Hi,

We have one problem for which we need a solution.

You will have 3 days to come up with a solution (Friday 18th  to Tuesday 22nd  ) and will have a call on Wednesday to review the solution.

You can google anything you need to, even copy pasting online code also is allowed, just that you should be able to explain it when asked.

Please reach out to me on if you have doubts.

Best of luck.

Question:

Make a Rest API that will have CURD operations.

Scenario:

Organization want to move from WEB base Operation to REST based operation for a Offer Creation.

* Create an API to create an Offer and store the Offer details in a Database.

A Offer can have a multiple sub Offer associated with it

              Validation while creating it:

* + - Offer Name/Sub Offer Name should not be greater than 30 characters and can only add – (Hyphen) $(Dollar Sign) as special characters
    - Offer Type  should be one of the below values and should not accept any other values and proper validation message should to thrown
      * Unlimited
      * Topup
      * Validity
      * OTT Offers
    - One Offer should have at least one sub offer.
    - Date Format acceptable is DD-MM-YYY and other date should throw a proper validation message
    - Validity should in multiples of a week e.g (28/56…)
* Create an API to update any Offer/Sub Offer details
  + Same validation should apply as above
  + Only date can be changed in Offer Table and nothing else.
  + For Sub Offer table, all fields can be changed
  + We should be able to add more sub offers
  + For Sub offers relation O/D->M modification should not be allowed

Create an API to GET all the Offers and Sub Offers.

* + Only those Offers or Sub offers should be visible for which Activation date is achieved and the offers are not expired.
* UI is not mandatory, though it’s a value add.
* Create a Jar for the application, Which should run on double click, try to make it as portable as possible.
* You can use any Local Databaseor any runtime DB as well, Ex:- H2 for Springboot. Reference : <https://www.tutorialspoint.com/spring_boot_h2/spring_boot_h2_quick_guide.htm#:~:text=Spring%20Boot%20%26%20H2%20%2D%20Overview,-What%20is%20H2&text=It%20is%20written%20in%20Java,unit%20test%20the%20overall%20functionality>.
* You can use any framework you like, just that you should be able to demonstrate it on screensharing.

***[Deepankar]*** You can google anything you need to, even copy pasting online code also is allowed, just that you should be able to explain it when asked.

**Table Structure**

Table\_Offer:

|  |  |
| --- | --- |
| Offer Id | Number |
| Offer\_Name | VARCHAR(30) |
| Offer Description | VARCHAR(50) |
| Offer Type | VARCHAR(20) |
| Activation Date | Date |
| Expiration Date | Date |

Table\_subOffer

|  |  |
| --- | --- |
| SubOfferId | Number |
| Sub\_OfferName | VARCHAR(30) |
| Price | Number |
| Validity | Number |
| Offer Id | Number |
| Parent Relation | ENUM (Default(D)/Mandatory(M)/Optional(O)) |

Customer:

              Offer\_Name: Apple Unlimited-Offers

              Offer Description: Apple Unlimited offers offers lucrative plan for Apple customers

Offer Type: Unlimited

              Activation Date: 01-08-2023

              Expiration Date: 31-12-2023

                             Sub Offer:

                                          Sub Offer Name: Apple 90$ Unlimited Plan

                                           Price: 90

                                           Validity: 28

Parent Relation: M

Generate Offer\_id and sub offer id sequentially.

Thanks and Regards,

Mitesh Kale