**The hospital management system project:**

Core Purpose:

This is a cloud-hosted application designed for mid-size multispecialty hospitals, with Skinspire Clinic (an aesthetic, plastic surgery & skin clinic) as the first reference customer. The system allows multiple clinics/hospitals to have independent instances while supporting multiple branches within a single instance.

Key Technical Aspects:

1. Architecture:

- Three-tier system: Development, QA, and Production environments

- Built using Python 3.12.8 with Flask 3.1.0 framework

- Data handling with Polars 1.19 and Apache Parquet for storage

- AI integration planned (voice assistant, voice-to-text, patient analysis)

2. Design Philosophy:

- Modular architecture for both frontend and backend

- Responsive design supporting web and mobile access

- Strong security focus with EMR compliance and data encryption

- Comprehensive CRUD operations (View, Add, Edit, Delete, Report) for all tables

- Centralized configuration and authorization

- Time stamp for all transactions to increase traceability

3. Database Structure:

The core entities include:

- Staff/User Management

- Patient (Patient) Management

- Appointments and Consultations (including video consultation)

- Procedures and Packages

- In patient handling (admissions, Insurance, wards, ICU)

- Resource management (OT, Procedure room, key movable equipment scheduling integrated with key roles)

- Patient queue handling

- Inventory and Medicine Management

- Supplier and Purchase Management

- Invoice and Billing Systems

- Basic General Ledger Accounting & payments

- Human Resources

Key Features and Requirements:

1. User Interface:

- Multiple user consoles: Patient, Doctor, Admin, and Therapist

- Dark theme with responsive design

- Tailwind CSS for styling

- Built-in reporting capabilities with PDF and CSV support

2. Security and Compliance:

- EMR-compliant patient records

- Role-based authorization

- Data partitioning

- CSRF protection

- Comprehensive error handling and logging

- Tax compliance and reporting

Face id or mobile sms login

3. Database Admin features

- Secure payment gateway

- API integration with Banks & Payment point of sale system

- Bulk data upload features

- Data back-up & archiving

4. Document Management:

- Support for multiple document types (pictures, video, audio)

- Date, patient, staff, wise storage

- Document tags for easy access and grouping

- Secure document attachment system

Areas of Focus:

- Patient lifecycle management

- Appointment handling

- Prescription management

- Resource scheduling (for assets and facilities)

- EMR compliance

- Pharmacy operations

- Promotions

- Basic accounting

- Staff/HR management (Identity card, Employment history, attendance, leave, salary slip)

- Laboratory integration

The following are key relationships and entities:

1. Core Entities:

- PATIENT (Patients)

- STAFF

- USER (System users)

- Procedures

- MEDICINES/ITEM

- PACKAGE and FAMILY\_PACKAGE

- RESOURCES (Assets (equipment), STAFF (Human resources) and facilities (OT, procedure room, ICU)

- GL Account heads

2. Transactional Entities:

- APPOINTMENT

- CONSULTATION

- INVOICE (HEADER and DETAILS)

- PURCHASE ORDER

- SUPPLIER INVOICE

- RESOURCE SCHEDULING (Assets (equipment), Human resources (Staff) and facilities (OT, procedure room, ICU) )

- GENERAL LEDGER

3. Support Entities:

- MANUFACTURER

- SUPPLIER

- INVENTORY

- DOCUMENTS

- AUTHORIZATION (supporting data partitions)

