Pharmacy Drugs Inventory Management

Milestone: Logical Model

Group 11

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Percentage of Effort Contributed by Student1: 50%

Percentage of Effort Contributed by Student2: 50%

Signature of Student 1: Sai Varun

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Logical Model:

Primary Key: Underlined with blue color

Foreign Key: Dotted lines with green color

Entity -1:

orders → (order_id, pharmacy_id, shipment_id, order_date, payment_type, total_amount)

Description:

order_id → Primary Key

pharmacy_id, shipment_id → Foreign Key

Orders entity contains whole information of a single order which is linked with pharmacy.

pharmacy_id → It is a foreign key in orders table, and it is a primary key in the drugs table, we join these tables with the drug_id as a reference.

Shipment_id → It is a foreign key in orders table, and it is a primary key in the shipment table, we join these tables with the shipment_id as a reference.

Entity-2:

order_details → (order_id, drug_id, quantiy)

Description:

order_id + drug_id → Primary Key

order_id, drug_id → Foreign Key

Order details entity contains the information of which drugs has ordered by pharmacy_id, and the total amount and payment type data in this table.

order_id → It is a foreign key in the orders details table and a primary key in the orders table which gives us a relation between both these tables.

drug_id → It is a foreign key in the order details table and a primary key in the pharmacy table

Entity-3:

stock_details → (stock_id, drug_id, stock_left, last_ordered_date, last_updated_date, warehouse_id, mfg_date, exp_date)

Description:

stock_id → Primary Key

drug_id, warehouse_id → Foreign Key

Stocks entity contains all the stock information of all the pharmacies with respect to each drug, and maintains the minimum stocks in each pharmacy store.

drug_id → It is a foreign key in stock_details table, and it is a primary key in the drugs table, we join these tables with the drug_id as a reference

warehouse_id → It is a foreign key in stock_details table, and it is a primary key in the warehouse table, we join these tables with the warehouse_id as a reference

Entity-4:

shipment_details → (shipment_id, warehouse_id, shipment_start_date, order_id, shipment_end_date)

Description:

shipment_id → Primary Key

warehouse_id, order_id → Foreign Key

Shipment entity contains all the shipment information like start and end date.

order_id → It is a foreign key in the shipment table and a primary key in the orders table which gives us a relation between both these tables.

warehouse_id → It is a foreign key in the shipment table and a primary key in the warehouse table which gives us a relation between both these tables.

Entity-5:

suppliers → (supplier_id, company_name, phone_no, address)

Description:

supplier_id → Primary Key

Here suppliers are a master tables which holds the information about all the suppliers

Entity-6:

drugs → (drug_id, drug_name, manufacturer, mrp_price, supplier_id)

Description:

drug_id → Primary Key

supplier_id → Foreign Key

Drugs entity contains all the information of the different drugs and stores the main info of it. It also has supplier_id in this table, by this we can know which supplier has supplied that drug.

supplier_id → It is a foreign key in the drugs table and a primary key in the supplier table which gives us a relation between both these tables. It refers to the which supplier is supplying which drugs

Entity-7:

warehouse_details → (warehouse_id, warehouse_name, address, zipcode)

Description:

warehouse_id → Primary Key

Warehouse entity contains all the details of the warehouse information like address, location and zipcode.

Entity-8:

pharmacy → (pharmacy_id, pharmacy_name, address, phone_no)

pharmacy_id → Primary Key

Pharmacy entity contains all the details of the pharmacies with their respective address and zipcode.