AIS India hands on Lab

### Scenario

FutureShop is looking to upgrade their existing customer management system to utilize new features of .NET. They are looking to create a rich UI application, using the technologies mentioned, which will be used to search for existing customers and Create new customers.

### Technologies

* Angular/MVC
* HTML5 and CSS (using bootstrap)
* REST API

### Instructions

* Duration of the lab is 2 hours.
* If not otherwise specified, the approach to take for each task is left up to you – as long as technologies listed above can support them.
* We will be evaluating coding style and quality of code in addition to implementing requirements.
* If you sketch any diagrams, do pass them on to the interviewee for records.
* You may use any resource available on the VM/laptop and research online.
* Use existing REST Service as a source of data.
* The student object can be viewed by accessing the GET method using Postman/Fiddler.
* Pass a header ‘**x-username**’ with your name.
* Pass a base64 encoded string of your name to ‘**x-token**’ header.
* If the above two are not passed, you will not see any response.

### Specification of the REST Service:

|  |  |  |  |
| --- | --- | --- | --- |
| **Function** | **Uri** | **Method** | **Endpoint** |
| Create | Hol/post | [**Post**](https://test-erms.azurewebsites.net/api/hol/post) | <https://test-erms.azurewebsites.net/api/hol/post> |
| Delete | Hol/Delete/id | [**Delete**](https://test-erms.azurewebsites.net/api/hol/delete) | <https://test-erms.azurewebsites.net/api/hol/delete> |
| Update | Hol/Put | [**Put**](https://test-erms.azurewebsites.net/api/hol/put) | <https://test-erms.azurewebsites.net/api/hol/put> |
| Get All | Hol/Get | [**Get**](https://test-erms.azurewebsites.net/api/hol/get) | <https://test-erms.azurewebsites.net/api/hol/get> |
| Get by Param | Hol/Get | [**Get**](https://test-erms.azurewebsites.net/api/hol/get?searchText=) | [https://test-erms.azurewebsites.net/api/hol/get?searchText={value}](https://test-erms.azurewebsites.net/api/hol/get?searchText=%7bvalue%7d) |

### Task 1 – Search Customer

* By default, for the first page load, all the customers in the Database should be displayed.
* Grid should be sortable on the following all the fields
  + Last Name
  + Date of Birth

### Task 2 – Create Customer

* Add a screen to create new customer that calls the Create API
* Should implement following input validations
  + Date of Birth should be a required field
  + Date of Birth should only allow to create Customer with minimum age as 20
* Should implement the following business validation
  + If there is already an existing Customer with the same corresponding values for the fields First Name, Last Name, Email and Date of Birth, prevent the user from creating a new Customer

### For all the above tasks, design a rich UI using HTML5 and CSS bootstrap and add the below

* + A Top area that has a logo on the left, and a login mechanism on the right.
  + A slider image section with 4 static images and a left and right arrow to navigate through the rest of the images (max 10 images). Each image in the slider should have a tooltip like callout on hover.

+91 7799286164