

A database for a Vehicle Insurance Company

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Team 3

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Physical Data Model(PDM)

PDM for vehicle insurance service

- Creating table and testing sql queries using MySQL Workbench

```
CREATE DATABASE IF NOT EXISTS mydb;
```

```
USE mydb;
```

```
CREATE TABLE IF NOT EXISTS t3_INCIDENT
```

```
(
```

```
t3_Incident_Id VARCHAR(20) NOT NULL ,
```

```
t3_Incident_Type VARCHAR(50) NULL ,
```

```
t3_Incident_Date DATE NOT NULL ,
```

```
t3_Description VARCHAR(1000) NULL ,
```

```
CONSTRAINT XPKINCIDENT_17 PRIMARY KEY (t3_Incident_Id)
```

```
);
```

```
CREATE UNIQUE INDEX XPKINCIDENT_17 ON t3_INCIDENT (t3_Incident_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_CUSTOMER
```

```
(
```

```
t3_Cust_Id VARCHAR(15) NOT NULL ,
```

```
t3_Cust_FName VARCHAR(15) NOT NULL ,
```

```
t3_Cust_LName VARCHAR(15) NOT NULL ,
```

```
t3_Cust_DOB DATE NOT NULL ,
```

```
t3_Cust_Gender CHAR(2) NOT NULL ,
```

```
t3_Cust_Address VARCHAR(35) NOT NULL ,
```

```
t3_Cust_MOB_Number BIGINT NOT NULL ,
```

```
t3_Cust_Email VARCHAR(25) NULL ,
```

```
t3_Cust_Passport_Number VARCHAR(20) NULL ,
```

```
t3_Cust_Marital_Status CHAR(12) NULL ,  
t3_Cust_PPS_Number INTEGER NULL ,  
CONSTRAINT XPKCUSTOMER PRIMARY KEY (t3_Cust_Id)  
);
```

```
CREATE UNIQUE INDEX XPKCUSTOMER_1 ON t3_CUSTOMER (t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_INCIDENT_REPORT  
(  
    Incident_Report_Id VARCHAR(20) NOT NULL ,  
    t3_Incident_Type CHAR(50) NULL ,  
    t3_Incident_Inspector VARCHAR(20) NULL ,  
    t3_Incident_Cost INTEGER NULL ,  
    t3_Incident_Report_Description VARCHAR(1000) NULL ,  
    t3_Incident_Id VARCHAR(20) NOT NULL ,  
    t3_Cust_Id VARCHAR(20) NOT NULL ,  
    CONSTRAINT XPKINCIDENT_REPORT_18 PRIMARY KEY  
    (Incident_Report_Id,t3_Incident_Id,t3_Cust_Id),  
    CONSTRAINT R_83 FOREIGN KEY (t3_Incident_Id) REFERENCES t3_INCIDENT (t3_Incident_Id) ON  
    DELETE CASCADE ON UPDATE CASCADE,  
    CONSTRAINT R_86 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER (t3_Cust_Id) ON  
    DELETE CASCADE ON UPDATE CASCADE  
);  
  
CREATE UNIQUE INDEX XPKINCIDENT_REPORT_18 ON t3_INCIDENT_REPORT (Incident_Report_Id ASC,t3_Incident_Id  
ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_INSURANCE_COMPANY
(
    t3_Company_Name VARCHAR(70) NOT NULL ,
    t3_Company_Address VARCHAR(400) NULL ,
    t3_Company_Contact_Number bigint NULL ,
    t3_Company_Fax bigint NULL ,
    t3_Company_Email VARCHAR(50) NULL ,
    t3_Company_Website VARCHAR(50) NULL ,
    t3_Company_Location VARCHAR(50) NULL,
    t3_Company_Department_Name VARCHAR(50) NULL ,
    t3_Company_Office_Name VARCHAR(50) NULL ,
    CONSTRAINT XPKINSURANCE_COMPANY_15 PRIMARY KEY
    (t3_Company_Name)
);

CREATE UNIQUE INDEX XPKINSURANCE_COMPANY_15 ON t3_INSURANCE_COMPANY
(t3_Company_Name ASC);

-- Table 5

CREATE TABLE IF NOT EXISTS t3_DEPARTMENT
(
    t3_Department_Name VARCHAR(50) NOT NULL ,
    t3_Department_ID VARCHAR(50) NOT NULL ,
    t3_Department_Staff VARCHAR(50) NULL ,
    t3_Company_Name VARCHAR(100) NOT NULL ,
    CONSTRAINT XPKDEPARTMENT PRIMARY KEY
    (t3_Department_Name,t3_Department_ID,t3_Company_Name),
    CONSTRAINT R_56 FOREIGN KEY (t3_Company_Name)
```

REFERENCES t3_INSURANCE_COMPANY (t3_Company_Name) ON DELETE CASCADE ON UPDATE
CASCADE

);

CREATE UNIQUE INDEX XPKDEPARTMENT ON t3_DEPARTMENT

(t3_Department_Name ASC,t3_Department_ID ASC,t3_Company_Name ASC);

