Final Project: COP 4710

Tables:

1. Users (UserID, Username, Email)

* PK: UserID
* Constraints: Username, Email Not NULL

1. Cities (CityID, CityName, State, Latitude, Longitude)

* PK: CityID
* Constraints: CityName, State Not NULL

1. PlacesToVisit (PlaceID, City, PlaceName, Tags, Latitude, Longitude)

* PK: PlaceID
* FK: City (references Cities)

1. Restaurants (RestaurantID, City, RestaurantName, CuisineType, MealType, Latitude, Longitude)

* PK: RestaurantID
* FK: City (references Cities)

1. Hotels (HotelID, City, HotelName, Rating, PriceRange, Latitude, Longitude)

* PK: HotelID
* FK: City (references Cities)

1. Interests (InterestID, InterestName)

* PK: InterestID

1. CanSatisfy (PlaceID, InterestID) (Relation)

* PK, FK: PlaceID (references PlacesToVisit), InterestID (references Interests)

1. UserPreferences (UserID, InterestID) (Relation)

* PK, FK: UserID (references Users), InterestID (references Interests)

1. Food (FoodID, FoodName)

* PK: FoodID

1. FoodPreferences (UserID, FoodID) (Relation)

* PK, FK: UserID (references Users), FoodID (references Food)

1. UserTrips (TripID, UserID, StartingCity, EndingCity, Notes, NumberOfDays)

* PK: TripID
* FK: UserID (references Users), StartingCity (references Cities, NotNULL), EndingCity (references Cities, NotNULL)

1. DayPlan (DayID, TripID, DayNumber, MorningPlaceID, AfternoonPlaceID, NightPlaceID, BreakfastRestaurantID, LunchRestaurantID, DinnerRestaurantID, HotelID, Notes)

* PK: DayID
* 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)