Suggestion Based Immune Vaccination Management System

Name : Varun.B
RollNo: 1602-18-737-115

Abstract :

**Suggestion based immune vaccination management system is basically about vaccines that should be taken and that are already taken by people before.
It stores data(Registration ID,Name,Gender,DateOfBirth,HealthIssues),
it stores data ,who took which vaccine and when did they take, it tells the maximum possible age for all the vaccines that should be taken,it tells which vaccine is to be taken to prevent disease or a problem. So, in a nutshell, this project provides an insight into how suggestion based vaccination management can be implemented efficiently. It gives a detailed information about which vaccine is the best fit to prevent any life-threatening diseases.**

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REQUIREMENT ANALYSIS:

List of tables:

Candidate
Vaccine
Candidate_Vaccine

List of attributes with their domain types:

Candidate:

Registration Number:Registration_Number-Number()
gender:gender-varchar2()
name:name-varchar2()
Health issues at time of birth-varchar2()
Date of birth-date()

Vaccine:

Vaccinename:varchar2()
Maxagetogetvaccine-number()
Genderspecification-Varchar2()
Dosage-Number()
Toprevent-Varchar2()

Candidate_Vaccine:

Registration_id:Number()
Vaccinename:varchar2()
Day:date()
Ageatthetimeofvaccination:Number()

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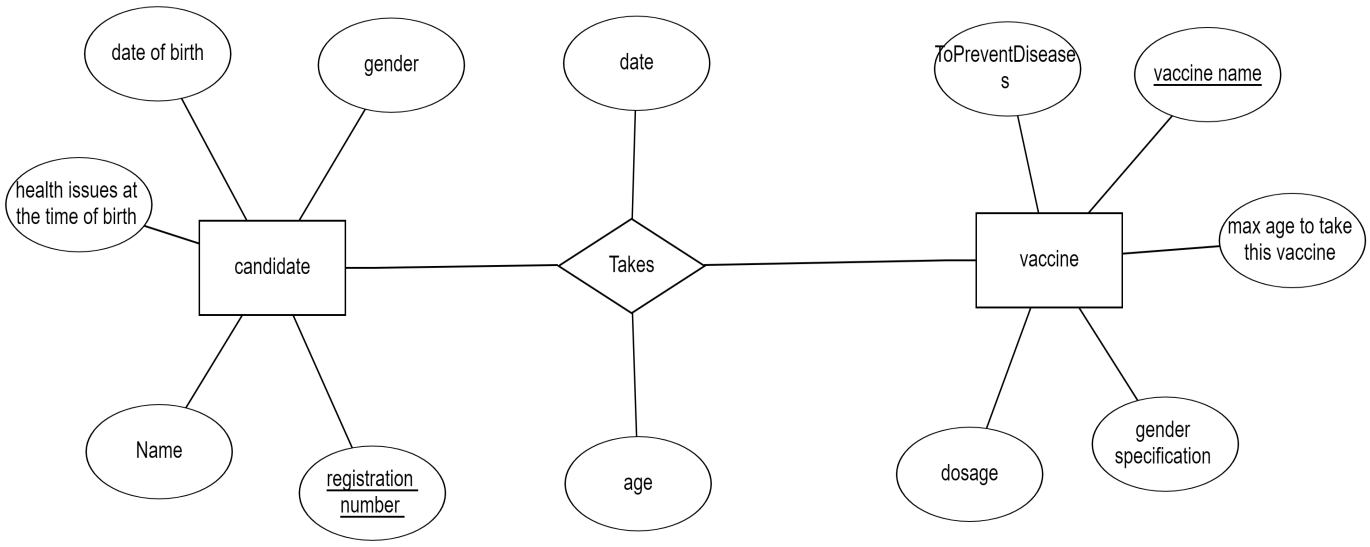
ER DIAGRAM:



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MAPPING CARDINALITIES AND PARTICIPATION CONSTRAINTS:

One candiadate can take many vaccines,and a vaccine can be taken by many candidates on the same day,every vaccine is unique it prevents a special virus to attack or disease.Here one to many and many to one relationship is established.

Here there is primary key constraint,No two people can have same RegistrationID and no two vaccines can have same name ,as both of them are primary key(in different entities).

sql commands:DDL and DML commands:

SQL> create table candidate(RegistrationId Number(5) not null,Name varchar2(50) not null,DateOfBirth date not null,Gender Varchar2(10) not null,HealthIssues varchar2(200) not null,primary key(RegistrationId));

Table created.

SQL> insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues');
Enter value for registrationid: 111
Enter value for name: Ayaz
Enter value for dateofbirth: 01-Jan-16
Enter value for gender: male
Enter value for healthissues: BornWithPolio
old 1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new 1: insert into candidate values(111,'Ayaz','01-Jan-16','male','BornWithPolio')

1 row created.

