IT214 Lab 2 Report

Keyur Govrani
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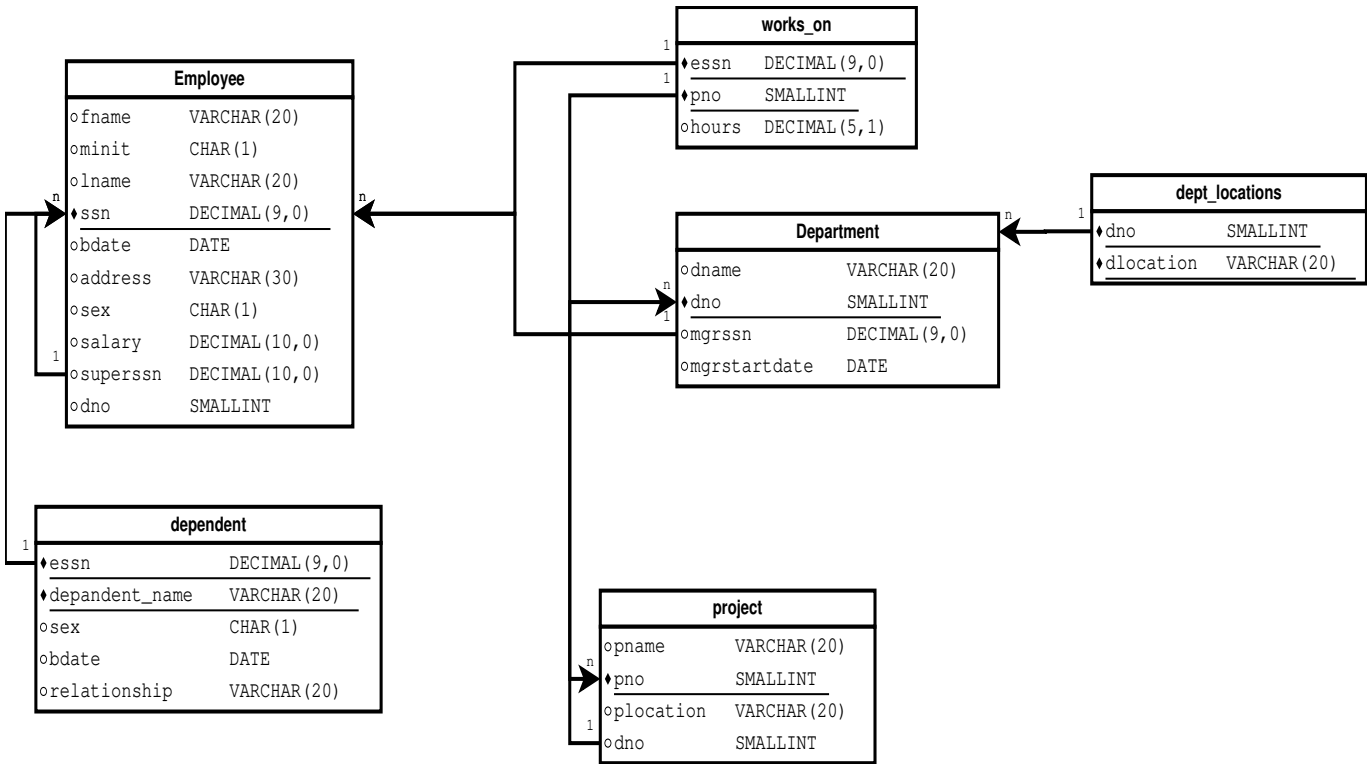
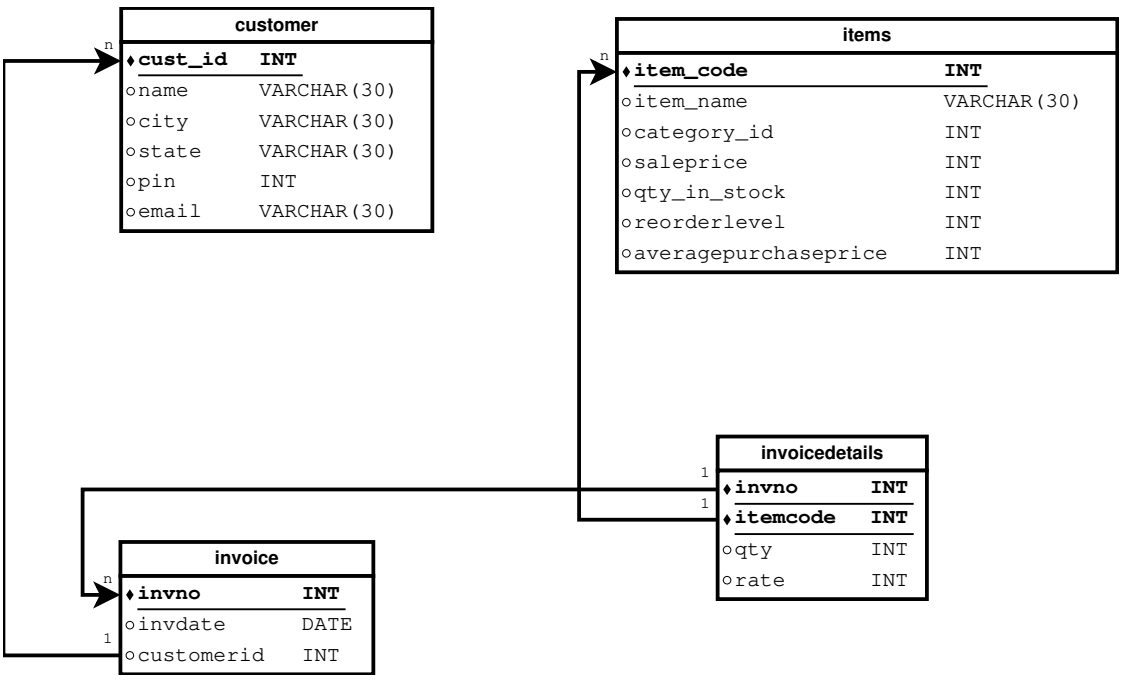
1 Schema diagram of Company Schema from Lab 1



