

E-PHARMACY DATABASE MANAGEMENT SYSTEM

REVIEW REPORT

Submitted by

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Prepared For

DATABASE SYSTEMS (CSE2004) – PROJECT COMPONENT

Submitted To

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Abstract

India being a highly vast market for innovation and several products but several studies still show that only 1% pharmacy stores have opted for online mode of doing business.

(Ref: thepassage.cc article 748)

But seeing today's era of COVID-19 and continuous lockdown there is an immediate requirement for pharmacy shops to switch to online mode of conducting business. With several telecom & technological players providing affordable data packs and smartphones India since 2014 has seen rise in the use of smartphones in all demographic locations if the country.

Hence this project focusses on database schema and database creation for helping small pharmacy shops transition to online mode of conducting business and hereby expand their customer base with the large customers being available online.

Keywords

Pharmacy, Online shop, E-Retail, E-Pharmacy, Medicine, Ecommerce, COVID-19

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1. INTRODUCTION

The need for healthcare and pharmacy has increased ever since COVID-19 crisis. Especially during the times of frequent and long nationwide and local lock-down buying medical supplies has become a necessity to sustain at home but moving out of home is also unsafe during these times. Businesses have also been facing several tough times of doing business because of the discomfort provided by COVID-19 crisis. Hence I would like to introduce an E-pharmacy Database Management System built on PostgreSQL for several offline shops to continue their business online and for customers to find regular medical supplies.

2. PROJECT SCOPE

E-Pharmacy Database Management System provided the admin with the facility of

- a. Performing all the CRUD operations.
- b. Viewing total profit, commission per purchase of product
- c. Usage of arithmetic operations
- d. Filtering on the basis of different criteria
- e. Knowing several details of products sold on several dates
- f. Use of PL/SQL queries and several functions in PostgreSQL

3. KEY CONTACTS AND STAKEHOLDERS

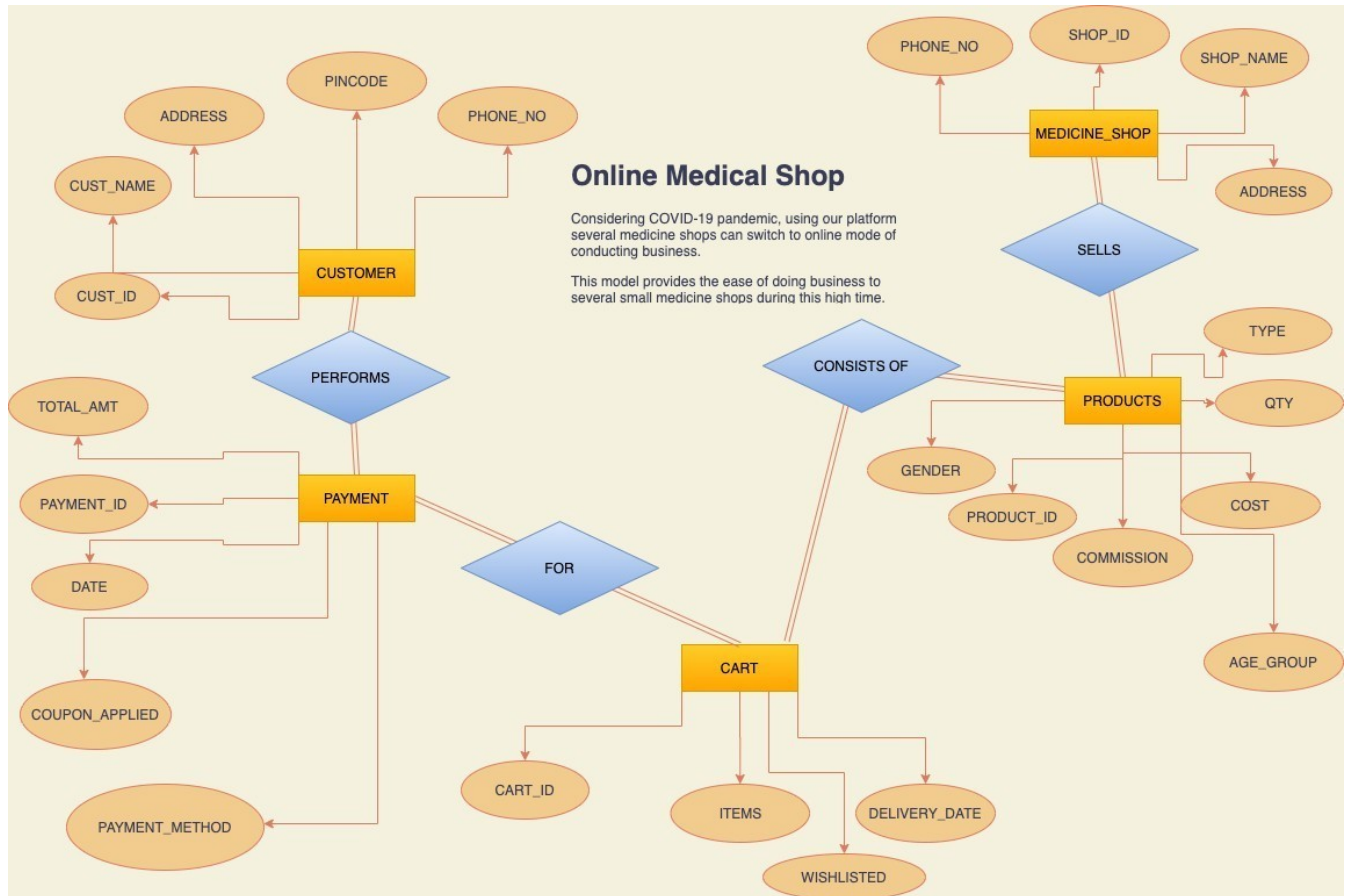
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4. PROJECT RESOURCE REQUIREMENTS