SQL> /
Enter value for registrationid: 112
Enter value for name: Tasneem
Enter value for dateofbirth: 02-Feb-17
Enter value for gender: female
Enter value for healthissues: NoHealthIssues
old 1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new 1: insert into candidate values(112,'Tasneem','02-Feb-17','female','NoHealthIssues')

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1 row created.

SQL> /
Enter value for registrationid: 113
Enter value for name: TejaSwaroop
Enter value for dateofbirth: 03-Feb-16
Enter value for gender: male
Enter value for healthissues: BornUnderWeight
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(113,'TejaSwaroop','03-Feb-16','male','BornUnderWeight')

1 row created.

SQL> /
Enter value for registrationid: 114
Enter value for name: UdayKiran
Enter value for dateofbirth: 04-mar-17
Enter value for gender: male
Enter value for healthissues: BornWithPolio
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(114,'UdayKiran','04-mar-17','male','BornWithPolio')

1 row created.

SQL> /
Enter value for registrationid: 115
Enter value for name: Varun
Enter value for dateofbirth: 05-dec-18
Enter value for gender: male
Enter value for healthissues: underweight
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(115,'Varun','05-dec-18','male','underweight')

1 row created.

SQL> /
Enter value for registrationid: 116
Enter value for name: Pranav
Enter value for dateofbirth: 06-oct-17
Enter value for gender: male
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Enter value for healthissues: BornOverweight
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(116,'Pranav','06-oct-17','male','BornOverweight')

1 row created.

SQL> /
Enter value for registrationid: 117
Enter value for name: VinayBabu
Enter value for dateofbirth: 07-nov-18
Enter value for gender: male
Enter value for healthissues: NoHealthIssues
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(117,'VinayBabu','07-nov-18','male','NoHealthIssues')

1 row created.

SQL> /
Enter value for registrationid: 118
Enter value for name: Vinuthna
Enter value for dateofbirth: 09-nov-18
Enter value for gender: Female
Enter value for healthissues: NoHealthIssues
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(118,'Vinuthna','09-nov-18','Female','NoHealthIssues')

1 row created.

SQL> /
Enter value for registrationid: 119
Enter value for name: Vyuha
Enter value for dateofbirth: 18-nov-18
Enter value for gender: female
Enter value for healthissues: UnderWeight
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(119,'Vyuha','18-nov-18','female','UnderWeight')

1 row created.
```


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SQL> /
Enter value for registrationid: 120
Enter value for name: Yashovardhan
Enter value for dateofbirth: 14-Feb-18
Enter value for gender: male
Enter value for healthissues: BornWithPolio
old   1: insert into candidate
values(&RegistrationId,'&Name','&DateOfBirth','&Gender','&HealthIssues')
new   1: insert into candidate values(120,'Yashovardhan','14-Feb-18','male','BornWithPolio')

1 row created.

SQL>

SQL> create table vaccine(vaccine_name varchar2(20) not null,maxagetogetvaccine
number(2,1) ,gender varchar2(6) not null,maximumTimes number(2),whocannottake
varchar2(25));

Table created.

SQL> desc vaccine;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              NOT NULL VARCHAR2(20)
 MAXAGETOGETVACCINE                                 NUMBER(2,1)
 GENDER                                    NOT NULL VARCHAR2(6)
 MAXIMUMTIMES                                       NUMBER(2)
 WHOCANNOTTAKE                                      VARCHAR2(25)

SQL> alter table vaccine modify(maximumTimes number(2) not null);

Table altered.

SQL> alter table vaccine modify(maxagetogetvaccine number(2,1) not null);

Table altered.

SQL> alter table vaccine modify(whocannottake varchar2(25) not null);

Table altered.

SQL> desc vaccine;
 Name                                      Null?    Type
```


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 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              NOT NULL VARCHAR2(20)
 MAXAGETOGETVACCINE                        NOT NULL NUMBER(2,1)
 GENDER                                    NOT NULL VARCHAR2(6)
 MAXIMUMTIMES                              NOT NULL NUMBER(2)
 WHOCANNOTTAKE                             NOT NULL VARCHAR2(25)
```

```
SQL> alter table vaccine add primary key(vaccine_name);

Table altered.

SQL> desc vaccine;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              NOT NULL VARCHAR2(20)
 MAXAGETOGETVACCINE                        NOT NULL NUMBER(2,1)
 GENDER                                    NOT NULL VARCHAR2(6)
 MAXIMUMTIMES                              NOT NULL NUMBER(2)
 WHOCANNOTTAKE                             NOT NULL VARCHAR2(25)

SQL> alter table vaccine rename column whocannottake to toprevent;

Table altered.

