PHONE RECYCLE PARTNERSHIP PROGRAM

Ex0tic Database

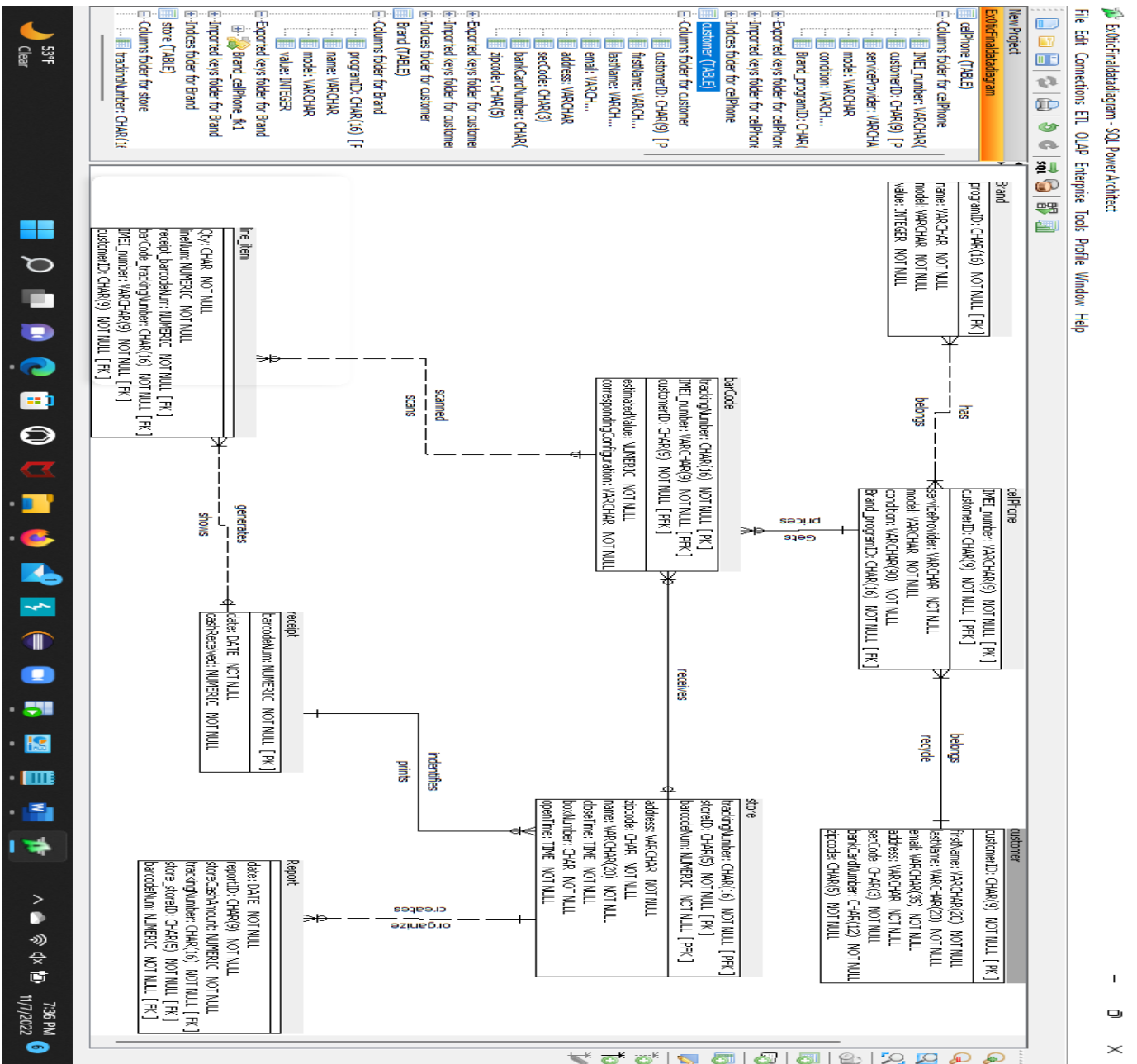Clayton State University

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OVERVIEW

There are hundreds of millions of cellphones were thrown in US every year. The problem is growing faster although cell service provider such as ATT, T-Mobile etc. encourage to exchange old phone to new models. Most customers still store them as a junk or dispose improperly. The business started efforts to reduce the risk of improper disposal with phone recycle partnered with local grocery stores. A phone recycle program is going to offer customers of local stores for an easy, safe, and convenient place to sell their used cell phones in exchange for store cash.

