

Telecom Support System - Physical Data Model (SQLite)

CUSTOMERS

```
CREATE TABLE customers (  
customer_id INTEGER PRIMARY KEY,  
name TEXT,  
phone_number TEXT,  
email TEXT,  
address TEXT,  
city TEXT,  
pincode TEXT,  
account_status TEXT,  
join_date TEXT,  
kyc_status TEXT  
);
```

PLANS

```
CREATE TABLE plans (  
plan_id INTEGER PRIMARY KEY,  
plan_name TEXT,  
price REAL,  
validity_days INTEGER,  
data_limit TEXT,  
voice TEXT,  
sms TEXT  
);
```

SUBSCRIPTIONS

```
CREATE TABLE subscriptions (  
subscription_id INTEGER PRIMARY KEY,  
customer_id INTEGER,  
plan_id INTEGER,  
start_date TEXT,  
end_date TEXT,  
auto_renew INTEGER,  
status TEXT,  
FOREIGN KEY(customer_id) REFERENCES customers(customer_id),  
FOREIGN KEY(plan_id) REFERENCES plans(plan_id)  
);
```

INVOICES

```
CREATE TABLE invoices (  
  invoice_id INTEGER PRIMARY KEY,  
  customer_id INTEGER,  
  amount REAL,  
  due_date TEXT,  
  paid_status TEXT,  
  billing_period TEXT,  
  FOREIGN KEY(customer_id) REFERENCES customers(customer_id)  
);
```

TRANSACTIONS

```
CREATE TABLE transactions (  
  txn_id INTEGER PRIMARY KEY,  
  customer_id INTEGER,  
  plan_id INTEGER,  
  amount REAL,  
  txn_date TEXT,  
  mode TEXT,  
  transaction_status TEXT,  
  FOREIGN KEY(customer_id) REFERENCES customers(customer_id),  
  FOREIGN KEY(plan_id) REFERENCES plans(plan_id)  
);
```

ISSUE_TYPES

```
CREATE TABLE issue_types (  
  issue_type_id INTEGER PRIMARY KEY,  
  name TEXT,  
  description TEXT  
);
```

AGENTS

```
CREATE TABLE agents (  
  agent_id INTEGER PRIMARY KEY,  
  name TEXT,  
  department TEXT,  
  shift_timing TEXT,  
  rating REAL
```

);

TICKETS

```
CREATE TABLE tickets (  
  ticket_id INTEGER PRIMARY KEY,  
  customer_id INTEGER,  
  issue_type_id INTEGER,  
  description TEXT,  
  status TEXT,  
  priority TEXT,  
  created_at TEXT,  
  closed_at TEXT,  
  assigned_agent_id INTEGER,  
  FOREIGN KEY(customer_id) REFERENCES customers(customer_id),  
  FOREIGN KEY(issue_type_id) REFERENCES issue_types(issue_type_id),  
  FOREIGN KEY(assigned_agent_id) REFERENCES agents(agent_id)  
);
```

CHAT_HISTORY

```
CREATE TABLE chat_history (  
  chat_id INTEGER PRIMARY KEY,  
  customer_id INTEGER,  
  message TEXT,  
  bot_response TEXT,  
  intent TEXT,  
  sentiment TEXT,  
  timestamp TEXT,  
  FOREIGN KEY(customer_id) REFERENCES customers(customer_id)  
);
```

OUTAGE_AREAS

```
CREATE TABLE outage_areas (  
  outage_id INTEGER PRIMARY KEY,  
  city TEXT,  
  pincode TEXT,  
  issue_description TEXT,  
  start_time TEXT,  
  expected_resolution TEXT  
);
```

CUSTOMER_USAGE

```
CREATE TABLE customer_usage (  
  usage_id INTEGER PRIMARY KEY,  
  customer_id INTEGER,  
  date TEXT,  
  mobile_data_used_gb REAL,  
  mobile_voice_minutes INTEGER,  
  mobile_sms_count INTEGER,  
  broadband_data_used_gb REAL,  
  plan_id INTEGER,  
  cycle_start TEXT,  
  cycle_end TEXT,  
  reported_at TEXT,  
  FOREIGN KEY(customer_id) REFERENCES customers(customer_id),  
  FOREIGN KEY(plan_id) REFERENCES plans(plan_id)  
);
```