

CSCI3170 Project Phase 1 Group 26

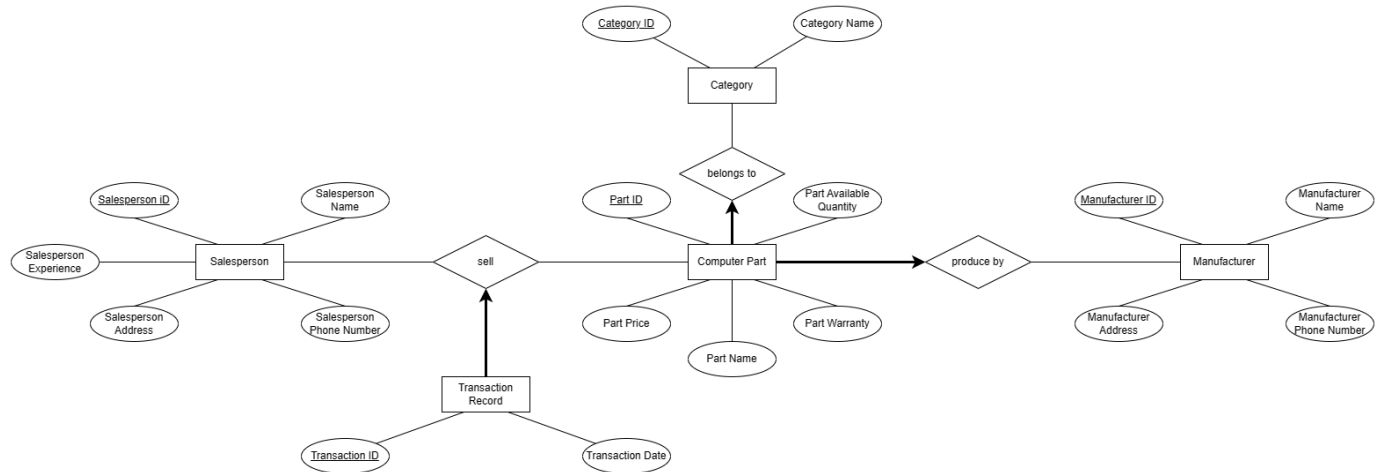
Group Information

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ER Diagram



Relational Schema

Salesperson(salesperson_id, salesperson_name, salesperson_experience, salesperson_address, salesperson_phone_number)

Transaction_Record(transaction_id, transaction_date)

Computer_Part(part_id, part_price, part_available_quantity, part_name, part_warranty)

Category(category_id, category_name)

Manufacturer(manufacturer_id, manufacturer_name, manufacturer_address, manufacturer_phone_number)

produce_by(part_id, manufacturer_id)

belong_to(part_id, category_id)

sell(transaction_record, salesperson_id, part_id)

SQL

```
1 CREATE TABLE Salesperson(  
2     salesperson_id          INT(2)          NOT NULL,  
3     salesperson_name        CHAR(20)         NOT NULL,  
4     salesperson_address     CHAR(50)         NOT NULL,  
5     salesperson_phone_number INT(8)          NOT NULL,  
6     salesperson_experience   INT(1)          NOT NULL,  
7     PRIMARY KEY (salesperson_id),  
8     CHECK (salesperson_id > 0 AND salesperson_phone_number > 0 AND salesperson_experience  
9     > 0)  
9 )
```

```

1 CREATE TABLE Transaction_Record(
2     transaction_id      INT(4)      NOT NULL,
3     transaction_date    DATE        NOT NULL,
4     PRIMARY KEY (transaction_id),
5     CHECK (transaction_id > 0)
6 )

```

```

1 CREATE TABLE Computer_Part(
2     part_id              INT(3)      NOT NULL,
3     part_name            CHAR(20)    NOT NULL,
4     part_price           INT(5)      NOT NULL,
5     part_warranty        INT(2)      NOT NULL,
6     part_available_quantity INT(2)    NOT NULL,
7     PRIMARY KEY (part_id),
8     CHECK (part_id > 0 AND part_price > 0 AND part_warranty > 0 AND
part_available_quantity > 0)
9 )

```

```

1 CREATE TABLE Category(
2     category_id         INT(1)      NOT NULL,
3     category_name       CHAR(20)    NOT NULL,
4     PRIMARY KEY (category_id),
5     CHECK (category_id > 0)
6 )

```

```

1 CREATE TABLE Manufacturer(
2     manufactuer_id      INT(2)      NOT NULL,
3     manufactuer_name    CHAR(20)    NOT NULL,
4     manufactuer_address CHAR(50)    NOT NULL,
5     manufactuer_phone_number INT(8)  NOT NULL,
6     PRIMARY KEY (manufactuer_id),
7     CHECK (manufactuer_id > 0 AND manufactuer_phone_number > 0)
8 )

```

```

1 CREATE TABLE produce_by(
2     part_id              INT(3)      NOT NULL,
3     manufactuer_id       INT(2)      NOT NULL,
4     PRIMARY KEY (part_id),
5     FOREIGN KEY (part_id) REFERENCES Computer_Part,
6     FOREIGN KEY (manufactuer_id) REFERENCES Manufacturer
7 )

```

```

1 CREATE TABLE belong_to(
2     part_id              INT(3)      NOT NULL,
3     category_id          INT(1)      NOT NULL,
4     PRIMARY KEY (part_id),
5     FOREIGN KEY (part_id) REFERENCES Computer_Part,
6     FOREIGN KEY (category_id) REFERENCES Category
7 )

```

```
1 CREATE TABLE sell(  
2     transaction_id      INT(4)      NOT NULL,  
3     salesperson_id      INT(2)      NOT NULL,  
4     part_id             INT(3)      NOT NULL,  
5     PRIMARY KEY (transaction_id),  
6     FOREIGN KEY (transaction_id) REFERENCES Transaction_Record,  
7     FOREIGN KEY (salesperson_id) REFERENCES Salesperson,  
8     FOREIGN KEY (part_id) REFERENCES Computer_Part  
9 )
```