CREATE TABLE t3_VEHICLE_SERVICE

(

t3_Department_Name VARCHAR(100) NOT NULL ,

t3_Vehicle_Service_Company_Name VARCHAR(10) NOT NULL ,

t3_Vehicle_Service_Address VARCHAR(200) NULL ,

t3_Vehicle_Service_Contact VARCHAR(200) NULL ,

t3_Vehicle_Service_Incharge VARCHAR(200) NULL ,

t3_Vehicle_Service_Type VARCHAR(200) NULL ,

t3_Department_ID VARCHAR(200) NOT NULL ,

t3_Company_Name VARCHAR(200) NOT NULL ,

CONSTRAINT XPKVEHICLE_SERVICE PRIMARY KEY

(t3_Vehicle_Service_Company_Name,t3_Department_Name),

CONSTRAINT R_50 FOREIGN KEY (t3_Department_Name, t3_Department_ID,

t3_Company_Name) REFERENCES t3_DEPARTMENT (t3_Department_Name,

t3_Department_ID, t3_Company_Name) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKVEHICLE_SERVICE ON t3_VEHICLE_SERVICE

(t3_Vehicle_Service_Company_Name ASC,t3_Department_Name ASC);

```
CREATE TABLE t3_VEHICLE
(
t3_Vehicle_Id VARCHAR(20) NOT NULL ,
t3_Policy_Id VARCHAR(20) NULL ,
t3_Vehicle_Registration_Number VARCHAR(20) NOT NULL ,
t3_Vehicle_Value bigint NULL ,
t3_Vehicle_Type VARCHAR(20) NOT NULL ,
t3_Vehicle_Size INTEGER NULL ,
t3_Vehicle_Number_Of_Seat INTEGER NULL ,
t3_Vehicle_Manufacturer VARCHAR(20) NULL ,
t3_Vehicle_Engine_Number INTEGER NULL ,
t3_Vehicle_Chassis_Number INTEGER NULL ,
t3_Vehicle_Number INTEGER NULL ,
t3_Vehicle_Model_Number VARCHAR(20) NULL ,
t3_Cust_Id VARCHAR(20) NOT NULL ,
CONSTRAINT XPKVEHICLE_6 PRIMARY KEY (t3_Vehicle_Id,t3_Cust_Id),
CONSTRAINT R_92 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER
(t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE UNIQUE INDEX XPKVEHICLE_6 ON t3_VEHICLE (t3_Vehicle_Id ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE t3_PREMIUM_PAYMENT
(
t3_Premium_Payment_Id VARCHAR(20) NOT NULL ,
t3_Policy_Number VARCHAR(20) NOT NULL ,
```

```
t3_Premium_Payment_Amount INTEGER NOT NULL ,  
t3_Premium_Payment_Schedule DATE NOT NULL ,  
t3_Receipt_Id VARCHAR(20) NOT NULL ,  
t3_Cust_Id VARCHAR(20) NOT NULL ,  
CONSTRAINT XPKPREMIUM_PAYMENT_5 PRIMARY KEY  
(t3_Premium_Payment_Id,t3_Cust_Id),  
CONSTRAINT R_85 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER  
(t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE  
);  
  
CREATE UNIQUE INDEX XPKPREMIUM_PAYMENT_5 ON  
t3_PREMIUM_PAYMENT  
(t3_Premium_Payment_Id ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_RECEIPT  
(  
t3_Receipt_Id VARCHAR(20) NOT NULL ,  
t3_Time DATE NOT NULL ,  
t3_Cost INTEGER NOT NULL ,  
t3_Premium_Payment_Id VARCHAR(20) NOT NULL ,  
t3_Cust_Id VARCHAR(20) NOT NULL ,  
CONSTRAINT XPKRECEIPT_21 PRIMARY KEY (t3_Receipt_Id,t3_Premium_Payment_Id,t3_Cust_Id),  
CONSTRAINT R_84 FOREIGN KEY (t3_Premium_Payment_Id, t3_Cust_Id)  
REFERENCES t3_PREMIUM_PAYMENT (t3_Premium_Payment_Id, t3_Cust_Id) ON DELETE  
CASCADE ON UPDATE CASCADE  
);  
  
CREATE UNIQUE INDEX XPKRECEIPT_21 ON t3_RECEIPT (t3_Receipt_Id ASC,t3_Premium_Payment_Id ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_APPLICATION
(
    t3_Application_Id VARCHAR(20) NOT NULL ,
    t3_Vehicle_Id VARCHAR(20) NOT NULL ,
    t3_Application_Status CHAR(8) NOT NULL ,
    t3_Coverage VARCHAR(50) NOT NULL ,
    t3_Cust_Id VARCHAR(20) NOT NULL ,
    CONSTRAINT XPKAPPLICATION_2 PRIMARY KEY (t3_Application_Id,t3_Cust_Id),
    CONSTRAINT R_93 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER
    (t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE UNIQUE INDEX XPKAPPLICATION_2 ON t3_APPLICATION
(t3_Application_Id ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_INSURANCE_POLICY
(
    t3_Agreement_id VARCHAR(20) NOT NULL ,
    t3_Department_Name VARCHAR(20) NULL ,
    t3_Policy_Number VARCHAR(20) NULL ,
    t3_Start_Date DATE NULL ,
    t3_Expiry_Date DATE NULL ,
    t3_Term_Condition_Description VARCHAR(400) NULL ,
    t3_Application_Id VARCHAR(20) NOT NULL ,
    t3_Cust_Id VARCHAR(20) NOT NULL ,
```


