NOT NULL	Reminder status (Pending/Triggered).
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP	Timestamp when the reminder was created.
updated_at	DATETIME	DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP	Timestamp of last update.

7. NORMALIZATION:

A database is considered to be in Third Normal Form (3NF) if:

- 1. It is in Second Normal Form (2NF).**
- 2. It has no transitive dependencies**

7.1. User Table

- 1NF (First Normal Form): The table has atomic (indivisible) values in each column, and each record is unique. The `phone_number` is a unique key, and there are no repeating groups of attributes.
- 2NF (Second Normal Form): The table is in 1NF, and every non-key attribute is fully dependent on the primary key. In this case, all columns (e.g., `phone_number`, `password`, `created_at`, `updated_at`) are directly related to the unique user identifier (`user_id`).
- 3NF (Third Normal Form): The table is in 2NF, and there are no transitive dependencies. For example, the `phone_number` doesn't depend on the `created_at` or `updated_at` fields. These columns are independent of each other.

Conclusion: The User table is in 3NF.

7.2. Beneficiary Table

- 1NF (First Normal Form): Each column has atomic values, and there is a unique identifier (`beneficiary_id`). Each record is distinct, and there are no repeating groups of attributes.
- 2NF (Second Normal Form):
 - The table is in 1NF, and all non-key attributes are fully functionally dependent on the primary key (`beneficiary_id`).
 - `name`, `dob`, `gender`, `phone_number`, and other attributes are fully dependent on the `beneficiary_id` and not partially dependent on any other attribute.
- 3NF (Third Normal Form):
 - The table is in 2NF, and there are no transitive dependencies. For instance, the `phone_number` and `gender` columns do not depend on each other.
 - `phone_number` is not determined by `dob` or `gender`, so no transitive dependency exists.

Conclusion: The Beneficiary table is in 3NF.

7.3. Vaccine Table

- 1NF (First Normal Form): The table has atomic values for all columns, such as `vaccine_name`, `description`, `age_group`, etc. Each record is unique, and there are no repeating groups.
- 2NF (Second Normal Form):
 - The table is in 1NF, and every non-key column is fully dependent on the primary key (`vaccine_id`). There is no partial dependency (i.e., no column is dependent on only a part of the primary key).
- 3NF (Third Normal Form):
 - The table is in 2NF, and there are no transitive dependencies. The `description` of the vaccine and `age_group` are dependent on `vaccine_id`, and not on any other non-key attribute.

Conclusion: The Vaccine table is in 3NF.

7.4. Vaccination Record Table

- 1NF (First Normal Form): The table has atomic values, and each record is uniquely identified by the `record_id` column. There are no repeating groups of attributes.
- 2NF (Second Normal Form):

- The table is in 1NF, and every non-key attribute is fully dependent on the primary key (`record_id`).
- `beneficiary_id` and `vaccine_id` are foreign keys, establishing relationships to other tables, and the remaining attributes (`vaccination_date`, `status`) depend on the entire composite key formed by `record_id`.
- 3NF (Third Normal Form):
 - The table is in 2NF, and there are no transitive dependencies. For instance, `vaccination_date` and `status` are directly dependent on `record_id`, not on any other non-key attribute.

