**RELATIONAL MAPPING**

**Diagram

Description automatically generated**

**Functional Dependancies**

**PATIENT :-**

* Patient\_ID -> Name, Email, Gender, Contact, Birth Date
* Email -> Name, Patient\_ID, Gender, Contact, Birth Date
* Contact -> Name, Patient\_ID, Gender, Email, Birth Date

**APPOINTMENT :-**

* Appointment\_ID -> Booking\_date, Symptoms, Patient\_ID, Doctor\_ID
* Booking\_date -> Appointment\_ID, Symptoms, Patient\_ID, Doctor\_ID
* Doctor\_ID, Patient\_ID, Appointment\_ID -> Booking\_date, Symptoms

**DOCTOR:-**

* Doctor\_ID -> D.Name, D.Contact
* D.Contact -> Doctor\_ID, D.name

**TREATMENT:-**

* Treatment\_ID -> Diagnosis

**MEDICINE :-**

* Medicine\_ID -> Description, M.name, Quantity, MFG\_date, Price
* M.name -> M.name, Price, Description, Medicine\_ID
* Medicine\_ID, M.name -> M.Description, Quantity, MFG\_date, Price

**PRESCRIPTION :-**

* Prescription\_ID-> Diagnosis\_info, Doctor\_info, Patient\_info, Patient\_ID Doctor\_ID,

**DOCTOR\_SPECIALIZATION:-**

* Doctor\_ID -> S.type, Doctor\_ID, S.name

**DISEASE :-**

* Disease\_ID -> Disease\_name, Disease\_Description
* Disease\_name -> Description, Disease\_ID

**EMR :-**

* Record\_ID -> medicine\_Info, Disease\_info, Appointment\_ID, Diagnosis, Patient\_ID, Doctor\_ID
* Record\_ID, Patient\_ID Doctor\_ID -> medicine\_Info, Disease\_info, Appointment\_ID, Diagnosis,

**SENDS:-**

* Appoinment\_ID -> Treatment\_ID
* Treatment\_ID -> Appoinment\_ID

**DECIDES :-**

* Treatment\_ID -> Medicine\_ID , Disease\_ID
* Medicine\_ID -> Treatment\_ID, Disease\_ID
* Disease\_ID -> Treatment\_ID, Medicine\_ID

**Candidate keys**

**PATIENT :-**

* Patient\_ID
* Email
* Contact

**APPOINTMENT :-**

* Appointment\_ID
* ,Booking\_date

**DOCTOR:**

* Doctor\_ID
* D.contact

**TREATMENT:**

* Treatment\_ID

**MEDICINE:**

* Medicine\_ID
* Medicine\_ID, M.name

**DISEASE:**

* Disease\_ID
* Disease\_name

**EMR:**

* Record\_ID

**PRESCRIPTION:**

* Prescription\_ID

**DOCTOR\_SPECIALIZATION:-**

* Doctor\_ID

**SENDS: -**

* Treatment\_ID
* Appoinment\_ID

**DECIDES :-**

* Treatment\_ID
* Medicine\_ID
* Disease\_ID

**Normalization:**

* We are decomposing medicine entity into two tables as
* It is not in 2NF normal form so we are decomposing into two tables

**Candidate keys of MEDICINE:**

* Medicine\_ID
* Medicine\_ID, M.name

**Functional dependencies: -**

**MEDICINE: -**

* Medicine\_ID -> M.Description, M.name, Quantity, MFG\_date, , Price
* Medicine\_ID, M.name -> M.Description, Quantity, MFG\_date, , Price
* *M.name -> M.name, Price, Description*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Medicine\_ID | M.Name | Quantity | MFG\_Date | Description | Price | Expiry |  |  |  |  |

**Normalized\_Tables :-**

|  |  |  |  |
| --- | --- | --- | --- |
| Medicine\_ID | M.Name | Quantity | MFG\_Date |

|  |  |  |
| --- | --- | --- |
| Description | M.name | Price |