CONSTRAINT XPKINSURANCE_POLICY_4 PRIMARY KEY

(t3_Agreement_id,t3_Application_Id,t3_Cust_Id),

CONSTRAINT R_95 FOREIGN KEY (t3_Application_Id, t3_Cust_Id) REFERENCES t3_APPLICATION

(t3_Application_Id, t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKINSURANCE_POLICY_4 ON t3_INSURANCE_POLICY

(t3_Agreement_id ASC,t3_Application_Id ASC,t3_Cust_Id ASC);

CREATE TABLE t3_POLICY_RENEWABLE

(

t3_Policy_Renewable_Id VARCHAR(20) NOT NULL ,

t3_Date_Of_Renewal DATE NOT NULL ,

t3_Type_Of_Renewal CHAR(15) NOT NULL ,

t3_Agreement_id VARCHAR(20) NOT NULL ,

t3_Application_Id VARCHAR(20) NOT NULL ,

t3_Cust_Id VARCHAR(20) NOT NULL ,

CONSTRAINT XPKPOLICY_RENEWABLE_16 PRIMARY KEY

(t3_Policy_Renewable_Id,t3_Agreement_id,t3_Application_Id,t3_Cust_Id),

CONSTRAINT R_101 FOREIGN KEY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id)

REFERENCES t3_INSURANCE_POLICY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id) ON DELETE

CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKPOLICY_RENEWABLE_16 ON

t3_POLICY_RENEWABLE

(t3_Policy_Renewable_Id ASC,t3_Agreement_id ASC,t3_Application_Id

ASC,t3_Cust_Id ASC);

```
CREATE TABLE IF NOT EXISTS t3_MEMBERSHIP
(
    t3_Membership_Id VARCHAR(20) NOT NULL ,
    t3_Membership_Type CHAR(15) NOT NULL ,
    t3_Organisation_Contact VARCHAR(20) NULL ,
    t3_Cust_Id VARCHAR(20) NOT NULL ,
    CONSTRAINT XPKMEMBERSHIP_12 PRIMARY KEY
    (t3_Membership_Id,t3_Cust_Id),
    CONSTRAINT R_91 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER
    (t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE UNIQUE INDEX XPKMEMBERSHIP_12 ON t3_MEMBERSHIP
(t3_Membership_Id ASC,t3_Cust_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_QUOTE
(
    t3_Quote_Id VARCHAR(20) NOT NULL ,
    t3_Issue_Date DATE NOT NULL ,
    t3_Valid_From_Date DATE NOT NULL ,
    t3_Valid_Till_Date DATE NOT NULL ,
    t3_Description VARCHAR(100) NULL ,
    t3_Product_Id VARCHAR(20) NOT NULL ,
    t3_Coverage_Level VARCHAR(20) NOT NULL ,
    t3_Application_Id VARCHAR(20) NOT NULL ,
    t3_Cust_Id VARCHAR(20) NOT NULL ,
```

CONSTRAINT XPKQUOTE_3 PRIMARY KEY

(t3_Quote_Id,t3_Application_Id,t3_Cust_Id),

CONSTRAINT R_94 FOREIGN KEY (t3_Application_Id, t3_Cust_Id) REFERENCES

t3_APPLICATION (t3_Application_Id, t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKQUOTE_3 ON t3_QUOTE

(t3_Quote_Id ASC,t3_Application_Id ASC,t3_Cust_Id ASC);