PROJECT SUMMARY

DESIGN

Syntax for DESIGN

```
Drop table report;

drop table store;

Drop table receipt;

Drop table line_item;

Drop table barCode;

Drop table cellphone;

drop table customer;

Drop table brand;


CREATE TABLE cellphone(

Condition NUMBER NOT NULL, --.1 being horible 1.0 being the best

Phonemodel VARCHAR(15) NOT NULL,

IMEI_number VARCHAR(9) NOT NULL,

serviceProvider VARCHAR(15) NOT NULL,

cID CHAR (9) NOT NULL,

pID CHAR(16) NULL,

PRIMARY KEY (IMEI_number)

);

CREATE TABLE brand(

name char(10) NOT NULL,

programID CHAR(16) NOT NULL,

totalValue NUMERIC NOT NULL,

Bmodel varchar(15) NOT NULL,
```

```sql
PRIMARY KEY (programID)

);

ALTER TABLE cellphone ADD (

FOREIGN KEY (pID) references brand(programID),

UNIQUE (pID)

);

CREATE TABLE customer (

secCode CHAR(3) NOT NULL,

customerID CHAR(9) NOT NULL,

Fname VARCHAR(20) NOT NULL,

Lname VARCHAR(20) NOT NULL,

email VARCHAR2(35) NOT NULL,

zipcode CHAR(5) NOT NULL,

address VARCHAR2(100) NOT NULL,

Bankcardnumber CHAR(12) NOT NULL,

Statename VARCHAR(20) NOT NULL,

County VARCHAR(20) NOT NULL,

country varchar(20) not null,

UNIQUE(email),

PRIMARY KEY (customerID)

);

ALTER TABLE cellphone ADD (

FOREIGN KEY (cID) references customer(customerID)--,

--UNIQUE (cID)

);

CREATE TABLE barCode(

trackingNumber CHAR(16) NOT NULL,
```

```sql
IMEI VARCHAR(9) NOT NULL,

BcID CHAR(9) NOT NULL,

BpID CHAR(16) NOT NULL,

estimatedValue NUMERIC NULL,

correspondingConfiguration VARCHAR(16) NOT NULL,

PRIMARY KEY(trackingNumber),

FOREIGN KEY (IMEI) references cellphone(IMEI_number),

FOREIGN KEY (BcID) references customer(customerID),

FOREIGN KEY (BpID) references cellPhone(pID)

);

CREATE TABLE line_item(

tNumber CHAR(16) NOT NULL,

Qty CHAR NOT NULL,

lineNumb NUMERIC NOT NULL,

bcNum NUMERIC NOT NULL,

FOREIGN KEY (tNumber) references barCode(trackingNumber),

UNIQUE(bcNum)

);

CREATE TABLE receipt(

paperTag NUMERIC NOT NULL,

barcodeNum NUMERIC NOT NULL,

todayDate DATE NOT NULL,

FOREIGN KEY (barcodeNum) references line_item (bcNum)

);

CREATE TABLE store(

opentime CHAR(6),

zipcode CHAR(5)NOT NULL,
```

```
Sname VARCHAR(10) NOT NULL,

Closetime CHAR(6),

boxNumber CHAR(5) NOT NULL,

storeID CHAR(5) NOT NULL,

address VARCHAR2(90) NOT NULL,

sStatename VARCHAR(20) NOT NULL,

sCounty VARCHAR(20) NOT NULL,

sCountry varchar(20) not null,

PRIMARY KEY(storeID)

);

CREATE TABLE report(

rtNumber CHAR(16) NOT NULL,

rbcNum NUMERIC NOT NULL,

ReportID CHAR(9) NOT NULL,

TodayDate DATE NOT NULL,

StoreCashAmount NUMERIC NOT NULL,

RstoreID CHAR(5) NOT NULL,

UNIQUE(ReportID),

FOREIGN KEY (RstoreID) references store(storeID),

 FOREIGN KEY (rtNumber) references barCode(trackingNumber),

FOREIGN KEY (rbcNum) references line_item (bcNum)

);
```

