Final Project: COP 4710

Tables:

1. Users (<u>UserID</u>, Username, Email)
   - PK: <u>UserID</u>
   - Constraints: Username, Email Not NULL
2. Cities (<u>CityID</u>, CityName, State, Latitude, Longitude)
   - PK: <u>CityID</u>
   - Constraints: CityName, State Not NULL
3. PlacesToVisit (<u>PlaceID</u>, City, PlaceName, Tags, Latitude, Longitude)
   - PK: <u>PlaceID</u>
   - FK: City (references Cities)
4. Restaurants (<u>RestaurantID</u>, City, RestaurantName, CuisineType, MealType, Latitude, Longitude)
   - PK: <u>RestaurantID</u>
   - FK: City (references Cities)
5. Hotels (<u>HotelID</u>, City, HotelName, Rating, PriceRange, Latitude, Longitude)
   - PK: <u>HotelID</u>
   - FK: City (references Cities)
6. Interests (<u>InterestID</u>, InterestName)
   - PK: <u>InterestID</u>
7. CanSatisfy (<u>PlaceID</u>, <u>InterestID</u>) (Relation)
   - PK, FK: PlaceID (references PlacesToVisit), InterestID (references Interests)
8. UserPreferences (<u>UserID</u>, <u>InterestID</u>) (Relation)
   - PK, FK: UserID (references Users), InterestID (references Interests)
9. Food (<u>FoodID</u>, FoodName)
   - PK: <u>FoodID</u>
10. FoodPreferences (<u>UserID</u>, <u>FoodID</u>) (Relation)
    - PK, FK: UserID (references Users), FoodID (references Food)
11. UserTrips (<u>TripID</u>, UserID, StartingCity, EndingCity, Notes, NumberOfDays)
    - PK: <u>TripID</u>
    - FK: UserID (references Users), StartingCity (references Cities, NotNULL), EndingCity (references Cities, NotNULL)

12. DayPlan (<u>DayID</u>, TripID, DayNumber, MorningPlaceID, AfternoonPlaceID, NightPlaceID, BreakfastRestaurantID, LunchRestaurantID, DinnerRestaurantID, HotelID, Notes)
    - PK: <u>DayID</u>
    - FK: TripID (references UserTrips), MorningPlaceID (references PlacesToVisit), AfternoonPlaceID (references PlacesToVisit), NightPlaceID (references PlacesToVisit), BreakfastRestaurantID (references Restaurants, NotNULL), LunchRestaurantID (references Restaurants, NotNULL), DinnerRestaurantID (references Restaurants, NotNULL)