CONFIGURATION ENTITIES

* HOSPITAL DETAILS (Highest level of partition) multiple Hospitals
* BRANCH DETAILS (FOR SAME HOSPITAL)
* AUTHORIZATION
* ROLE MASTER
* MEDICINE TYPES
* PREFIX
* BLOOD GROUP
* PREFERED LANGUAGE
* GENDER
* MARITAL STATUS
* CITY
* FIELD PARAMETERS SETTING (OPTIONAL, MANDATORY, VALIDATION DISABLED / ENABLED, CONDITIONAL VALIDATION)
* BOOKING STATUS (APPOINTMENT)
* SERIAL NUMBER GENERATION (CURRENT SR. NO.)
* SPECIALITY (FOR DOCTORS)
* CONSULTATION TYPE
* INVOICE TYPE
* GST RATES
* PACKAGE FAMILY
* MEDICINE CATEGORY
* ASSET MASTER
* FACILITY MASTER
* STOCK TYPE
* Safety stock level (%age stock)
* MANUFACTURER
* SUPPLIER
* SUPPLIER CATEGORY
* PERFORMANCE RATING
* CHART OF ACCOUNTS
* ACCOUNT HEADS GROUPED BY Assets, Liabilities, Income, Expense
* PAYMENT GATEWAY SETTINGS
* REPORT CONFIGURATION (TO BE ANALYSED)

Key Relationships:

1. Patient-centered:

- Patients can make appointments (video as well as in person consultations)

- Patients can be users and have their own online account

Patients receive consultations

- Patients are associated with invoices

- Patient can view their own EMR & history

- Patient can view targeted offers

- Patient can make online payments

- patient can initiate whatsapp chat with clinic

2. Staff-centered:

- Staff members can be users

- Staff member is associated with unique role

- Staff provides consultations

- Staff member time is also scheduled

- Staff member will have leave, attendance, salary records

3. Medicines:

- Medicines are produced by manufacturers

- Medicines are supplied by suppliers

- Medicines are of difference category (Prescription drugs, Products, Consumables, Misc items)

- Medicines are stored in inventory

- Medicines can be prescribed during consultations

- Medicines are consumed during procedures

4. Inventory centered

* Managing inventory of Medicines (all categories)
* Supplier invoice - input for inventory
* Patient billing for medicines – output for products and prescription drugs
* Consumables - consumed as defined by specific quantity for a procedure
* Opening stock, stock adjustment, ageing analysis, expiry management, safety stock