POPULATE DATA

insert INTO brand

Values('Apple','apple25F68V8273T',1200,'Iphone 14');

insert INTO brand

Values('Apple','apple25F68V8275T',1200,'Iphone 14');

insert INTO brand

Values('Apple','apple19F68V8273T',250, 'Iphone 6');

insert INTO brand

Values ('Samsung','samsung25F68538A',950, 'GALAXYS 10');

insert INTO brand

Values ('Samsung','samsung23F68538A',900, 'GALAXYS 8');

insert INTO brand

Values ('Google','google25F687253O',750, 'Pixel 6a');

insert INTO brand

Values ('Google','google25F6872531',750, 'Pixel 6a');

insert INTO brand

Values ('Google','google25F6872532',750, 'Pixel 6a');

insert INTO brand

Values ('Google','google26F687253O',800, 'Pixel 7');

insert INTO brand

Values ('Motorola','Motorola25F7364O',500, 'moto g');

insert INTO brand

Values ('Motorola','Motorola23F7364O',150, 'RAZR');

insert INTO customer

Values ('354','900394374','Tyon','Davis','tdavis112@student.clayton.edu','30012','155 Flapdrago

ln','263734856436','GA','Rockdale','US');

insert INTO customer

Values ('568','900653567','Alena','Welch','awelch11@student.clayton.edu','85713','32 Jackwell

dr','876497646789','AZ','Maricopa','US');

insert INTO customer

Values ('896','900974565','Juwan','Hollingsworth','jhollingsworth@student.clayton.edu','60112','60 Long

Harvey','870876665478','GA','Dekalb','US');

insert INTO customer

Values ('122','900954324','Kairee','gay','kgay2@student.clayton.edu','92274','50 henny

ln','444456767675','CA','Imperial','US');

insert INTO customer

Values ('959','900234567','Javonte','Carr','jcarr10@student.clayton.edu','99864','92 flatts

','667845675444','ORE','wasco','US');

insert INTO customer

Values ('964','900768593','Yonatan','Yesuf','yyesuf@student.clayton.edu','30354','42 crown royal

dr','098778878755','OH','licking','US');

insert INTO Cellphone

Values (' .1', 'Pixel 6a','35177253O','TMOBILE', '900394374','google25F687253O');

insert INTO Cellphone

Values (' 1', 'Pixel 6a','351772531','TMOBILE', '900394374','google25F6872531');

insert INTO Cellphone

Values ('.2', 'Iphone 14', '12178273T','ATANDT', '900653567','apple25F68V8273T');

insert INTO Cellphone

Values (' 1', 'Pixel 6a','12178274T','ATANDT','900653567','google25F6872532');

insert INTO Cellphone

Values ('.71', 'Iphone 14', '12178275T','ATANDT', '900653567','apple25F68V8275T');

insert INTO Cellphone

Values (' .5', 'GALAXYS 10','10178538A', 'METRO pcs', '900974565','samsung25F68538A');

insert INTO Cellphone

Values ('1', 'moto g', 'g5177364O','TMOBILE', '900234567','Motorola25F7364O');

insert INTO barcode

Values('y86gt68hyu7ytu7y','35177253O', '900394374','google25F687253O',75,'e38ei39edu39ek3i');

insert INTO barcode

Values('y86gt688yu7ytu7y','351772531', '900394374','google25F6872531',750,'e38ei40edu39ek3i');

insert INTO barcode

Values('y86gt6rjeu7ytu7y','12178273T', '900653567','apple25F68V8273T',1000,'e38eeu4edu39ek3i');

insert INTO barcode

Values('y86gt6rjeu7ytu7a','12178274T', '900653567','google25F6872532',750,'e38eeu4edu39ek3i');

insert INTO barcode

Values('y86gt6rjeu7ytu7b','12178275T', '900653567','apple25F68V8275T',1000,'e38eeu4edu39ek3i');

insert INTO barcode

Values('y86gej48eu7ytu7y','10178538A', '900974565','samsung25F68538A',470,'e38eitm5du39ek3i');

insert INTO barcode

Values('y86g48rheu7ytu7y','12178273T', '900974565','apple25F68V8273T',200,'e38eerud7u39ek3i');

insert INTO barcode

Values('y86grif7ru48tu7y','10178538A','900234567','Motorola25F7364O',500,'e38r4ydye839ek3i');