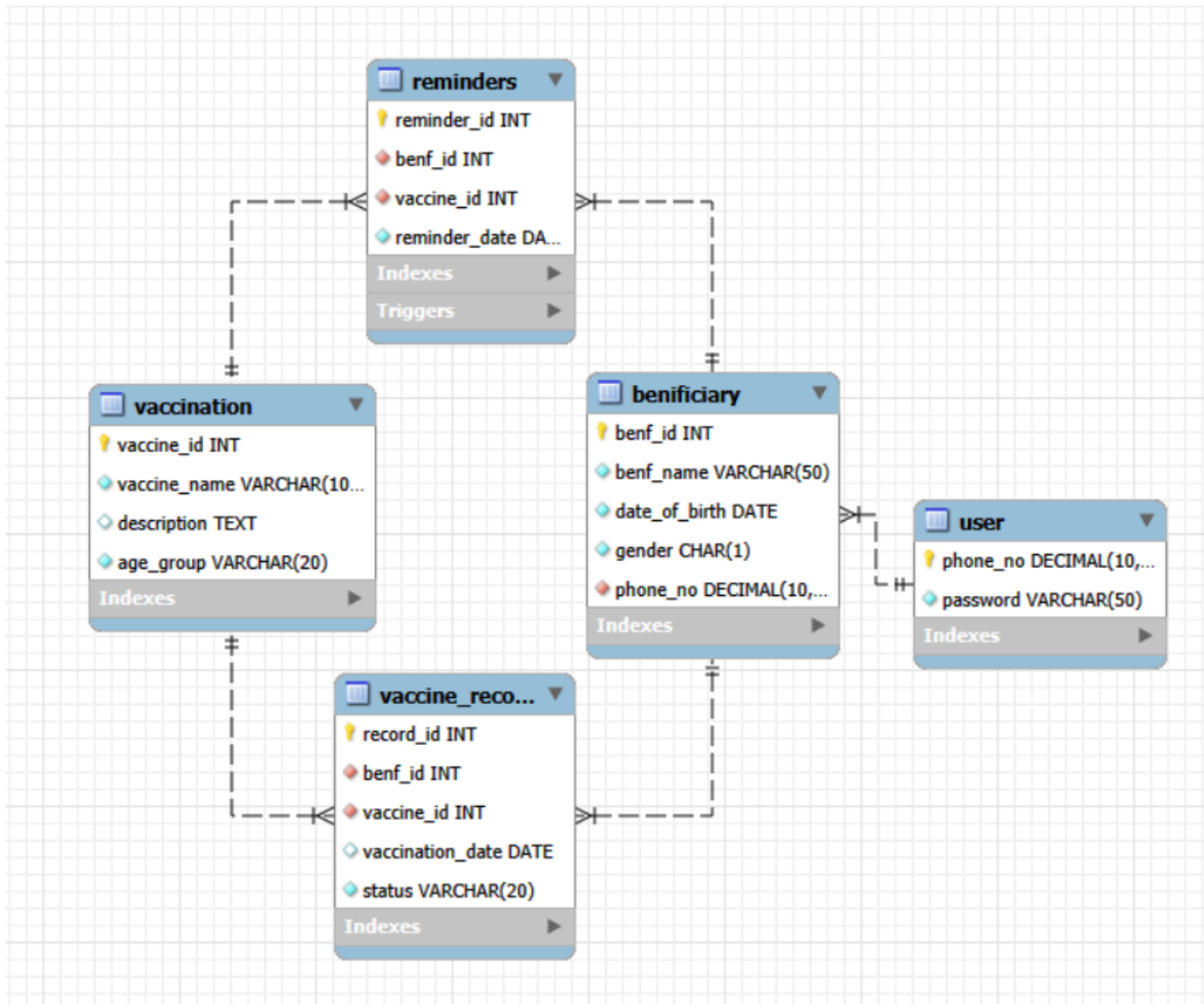
Conclusion: The Vaccination_Record table is in 3NF.

7.5. Reminder Table

- 1NF (First Normal Form): The table has atomic values for all columns, and each record is uniquely identified by the `reminder_id`. There are no repeating groups of attributes.
- 2NF (Second Normal Form):
 - The table is in 1NF, and every non-key attribute is fully dependent on the primary key (`reminder_id`).
 - `beneficiary_id` and `vaccine_id` are foreign keys, establishing relationships to other tables, and the remaining attributes (`reminder_date`, `status`) are dependent on the entire composite key.
- 3NF (Third Normal Form):
 - The table is in 2NF, and there are no transitive dependencies. The `reminder_date` and `status` columns are only dependent on `reminder_id`.

Conclusion: The Reminder table is in 3NF.

