DATABASE DESIGN

**1.Tbl\_user**

Eg.Primary key: umsId

Eg.Foreign key: umsId references table **Tbl\_login**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | umsId | string | primary key | Alpha-numeric UUIDv4, unique identifier for the user |
| 2. | name | string |  | Name of the user |
| 3. | email | string | unique | Email address of the user |
| 4. | googleAuthId | string |  | Google authentication ID |
| 5. | phoneNumber | string |  | Phone number of the user |
| 6. | address | string |  | Physical address of the user |
| 7. | status | string |  | Status of the user account |
| 8. | passwordHash | string |  | Hashed and salted passwor |

**2.Tbl\_roles**

Eg.Primary key: **loginid**

Eg.Foreign key: **loginid** references table **Tbl\_users\_login**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | rolesId | integer | primary key | Unique identifier for the role |
| 2. | roleName | string |  | Name of the role |

**3.Tbl\_login**

Eg.Primary key: umsId

Eg.Foreign key: umsId references table **Tbl\_patients**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | umsId | string | primary key, foreign key (users.umsId) | Alpha-numeric identifier linking to users table |
| 2. | passwordHash | string |  | Hashed and salted password |
| 3. | email | string | unique | User's email address |
| 4. | roleId | integer | foreign key (roles.rolesId) | Role identifier |
| 5. | status | string |  | Login status |

**4.Tbl\_Patients**

Eg.Primary key: umsId

Eg.Foreign key: umsId references table **Tbl\_patientsdetails**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | umsId | string | primary key, foreign key (users.umsId) | UMSG-UUIDv4 format patient identifier |
| 2. | dateOfBirth | date |  | Patient's date of birth |
| 3. | gender | string |  | Patient's gender |
| 4. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |

**5.Tbl\_Patient detail**

Eg.Primary key: **patientId**

Eg.Foreign key: **patientId** references table **Tbl\_appointments**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | patientId | integer | primary key, foreign key (patients.umsId) | Patient identifier |
| 2. | medicalHistory | json |  | Patient's medical history in JSON format |
| 3. | photo | string |  | Path to patient's photo |
| 4. | status | string |  | Current status |
| 5. | patientId | integer | primary key, foreign key (patients.umsId) | Patient identifier |

**6.Tbl\_Doctors**

Eg.Primary key: **umsid**

Eg.Foreign key: **umsid** references table **Tbl\_patients**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | umsId | string | primary key, foreign key (users.umsId) | UMSD-UUIDv4 format doctor identifier |
| 2. | specialization | string |  | Doctor's medical specialization |
| 3. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |

**7.Tbl\_doctor details**

Eg.Primary key: **doctorid**

Eg.Foreign key: **doctorid** references table **Tbl\_appointments**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | doctorId | integer | primary key, foreign key (doctors.umsId) | Doctor identifier |
| 2. | availability | string |  | Doctor's availability schedule |
| 3. | medicalId | string |  | Alpha-numeric medical license ID |
| 4. | qualification | json |  | Doctor's qualifications in JSON format |
| 5. | photo | string |  | Path to doctor's photo |
| 6. | status | string |  | Current status |
| 7. | doctorId | integer | primary key, foreign key (doctors.umsId) | Doctor identifier |

**8.Tbl\_Hospitals**

Eg.Primary key: **umsid**

Eg.Foreign key: **umsid** references table **Tbl\_hospital\_Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | umsId | string | primary key, foreign key (users.umsId) | UMSH-UUIDv4 format hospital identifier |
| 2. | hospitalName | string |  | Name of the hospital |
| 3. | location | string |  | Hospital location |
| 4. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |

**9.Tbl\_hospital details**

Eg.Primary key: **hospitalid**

Eg.Foreign key: **hospitalid** references table **Tbl\_user**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | hospitalId | integer | primary key, foreign key (hospitals.umsId) | Hospital identifier |
| 2. | hospitalType | string |  | Type of hospital |
| 3. | speciality | json |  | Hospital specialities in JSON format |
| 4. | affiliationNumber | string |  | Alpha-numeric affiliation number |
| 5. | status | string |  | Current status |

**10.Tbl\_appointments**

Eg.Primary key: **appointmentid**

Eg.Foreign key: **loginid** references table **Tbl\_users\_login**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | appointmentId | integer | primary key | Unique identifier for appointment |
| 2. | patientId | integer | foreign key (patients.umsId) | Patient identifier |
| 3. | doctorId | integer | foreign key (doctors.umsId) | Doctor identifier |
| 4. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |
| 5. | dateTime | timestamp |  | Appointment date and time |
| 6. | appointmentNotes | text |  | Notes about the appointment |
| 7. | appointmentSpecialization | string |  | Specialization required for appointment |
| 8. | appointmentStatus | string |  | Status of the appointment |
| 9. | disabilityCertificateId | string |  | Alpha-numeric disability certificate ID |
| 10. | status | string |  | Current status |

**11.Tbl\_medical records**

Eg.Primary key: **recordid**

Eg.Foreign key: **recordid** references table **Tbl\_appointment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | recordId | integer | primary key | Unique identifier for medical record |
| 2. | patientId | integer | foreign key (patients.umsId) | Patient identifier |
| 3. | doctorId | integer | foreign key (doctors.umsId) | Doctor identifier |
| 4. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |
| 5. | dateOfRecord | date |  | Date of the medical record |
| 6. | documentType | string |  | Type of medical document |
| 7. | documentContent | json |  | Medical record content in JSON format |
| 8. | hospitalDb | string |  | Hospital database reference |
| 9. | status | string |  | Current status |

**12.Tbl\_symptoms**

Eg.Primary key: **symptomid**

Eg.Foreign key: **symptomid** references table **Tbl\_appointment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | symptomId | integer | primary key | Unique identifier for symptom record |
| 2. | patientId | integer | foreign key (patients.umsId) | Patient identifier |
| 3. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |
| 4. | date | date |  | Date of symptom report |
| 5. | reportedSymptoms | string | increment | List of reported symptoms |
| 6. | status | string |  | Current status |

**13.Tbl\_disease outbreaks**

Eg.Primary key: **outbreakId**

Eg.Foreign key: **outbreakId** references table **Tbl\_medical records**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No: | Fieldname | Datatype (Size) | Key Constraints | Description of the Field |
| 1. | outbreakId | integer | primary key | Unique identifier for disease outbreak |
| 2. | diseaseName | string |  | Name of the disease |
| 3. | location | geojson |  | Geographic location data |
| 4. | rolesId | integer | foreign key (roles.rolesId) | Role identifier |
| 5. | startDate | date |  | Outbreak start date |
| 6. | latestUpdate | date |  | Date of latest update |
| 7. | caseCount | integer |  | Number of cases |
| 8. | status | string |  | Current status |