Team Members:

Ran Sa, Pu Chen, Dingbang Chen, Yaowen Zhang, Ziru Liu

SQL:

CREATE TABLE Hotel(

HotelID INTEGER,

Location VARCHAR(50),

Phone_No INTEGER,

PRIMARY KEY(HotelID)

);

CREATE TABLE Review(

ReviewID INTEGER,

Rating FLOAT,

TextComment VARCHAR(100),

reviewDate date,

PRIMARY KEY(ReviewID)

);

Create TABLE RoomReview(

ReviewID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES Review(ReviewID)

);

CREATE TABLE BreakfastReview(

ReviewID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES Review(ReviewID)

);

```sql
Create TABLE ServiceReview(

ReviewID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES Review(ReviewID)

);

CREATE TABLE Reservation(

InvoiceNo INTEGER,

ResDate DATE,

TotalAmt INTEGER,

PRIMARY KEY(InvoiceNo)

);

CREATE TABLE CreditCard(

Cnumber VARCHAR(20),

ExpDate DATE,

Type VARCHAR(10),

SecCode VARCHAR(10),

Name VARCHAR(15),

BillingAddr VARCHAR(50),

PRIMARY KEY(Cnumber)

);

CREATE TABLE Customer(

CID INTEGER,

Email VARCHAR(30),

Address VARCHAR(50),

Phone_no VARCHAR(15),

Name VARCHAR(15),

password VARCHAR(16),

PRIMARY KEY(CID)

);
```

```sql
CREATE TABLE Has_Room(

HotelID INTEGER,

Room_no INTEGER,

Price FLOAT,

Capacity INTEGER,

Floor_no INTEGER,

Description VARCHAR(100),

Type VARCHAR(10),

SDate DATE,

EDate DATE,

Discount FLOAT,

PRIMARY KEY(HotelID, Room_no),

FOREIGN KEY(HotelID) REFERENCES Hotel(HotelID)

);

CREATE TABLE Offers_Breakfast(

HotelID INTEGER,

bPrice INTEGER,

bType VARCHAR(25),

Description VARCHAR(100),

PRIMARY KEY(HotelID, bType),

FOREIGN KEY(HotelID) REFERENCES Hotel(HotelID)

);

CREATE TABLE Provides_Service(

sType varchar(10),

sCost INTEGER,

HotelID INTEGER,

PRIMARY KEY(HotelID, sType),

FOREIGN KEY(HotelID) REFERENCES Hotel(HotelID)

);
```

```sql
CREATE TABLE Include(

HotelID INTEGER,

bType VARCHAR(25),

InvoiceNo INTEGER,

Primary Key(HotelID, bType, InvoiceNo),

Foreign Key(HotelID, bType) REFERENCES Offers_Breakfast(HotelID,bType),

Foreign Key(InvoiceNo) REFERENCES Reservation(InvoiceNo)

);

CREATE TABLE Reserves(

HotelID INTEGER,

Room_No INTEGER,

InvoiceNo INTEGER,

OutDate DATE,

InDate DATE,

NoOfDays INTEGER,

PRIMARY KEY(HotelID, Room_No, InvoiceNo),

FOREIGN KEY(HotelID, Room_No) REFERENCES Has_Room(HotelID, Room_no),

FOREIGN KEY(InvoiceNo) REFERENCES Reservation(InvoiceNo)

);

CREATE TABLE Writes(

ReviewID INTEGER,

CID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES Review (ReviewID),

FOREIGN KEY(CID) REFERENCES Customer(CID)

);

CREATE TABLE assesses(

ReviewID INTEGER,

bType VARCHAR(25),
```

```
HotelID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES BreakfastReview(ReviewID),

FOREIGN KEY(HotelID, bType) REFERENCES Offers_Breakfast(HotelID, bType)

);

CREATE TABLE rates(

ReviewID INTEGER,

sType VARCHAR(10),

HotelID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES ServiceReview(ReviewID),

FOREIGN KEY(HotelID, sType) REFERENCES Provides_Service(HotelID, sType)

);

CREATE TABLE evaluates(

ReviewID INTEGER,

Room_no INTEGER,

HOTELID INTEGER,

PRIMARY KEY(ReviewID),

FOREIGN KEY(ReviewID) REFERENCES RoomReview (ReviewID),

FOREIGN KEY(HotelID, Room_no) REFERENCES Has_Room(HotelID, Room_no)

);

CREATE TABLE Contain(

HotelID INTEGER,

sType VARCHAR(10),

InvoiceNo INTEGER,

PRIMARY KEY(HotelID, sType, InvoiceNo),

FOREIGN KEY(HotelID, sType) REFERENCES Provides_Service(HotelID, sType),

FOREIGN KEY(InvoiceNo) REFERENCES Reservation(InvoiceNo)

);
```

```sql
CREATE TABLE makes(

InvoiceNo INTEGER,

CID INTEGER,

Cnumber VARCHAR(20),

isRoomReviewed INTEGER,

isBreakfastReviewed INTEGER,

isServiceReviewed INTEGER,

PRIMARY KEY(InvoiceNo),

FOREIGN KEY(InvoiceNo) REFERENCES Reservation(InvoiceNo),

FOREIGN KEY(CID) REFERENCES Customer(CID),

FOREIGN KEY(Cnumber) REFERENCES CreditCard(Cnumber)

);
```