CREATE TABLE IF NOT EXISTS t3_STAFF

(

t3_Staff_Id VARCHAR(200) NOT NULL ,

t3_Staff_Fname VARCHAR(100) NULL ,

t3_Staff_LName VARCHAR(100) NULL ,

t3_Staff_Address VARCHAR(200) NULL ,

t3_Staff_Contact BIGINT NULL ,

t3_Staff_Gender CHAR(2) NULL ,

t3_Staff_Marital_Status CHAR(8) NULL ,

t3_Staff_Nationality CHAR(15) NULL ,

t3_Staff_Qualification VARCHAR(20) NULL ,

t3_Staff_Allowance bigint NULL ,

t3_Staff_PPS_Number bigint NULL ,

t3_Company_Name VARCHAR(400) NOT NULL ,

CONSTRAINT XPKSTAFF_9 PRIMARY KEY (t3_Staff_Id,t3_Company_Name),

CONSTRAINT R_105 FOREIGN KEY (t3_Company_Name) REFERENCES

t3_INSURANCE_COMPANY (t3_Company_Name) ON DELETE CASCADE ON UPDATE CASCADE

);

```
CREATE UNIQUE INDEX XPKSTAFF_9 ON t3_STAFF (t3_Staff_Id ASC,t3_Company_Name ASC);
```

```
CREATE TABLE t3_NOK
```

```
(
```

```
t3_Nok_Id VARCHAR(20) NOT NULL ,
```

```
t3_Nok_Name VARCHAR(20) NULL ,
```

```
t3_Nok_Address VARCHAR(200) NULL ,
```

```
t3_Nok_Phone_Number BIGINT NULL ,
```

```
t3_Nok_Gender CHAR(10) NULL ,
```

```
t3_Nok_Marital_Status CHAR(8) NULL ,
```

```
t3_Agreement_id VARCHAR(20) NOT NULL ,
```

```
t3_Application_Id VARCHAR(20) NOT NULL ,
```

```
t3_Cust_Id VARCHAR(20) NOT NULL ,
```

```
CONSTRAINT XPKNOK_14 PRIMARY KEY
```

```
(t3_Nok_Id,t3_Agreement_id,t3_Application_Id,t3_Cust_Id),
```

```
CONSTRAINT R_99 FOREIGN KEY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id)
```

```
REFERENCES t3_INSURANCE_POLICY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id) ON DELETE
```

```
CASCADE ON UPDATE CASCADE
```

```
);
```

```
CREATE UNIQUE INDEX XPKNOK_14 ON t3_NOK (t3_Nok_Id ASC,t3_Agreement_id ASC,t3_Application_Id ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_PRODUCT
```

```
(
```

```
t3_Product_Number VARCHAR(200) NOT NULL ,
```

```
t3_Product_Price INTEGER NULL ,
```

```
t3_Product_Type CHAR(40) NULL ,  
t3_Company_Name VARCHAR(200) NOT NULL ,  
CONSTRAINT XPKPRODUCT_20 PRIMARY KEY (t3_Product_Number,t3_Company_Name),  
CONSTRAINT R_107 FOREIGN KEY (t3_Company_Name) REFERENCES t3_INSURANCE_COMPANY  
(t3_Company_Name) ON DELETE CASCADE ON UPDATE CASCADE  
);
```

```
CREATE UNIQUE INDEX XPKPRODUCT_20 ON t3_PRODUCT (t3_Product_Number ASC,t3_Company_Name ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_OFFICE
```

```
(  
t3_Office_Name VARCHAR(200) NOT NULL ,  
t3_Office_Leader VARCHAR(200) NOT NULL ,  
t3_Contact_Information VARCHAR(200) NOT NULL ,  
t3_Address VARCHAR(200) NOT NULL ,  
t3_Admin_Cost INTEGER NULL ,  
t3_Staff VARCHAR(50) NULL ,  
t3_Department_Name VARCHAR(200) NOT NULL ,  
t3_Department_ID VARCHAR(200) NOT NULL ,  
t3_Company_Name VARCHAR(200) NOT NULL ,  
CONSTRAINT XPKOFFICE_11 PRIMARY  
KEY(t3_Office_Name,t3_Department_Name,t3_Company_Name),  
CONSTRAINT R_104 FOREIGN KEY (t3_Department_Name,t3_Department_ID,t3_Company_Name)  
REFERENCES t3_DEPARTMENT (t3_Department_Name,t3_Department_ID,t3_Company_Name) ON  
DELETE CASCADE ON UPDATE CASCADE  
);
```

```
CREATE UNIQUE INDEX XPKOFFICE_11 ON t3_OFFICE (t3_Office_Name ASC,t3_Department_Name ASC,t3_Company_Name ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_COVERAGE
(
    t3_Coverage_Id VARCHAR(20) NOT NULL ,
    t3_Coverage_Amount INTEGER NOT NULL ,
    t3_Coverage_Type CHAR(30) NOT NULL ,
    t3_Coverage_Level CHAR(30) NOT NULL ,
    t3_Product_Id VARCHAR(30) NOT NULL ,
    t3_Coverage_Description VARCHAR(400) NULL ,
    t3_Coverage_Terms VARCHAR(50) NULL ,
    t3_Company_Name VARCHAR(400) NOT NULL ,
    CONSTRAINT XPKCOVERAGE_19 PRIMARY KEY
    (t3_Coverage_Id,t3_Company_Name),
    CONSTRAINT R_102 FOREIGN KEY (t3_Company_Name) REFERENCES
    t3_INSURANCE_COMPANY (t3_Company_Name) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE UNIQUE INDEX XPKCOVERAGE_19 ON t3_COVERAGE
(t3_Coverage_Id ASC,t3_Company_Name ASC);
```

```
CREATE TABLE IF NOT EXISTS t3_INSURANCE_POLICY_COVERAGE
(
    t3_Agreement_id VARCHAR(20) NOT NULL ,
    t3_Application_Id VARCHAR(20) NOT NULL ,
    t3_Cust_Id VARCHAR(20) NOT NULL ,
    t3_Coverage_Id VARCHAR(20) NOT NULL ,
```

```
t3_Company_Name VARCHAR(200) NOT NULL ,  
  
CONSTRAINT XPKINSURANCE_POLICY_4_COVERAGE PRIMARY KEY  
(t3_Agreement_id,t3_Application_Id,t3_Cust_Id,t3_Coverage_Id,t3_Company_Name),  
  
CONSTRAINT R_97 FOREIGN KEY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id)  
REFERENCES t3_INSURANCE_POLICY (t3_Agreement_id, t3_Application_Id, t3_Cust_Id) ON DELETE  
CASCADE ON UPDATE CASCADE,  
  
CONSTRAINT R_98 FOREIGN KEY (t3_Coverage_Id, t3_Company_Name)  
REFERENCES t3_COVERAGE (t3_Coverage_Id, t3_Company_Name) ON DELETE CASCADE ON  
UPDATE CASCADE  
  
);  
  
CREATE UNIQUE INDEX XPKINSURANCE_POLICY_4_COVERAGE ON  
t3_INSURANCE_POLICY_COVERAGE  
(t3_Agreement_id ASC,t3_Application_Id ASC,t3_Cust_Id ASC,t3_Coverage_Id  
ASC,t3_Company_Name ASC);  
  
  
CREATE TABLE IF NOT EXISTS t3_CLAIM  
(  
  
t3_Claim_Id VARCHAR(20) NOT NULL ,  
  
t3_Agreement_id VARCHAR(20) NOT NULL ,  
  
t3_Claim_Amount INTEGER NOT NULL ,  
  
t3_Incident_Id VARCHAR(20) NOT NULL ,  
  
t3_Damage_Type VARCHAR(20) NOT NULL ,  
  
t3_Date_Of_Claim DATE NOT NULL ,  
  
t3_Claim_Status CHAR(10) NOT NULL ,  
  
t3_Cust_Id VARCHAR(20) NOT NULL ,  
  
CONSTRAINT XPKCLAIM_7 PRIMARY KEY (t3_Claim_Id,t3_Cust_Id),
```