5. Financial Flow:

- Procedures are detailed in invoices

- Suppliers receive purchase orders

- Suppliers generate invoices

Data structure (suggested)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **USER MASTER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type (Arrow)** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | User id (Phone number) | int 32 | Numeric | Validate Phone no. with SMS. Check, fPhone no. is aregistered as staff or Patient, populate ID and name fields | Key field |
| 2 | Password | string | Text | Masked | Mandatory |
| 3 | Role | string | List | reference from separate role table. Possible values are Doctor, Consultant, Therapispt, Staff Nurse, Clinic Manager, Assistant Manager, visiting expert, Patient, Administrator, Accountant, Pharmacy manager | Mandatory |
| 4 | Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Reference Field |
| 5 | First Name | string | Text |  | Reference Field |
| 6 | Last Name | string | Text |  | Reference Field |
| 7 | Staff ID | string | Text | Populated based on Phone no. Can be edited | Conditional reference |
| 8 | Patient ID | string | Text | Populated based on Phone no. Can be edited | Conditional reference |
| **STAFF MASTER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type (Arrow)** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Staff ID | int 32 | Numeric | 4 digit running serial number. This is automatically updated based on current record. This is not a user entered field | Key Field |
| 2 | Role | string | List | reference from separate role table. Possible values are Doctor, Consultant, Therapispt, Staff Nurse, Clinic Manager, Assistant Manager, visiting expert, Administrator, Accountant, Pharmacy manager | Reference Field |
| 3 | Phone Number | int 32 | Numeric | validate phone no. with SMS. If phone number is registered as user, populate all relevant fields from user table. | Mandatory |
| 4 | Whether Empoyee? | bool | Radio Button | Yes, No | Mandatory |
| 5 | Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Mandatory |
| 6 | First Name | string | Text |  | Mandatory |
| 7 | Last Name | string | Text |  | Mandatory |
| 8 | E Mail ID | string | Text | Validate Email id | Mandatory |
| 9 | Gender | string | Radio Button | Male Female Trans gender, Not disclosed | Mandatory |
| 10 | Age | int 32 | Numeric | Validation between 0 to 100. derived from date of birth | Derived |
| 11 | D.O.B. | date | Date | not more then current date and age not more than 110 years | Mandatory |
| 12 | Preferred Language | string | List | English, Hindi, Kannada, Tamil | Mandatory |
| 13 | City | string | List | All major cities of India. Also provide user to enter if it is not in the list. | Mandatory |
| 14 | Address | Dictionary | Dictionary | 3 lines for user entry | Mandatory |
| 15 | PIN CODE | int 32 | Numeric | validation for six digits | Mandatory |
| 16 | Blood Group | string | List | O+ve, AB+ve, O-ve, AB-ve, A+ve, A-ve, B+ve, B-ve | Optional |
| 17 | Marital Status | string | Radio Button | Married, Single, Not disclosed, | Mandatory |
| 18 | Date of Joining | date | Date | not more then current date | Mandatory |
| 20 | User ID | string | Text | E Mail id | Conditional Reference |
| 21 | Profile Picture | Picture | Picture |  | Optional |
| 22 | Documents |  |  | Moe then one document regarding address proof, ID proof education, etc Datewise storage | Optional |
| 23 | Note | string | Text |  | Optional |
| **PATIENT MASTER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Patient id (Phone number) | int 32 | Numeric | 10 digit no. preceded by country code. To validate with SMS in case of self registration. In user based entry SMS based validation is bypassed | Key field |
| 2 | Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Mandatory |
| 3 | First Name | string | Text |  | Mandatory |
| 4 | Last Name | string | Text |  | Mandatory |
| 5 | Alternate Phone Number | int 32 | Numeric | fixed length of 10 digits | Mandatory |
| 6 | Attender name | string | Text |  | Optional |