8. ENTITY RELATIONSHIP DIAGRAM (ERD):



9.MYSQL QUERIES:

9.1 Creating Database:

```
create database miniproject;
```

```
use miniproject;
```

9.2 Create user Table:

```
create table user(  
phone_no numeric(10) primary key,  
password varchar(50) not null  
);
```

9.3 Create BEneficiary Table:

```
create table benificiary (  
benf_id int primary key,  
benf_name varchar(50) not null,  
date_of_birth date not null,  
gender char not null,  
phone_no numeric(10) not null,  
foreign key(phone_no) references user(phone_no)  
);
```

9.4 Create Vaccination Table:

```
create table Vaccination (  
vaccine_id INT PRIMARY KEY,  
vaccine_name VARCHAR(100) not null,  
description TEXT,  
age_group VARCHAR(20) not null  
);
```

9.5 Create Vaccine-record Table:

```
create table Vaccine_Record (  
record_id INT PRIMARY KEY,
```

```
benf_id INT not null,  
  
vaccine_id INT not null,  
  
vaccination_date DATE,  
  
status VARCHAR(20) not null,  
  
FOREIGN KEY(benf_id) REFERENCES beneficiary(benf_id),  
  
FOREIGN KEY(vaccine_id) REFERENCES Vaccination(vaccine_id)  
  
);
```

9.6 Create Reminders Table:

```
create table reminders (  
  
reminder_id INT PRIMARY KEY,  
  
benf_id INT not null,  
  
vaccine_id INT not null,  
  
reminder_date DATE not null,  
  
FOREIGN KEY (benf_id) REFERENCES beneficiary(benf_id),  
  
FOREIGN KEY (vaccine_id) REFERENCES Vaccination(vaccine_id)  
  
);
```

9.7 Inserting Vaccines into Vaccination:

```
insert into vaccination values  
  
(701, 'BCG', 'Prevents Tuberculosis', '0'),  
  
(702, 'Hepatitis B (Birth Dose)', 'Prevents Hepatitis B', '0'),  
  
(703, 'OPV (0 Dose)', 'Prevents Polio', '0'),  
  
(704, 'Hepatitis B (2nd Dose)', 'Prevents Hepatitis B', '0.1'),  
  
(705, 'OPV (1st Dose)', 'Prevents Polio', '0.1'),  
  
(706, 'DPT (1st Dose)', 'Prevents Diphtheria, Pertussis, and Tetanus', '0.1'),  
  
(707, 'Hib (1st Dose)', 'Prevents Haemophilus influenzae type b', '0.1'),  
  
(708, 'Rotavirus (1st Dose)', 'Prevents Rotavirus infections', '0.1'),  
  
(709, 'PCV (1st Dose)', 'Prevents Pneumococcal infections', '0.1'),  
  
(710, 'Hepatitis B (3rd Dose)', 'Prevents Hepatitis B', '0.2'),  
  
(711, 'OPV (2nd Dose)', 'Prevents Polio', '0.2'),  
  
(712, 'DPT (2nd Dose)', 'Prevents Diphtheria, Pertussis, and Tetanus', '0.2'),
```

(713, 'Hib (2nd Dose)', 'Prevents Haemophilus influenzae type b', '0.2'),
(714, 'Rotavirus (2nd Dose)', 'Prevents Rotavirus infections', '0.2'),
(715, 'PCV (2nd Dose)', 'Prevents Pneumococcal infections', '0.2'),
(716, 'OPV (3rd Dose)', 'Prevents Polio', '0.3'),
(717, 'DPT (3rd Dose)', 'Prevents Diphtheria, Pertussis, and Tetanus', '0.3'),
(718, 'Hib (3rd Dose)', 'Prevents Haemophilus influenzae type b', '0.3'),
(719, 'Rotavirus (3rd Dose)', 'Prevents Rotavirus infections', '0.3'),
(720, 'PCV (3rd Dose)', 'Prevents Pneumococcal infections', '0.3'),
(721, 'Measles-Rubella (1st Dose)', 'Prevents Measles and Rubella', '1'),
(722, 'JE (1st Dose)', 'Prevents Japanese Encephalitis (endemic areas)', '1'),
(723, 'DPT (1st Booster)', 'Prevents Diphtheria, Pertussis, and Tetanus', '1.5'),
(724, 'OPV (Booster)', 'Prevents Polio', '1.5'),
(725, 'Measles-Rubella (2nd Dose)', 'Prevents Measles and Rubella', '1.5'),
(726, 'JE (2nd Dose)', 'Prevents Japanese Encephalitis (endemic areas)', '1.5'),
(727, 'PCV (Booster)', 'Prevents Pneumococcal infections', '1.5'),
(728, 'DPT (2nd Booster)', 'Prevents Diphtheria, Pertussis, and Tetanus', '5'),
(729, 'Td (10-12 Years)', 'Prevents Tetanus and Diphtheria', '12'),
(730, 'Td (Booster)', 'Prevents Tetanus and Diphtheria', '16'),
(731, 'TT (Women of Childbearing Age)', 'Prevents Tetanus and Neonatal Tetanus', '16'),
(732, 'Influenza', 'Prevents Influenza', '50'),
(733, 'Zoster', 'Prevents Herpes Zoster', '60'),
(734, 'Pneumococcal Vaccine', 'Prevents Pneumococcal infections', '60');