CONSTRAINT R_88 FOREIGN KEY (t3_Cust_Id) REFERENCES t3_CUSTOMER

(t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKCLAIM_7 ON t3_CLAIM

(t3_Claim_Id ASC,t3_Cust_Id ASC);

CREATE TABLE IF NOT EXISTS t3_CLAIM_SETTLEMENT

(

t3_Claim_Settlement_Id VARCHAR(20) NOT NULL ,

t3_Vehicle_Id VARCHAR(20) NOT NULL ,

t3_Date_Settled DATE NOT NULL ,

t3_Amount_Paid INTEGER NOT NULL ,

t3_Coverage_Id VARCHAR(20) NOT NULL ,

t3_Claim_Id VARCHAR(20) NOT NULL ,

t3_Cust_Id VARCHAR(20) NOT NULL ,

CONSTRAINT XPKCLAIM_SETTLEMENT_8 PRIMARY KEY

(t3_Claim_Settlement_Id,t3_Claim_Id,t3_Cust_Id),

CONSTRAINT R_90 FOREIGN KEY (t3_Claim_Id, t3_Cust_Id) REFERENCES t3_CLAIM

(t3_Claim_Id, t3_Cust_Id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE UNIQUE INDEX XPKCLAIM_SETTLEMENT_8 ON

t3_CLAIM_SETTLEMENT

(t3_Claim_Settlement_Id ASC,t3_Claim_Id ASC,t3_Cust_Id ASC);

TESTING QUERY 1**SELECT*********FROM****t3_CUSTOMER,****t3_VEHICLE****WHERE****t3_CUSTOMER.t3_Cust_Id IN (SELECT****t3_Cust_Id****FROM****t3_INCIDENT_REPORT****WHERE****t3_Cust_Id IN (SELECT****t3_Cust_Id****FROM****t3_CLAIM****WHERE****t3_Claim_Status = 'Pending'))****AND t3_CUSTOMER.t3_Cust_Id = t3_VEHICLE.t3_Cust_Id;**

OUTPUT QUERY 1

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```

SELECT *
FROM
  t3_CUSTOMER,
  t3_VEHICLE
WHERE
  t3_CUSTOMER.t3_Cust_Id IN (SELECT
    t3_Cust_Id
  FROM
    t3_INCIDENT_REPORT
  WHERE
    t3_Cust_Id IN (SELECT
      t3_Cust_Id
    FROM
      t3_CLAIM
    WHERE
      t3_Claim_Status = 'Pending'))
  AND t3_CUSTOMER.t3_Cust_Id = t3_VEHICLE.t3_Cust_Id;

```

The results pane shows the following data:

| # | t3_Cust_Id | t3_Cust_FName | t3_Cust_LName | t3_Cust_DOB | t3_Cust_Gender | t3_Cust_Address | t3_Cust_MOB_Numbe | t3_Cust_Email | t3_Cust_Passport |
|---|------------|---------------|---------------|-------------|----------------|-----------------|-------------------|-------------------------|------------------|
| 1 | 30219 | Diksha | Chatterjee | 1997-10-23 | F | Faridabad | 6607568394 | mail0843@company.com | 6998758364 |
| 2 | 30202 | Rohit | Roy | 2000-07-28 | M | Pune | 1107568394 | mail0342162@company.com | 8126759364 |
| 3 | 30210 | Mohammad | Rajhman | 1979-04-23 | M | Vizag | 4007568394 | mail758@company.com | 7866651264 |
| 4 | 30216 | Yashvi | Mehta | 1989-10-23 | F | Lucknow | 2207568394 | mail08s423@company.com | 7016758364 |
| 5 | 30201 | Amitabh | Paliwal | 1994-09-06 | M | Haldwani | 6963456969 | mail904@company.com | 9103258395 |

TESTING QUERY 2

SELECT

*

FROM

t3_CUSTOMER

WHERE

t3_Cust_id IN (SELECT

t3_Cust_Id

FROM

t3_PREMIUM_PAYMENT

WHERE

t3_Premium_Payment_Amount > (SELECT