| 7 | Relationship with Patient | string | Text |  | Optional |
| 8 | E Mail ID | string | Text |  | Optional |
| 9 | Gender | string | Radio Button | Male Female Trans gender, Not disclosed | Mandatory |
| 10 | Age | int 32 | Numeric | Validation between 0 to 100 | Mandatory |
| 11 | D.O.B. | date | Date |  | Optional |
| 12 | Preferred Language | string | List | English, Hindi, Kannada, Tamil | Mandatory |
| 13 | City | string | List | All major cities | Mandatory |
| 14 | Address | Dictionary | Dictionary | Multi line entry | Mandatory |
| 15 | PIN CODE | int 32 | Numeric | vcalidation for six digits | Mandatory |
| 16 | Blood Group | string | List | O+ve, AB+ve, O-ve, AB-ve, A+ve, A-ve, B+ve, B-ve | Optional |
| 17 | Marital Status | string | Radio Button | Married, Single, Not disclosed, | Mandatory |
| 18 | How did you know about us? | string | Radio Button | Walk In, Google serarch, Reference, Social media, others | Mandatory |
| 19 | Any Kinown alergires | Dictionary | Dictionary |  | Optional |
| 20 | Referred By | string | Text |  | Optional |
| 21 | Password | string | Text | Masked. Only in case of self registration | Mandatory |
| 22 | Profile Picture | Picture | Picture |  | Optional |
| 23 | Documents | Multi media | Multi media | Moe then one document regarding lab records, reports or other information date wise storage |  |
| 24 | Notes | Dictionary | Dictionary |  | optional |
| 25 | User ID | string | Text | E Mail id if record exists in user table based on phone number | Conditional Reference |
| **APPOIONTMENT** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Appointment ID | int 32 | Numeric | Running Sr. No. | Key Field |
| 2 | Patient ID | int 32 | Numeric |  | Reference Field |
| 3 | Patient Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Mandatory |
| 4 | Patient First Name | string | Text | copied from master | Mandatory |
| 5 | Patient Last Name | string | Text | copied from master | Mandatory |
| 6 | Appointment Date | date | Date |  | Mandatory |
| 7 | Appointment Time | time64 | Time |  | Mandatory |
| 8 | Doctor ID | int 32 | Numeric |  | Reference Field |
| 9 | Doctor Name | string | Text | copied from master | Optional |
|  | Department | string | Text | copied from master | Mandatory |
| 10 | Package | string | Text |  | Reference Field |
| 11 | Service | string | Text |  | Reference Field |
| 12 | Staff ID | int 32 | Numeric |  | Reference Field |
| 13 | Staff Name | string | Text |  | Optional |
| 14 | Booking Status | string | List | Booked, Cancelled, Visited | Mandatory |
| 15 | Type | string | Text | In Person , Video Call, walk-in | Mandatory |
| 16 | Skip Billing | bool | Check Box | Skip Billing check box | Optional |
| 17 | Price | int 32 | Numeric |  | Optional |
| 18 | Bill No. | int 32 | Numeric |  | Reference Field |
| 19 | Time Stamp | timestamp | Date | Automatic system entry | Mandatory |
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| **DOCTOR CONSULTATION** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| **CONSULTATION** | | | | | |
| 1 | Appointment ID | int 32 |  |  | Key Field |
| 2 | Patient ID | int 32 |  |  | Reference Field |
| 3 | Patient Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Reference Field |
| 4 | Patient First Name | string |  |  | Reference Field |
| 5 | Patient Last Name | string |  |  | Reference Field |
| 6 | Consultation Date | date |  |  | Mandatory |
| 7 | Consultation Time | time64 |  |  | Mandatory |
|  | Consultation type |  |  | online, In person | Reference Field |
| 8 | Doctor Name | string |  |  | Reference Field |
| 9 | BP | int 32 |  |  | Optional |
| 10 | Pulse | int 32 |  |  | Optional |
| 11 | Height | int 32 |  |  | Optional |
| 12 | Weight | int 32 |  |  | Optional |
| 13 | Temperature | int 32 |  |  | Optional |
| 14 | BMI | int 32 |  |  | Optional |
| 15 | Waist / hip | int 32 |  |  | Optional |
| 16 | SPO2 | int 32 |  |  | Optional |
| 17 | Complaints | string |  |  | Optional |
| 18 | Diagnosis | string |  |  | Optional |