9.8 Insert credentials into User:

insert into user values

(9876543210, 'password123'),
(9123456789, 'securePass456'),
(9988776655, 'mySecret789'),
(9123450987, 'safeKey1010'),
(9001122334, 'pass@word321');

9.9 Insert details into beneficiary:

insert into beneficiary values

```
(101, 'Rohit Sharma', '2022-05-15', 'M', 9876543210),  
(102, 'Priya Singh', '1966-08-20', 'F', 9123456789),  
(103, 'Amit Kumar', '2012-03-10', 'M', 9988776655),  
(104, 'Anjali Verma', '2018-11-05', 'F', 9123450987),  
(105, 'Rajesh Khanna', '2024-07-22', 'M', 9001122334),  
(106, 'Sneha Patel', '1997-04-18', 'F', 9876543210),  
(107, 'Vikram Mehra', '2017-12-02', 'M', 9123456789),  
(108, 'Nisha Rao', '2000-09-29', 'F', 9988776655);
```

insert into beneficiary values

```
(109, 'Anshul Koli', '2022-05-15', 'F', 9876543210),  
(110, 'Jaya Nair', '2020-08-20', 'F', 9123456789);
```

9.10 insert benf vaccine details:

INSERT INTO vaccine_record VALUES

```
(1, 101, 701, '2023-01-15', 'Completed'),  
(2, 102, 702, '2023-02-20', 'Completed'),  
(3, 103, 703, '2023-03-05', 'Completed'),  
(4, 104, 704, '2023-04-10', 'Pending'),  
(5, 105, 705, '2023-05-15', 'Scheduled');
```

INSERT INTO vaccine_record VALUES

```
(6, 106, 706, '2023-06-18', 'Completed'),  
(7, 107, 707, '2023-07-22', 'Scheduled');
```

update vaccine_record set vaccination_date = null where status="pending" or status="scheduled";

Query OK, 3 rows affected (0.12 sec)

Rows matched: 3 Changed: 3 Warnings: 0

9.11 Add New User to Database:

"INSERT INTO User (phone_no,password) VALUES (?, ?)"

9.12 Display all Users:

String query = "SELECT * FROM User";

9.13 Login with the existing user details:

String sql = "SELECT * FROM User WHERE phone_no = ? AND password = ?";

9.14 Add New Beneficiary:

"INSERT INTO beneficiary (benf_id, benf_name, date_of_birth, gender, phone_no) VALUES (?, ?, ?, ?, ?)";

9.15 Display details of all beneficiaries of the logged-in user:

String query = "select * from beneficiary natural join user where phone_no = ? ";

9.16 Delete Beneficiaries of logged in user:

String query = "DELETE FROM beneficiary WHERE benf_id = ?";

9.17 Update beneficiary status of logged-in user:

String query = "UPDATE vaccine_record SET status = 'completed' WHERE benf_id = ?";

