

XR Elements Developer Graduate Coding Challenge 2022

Scenario

You are a developer who must code a solution for a travel agency company that manages bookings for clients. Each booking can consist of one or more days, and each day has one or more activities planned for it. Each activity has an activity provider which is a third party that conducts these activities.

Tasks

1. **(Mandatory)** Create a new model for activities. Each 'Activity' should be linked to a 'Day' and an 'ActivityProvider'. Each activity will also need to store the name of the activity (e.g., "30-minute laser skirmish 5 a side").
2. **(Mandatory)** Create an entity-relationship diagram for each of the models (including the one created under task 1). Make sure the diagram includes crows foot notation, so it is clear if it is a many to one or many to many relationship. (This can be submitted as a Visio or image file).
3. **(Mandatory)** Create a function that will set the xre_startdate and xre_enddate fields against the BookingModel. First, you will need to get all the DayModels that have the same xre_bookingrecordid as the BookingModels primary key. Then you can manipulate this list to obtain the start and end date.
4. **(Optional)** Create a function that will count the number of activities that are against each day for a booking. The final count should be saved against the days' xre_activitycount field.
5. **(Optional)** Create a function that will output the activity providers name, address, and contact number to JSON for each activity against a given booking (without duplicates).
6. **(Optional)** For something fun, please send us your favour funny Meme.