| 19 | Treatment Advise | string |  |  | Optional |
| 20 | Tests Requested | string |  |  | Optional |
| 21 | Next visit days | int 32 |  |  | Optional |
| 22 | Date | date |  |  | Optional |
| 23 | Investigations | string |  |  | Optional |
| 24 | Referred to: Doctor | string |  |  | Optional |
| 25 | Speciality | string |  |  | Optional |
| 26 | Phone No. | int 32 |  |  | Optional |
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| **Medicines Prescribed** | | | | | |
| 1 | Appointment ID | int 32 |  |  | Reference Field |
| 2 | Patient ID | int 32 |  |  | Reference Field |
| 3 | Medicine Name | string |  |  | Reference Field |
| 4 | Frequency | string |  |  | Optional |
| 5 | Dosage | int 32 |  |  | Optional |
| 6 | Morning | bool |  |  | Optional |
| 7 | Afternoon | bool |  |  | Optional |
| 8 | Evening | bool |  |  | Optional |
| 9 | Every | string |  |  | Optional |
| 10 | Duration | int 32 |  |  | Optional |
| 11 | Notes | string |  |  | Optional |
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| **BILLING** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| **Invoice Header** | | | | | |
| 1 | InvoiceType | string |  | Service, Cosmatic Products, Prescription / Emergency Drugs, Misc Bill | Mandatory |
| 2 | Invoice Date | date |  |  | Mandatory |
| 3 | Invoice ID | int 32 |  |  | Key Field |
| 4 | Patient ID | int 32 |  |  | Mandatory |
| 5 | Patient Prefix | string | List | Mr. Mrs. Ms. Dr. Prof. Sir. Col. | Reference Field |
| 6 | Patient First Name | string |  |  | Reference Field |
| 7 | Patient Last Name | string |  |  | Reference Field |
| 8 | Appointment ID | int 32 |  |  | Mandatory |
| 9 | Appointment Date | date |  |  | Reference Field |
|  | Doctor Name | string |  |  | Reference Field |
|  |  |  |  |  |  |
| **Invoice Line Item** | | | | | |
| 1 | Package ID | int 32 |  |  | Reference Field |
| 2 | Package Name | string |  |  | Reference Field |
| 3 | Package Family | string |  |  | Reference Field |
| 4 | Service ID | int 32 |  |  | Conditional Reference |
| 5 | Service Name | string |  |  | Reference Field |
| 6 | Medicine ID | int 32 |  |  | Conditional Reference |
| 7 | Medicine Name | string |  |  | Reference Field |
| 8 | Batch | string |  |  | Reference Field |
| 9 | Expiry Date | date |  |  | Reference Field |
| 10 | Qty | int 32 |  |  | Mandatory |
| 11 | Item Price | int 32 |  |  | Reference Field |
| 12 | Item Discount | int 32 |  |  | Reference Field |
| 13 | Gst(%) | int 32 |  |  | Reference Field |
| 14 | Gst(Amt) | int 32 |  |  | Reference Field |
| 15 | Disc Amt | int 32 |  |  | Reference Field |
| 16 | Bill Value | int 32 |  |  | Reference Field |
| 17 | Currency | string |  |  | Reference Field |
| 18 | Paid Amount CASH | int 32 |  |  | Optional |
| 19 | Paid Amount Credit Card | int 32 |  |  | Optional |
| 20 | Paid Amount Debit Card | int 32 |  |  | Optional |
| 21 | Paid Amount UPI | int 32 |  |  | Optional |
| 22 | Total Amount Paid | int 32 |  |  | Derived |
| 23 | Amount Due | int 32 |  |  | Derived |
| 24 | Refunded Amount | int 32 |  |  | Optional |
|  |  |  |  |  |  |
| **Package Family** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Package Family ID | string |  |  | Key Field |
| 2 | Package Family | string |  |  | Mandatory |
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| **Packages** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Package ID | int 32 |  |  | Key Field |
| 2 | Package Name | string |  |  | Mandatory |
| 3 | Package Family | string |  |  | Reference Field |
| 4 | Price | int 32 |  |  | Mandatory |
| 5 | CGST | int 32 |  |  | Mandatory |
| 6 | IGST | int 32 |  |  | Mandatory |
| 7 | Total GST | int 32 |  |  | Derived |
| 8 | Active discontinued | string |  |  | Mandatory |
| 9 | Service Owner | string |  |  | Mandatory |
| 10 | Max Discount | int 32 |  |  | Optional |
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| **Services** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Mandatory / Optional** |
| 1 | CODE | int 32 |  |  |  |
| 2 | Service ID | int 32 |  |  |  |