```

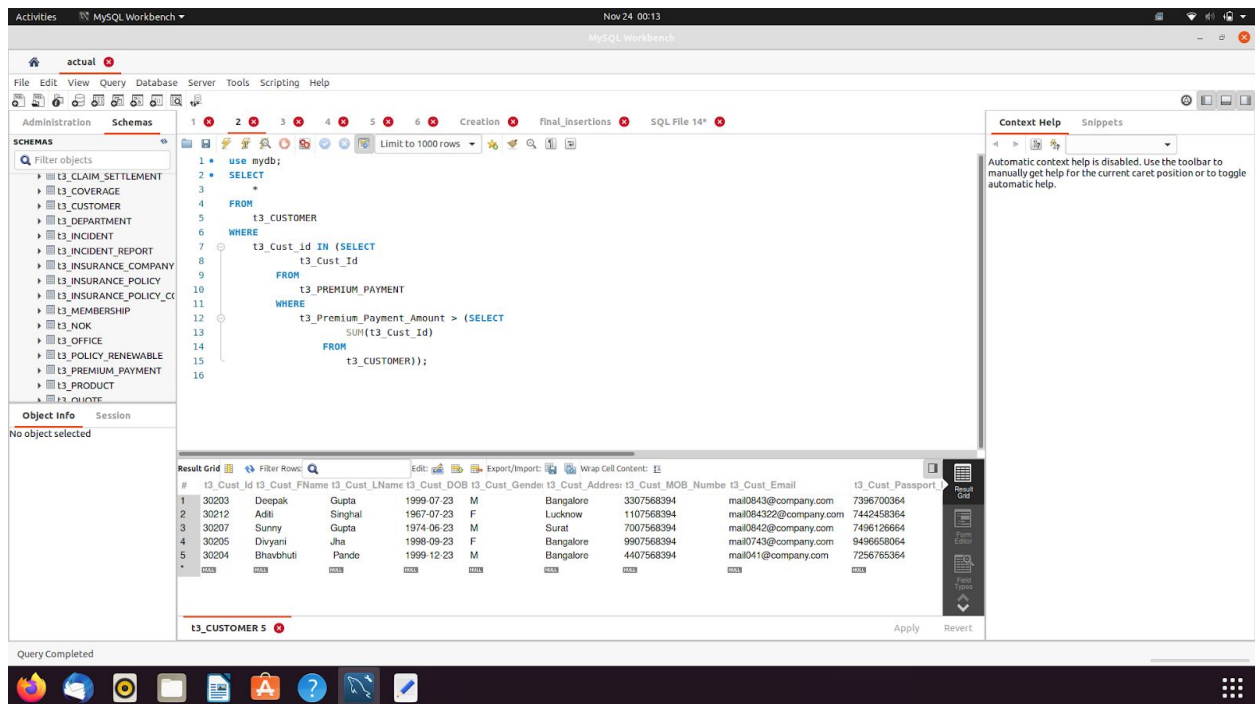
SUM(t3_Cust_Id)

FROM

t3_CUSTOMER));

```

OUTPUT QUERY 2



The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```

1 use mydb;
2 SELECT
3 *
4 FROM
5 t3_CUSTOMER
6 WHERE
7 t3_Cust_Id IN (SELECT
8 t3_Cust_Id
9 FROM
10 t3_PREMIUM_PAYMENT
11 WHERE
12 t3_Premium_Payment_Amount > (SELECT
13 SUM(t3_Cust_Id)
14 FROM
15 t3_CUSTOMER));
16

```

The result grid shows the following data:

| # | t3_Cust_Id | t3_Cust_FName | t3_Cust_LName | t3_Cust_DOB | t3_Cust_Gender | t3_Cust_Address | t3_Cust_MOB_Numbe | t3_Cust_Email | t3_Cust_Passport |
|---|------------|---------------|---------------|-------------|----------------|-----------------|-------------------|------------------------|------------------|
| 1 | 30203 | Deepak | Gupta | 1999-07-23 | M | Bangalore | 3307568394 | mail0843@company.com | 7396700364 |
| 2 | 30212 | Aditi | Singhal | 1967-07-23 | F | Lucknow | 1107568394 | mail084322@company.com | 7442458364 |
| 3 | 30207 | Sunny | Gupta | 1974-06-23 | M | Surat | 7007568394 | mail0842@company.com | 7496126664 |
| 4 | 30205 | Divyani | Jha | 1998-09-23 | F | Bangalore | 9907568394 | mail0743@company.com | 9496658064 |
| 5 | 30204 | Bhavbhuti | Pande | 1999-12-23 | M | Bangalore | 4407568394 | mail041@company.com | 7256765364 |

The status bar at the bottom indicates "Query Completed".

