Assignment - 4

Team-3

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Airbnb System SQL Table Creation

Objective: Create tables using appropriate SQL command. Make sure to include primary key and foreign key definitions and triggered actions on foreign keys. Decide also about NOT NULL constraints and DEFAULT values for the attributes.

```
CREATE TABLE User (
        accountid integer not null,
        firstName varchar(15) not null,
        lastName varchar(15) not null,
        birthDate date,
        personalEmail varchar(30) not null,
        workEmail varchar(30),
        phoneNumber integer,
        profilePhotoLink varchar(100),
        description varchar(500),
        address varchar (50),
        PRIMARY KEY (accountid));
```

```
CREATE TABLE Languages_Spoken (
        accountid integer not null,
        language varchar(20) not null,
        PRIMARY KEY (accountid, language),
        FOREIGN KEY (accountid) REFERENCES User (accountid)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Host(
        accountid integer not null,
        isSuperhost boolean DEFAULT FALSE,
        reviewsAbout integer DEFAULT 0,
        reviewsWritten integer DEFAULT 0,
        cancellationRate decimal(3),
        responseRate decimal(3),
        PRIMARY KEY (accountid),
        FOREIGN KEY (accountid) REFERENCES User (accountid)
```

```
        ON UPDATE CASCADE);
```

```
CREATE TABLE Guest(
        accountid integer not null,
        reviewsAbout integer DEFAULT 0,
        reviewsWritten integer DEFAULT 0,
        PRIMARY KEY (accountid),
        FOREIGN KEY (accountid) REFERENCES User (accountid)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Payout_Method(
        accountid integer not null,
        payoutMID integer not null,
        payoutDetails varchar(200) not null,
        PRIMARY KEY (accountid, payoutMID),
        FOREIGN KEY (accountid) REFERENCES User (accountid)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Payment_Method(
        accountid integer not null,
        paymentMID integer not null,
        paymentDetails varchar(200) not null,
        PRIMARY KEY (accountid, paymentMID),
        FOREIGN KEY (accountid) REFERENCES User (accountid)
                ON UPDATE CASCADE);
```

```
CREATE TABLE BookingA(
        bookingID integer not null,
        startDate Date not null,
        endDate Date not null,
        dateOfBooking Date not null,
        discounts decimal(5,2) DEFAULT 0,
        PRIMARY KEY (bookingID));
```

```
CREATE TABLE BookingB(
        listingID integer not null,
        serviceFee decimal(5,2),
```

```
    listPrice decimal(5,2) not null,
    cleaningFees decimal(5,2),
    PRIMARY KEY (listingID),
    FOREIGN KEY (listingID) REFERENCES Listing (listingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE BookingC(
    bookingID integer not null,
    paymentMID integer not null,
    payoutMID integer not null,
    accountID integer not null,
    listingID integer not null,
    PRIMARY KEY (bookingID),
    FOREIGN KEY (bookingID) REFERENCES BookingA (bookingID)
        ON UPDATE CASCADE,
    FOREIGN KEY (listingID) REFERENCES Listing (listingID)
        ON UPDATE CASCADE,
    FOREIGN KEY (accountID) REFERENCES User (AccountID)
        ON UPDATE CASCADE,
    FOREIGN KEY (paymentMID) REFERENCES Payment_Method (PaymentMID)
        ON UPDATE CASCADE,
    FOREIGN KEY (payoutMID) REFERENCES Payout_Method (PayoutMID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Guest_Review(
    bookingID integer not null,
    rating integer,
    comment varchar(200),
    PRIMARY KEY (bookingID),
    FOREIGN KEY (bookingID) REFERENCES BookingA (bookingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Host_Review(
    bookingID integer not null,
    rating integer,
    comment varchar(200),
    PRIMARY KEY (bookingID),
```

```
    FOREIGN KEY (bookingID) REFERENCES BookingA (bookingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE ListingA(
    listingID integer not null,
    address varchar (50) not null,
    averageRating decimal(3,2),
    numGuests integer not null,
    description varchar(500),
    bookingType varchar(50),
    cancellationPolicy varchar(50),
    locationDescription varchar(50),
    PRIMARY KEY (listingID));
```

```
CREATE TABLE ListingB(
    listingID integer not null,
    accountID integer not null,
    PRIMARY KEY (listingID),
    FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
        ON UPDATE CASCADE),
    FOREIGN KEY (accountID) REFERENCES User (accountID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Accessibility(
    listingID integer not null,