| 3 | Service Name | string |  |  |  |
| 4 | Package Name | string |  |  |  |
| 5 | No. of Sessions for Package | int 32 |  |  |  |
| 6 | Price per Session excluding GST | int 32 |  |  |  |
| 7 | CGST | int 32 |  |  |  |
| 8 | IGST | int 32 |  |  |  |
| 9 | Total GST | int 32 |  |  |  |
| 10 | Total Price | int 32 |  |  |  |
| 11 | Priority | string |  |  |  |
| 12 | Max Discount | int 32 |  |  |  |
|  |  |  |  |  |  |
| **PURCHASE ORDER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| **Header** | | | | | |
| 1 | P.O. No. | int 32 |  |  | Key Field |
| 2 | P.O. Date | date |  |  | Mandatory |
| 3 | Manufacturer Name | string |  |  | Reference Field |
| 4 | Quotation ID | int 32 |  |  | Optional |
| 5 | Quotation Date | date |  |  | Optional |
|  | Deleted Flag | bool |  |  | Optional |
| **Line Items** | | | | | |
| 6 | Medicine Name | string |  |  | Mandatory |
| 7 | Medicine ID | int 32 |  |  | Reference Field |
| 8 | Pack(Purchase Price) | int 32 |  |  | Reference Field |
| 9 | Pack(MRP) | int 32 |  |  | Reference Field |
| 10 | Units(Per Pack) | int 32 |  |  | Reference Field |
| 11 | Units(Price) | int 32 |  |  | Reference Field |
| 12 | CGST | int 32 |  |  | Reference Field |
| 13 | IGST | int 32 |  |  | Reference Field |
| 14 | Total GST | int 32 |  |  | Derived |
| 15 | Units | int 32 |  |  | Mandatory |
|  |  |  |  |  |  |
| **SUPPLIER INVOICE** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| **Header** | | | | | |
| 1 | P.O. No. | int 32 |  |  | Key Field |
| 2 | P.O. Date | date |  |  | Mandatory |
| 3 | Manufacturer Name | string |  |  | Reference Field |
| 4 | Invoice ID | int 32 |  |  | Reference Field |
| 5 | Invoice Date | date |  |  | Reference Field |
| **Line Items** | | | | | |
| 6 | Medicine Name | string |  |  | Mandatory |
| 7 | Medicine ID | int 32 |  |  | Reference Field |
| 8 | Pack(Purchase Price) | int 32 |  |  | Mandatory |
| 9 | Pack / Strip (MRP) | int 32 |  |  | Mandatory |
| 10 | Units(Per Pack / Strip) | int 32 |  |  | Mandatory |
| 11 | Units(Price) | int 32 |  |  | Mandatory |
| 12 | CGST | int 32 |  |  | Mandatory |
| 13 | IGST | int 32 |  |  | Mandatory |
| 14 | Total GST | int 32 |  |  | Derived |
| 15 | Units | int 32 |  |  | Mandatory |
|  |  |  |  |  |  |
| **SUPPLIER MASTER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Supplier ID | int 32 |  |  | Key Field |
| 2 | Supplier Name | string |  |  | Mandatory |
| 3 | Supplier Address | Dictionary |  |  | Optional |
| 4 | Supplier Category | string |  | Retail supplier, Distributor, equitment dealer, trader | Reference Field |
| 5 | Black Listed? | bool |  |  | Optional |
| 6 | Performance Rating | int 32 |  |  | Optional |
| 7 | Payment terms | string |  |  | Optional |
| 8 | Remarks | string |  |  | Optional |
| 9 | Contact Person Name | string |  |  | Optional |
| 10 | Contact No. | int 32 |  |  | Optional |
| 11 | Manager Name | string |  |  | Optional |
| 12 | Manager Contact no. | int 32 |  |  | Optional |
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| **MANUFACTURER** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Manufacturer id | int 32 |  |  | Key Field |
| 2 | Manufacturer Name | string |  |  | Mandatory |
| 3 | Manufacturer Address | Dictionary |  |  | Optional |
| 4 | Specialization | string |  |  | Optional |
| 5 | Active / Inactive | bool |  |  | Optional |
| 6 | Remarks | string |  |  | Optional |
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| **MEDICINES** | | | | |  |
| **Sr. No.** | **Field Name** | **Data Type** | **Field type** | **Attribute** | **Field Properties** |
| 1 | Medicine ID | int 32 |  |  | Key Field |
| 2 | Medicine Name | string |  |  | Mandatory |
| 3 | Manufacturer Name | string |  |  | Optional |
|  | Preferred Distributor name | string |  |  | Optional |
| 4 | Medicine Category | string |  | Emergency Drug, Priscription Drug, Cosmetic Drug, Consumable, Utility Stock, Low cost consumable, Misc | Reference Field |
| 5 | Safety Stock | int 32 |  |  | Optional |
| 6 | CGST | int 32 |  |  | Mandatory |