9.18 Display details of all beneficiaries with pending vaccine status of logged in user:

String query = "select record_id,benf_id,vaccine_id,status from vaccine_record natural join user where status = 'pending' and phone_no = ? ";

9.19 Display the Vaccine History of all beneficiaries:

String query = "select record_id,benf_id,vaccine_id,status from vaccine_record natural join user where status = 'completed' and phone_no = ? ";

9.20 Procedure to Display all vaccines applicable for a beneficiary according to its age:

DELIMITER \$\$

CREATE PROCEDURE GetApplicableVaccines(IN benf_id INT)

BEGIN

-- Select all vaccines that are applicable to the beneficiary based on their age

SELECT v.vaccine_name, v.description, v.age_group

FROM vaccination v

JOIN beneficiary b ON b.benf_id = benf_id

WHERE TIMESTAMPDIF(YEAR, b.date_of_birth, CURDATE()) >= CAST(v.age_group AS DECIMAL)

ORDER BY v.age_group;

END\$\$

DELIMITER ;

9.22 Displaying applicable vaccines

```
String query = " CALL GetApplicableVaccines(?) ";
```

9.23 Display pending vaccines of each beneficiary:

```
String query = "SELECT distinct benf_id, vaccine_id, status FROM vaccine_record NATURAL JOIN user  
WHERE status = 'pending' AND benf_id = ?";
```

9.24 Display the vaccine history of the selected beneficiary:

```
String query = "SELECT distinct benf_id, vaccine_id, status FROM vaccine_record NATURAL JOIN user  
WHERE status = 'completed' AND benf_id = ?";
```

9.25 Trigger to change status from pending to scheduled on adding reminder:

```
DELIMITER $$
```

```
CREATE TRIGGER update_vaccine_status_on_reminder
```

```
AFTER INSERT ON reminders
```

```
FOR EACH ROW
```

```
BEGIN
```

```
-- Update the vaccine record status to 'Scheduled' when a reminder is set
```

```
UPDATE vaccine_record
```

```
SET status = 'Scheduled'
```

```
WHERE benf_id = NEW.benf_id
```

```
AND vaccine_id = NEW.vaccine_id
```

```
AND status != 'Completed'; -- Ensure we don't overwrite 'Completed' records
```

```
END $$
```

```
DELIMITER ;
```

9.26 Adding reminders:

```
String SQL = "INSERT INTO reminders (reminder_id, benf_id, vaccine_id) VALUES (?, ?, ?)";
```

9.27 Changing beneficiary Status to completed on getting vaccinated:

```
String query = "UPDATE vaccine_record SET status = 'completed' WHERE benf_id = ?";
```


OUTPUT:

*** Vaccine Management System ***

1. Sign Up

2. Log In

Choose an option: 2

Enter Phone number:

9876543210

Enter Password:

password123

Login successful! Welcome!!

*** Vaccine Management System ***

1. Add Beneficiary

2. Display Beneficiaries

3. Delete Beneficiaries

4.Show pending vaccines of all benificiary:

5.Show completed vaccines of all benificiary:

6.Add Reminder to pending vaccines :

7. Exit

Enter your choice: 1

Enter Beneficiary ID: 310

Enter Beneficiary Name: pranav

Enter date of birth (YYYY-MM-DD): 2009-08-07

Enter gender (M/F) : M

Enter phone no. used for login : 9876543210

Beneficiary added successfully!

ID:101 Name: Rohit Sharma DOB: 2022-05-15 Gender: M Phone: 9876543210

ID:106 Name: Sneha Patel DOB: 1997-04-18 Gender: F Phone: 9876543210

ID:109 Name: Anshul Koli DOB: 2022-05-15 Gender: F Phone: 9876543210

ID:310 Name: pranav DOB: 2009-08-07 Gender: M Phone: 9876543210

*** Vaccine Management System ***

1. Add Beneficiary
2. Display Beneficiaries
3. Delete Beneficiaries
- 4.Show pending vaccines of all benificiary:
- 5.Show completed vaccines of all benificiary:
- 6.Add Reminder to pending vaccines :
7. Exit

Enter your choice: 3

Enter the benificiary id you want to delete : 310

Beneficiary with ID 310 has been successfully deleted.