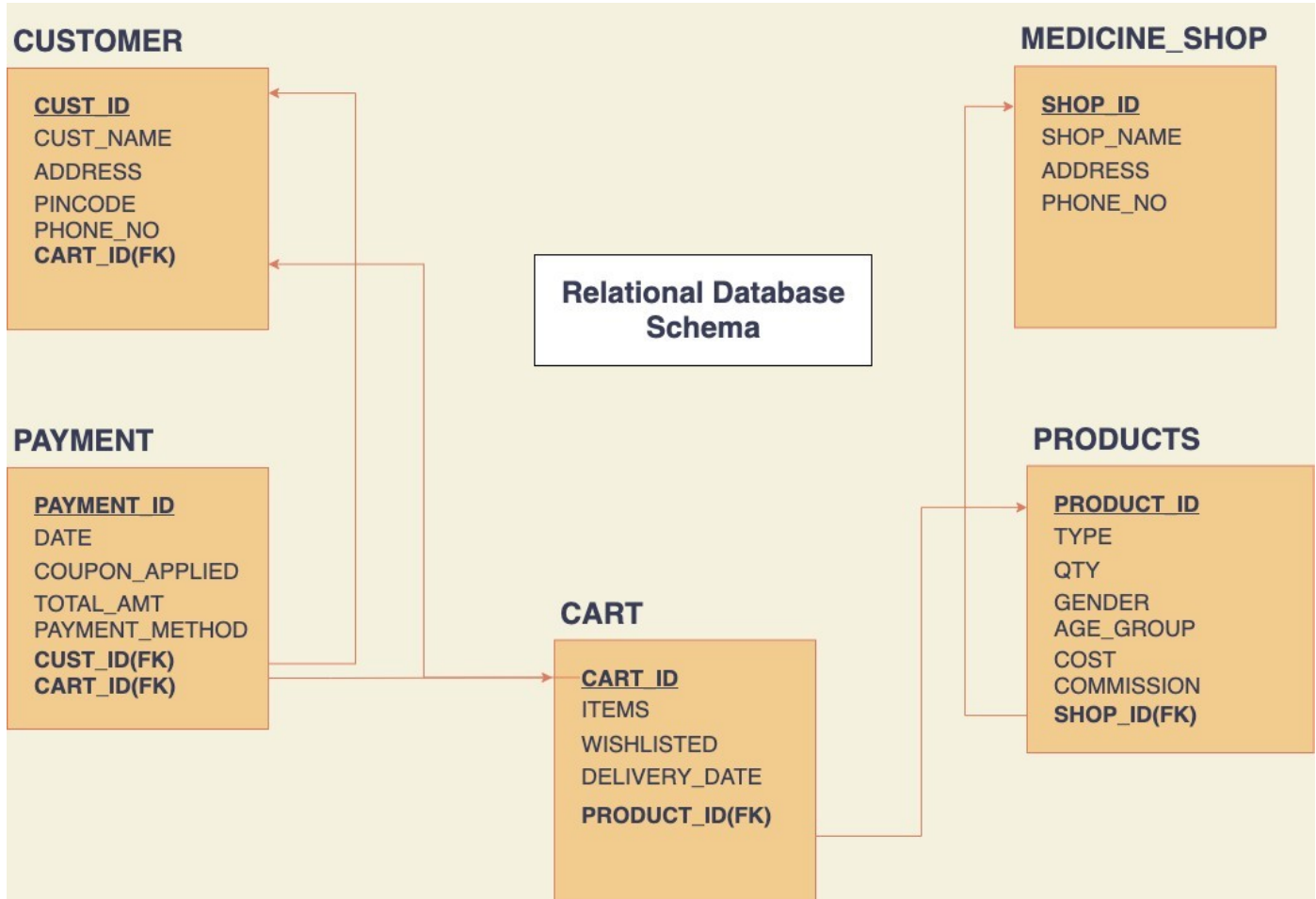
Software Resource Requirements

1. PostgreSQL

5. ER DIAGRAM



6. RELATIONAL DATABASE SCHEMA



7. TABLES AND CONSTRAINTS

CUSTOMER TABLE

```
dhairyaostwal — psql -p5432 test — 129x33
test=# \d CUSTOMER;
               Table "public.customer"
  Column      |      Type      | Collation | Nullable |      Default
-----|-----|-----|-----|-----
cust_id       | bigint         |           | not null | nextval('customer_cust_id_seq'::regclass)
cust_name     | character varying(50) |           | not null |
address       | character varying(100) |           |           |
pincode       | numeric(6,0)    |           | not null |
phone_no      | numeric(10,0)   |           | not null |
cart_id       | integer        |           |           |
Indexes:
    "customer_pkey" PRIMARY KEY, btree (cust_id)
Check constraints:
    "customer_phone_no_check" CHECK (phone_no > '5555555555'::bigint::numeric AND phone_no < '9999999999'::bigint::numeric)
    "customer_pincode_check" CHECK (pincode > 100000::numeric AND pincode < 999999::numeric)
Foreign-key constraints:
    "customer_cart_id_fkey" FOREIGN KEY (cart_id) REFERENCES cart(cart_id)
Referenced by:
    TABLE "payment" CONSTRAINT "payment_cust_id_fkey" FOREIGN KEY (cust_id) REFERENCES customer(cust_id)