| 7 | IGST | int 32 |  |  | Mandatory |
| 8 | Total GST | int 32 |  |  | Derived |
| 9 | Current Stock Unit | int 32 |  |  | Derived |
| 10 |  |  |  |  |  |
|  |  |  |  |  |  |
| **INVENTORY** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Stock type | string | List | Opening Stock, Stock Adjustment, Purchase, Purchase Return, Sale, Sale Return, Free items | Mandatory |
| 2 | Distributor Invoice No. | int 32 | Numeric | Automatic copy from transaction | Optional |
| 3 | Date of purchase | date | Date | Automatic copy from transaction | Optional |
| 4 | Distributor Name | string | Text | Automatic copy from transaction | Optional |
| 5 | P.O. No. | int 32 | Numeric | Automatic copy from transaction | Optional |
| 6 | Bill ID | int 32 | Numeric | Automatic copy from transaction | Optional |
| 7 | Bill Date | date | Date | Automatic copy from transaction | Optional |
| 8 | Patient ID | int 32 | Numeric | Automatic copy from transaction | Optional |
| 9 | Medicine ID | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 10 | Medicine Name | string | Text | Automatic copy from transaction | Mandatory |
| 12 | Medicine Category | string | List | Emergency Drug, Priscription Drug, Cosmetic Drug, Consumable, Utility Stock, Low cost consumable, Misc | Mandatory |
| 13 | Batch | string | Text | Automatic copy from transaction | Mandatory |
| 14 | Expiry | date | Date | Automatic copy from transaction | Mandatory |
| 15 | Pack(Purchase Price) | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 16 | Pack(MRP) | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 17 | Units(Per Pack) | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 18 | Units(Price) - derived field | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 19 | Sale Price | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 20 | Units (Purchased / Sold) | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 21 | %(Discount) | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 22 | CGST | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 23 | IGST | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 24 | Total GST | int 32 | Numeric | Automatic copy from transaction | Mandatory |
| 25 | Reason | string | Text |  | Optional |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Chart of Accounts** | | | | | |
| **Sr. No.** | **Field Name** | **Data Type** | **Field Type** | **Attribute** | **Field Properties** |
| 1 | Group | string | List | Assets, Liabilities, Income, Expense | Mandatory |
| 2 | GL Account No. | int 32 | Numeric |  | Mandatory |
| 3 | Account Name | string | Date |  | Mandatory |
| 4 | [Opening Balance](https://in.adda.io/modules/general_ledger_page.php?module_page=general_ledger&page=0&notempty=1) | int 32 | Text |  | Optional |
| 5 | Opening Balance Date | date | Numeric |  | Optional |
| 6 | De-Activate | bool | Check Box |  | Optional |

Modern navigation menu structure

Menu structure is organized into seven main sections:

1. Patient Care

- Patient Registration

- Appointments

- EMR Records

- Promotions & special offers

2. Clinical

- Consultations

- Prescriptions

- Lab Records

- Treatment Plans

3. Pharmacy

- Inventory

Opening Stock entries

Adjustment Entries

Inventory Listing

- Medicines

- Purchase Orders

- Suppliers

4. Procedures

- Service Catalog

- Package Management

- Treatment Rooms

5. Billing

- Invoices

- Payments

- Insurance Claims

- Financial Reports

6. Administration

- Staff Management

- User Access

- Branch Setup

- System Settings (Configuration)

7. Reports & Analytics

- Operational Reports

- Financial Analytics

- Patient Statistics

- Inventory Reports

Features of the menu:

- Responsive design that works on both desktop and mobile

- Collapsible sidebar with icons and labels

- Clear hierarchy with main sections and subsections

- User profile access in the header

- Dark theme matching the requirements

- Mobile-friendly with hamburger menu

- Listing reports with filters may be offered within view tabs of most of the screens