WEB API HANDS-ON LAB

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1.1   Project Overview

Yum is a leading restaurant chain that operates 50+ restaurants across the country. Due to successful business model and solid understanding about consumer needs, the Yum executive management feels that they can increase their business by going online and delivery food to the door steps of the customer. They are planning to open an online portal called **truYum** through which they want to reach out a larger customer base.

1.2   Scope

Develop truYum application web services using Web API on .Net core and deploy that to Azure

1.3   Menu item listing and adding to cart

The requirement is to create 2 Web Apis

MenuItemListing and **OrderItem**.

- **MenuItemListing** is to get the hard coded menu items
- **OrderItem** is to view menu items and choose the items to add to cart

1.4   MenuItemListing WebApi

Create a WebApi MenuItemListing with a controller MenuItemController.

Create New class 'MenuItem' as business entity

1. Create the class for MenuItem business entity with the appropriate fields as listed below.

Class Name: MenuItem

Field Name	Data annotation for field	Field datatype
Id	Key	Int
Name	Required	string
freeDelivery	Display(Name="Free Delivery")	Boolean
Price	Required	Double

dateOfLaunch	`[DataType(DataType.Date)]`
	`[DisplayFormat(DataFormatString =`
	`"{0:yyyy-MM-dd}",`
	`ApplyFormatInEditMode = true)]`
		Datetime

Active		Boolean

2. In the GET action method of the MenuItemController, create a list of MenuItem with hard coded data.

3. Create GET action method with Id as input parameter to fetch the menuitem name based on that Id

1.5   OrderItem WebApi

Create a WebApi OrderItem with a controller OrderController. Create New class 'Cart' as business entity.

1. Create the class for Cart business entity with the appropriate fields as listed below.

<u>Class Name: Cart</u>

Field Name	Data annotation for field	Field datatype
Id	Key	Int
userId		int
menuItemId		int
menuItemName		string

2. In the POST action method of the OrderController, take the menuItemId as input parameter, hardcode the Id and userId as 1. Create an instance of Cart class and set the properties.

3. Hit the GET action method of the MenuItemListing WebApi that takes menuItemId as input parameter. On getting the menuItem name from the WebApi, set that name in the Cart instance. The POST action method should return the Cart instance.

2.0   Deployment and consumption in Console application

Follow the steps listed below

- Create a Console application to show the Menu items and Order menu item
- Invoke the MenuItemListing WebApi to display the menu items
- Choose the menuitem from the list and hit the OrderItem WebApi to order, view the cart item.
  - If an incorrect menu item id is chosen, throw a validation message "Incorrect menu item id chosen. Please choose the appropriate Id"