

# **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)
);
```