4.1.4 Class Diagram

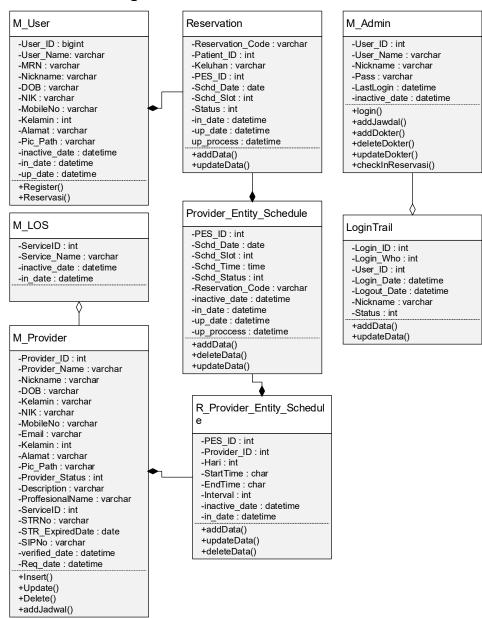


Diagram 4.16 Class Diagram

4.2 Database Manajemen Sistem

Database manajemen sistem (*DBMS*) merupakan suatu sistem yang dirancang khusus untuk mengelola suatu database dan menjalankan operasi terhadap data yang diminta oleh banyak pengguna. Berikut adalah *Database* Manajemen Sistem (*DBMS*) yang diusulkan:

4.2.1 *Normalisasi* Diagram

1. Unnormalisasi

| Dokter ID | Profesional Name | PES ID | Schd Date | Jadwal Hari |
|--------------|-----------------------|-----------|--------------|----------------|
| 5 | Dr. Buyung Randika | 51 | 2021-03-09 | Rabu |
| | | 52 | | Jumat |
| 9 | Dr. Muhammad Abbas | 60 | 2021-02-18 | Selasa |
| | | 61 | | Kamis |
| 12 | dr. Dini Zuriana Sp.A | 53 | 2021-02-18 | Selasa |
| | | 54 | | Minggu |

| Start Time | End Time | Interval |
|---------------|-------------|----------|
| 9:00 | 13:00 | 20 |
| 10:00 | | |
| 15:00 | 17:00 | 20 |
| 16:00 | 18:00 | |
| 14:00 | 16:00 | 20 |
| 10:00 | 13:00 | |

Table 4.8 Table Jadwal Dokter Unnormal

| Kode Reservasi | Profesional Name | Nama Pasien | Tanggal Reservasi |
|----------------|-----------------------|---------------------|----------------------|
| 20210312000002 | Dr. Buyung Randika | Laela Suryani | 2021-03-12 |
| 20210310000003 | Dr. Muhammad Abbas | M. Rijal Fadil | 2021-03-10 |
| 20210211000004 | | M Sidik | 2021-02-11 |
| 20210215000005 | dr. Dini Zuriana Sp.A | Yanti Sartika Putri | 2021-02-15 |

| Hari | Jam Reservasi | Keluhan |
|-------|------------------|----------------------------|
| Jumat | 14:00 | Pusing |
| Rabu | | Tenggorokan Sakit |
| Kamis | 10:00 | Pusing, Pandangan kabur |
| Senin | 14:30 | Pusing, tenggorokan kering |

Table 4.9 Table Reservasi Unnormal

2. 1NF

| Dokter ID | Profesional Name | PES ID | Schd Date | Jadwal Hari |
|--------------|-----------------------|-----------|--------------|----------------|
| 5 | Dr. Buyung Randika | 51 | 2021-03-09 | Rabu |
| 5 | Dr. Buyung Randika | 52 | 2021-03-09 | Jumat |
| 9 | Dr. Muhammad Abbas | 60 | 2021-02-18 | Selasa |
| 9 | Dr. Muhammad Abbas | 61 | 2021-02-18 | Kamis |
| 12 | dr. Dini Zuriana Sp.A | 53 | 2021-02-18 | Selasa |
| 12 | dr. Dini Zuriana Sp.A | 54 | 2021-02-18 | Minggu |

| Start Time | End Time | Interval |
|---------------|-------------|----------|
| 9:00 | 13:00 | 20 |
| 10:00 | 13:00 | 20 |
| 15:00 | 17:00 | 20 |
| 16:00 | 18:00 | 20 |
| 14:00 | 16:00 | 20 |
| 10:00 | 13:00 | 20 |