TESTING QUERY 3

```

SELECT

*

FROM

t3_INSURANCE_COMPANY

WHERE

t3_Company_Name IN (SELECT

t3_Company_Name

FROM

```

t3_OFFICE

GROUP BY t3_Company_Name

HAVING COUNT(DISTINCT (t3_Address)) > 1)

AND t3_Company_Name IN (SELECT

t3_DEPARTMENT.t3_Company_Name

FROM

t3_PRODUCT

INNER JOIN

t3_DEPARTMENT ON t3_DEPARTMENT.t3_Company_Name = t3_PRODUCT.t3_Company_Name

GROUP BY t3_DEPARTMENT.t3_Company_Name

HAVING COUNT(DISTINCT (t3_Product_Type)) > COUNT(DISTINCT (t3_Department_Name)));

OUTPUT QUERY 3

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```

1 use mydb;
2
3 SELECT
4 *
5 FROM
6 t3_INSURANCE_COMPANY
7 WHERE
8 t3_Company_Name IN (SELECT
9 t3_Company_Name
10 FROM
11 t3_OFFICE
12 GROUP BY t3_Company_Name
13 HAVING COUNT(DISTINCT (t3_Address)) > 1)
14 AND t3_Company_Name IN (SELECT
15 t3_DEPARTMENT.t3_Company_Name
16 FROM
17 t3_PRODUCT
18 INNER JOIN
19 t3_DEPARTMENT ON t3_DEPARTMENT.t3_Company_Name = t3_PRODUCT.t3_Company_Name
20 GROUP BY t3_DEPARTMENT.t3_Company_Name
21 HAVING COUNT(DISTINCT (t3_Product_Type)) > COUNT(DISTINCT (t3_Department_Name)));
  
```

The Results Grid shows the following data:

| # | t3_Company_Name | t3_Company_Address | t3_Company_Contact_Numbr | t3_Company_Fax | t3_Company_Email | t3_Company_Website |
|---|--------------------------------------|--|--------------------------|----------------|--------------------------------------|----------------------------|
| 1 | Birla Sun Vehicle Insurance Compa... | One World Center, Tower 1, 16th FL... | 18002707000 | 18002707000 | care.Vehicleinsurance@adityabirla... | https://www.birlasun.co.in |
| 2 | Kotak Vehicle Insurance Company ... | Kotak Mahindra Vehicle Insurance ... | 1800287867160 | 556622020 | KotakVehicleinsurance@help.com | KotakVehicleInsurance.com |
| 3 | SBI Vehicle Insurance Company L... | SBI Vehicle Corporate Solutions, 7L... | 180571584020 | 5565871687 | sbiVehicle@help.com | sbiVehicle.com |

The status bar at the bottom indicates "Query Completed".

TESTING QUERY 4**SELECT DISTINCT*********FROM****t3_CUSTOMER****WHERE****t3_Cust_id IN (SELECT****t1.t3_Cust_Id****FROM****t3_VEHICLE AS t1****INNER JOIN****t3_INCIDENT_REPORT AS t2 ON t1.t3_Cust_Id = t2.t3_Cust_Id****LEFT JOIN****t3_PREMIUM_PAYMENT AS t3 ON t2.t3_Cust_Id = t3.t3_Cust_Id****GROUP BY t1.t3_Cust_Id****HAVING COUNT(t1.t3_Vehicle_Id) > 1);**

OUTPUT QUERY 4

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```

1 use mydb;
2 SELECT DISTINCT
3 *
4 FROM
5 t3_CUSTOMER
6 WHERE
7 t3_Cust_Id IN (SELECT
8 t1.t3_Cust_Id
9 FROM
10 t3_VEHICLE AS t1
11 INNER JOIN
12 t3_INCIDENT_REPORT AS t2 ON t1.t3_Cust_Id = t2.t3_Cust_Id
13 LEFT JOIN
14 t3_PREMIUM_PAYMENT AS t3 ON t2.t3_Cust_Id = t3.t3_Cust_Id
15 GROUP BY t1.t3_Cust_Id
16 HAVING COUNT(t1.t3_Vehicle_Id) > 1);

```

The result grid shows the following data:

| # | t3_Cust_Id | t3_Cust_FName | t3_Cust_LName | t3_Cust_DOB | t3_Cust_Gender | t3_Cust_Address | t3_Cust_MOB_Numbe | t3_Cust_Email | t3_Cust_Passport_No |
|---|------------|---------------|---------------|-------------|----------------|-----------------|-------------------|----------------------|---------------------|
| 1 | 30205 | Divyani | Jha | 1998-09-23 | F | Bangalore | 9807568394 | mail0743@company.com | 9496658064 |
| 2 | 30208 | Shivang | Bisht | 1969-07-23 | M | Bangalore | 9007568394 | mail0732@company.com | 7496546564 |
| 3 | 30211 | Aakriti | Patil | 1999-07-23 | F | Hyderabad | 7707568394 | mail0451@company.com | 7696658364 |

The status bar at the bottom indicates "Query Completed".

TESTING QUERY 5

SELECT

t1.*

FROM

t3_VEHICLE AS t1,

t3_PREMIUM_PAYMENT AS t2

WHERE

t2.t3_Premium_Payment_Amount > t1.t3_Vehicle_Number

AND t1.t3_Cust_Id = t2.t3_Cust_Id;

OUTPUT QUERY 5

MySQL Workbench - Nov 24 00:13

actual

File Edit View Query Database Server Tools Scripting Help

Administration Schemas

1 2 3 4 5 6 7 8 9

1 use mydb;