ID:101 Name: Rohit Sharma DOB: 2022-05-15 Gender: M Phone: 9876543210

ID:106 Name: Sneha Patel DOB: 1997-04-18 Gender: F Phone: 9876543210

ID:109 Name: Anshul Koli DOB: 2022-05-15 Gender: F Phone: 9876543210

*** Vaccine Management System ***

1. Add Beneficiary
2. Display Beneficiaries
3. Delete Beneficiaries
- 4.Show pending vaccines of all benificiary:
- 5.Show completed vaccines of all benificiary:
- 6.Add Reminder to pending vaccines :
7. Exit

Enter your choice: 4

Record ID:6 Beneficiary ID: 106 Vaccine ID: 706 Status: pending

Record ID:8 Beneficiary ID: 108 Vaccine ID: 703 Status: Pending
Record ID:9 Beneficiary ID: 109 Vaccine ID: 704 Status: Pending
Record ID:10 Beneficiary ID: 110 Vaccine ID: 705 Status: Pending
Record ID:11 Beneficiary ID: 101 Vaccine ID: 706 Status: pending
Record ID:12 Beneficiary ID: 102 Vaccine ID: 707 Status: Pending

*** Vaccine Management System ***

1. Add Beneficiary
2. Display Beneficiaries
3. Delete Beneficiaries
- 4.Show pending vaccines of all benificiary:
- 5.Show completed vaccines of all benificiary:
- 6.Add Reminder to pending vaccines :
7. Exit

Enter your choice: 5

Record ID:1 Beneficiary ID: 101 Vaccine ID: 701 Status: completed
Record ID:2 Beneficiary ID: 102 Vaccine ID: 702 Status: Completed
Record ID:3 Beneficiary ID: 103 Vaccine ID: 703 Status: Completed
Record ID:4 Beneficiary ID: 104 Vaccine ID: 704 Status: completed

*** Vaccine Management System ***

1. Add Beneficiary
2. Display Beneficiaries
3. Delete Beneficiaries
- 4.Show pending vaccines of all benificiary:
- 5.Show completed vaccines of all benificiary:
- 6.Add Reminder to pending vaccines :
7. Exit

Enter your choice: 2

ID:101 Name: Rohit Sharma DOB: 2022-05-15 Gender: M Phone: 9876543210

ID:106 Name: Sneha Patel DOB: 1997-04-18 Gender: F Phone: 9876543210

ID:109 Name: Anshul Koli DOB: 2022-05-15 Gender: F Phone: 9876543210

Enter the beneficiary id of the child whose details you want to see : 101

- 1:Show all vaccines according to his/her age group
- 2:Show all pending vaccines
- 3:Show vaccine history
- 4:Add reminders
- 5:Update its status to completed
- 6:Exit

Enter your choice : 1

Vaccines applicable to beneficiary (benf_id: 101):

Vaccine	Description
Age Group	

BCG	Prevents Tuberculosis
0	
Hepatitis B (Birth Dose)	Prevents Hepatitis B
0	
OPV (0 Dose)	Prevents Polio
0	
Hepatitis B (2nd Dose)	Prevents Hepatitis B
0.1	
OPV (1st Dose)	Prevents Polio
0.1	
DPT (1st Dose)	Prevents Diphtheria, Pertussis, and
Tetanus	0.1
Hib (1st Dose)	Prevents Haemophilus influenzae type b
0.1	
Rotavirus (1st Dose)	Prevents Rotavirus infections
0.1	