Insert INTO line_item

Values ('y86gt68hyu7ytu7y',4,1,101);

Insert INTO line_item

Values ('y86gt688yu7ytu7y',3,1,107);

Insert INTO line_item

Values('y86gt6rjeu7ytu7y',2,1,102);

Insert INTO line_item

Values('y86gt6rjeu7ytu7a',1,1,108);

Insert INTO line_item

Values('y86gt6rjeu7ytu7b',1,1,109);

Insert INTO line_item

Values('y86gej48eu7ytu7y',1,1,103);

Insert INTO line_item

Values('y86g48rheu7ytu7y',1,1,104);

Insert INTO line_item

Values('y86grif7ru48tu7y',1,1,106);

Insert INTO receipt

Values(3453,101,date '2022-11-18');

Insert INTO receipt

Values(4324,107,date '2022-11-28');

Insert INTO receipt

Values(3254,102,date '2022-11-18');

Insert INTO receipt

Values(3254,108,date '2022-11-18');

Insert INTO receipt

Values(3254,109,date '2022-11-18');

Insert INTO receipt

Values(3465,103,date '2022-11-18');

Insert INTO receipt

Values(3567,104,date '2022-11-18');

Insert INTO receipt

Values(8765,106,date '2022-11-18');

Insert INTO store

Values ('7:00AM',30012, 'TMOBILE','6:30pm','1001a','4567a','456 wayback','GA','Rockdale','US');

Insert INTO store

Values ('7:00AM',30828, 'TMOBILE','6:30pm','1001b','4567b','45 slap jack','GA','warrenton','US');

Insert INTO store

Values('7:00AM',85713, 'ATANDT','6:30pm','1002a','4565b','82 fire jack','AZ','Maricopa','US');

Insert INTO store

Values('7:00AM',30012, 'METRO pcs','6:30pm','1003a','3467c','78 Star doc','GA','Rockdale','US');

Insert INTO store

Values('7:00AM',60112 ,'Verizon','6:30pm','1005b','df54d' ,'654 Sky high ln

','GA','Dekalb','US');

Insert INTO store

Values('7:00AM', 99864,'TMOBILE','6:30pm','1006f','r957y','3636 Rocky park

way','ORE','wasco','US');

Insert INTO report

Values('y86gt68hyu7ytu7y',101,'SR8965434',date '2022-11-18',75, '4567a');

Insert INTO report

Values('y86gt688yu7ytu7y',107,'SR8965435',date '2022-11-28',750, '4567b');

Insert INTO report

Values('y86gt6rjeu7ytu7y',102,'SR4235674',date '2022-11-18',240, '4565b');

Insert INTO report

Values('y86gt6rjeu7ytu7a',108,'SR4235774',date '2022-11-18',240, '4565b');

Insert INTO report

Values('y86gt6rjeu7ytu7b',109,'SR4235614',date '2022-11-18',240, '4565b');

Insert INTO report

Values('y86gej48eu7ytu7y',103,'SR4865434',date '2022-11-18',475, '3467c');

Insert INTO report

Values('y86g48rheu7ytu7y',104,'SR4833254', date '2022-11-18',200, 'df54d');

Insert INTO report

Values('y86grif7ru48tu7y',106,'SR4837434', date '2022-11-18',500, 'r957y');

ANSWER FOR THE 5 ?

--1

```
select fname, lname, Qty

from customer, line_item,barcode

where trackingNumber=tNumber AND bcID= customerID

order by Qty desc

;
```

--2

```
select fname, lname, StoreCashAmount

from customer, report,barcode

where rtNumber=trackingNumber AND  bcID = customerID AND StoreCashAmount >

   (select avg(StoreCashAmount)

   from report)

;
```

--3

■

■

--4

select fname,lname, StoreID,customerID,name

from customer, store, barcode,report,line_item,brand

where BpID=programid AND rstoreID=storeID AND rbcNum= bcnum AND tnumber= trackingnumber AND bcid=customerID AND (select rstoreid

from report

GROUP BY rstoreid

HAVING COUNT(rstoreid)>1) = storeID

;

--5

select Sname, fname, lname, AVG(StoreCashAmount)

from store, customer, report,barcode

where rstoreID=storeID AND rtnumber= trackingnumber AND bcID= customerID

group by Sname, fname, lname

;