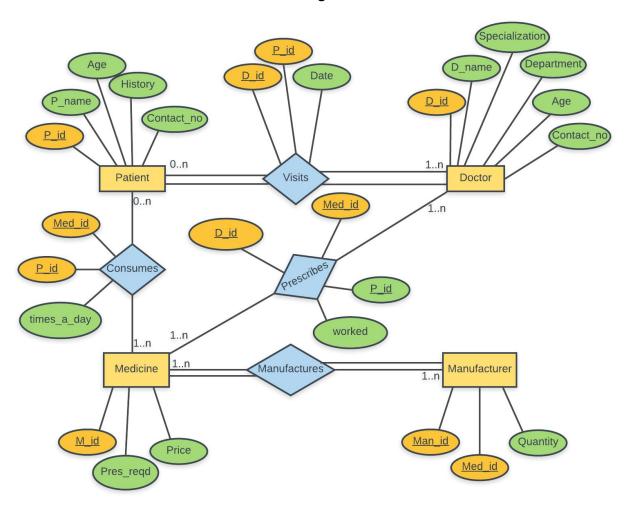
### **ER Diagram**



### **Relational Schema**

**Doctor** (<u>D\_id</u>, <u>D\_name</u>, Age, Department, Specialization, Contact\_no)

Patient (P\_id, P\_name, Age, History, Contact\_no)

**Medicine** (M\_id, Pres\_reqd, Price)

**Manufacturer** (Man\_id, Med\_id, Quantity)

Visits (P\_id, D\_id, Date)

Consumes (P\_id, Med\_id, times\_a\_day)

# Prescribes (<u>D\_id</u>, <u>Med\_id</u>, <u>P\_id</u>, worked)

# **Functional Dependency**

| Relation     | Functional Dependencies                                       |  |  |
|--------------|---|--|--|
| Doctor       | D_id → D_name, Age, Department,<br>Specialization, Contact_no |  |  |
| Patient      | P_id → P_name, Age, History, Contact_no                       |  |  |
| Medicine     | M_id → Pres_reqd, Price                                       |  |  |
| Manufacturer | Man_id, Med_id → Quantity                                     |  |  |
| Visits       | P_id, D_id → Date   |  |  |
| Consumes     | P_id, Med_id → times_a_day                                    |  |  |
| Prescribes   | D_id, Med_id, P_id → worked                                   |  |  |

# Both 2NF and 3NF are implemented in the schema.

| 🙆 Query 10      |      |        |            | 0 <del>-</del> 0 |     | × |
|-----------------|------|--------|------------|------------------|-----|---|
| Query10         |      |        |            |                  |     |   |
|                 |      | P_name |            |                  |     |   |
| Abhimanyu Lakra |      | ,      |            |                  |     |   |
| Isha Goel       |      |        |            |                  |     |   |
| Sarthak Negi    |      |        |            |                  |     |   |
| Shloak Aggarwal |      |        |            |                  |     |   |
| Ajeet Kumar     |      |        |            |                  |     |   |
| Amogh Gulati    |      |        |            |                  |     |   |
| Shloak Aggarwal |      |        |            |                  |     |   |
| Akash Singh     |      |        |            |                  |     |   |
| Amogh Gulati    |      |        |            |                  |     |   |
| Manasvi Sharma  |      |        |            |                  |     |   |
| Rohan Rajpal    |      |        |            |                  |     |   |
| Madhav Sainanee |      |        |            |                  |     |   |
| Query 3         |      |        | _          |                  | ×   |   |
| Query3          |      |        |            |                  |     |   |
| P_id            |      | D_id   | D          | ata              | -   |   |
| 123             | 1006 | 5_14   | 2018-04-15 | atu              | - 5 |   |
| 108             | 1008 |        | 2018-04-15 |                  |     |   |
| 112             | 1010 |        | 2018-04-15 |                  |     |   |
| 116             | 1012 |        | 2018-04-15 |                  |     |   |
| ② Query 5       |      |        |            |                  | ×   |   |
| Query5          |      |        |            |                  |     |   |
|                 |      | M_id   |            |                  |     |   |
| 1000            |      |        |            |                  |     |   |
| 1002            |      |        |            |                  |     |   |
| 1004            |      |        |            |                  |     |   |
| 1011            |      |        |            |                  |     |   |
| 1012            |      |        |            |                  |     |   |
| 1014            |      |        |            |                  |     |   |
| 1017            |      |        |            |                  |     |   |