Table 4.10 Table Jadwal Dokter 1NF

| Kode Reservasi | Profesional Name | Nama Pasien | Tanggal Reservasi |
|----------------|-----------------------|---------------------|----------------------|
| 20210309000002 | Dr. Buyung Randika | Laela Suryani | 2021-03-09 |
| 20210310000003 | Dr. Muhammad Abbas | M. Rijal Fadil | 2021-03-10 |
| 20210211000004 | Dr. Muhammad Abbas | M Sidik | 2021-02-11 |
| 20210215000005 | dr. Dini Zuriana Sp.A | Yanti Sartika Putri | 2021-02-15 |

| Hari | Jam Reservasi | Keluhan | |
|-------|------------------|----------------------------|--|
| Jumat | 14:00 | Pusing | |
| Rabu | 14:00 | Tenggorokan Sakit | |
| Kamis | 10:00 | Pusing, Pandangan kabur | |
| Senin | 14:30 | Pusing, tenggorokan kering | |

Table 4.11 Table Reservasi 1NF

3. 2NF

a. Table Data Dokter

| Dokter ID | Profesional Name | Nickname | Tanggal Lahir | Jenis Kelamin |
|--------------|-----------------------|------------|------------------|------------------|
| 5 | Dr. Buyung Randika | Dr. Buyung | 1985-11-14 | Laki-Laki |
| 9 | Dr. Muhammad Abbas | Dr. Abbas | 1989-08-04 | Laki-Laki |
| 12 | dr. Dini Zuriana Sp.A | Dr. Dini | 1980-05-21 | Perempuan |

| NIK | Mobile No | Service ID | Service |
|------------------|--------------|---------------|--------------------------|
| 3271041411850005 | 081238134743 | 1 | Spesialis Penyakit Dalam |
| 3674030408890003 | 08567386275 | 2 | Dokter Umum |
| 1218046105800009 | 0811629077 | 3 | Spesialis Anak |

Table 4.12 Table 2NF Data Dokter

b. Table Jadwal Dokter per-hari

| PES | Dokter | Jadwal | Start | End | Interval |
|-----|--------|--------|-------|-------|----------|
| ID | ID | Hari | Time | Time | |
| 51 | 5 | Rabu | 9:00 | 13:00 | 20 |
| 52 | 5 | Jumat | 10:00 | 13:00 | 20 |
| 60 | 9 | Selasa | 15:00 | 17:00 | 20 |
| 61 | 9 | Kamis | 16:00 | 18:00 | 20 |
| 53 | 12 | Selasa | 14:00 | 16:00 | 20 |
| 54 | 12 | Minggu | 10:00 | 13:00 | 20 |

Table 4.13 Table 2NF Jadwal Dokter Per-Hari

c. Table Data User

| User ID | User Name | Nickname | Tanggal Lahir | NIK |
|------------|---------------------|----------|------------------|------------------|
| 1 | Laela Suryani | Ela | 2007-01-22 | 3210209220100025 |
| 2 | M. Rijal Fadil | Rijal | 2013-06-06 | 3225249060600136 |
| 3 | M Sidik | Sidik | 1972-07-21 | 2156204210700850 |
| 4 | Yanti Sartika Putri | Yanti | 1978-03-23 | 2114564230300160 |

| MRN | Jenis Kelamin | MobileNo | Alamat |
|----------------|------------------|-------------|--------------|
| 54008032100001 | Perempuan | 08128981935 | Kp. Cikuda |
| 60519120000002 | Laki-Laki | - | Rawailat |
| 52206030100003 | Laki-Laki | 08219845890 | Wanaherang |
| 62704029800004 | Perempuan | 08948538223 | Gunung Putri |