SQL> desc vaccine;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              NOT NULL VARCHAR2(20)
 MAXAGETOGETVACCINE                        NOT NULL NUMBER(2,1)
 GENDER                                    NOT NULL VARCHAR2(6)
 MAXIMUMTIMES                              NOT NULL NUMBER(2)
 TOPREVENT                                 NOT NULL VARCHAR2(25)

SQL> alter table vaccine rename column maximumtimes to dosage;

Table altered.

SQL> desc vaccine;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              NOT NULL VARCHAR2(20)
 MAXAGETOGETVACCINE                        NOT NULL NUMBER(2,1)
 GENDER                                    NOT NULL VARCHAR2(6)
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 DOSAGE                        NOT NULL NUMBER(2)
 TOPREVENT                       NOT NULL VARCHAR2(25)

SQL> alter table vaccine modify(maxagetogetvaccine number(3));

Table altered.

SQL> create table takes(vaccine_name varchar2(20),registrationid number(5),day
date,ageondayofvaccination number(3,1),foreign key(vaccine_name) references vaccine,foreign
key(registrationid) references candidate);

Table created.

SQL> desc takes;
 Name                          Null?    Type
 ----------------------------------------- -------- ----------------------------
 VACCINE_NAME                              VARCHAR2(20)
 REGISTRATIONID                            NUMBER(5)
 DAY                                  DATE
 AGEONDAYOFVACCINATION                          NUMBER(3,1)
SQL> insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent');
Enter value for vaccine_name: DTAP
Enter value for maxagetogetvaccine: 6
Enter value for gender: all
Enter value for dosage: 5
Enter value for toprevent: Diphteria
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('DTAP',6,'all',5,'Diphteria')

1 row created.

SQL> /
Enter value for vaccine_name: HepatatisA
Enter value for maxagetogetvaccine: 20
Enter value for gender: All
Enter value for dosage: 2
Enter value for toprevent: LiverDiseases
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('HepatatisA',20,'All',2,'LiverDiseases')
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1 row created.

SQL> /
Enter value for vaccine_name: HepatatisB
Enter value for maxagetogetvaccine: 20
Enter value for gender: All
Enter value for dosage: 3
Enter value for toprevent: LiverCancer
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('HepatatisB',20,'All',3,'LiverCancer')

1 row created.

SQL> /
Enter value for vaccine_name: Influenza
Enter value for maxagetogetvaccine: 18
Enter value for gender: all
Enter value for dosage: 1
Enter value for toprevent: InfluenzaVirus
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('Influenza',18,'all',1,'InfluenzaVirus')

1 row created.

SQL> /
Enter value for vaccine_name: Measles
Enter value for maxagetogetvaccine: 12
Enter value for gender: all
Enter value for dosage: 2
Enter value for toprevent: measles
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('Measles',12,'all',2,'measles')

1 row created.

SQL> /
Enter value for vaccine_name: polio
Enter value for maxagetogetvaccine: 18
Enter value for gender: all
Enter value for dosage: 10
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Enter value for toprevent: PolioVirus
old   1: insert into vaccine
values('&vaccine_name',&maxagetogetvaccine,'&gender',&dosage,'&toprevent')
new   1: insert into vaccine values('polio',18,'all',10,'PolioVirus')

1 row created.
SQL> insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination);
Enter value for vaccinename: DTAP
Enter value for registrationid: 117
Enter value for day: 1-nov-19
Enter value for ageondayofvaccination: 1
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('DTAP',117,'1-nov-19',1)

1 row created.

SQL> /
Enter value for vaccinename: Influenza
Enter value for registrationid: 120
Enter value for day: 14-feb-19
Enter value for ageondayofvaccination: 1
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('Influenza',120,'14-feb-19',1)

1 row created.

SQL> /
Enter value for vaccinename: polio
Enter value for registrationid: 116
Enter value for day: 6-oct-19
Enter value for ageondayofvaccination: 2
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('polio',116,'6-oct-19',2)

SQL> /
Enter value for vaccinename: polio
Enter value for registrationid: 119
Enter value for day: 18-nov-19
Enter value for ageondayofvaccination: 1
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('polio',119,'18-nov-19',1)

1 row created.
```


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SQL> insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination);
Enter value for vaccinename: Measles
Enter value for registrationid: 115
Enter value for day: 01-jan-19
Enter value for ageondayofvaccination: 1
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('Measles',115,'01-jan-19',1)

1 row created.
SQL> insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination);
Enter value for vaccinename: polio
Enter value for registrationid: 111
Enter value for day: 1-jan-2019
Enter value for ageondayofvaccination: 3
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('polio',111,'1-jan-2019',3)

1 row created.

SQL> /
Enter value for vaccinename: DTAP
Enter value for registrationid: 111
Enter value for day: 2-feb-19
Enter value for ageondayofvaccination: 2
old   1: insert into takes values('&VaccineName',&registrationid,'&Day',&AgeondayofVaccination)
new   1: insert into takes values('DTAP',111,'2-feb-19',2)

1 row created.
```


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