PCV (1st Dose) 0.1	Prevents Pneumococcal infections
Hepatitis B (3rd Dose) 0.2	Prevents Hepatitis B
OPV (2nd Dose) 0.2	Prevents Polio
DPT (2nd Dose) Tetanus 0.2	Prevents Diphtheria, Pertussis, and
Hib (2nd Dose) 0.2	Prevents Haemophilus influenzae type b
Rotavirus (2nd Dose) 0.2	Prevents Rotavirus infections
PCV (2nd Dose) 0.2	Prevents Pneumococcal infections
OPV (3rd Dose) 0.3	Prevents Polio
DPT (3rd Dose) Tetanus 0.3	Prevents Diphtheria, Pertussis, and
Hib (3rd Dose) 0.3	Prevents Haemophilus influenzae type b
Rotavirus (3rd Dose) 0.3	Prevents Rotavirus infections
PCV (3rd Dose) 0.3	Prevents Pneumococcal infections
Measles-Rubella (1st Dose) 1	Prevents Measles and Rubella
JE (1st Dose) (endemic areas) 1	Prevents Japanese Encephalitis
DPT (1st Booster) Tetanus 1.5	Prevents Diphtheria, Pertussis, and
OPV (Booster) 1.5	Prevents Polio
Measles-Rubella (2nd Dose) 1.5	Prevents Measles and Rubella
JE (2nd Dose) (endemic areas) 1.5	Prevents Japanese Encephalitis
PCV (Booster) 1.5	Prevents Pneumococcal infections

1:Show all vaccines according to his/her age group

2:Show all pending vaccines

3:Show vaccine history

4:Add reminders

5:Update its status to completed

6:Exit

Enter your choice : 2

Beneficiary ID: 101, Vaccine ID: 706, Status: pending

1:Show all vaccines according to his/her age group

2:Show all pending vaccines

3:Show vaccine history

4:Add reminders

5:Update its status to completed

6:Exit

Enter your choice : 3

Beneficiary ID: 101, Vaccine ID: 701, Status: completed

1:Show all vaccines according to his/her age group

2:Show all pending vaccines

3:Show vaccine history

4:Add reminders

5:Update its status to completed

6:Exit

Enter your choice : 5

Beneficiary with ID 101 has been successfully updated.

1:Show all vaccines according to his/her age group

2:Show all pending vaccines

3:Show vaccine history

4:Add reminders

5:Update its status to completed

6:Exit

Enter your choice : 4

Enter Vaccine ID: 708

Enter Beneficiary ID: 101

Enter Reminder ID: 401

Enter reminder date (YYYY-MM-DD):

Reminder added successfully!

1:Show all vaccines according to his/her age group

2:Show all pending vaccines

3:Show vaccine history

4:Add reminders

5:Update its status to completed

6:Exit

Enter your choice : 6

Exiting the Vaccine Management System.

*** Vaccine Management System ***

1. Add Beneficiary

2. Display Beneficiaries

3. Delete Beneficiaries

4.Show pending vaccines of all benificiary:

5.Show completed vaccines of all benificiary:

6.Add Reminder to pending vaccines :

7. Exit

Enter your choice: 7

Exiting the Vaccine Management System.

*** Vaccine Management System ***

1. Sign Up

2. Log In

Choose an option: 1

Enter Phone number : 8978675645

Enter Password: welcome123

User signed up successfully.

Sign up successful !!

Kindly login:

Enter Phone number:

8978675645

Enter Password:

welcome123

Login successful! Welcome!!

*** Vaccine Management System ***

1. Add Beneficiary

2. Display Beneficiaries

3. Delete Beneficiaries

4. Show pending vaccines of all beneficiary:

5. Show completed vaccines of all beneficiary:

6. Add Reminder to pending vaccines :

7. Exit

Enter your choice: 1

Enter Beneficiary ID: 120

Enter Beneficiary Name: smruti

Enter date of birth (YYYY-MM-DD): 2001-02-11

Enter gender (M/F) : F

Enter phone no. used for login : 8978675645

Beneficiary added successfully!

ID:120 Name: smruti DOB: 2001-02-11 Gender: F Phone: 8978675645

*** Vaccine Management System ***

1. Add Beneficiary

2. Display Beneficiaries

3. Delete Beneficiaries

4. Show pending vaccines of all beneficiary:

5. Show completed vaccines of all beneficiary:

6. Add Reminder to pending vaccines :

7. Exit

Enter your choice: 7

Exiting the Vaccine Management System.