test=#
```

PRODUCTS TABLE

```
dhairyaostwal — psql -p5432 test — 129x33
[test=# \d PRODUCTS;
      Column      |      Type      |      Table "public.products"
      -----|-----|-----|-----|-----|
      | Collation | Nullable |      Default
-----|-----|-----|-----|-----|
product_id | bigint         |          | not null | nextval('products_product_id_seq'::regclass)
type       | character varying(20) |          | not null |
qty        | numeric(4,0)    |          | not null |
gender     | character varying(7) |          | not null |
age_group  | character varying(20) |          | not null |
cost       | numeric(5,2)    |          | not null |
commission_percent | numeric(3,2)    |          | not null |
Indexes:
    "products_pkey" PRIMARY KEY, btree (product_id)
Check constraints:
    "gender_constraint" CHECK (gender::text = ANY (ARRAY['MALE'::character varying, 'FEMALE'::character varying]::text[]))
    "products_age_group_check" CHECK (age_group::text = ANY (ARRAY['INFANT'::character varying, 'CHILDREN'::character varying, 'ADULT'::character varying]::text[]))
Referenced by:
    TABLE "cart" CONSTRAINT "cart_product_id_fkey" FOREIGN KEY (product_id) REFERENCES products(product_id) ON DELETE CASCADE
test=#
```