    accessibilityFeature varchar(50) not null,
    PRIMARY KEY (ListingID, AccessibilityFeature),
    FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Picture_Link(
    listingID integer not null,
    pictureLink varchar(100),
    PRIMARY KEY (listingID, pictureLink),
    FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Health_Safety(
        listingID integer not null,
        healthSafetyFeature varchar(50) not null,
        PRIMARY KEY (listingID, healthSafetyFeature),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Rental_Listing(
        listingID integer not null,
        numBedrooms integer,
        numBathrooms integer,
        numBeds integer,
        pricePerNight decimal(5,2) not null,
        houseRules varchar(200),
        houseManual varchar(200),
        checkInInstructions varchar(200),
        cleaningFee decimal(5,2),
        serviceFee decimal(5,2),
        minLengthOfStay integer DEFAULT 1 not null,
        maxLengthOfStay integer not null,
        prepTimeRequired time not null,
        PRIMARY KEY (listingID),
        FOREIGN KEY(listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Rental_Amenity(
        amenityName varchar(30) not null,
        category varchar(30),
        PRIMARY KEY (amenityName) );
```

```
CREATE TABLE Has_Amenity(
        listingID integer not null,
        amenityName varchar(30) not null,
        PRIMARY KEY (listingID, amenityName),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE,
        FOREIGN KEY (amenityName) REFERENCES Rental_Amenity (amenityName)
```

```
        ON UPDATE CASCADE);
```

```
CREATE TABLE Experience_Listing(
        listingID integer not null,
        modality varchar(30),
        lengthOfTime time not null,
        price decimal(5,2) not null,
        guestRequirements varchar(100) not null,
        PRIMARY KEY (listingID),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID),
                ON UPDATE CASCADE);
```

```
CREATE TABLE What_To_Bring(
        listingID integer not null,
        itemToBring varchar(30) not null,
        PRIMARY KEY (listingID, itemToBring),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Whats_Included(
        listingID integer not null,
        itemIncluded varchar(30) not null,
        PRIMARY KEY (listingID, itemIncluded),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Qualities(
        listingID integer not null,
        qualities varchar(30) not null,
        PRIMARY KEY (listingID, qualities),
        FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
                ON UPDATE CASCADE);
```

```
CREATE TABLE Themes(
        listingID integer not null,
        theme varchar(30) not null,
        PRIMARY KEY (listingID, theme),
```

```
    FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Languages_Offered(
    listingID integer not null,
    language varchar(30) not null,
    PRIMARY KEY (listingID, language),
    FOREIGN KEY (listingID) REFERENCES ListingA (listingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Wishlist(
    accountID integer not null,
    PRIMARY KEY (accountID),
    FOREIGN KEY (accountID) REFERENCES User (accountID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Wishlist_Listing(
    accountID integer not null,
    listingID integer not null,
    PRIMARY KEY (accountID, listingID),
    FOREIGN KEY (accountID) REFERENCES User (accountID),
    FOREIGN KEY (lisitingID) REFERENCES Listing (lisitingID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE GuideBook(
    accountID integer not null,
    guidebookID integer not null,
    PRIMARY KEY (accountID, guidebookID),
    FOREIGN KEY (accountID) REFERENCES User (accountID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Guidebook_Entry(
    accountID integer not null,
    guidebookID integer not null,
    entryName varchar(30) not null,
    entryType varchar(30),
    description varchar(200),
```

```
    category varchar(30),
    PRIMARY KEY (accountID, guidebookID, entryName
        ON UPDATE CASCADE),
    FOREIGN KEY (accountID) REFERENCES User (accountID)
        ON UPDATE CASCADE,
    FOREIGN KEY (guideBookID) REFERENCES GuideBook (guideBookID)
        ON UPDATE CASCADE);
```

```
CREATE TABLE Guidebook_For_Listing(
    accountID integer not null,
    guidebookID integer not null,
    listingID integer not null,
    PRIMARY KEY (accountID, guidebookID, listingID),
    FOREIGN KEY (accountID) REFERENCES User (accountID)
        ON UPDATE CASCADE,
    FOREIGN KEY (guideBookID) REFERENCES GuideBook (guideBookID)
        ON UPDATE CASCADE,
    FOREIGN KEY (listingID) REFERENCES Listing (accountID),
        ON UPDATE CASCADE);
```