Table 4.14 Table 2NF Data User

d. Table Data Reservasi

| Kode Reservasi | ID Dokter | ID Pasien | Keluhan | PES ID |
|-------------------|--------------|--------------|----------------------------|-----------|
| 20210312000002 | 5 | 1 | Pusing | 5 |
| 20210310000003 | 9 | 2 | Tenggorokan Sakit | 9 |
| 20210211000004 | 9 | 3 | Pusing, Pandangan kabur | 9 |
| 20210215000005 | 12 | 4 | Pusing, tenggorokan kering | 12 |

| Schd Date | Schd Slot |
|--------------|--------------|
| 2021-03-09 | 1 |
| 2021-02-18 | 1 |
| 2021-02-18 | 2 |
| 2021-02-18 | 1 |

Table 4.15 Table 2NF Data Reservasi

4. 3NF

a. Table Detail Jadwal Dokter

| PES ID | Schd Date | Schd Slot | Schd Time | Schd Status | Dokter ID |
|-----------|--------------|--------------|--------------|----------------|--------------|
| 5 | 2021-03-09 | 1 | 10:00 | 1 | 5 |
| 5 | 2021-03-09 | 2 | 10:20 | 1 | 5 |
| 9 | 2021-02-18 | 1 | 16:00 | 1 | 9 |
| 9 | 2021-02-18 | 2 | 16:20 | 1 | 9 |
| 12 | 2021-02-18 | 1 | 10:00 | 1 | 12 |
| 12 | 2021-02-18 | 2 | 10:20 | 1 | 12 |

Table 4.16 Table 3NF Detail Data Jadwal

b. Table Detail Daftar Service Dokter

| Service ID | Service Name |
|---------------|--------------------------|
| 1 | Spesialis Penyakit Dalam |
| 2 | Dokter Umum |
| 3 | Spesialis Anak |
| 4 | Spesialis Kandungan |
| 5 | Spesialis Gigi & Mulut |

Table 4.17 Table Detail List Of Service

4.2.2 Entity Relationship Diagram

Berikut ini merupakan *ERD* dari program yang akan penulis usulkan

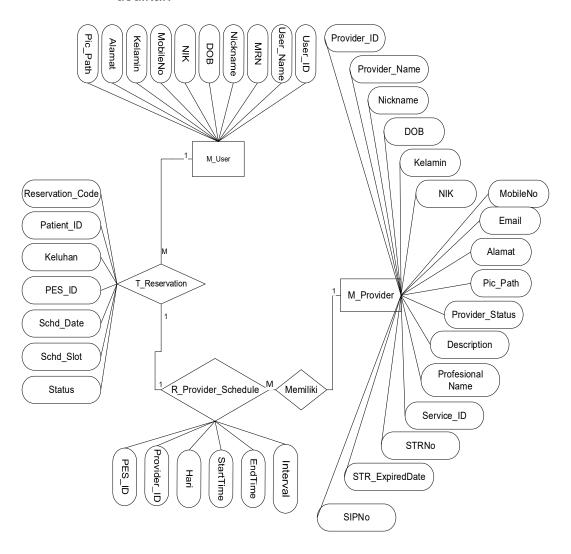


Diagram 4.17 Diagram ERD Usulan

4.2.3 Logic Record Structure

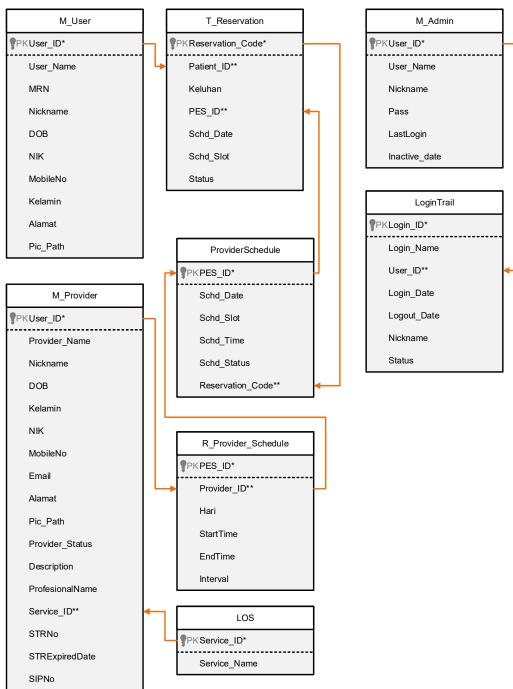


Diagram 4.18 Diagram LRS Usulan