CART TABLE

```
dhairyaostwal — psql -p5432 test — 105x33
[test=# \d CART
      Column      |      Type      |      Table "public.cart"
      -----|-----|-----|-----|-----|
      | Collation | Nullable |      Default
-----|-----|-----|-----|-----|
cart_id | bigint         |          | not null | nextval('cart_cart_id_seq'::regclass)
items   | numeric(15,0)  |          | not null |
wishlist | integer        |          |          |
delivery_date | date          |          | not null |
product_id | integer       |          |          |
Indexes:
    "cart_pkey" PRIMARY KEY, btree (cart_id)
Foreign-key constraints:
    "cart_product_id_fkey" FOREIGN KEY (product_id) REFERENCES products(product_id) ON DELETE CASCADE
Referenced by:
    TABLE "customer" CONSTRAINT "customer_cart_id_fkey" FOREIGN KEY (cart_id) REFERENCES cart(cart_id)
    TABLE "payment" CONSTRAINT "payment_cart_id_fkey" FOREIGN KEY (cart_id) REFERENCES cart(cart_id)
test=#
```


MEDICINE SHOP TABLE

```

[test=# \d MEDICINE_SHOP
Table "public.medicine_shop"
  Column      |          Type          |          |          |          |          Default
-----+-----+-----+-----+-----+-----
shop_id       |      bigint            |          | not null |          | nextval('medicine_shop_shop_id_seq'::regclas
s)
shop_name     | character varying(20)  |          | not null |          |
address       | character varying(100) |          |          |          |
phone_no      | numeric(10,0)          |          | not null |          |
Indexes:
    "medicine_shop_pkey" PRIMARY KEY, btree (shop_id)
Check constraints:
    "medicine_shop_phone_no_check" CHECK (phone_no > '5555555555'::bigint::numeric AND phone_no < '999999
9999'::bigint::numeric)
(END)
```

PAYMENT TABLE

```

[test=# \d PAYMENT;
Table "public.payment"
  Column      |          Type          |          |          |          |          Default
-----+-----+-----+-----+-----+-----
payment_id    |      bigint            |          | not null |          | nextval('payment_payment_id_seq'::regclas
s)
payment_date  |      date              |          |          |          |
coupon_applied | character varying(4)   |          | not null |          |
total_amt     | numeric(6,2)           |          |          |          |
payment_method | character varying(50)  |          | not null |          |
cart_id       |      integer           |          |          |          |
cust_id       |      integer           |          |          |          |
Indexes:
    "payment_pkey" PRIMARY KEY, btree (payment_id)
Check constraints:
    "payment_coupon_applied_check" CHECK (coupon_applied::text = ANY (ARRAY['YES'::character varying, 'NO
'::character varying]::text[]))
    "payment_payment_method_check" CHECK (payment_method::text = ANY (ARRAY['CASH ON DELIVERY'::character
varying, 'CREDIT/DEBIT CARD'::character varying, 'E-WALLETS'::character varying, 'NETBANKING'::character
varying]::text[]))
    "positive_amount" CHECK (total_amt > 0::numeric)
Foreign-key constraints:
    "payment_cart_id_fkey" FOREIGN KEY (cart_id) REFERENCES cart(cart_id)
    "payment_cust_id_fkey" FOREIGN KEY (cust_id) REFERENCES customer(cust_id)
(END)
```

8. WORK BREAK DOWN

Registration Number	Name	Work Assigned
19BCE2199	Dhairya Ostwal	Complete Project

9. REVIEW EVALUATION

COMPONENT	MARKS	MARKS AWARDED
Project Proposal With Individual Role	5	
Abstract Submission	5	
Review-1- Report	5	
Review-1-Presentation	5	
TOTAL	20 MARKS	