2 Schema diagram of Sales Management from Lab 2



3 DDL Script of Sales Management

```
CREATE SCHEMA LAB2;
SET SEARCH_PATH to LAB2;

CREATE TABLE customer (
    cust_id INT NOT NULL PRIMARY KEY,
    "name" VARCHAR(30),
    city VARCHAR(30),
    "state" VARCHAR(30),
    pin INT,
    email VARCHAR(30)
);

CREATE TABLE items (
    item_code INT NOT NULL PRIMARY KEY,
    item_name VARCHAR(30),
    category_id INT,
    saleprice INT,
    qty_in_stock INT,
    reorderlevel INT,
    averagepurchaseprice INT
);

CREATE TABLE invoice (
    invno INT NOT NULL PRIMARY KEY,
    invdate DATE,
    customerid INT,
    FOREIGN KEY (customerid) REFERENCES customer (cust_id)
    ON DELETE SET NULL
);

CREATE TABLE invoicedetails (
    invno INT NOT NULL,
    itemcode INT NOT NULL,
    qty INT,
    rate INT,
    FOREIGN KEY (invno) REFERENCES invoice(invno)
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (itemcode) REFERENCES items(item_code)
    ON DELETE CASCADE ON UPDATE CASCADE,
    PRIMARY KEY (invno, itemcode)
);
```

4 SQL statements for all queries

1. Add 5 customers

```
INSERT INTO customer VALUES
(101, 'Ram', 'Surat', 'Gujarat', 395005, 'abc123@gmail.com');
INSERT INTO customer VALUES
(102, 'Shyam', 'Baroda', 'Gujarat', 395895, 'def123@gmail.com');
INSERT INTO customer VALUES
(103, 'Raj', 'Mumbai', 'Maharashtra', 395045, 'ghi123@gmail.com');
INSERT INTO customer VALUES
(104, 'Jake', 'Pune', 'Maharashtra', 394705, 'jkl123@gmail.com');
INSERT INTO customer VALUES
(105, 'Pedro', 'Navsari', 'Gujarat', 395235, 'mno123@gmail.com');

SELECT * FROM customer;
```

2. Add 10 items

```
INSERT INTO items VALUES(11101, 'Mouse', 1, 300, 50, 5, 250);
INSERT INTO items VALUES(11102, 'Keyboard', 1, 350, 75, 6, 300);
INSERT INTO items VALUES(11103, 'Mobile', 1, 2000, 30, 3, 1900);
INSERT INTO items VALUES(11104, 'Books', 2, 60, 100, 10, 55);
INSERT INTO items VALUES(11105, 'Pen', 2, 20, 150, 15, 15);
INSERT INTO items VALUES(11106, 'Scale', 2, 10, 100, 15, 8);
INSERT INTO items VALUES(11107, 'Eraser', 2, 5, 125, 18, 5);
INSERT INTO items VALUES(11108, 'Charger', 1, 400, 70, 5, 355);
INSERT INTO items VALUES(11109, 'Earphone', 1, 450, 90, 8, 400);
INSERT INTO items VALUES(11110, 'Pouch', 2, 50, 80, 5, 40);

SELECT * FROM items;
```

3. Add 5 invoices

```
INSERT INTO invoice VALUES(1, '2019-12-12', 101);
INSERT INTO invoice VALUES(2, '2019-12-18', 102);
INSERT INTO invoice VALUES(3, '2019-12-6', 103);
INSERT INTO invoice VALUES(4, '2019-12-9', 104);
INSERT INTO invoice VALUES(5, '2019-12-11', 105);

SELECT * FROM invoice;
```

4. Add 2 - 4 items in all invoices

```
INSERT INTO invoicedetails VALUES(1, 11101, 2, 290);
INSERT INTO invoicedetails VALUES(1, 11104, 5, 55);
INSERT INTO invoicedetails VALUES(2, 11108, 3, 395);
INSERT INTO invoicedetails VALUES(2, 11109, 1, 450);
INSERT INTO invoicedetails VALUES(3, 11103, 4, 1850);
INSERT INTO invoicedetails VALUES(3, 11107, 5, 4);
INSERT INTO invoicedetails VALUES(4, 11106, 1, 10);
INSERT INTO invoicedetails VALUES(4, 11102, 3, 330);
```

```
INSERT INTO invoicedetails VALUES(5, 11105, 2, 38);
INSERT INTO invoicedetails VALUES(5, 11106, 4, 8);

SELECT * FROM invoicedetails;
```

5. Update price of given item

```
UPDATE items SET saleprice = 3000 WHERE item_name='Mobile';
```

6. Give 10% increment to all items

```
UPDATE items SET saleprice = saleprice + (saleprice*(10.0/100));
```

7. Give 5% increments to all items for category = 2

```
UPDATE items SET saleprice = saleprice + (saleprice*(5.0/100))
WHERE category_id = 2;
```

8. Delete a given item from items item code = 11101

```
DELETE FROM items WHERE item_code = 11101;
```

9. Delete a given customer = 101

```
DELETE FROM customer WHERE cust_id = 101;
```

10. Delete all invoices of a given state '2019-12-11'. This should also delete all items of affected invoices

```
DELETE FROM invoice WHERE invdate = '2019-12-11';
```