2 SELECT

3 t1.*

4 FROM

5 t3_VEHICLE AS t1,

6 t3_PREMIUM_PAYMENT AS t2

7 WHERE

8 t2.t3_Premium_Payment_Amount > t1.t3_Vehicle_Number

9 AND t1.t3_Cust_Id = t2.t3_Cust_Id;

Context Help Snippets

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Object Info Session

No object selected

Result Grid

| # | t3_Vehicle_Id | t3_Policy_Id | t3_Vehicle_Registration_Number | t3_Vehicle_Value | t3_Vehicle_Type | t3_Vehicle_Size | t3_Vehicle_Number_Of_Seats | t3_Vehicle_Manufacturer |
|---|---------------|--------------|--------------------------------|------------------|-----------------|-----------------|----------------------------|-------------------------|
| 1 | 30705 | 2369893 | UK 43 CX 5047 | 75000 | 2 wheeler | 13 | 2 | TVS |
| 2 | 30704 | 2487318 | MP 27 LO 1161 | 46990 | 2 wheeler | 19 | 2 | Hero |
| 3 | 30705 | 4503208 | WB 12 EV 5245 | 1690000 | 4 wheeler | 25 | 8 | Mahindra |
| 4 | 30706 | 4883265 | UP 76 FU 4564 | 80000 | 2 wheeler | 15 | 2 | Hero |
| 5 | 30707 | 2855545 | UK 89 GH 2646 | 800000 | 4 wheeler | 12 | 4 | Volkswagon |
| 6 | 30709 | 2567548 | UP 45 CD 4634 | 1100000 | 4 wheeler | 15 | 4 | Ford |
| 7 | 30718 | 4454729 | HP 56 HI 3727 | 90000 | 2 wheeler | 15 | 2 | Hero |

Result 9

Query Completed

TESTING QUERY 6

SELECT DISTINCT

t1.*

FROM

t3_CUSTOMER AS t1,

t3_COVERAGE AS t2,

t3_CLAIM_SETTLEMENT AS t3,

t3_CLAIM AS t4

WHERE

t4.t3_Claim_Amount < t2.t3_Coverage_Amount

AND t4.t3_Claim_Amount > (t3.t3_Claim_Settlement_Id + t3.t3_Vehicle_Id + t3.t3_Claim_Id +
t3.t3_Cust_Id)

AND t1.t3_Cust_Id = t4.t3_Cust_Id;

OUTPUT QUERY 6

The screenshot displays the MySQL Workbench interface. The main window shows a SQL query in the editor, which is a complex join query involving tables t1, t2, t3, and t4. The query filters for claims where the claim amount is less than the coverage amount and where the claim settlement ID, vehicle ID, claim ID, and customer ID are all non-zero. The results are displayed in a grid below the query editor.

Query:

```

1 use mydb;
2 SELECT DISTINCT
3   t1.*
4 FROM
5   t3_CUSTOMER AS t1,
6   t3_COVERAGE AS t2,
7   t3_CLAIM_SETTLEMENT AS t3,
8   t3_CLAIM AS t4
9 WHERE
10  t4.t3_Claim_Amount < t2.t3_Coverage_Amount
11  AND t4.t3_Claim_Amount > 0
12  AND t1.t3_Cust_Id = t4.t3_Cust_Id;

```

Result Grid:

| # | t3_Cust_Id | t3_Cust_FName | t3_Cust_LName | t3_Cust_DOB | t3_Cust_Gender | t3_Cust_Address | t3_Cust_MOB_Numbe | t3_Cust_Email | t3_Cust_Passwor |
|----|------------|---------------|---------------|-------------|----------------|-----------------|-------------------|-------------------------|-----------------|
| 1 | 30212 | Aditi | Singhal | 1967-07-23 | F | Lucknow | 1107568394 | mail084322@company.com | 7442458364 |
| 2 | 30201 | Amitabh | Paliwal | 1994-09-06 | M | Haldwani | 6963456969 | mail0904@company.com | 9103258395 |
| 3 | 30216 | Yashvi | Mehta | 1989-10-23 | F | Lucknow | 2207568394 | mail08s423@company.com | 7016758364 |
| 4 | 30210 | Mohammad | Rayhaan | 1979-04-23 | M | Vizag | 4007568394 | mail758@company.com | 7666651264 |
| 5 | 30214 | Sahana | NH | 1998-07-23 | F | Mumbai | 8307468394 | mail384@company.com | 7666756364 |
| 6 | 30202 | Rohit | Roy | 2000-07-23 | M | Pune | 1107568394 | mail0342182@company.com | 8126759364 |
| 7 | 30219 | Diksha | Chatterjee | 1997-10-23 | F | Faridabad | 6607568394 | mail0843@company.com | 6998758364 |
| 8 | 30208 | Shivang | Bisht | 1969-07-23 | M | Bangalore | 9007568394 | mail0732@company.com | 7496546564 |
| 9 | 30204 | Bhavbhuti | Pande | 1999-12-23 | M | Bangalore | 4407568394 | mail041@company.com | 7256765364 |
| 10 | 30217 | Souvik | Das | 1989-12-04 | M | Kolkata | 9697643296 | mail399@company.com | 6583943462 |

The status bar at the bottom indicates "Query Completed".

Conclusion

We have a class project created database (DB) with all documentations and reports included. Our goal was to create a DB for Online vehicle insurance companies with code generated for MySQL workbench. There were some big and small challenges but we succeeded in making a functional DB. We started to build conceptual data models (CDM), we continued with logical data models (LDM) and then we made physical data models (PDM). From the physical data model we created a code to be run in MySQL database management system (DBMS). For better understanding for a reader and for our learning we included some theory in each phase we did and documented in the project initial document (PID) with reports of progress and work being done.