CST8259 Web Programming Language II

Lab 7

Objective

Create and consume Restful Web API

Due Date

See Brightspace posting for the due date of this lab. To earn 5 points, you are required:

1. Complete the lab as required.
2. Submit your lab work to the Brightspace before the due date.
3. Demo your lab work during the following week's lab sessions.

Requirements

1. Develop an ASP.NET Core project **Lab7ServiceAPI** to provide the following Restful Service API:

   - **Get All Restaurant Reviews** – Accept a HTTP GET request without review's ID, return a json string of a list of **RestaurantInfo** (the same as the class you used in Lab 6) objects containing the restaurant review data in your restaurant_review.xml file.

   - **Get Restaurant Review by Id** – Accept a HTTP GET request with a review's ID, returns a json string of a **RestaurantInfo** objects containing the restaurant review data.

   - **Get Restaurant Names** – Accept a HTTP specific GET request for all names of the restaurants in the restaurant_review.xml file, returns an array of restaurant names.

   - **Update a Restaurant Review** – Accept a HTTP PUT request for updating a restaurant review in the restaurant_review.xml file. The HTTP request body contains **RestaurantInfo** object of the updated restaurant review data in the form of json string.

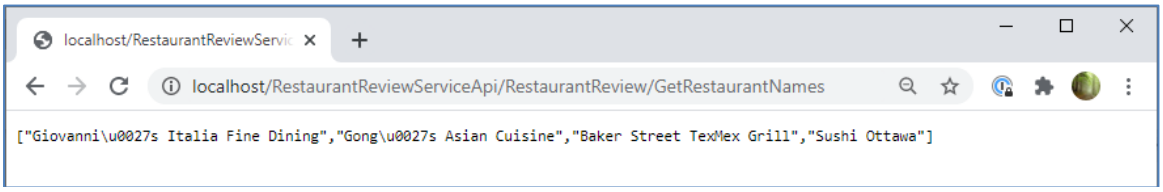
   - **Save a Restaurant Review** – Response to a HTTP POST request for saving a new restaurant review to the restaurant_review.xml file. The HTTP request body contains **RestaurantInfo** object of the new restaurant review data in the form of

json string. For simplicity, the new restaurant review write to the xml file will only contain the data in the RestaurantInfo object,

- **Delete a Restaurant Review** – Response to a HTTP DELETE request with a review's ID. returns a json string of a **RestaurantInfo** objects containing the restaurant review data.

2. Following Power Point Slides "**3. Host a ASP.NET Restful Web Service.pptx"** to deploy the **Restful Web API** you created in step 1 to the Microsoft Internet Information Service (**IIS**).

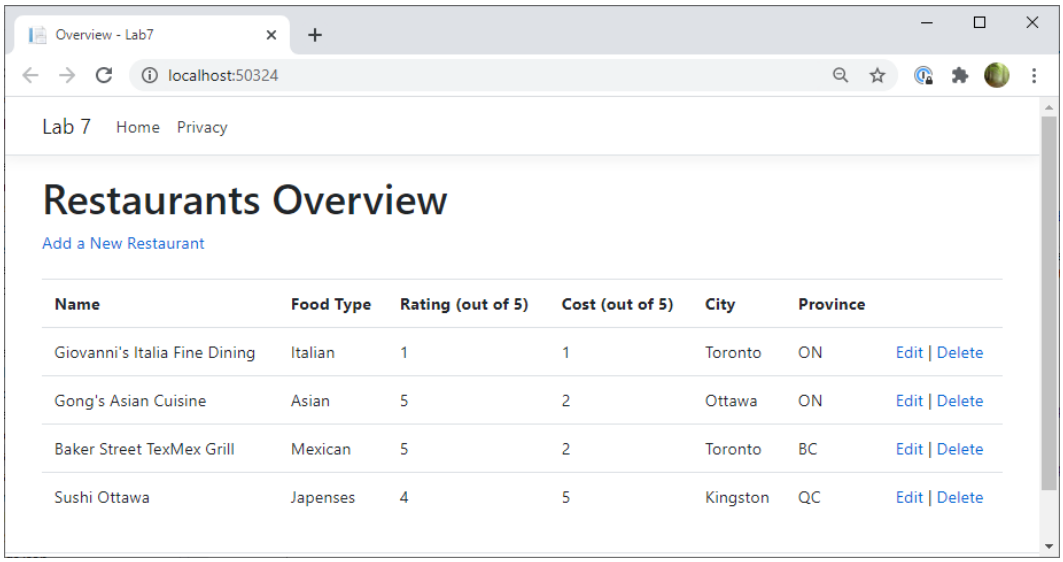
Notes:
After successful deployment, if you use the suggested **RestaurantReviewServiceApi** as IIS alias for **Restful Web API**, you should be able to access the API's three GET methods from a browser as:



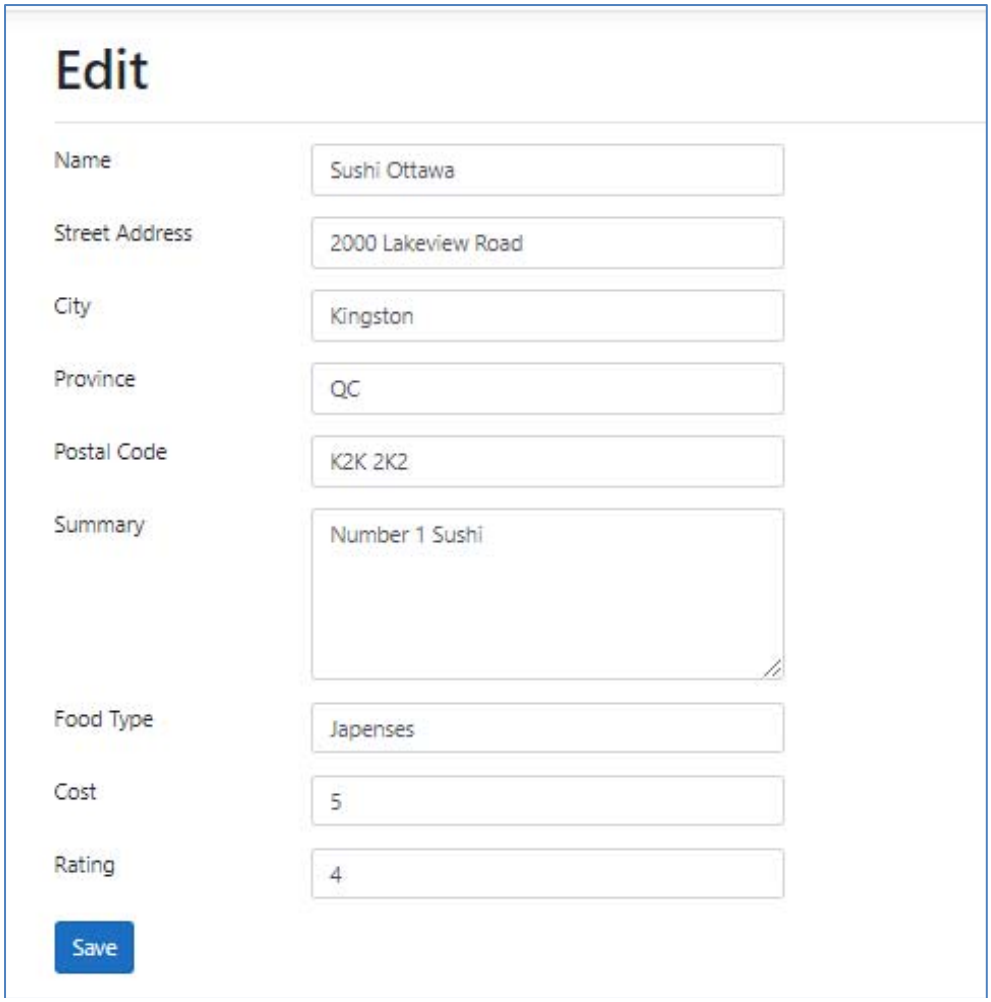
,

3. Create an ASP.NET MVC Core web application **Lab7Client** in the same way as when creating Lab6Client. The **HomeController** class provides a user interface to the **RestaurantReview Restful API** deployed on your IIS:

- On its **Index** view, it shows all restaurant reviews received from the **RestaurantReview Restful API** as:



- When the user clicks the Edit link next to a restaurant, it presents the Edit view prefill with the restaurant's data for editing.

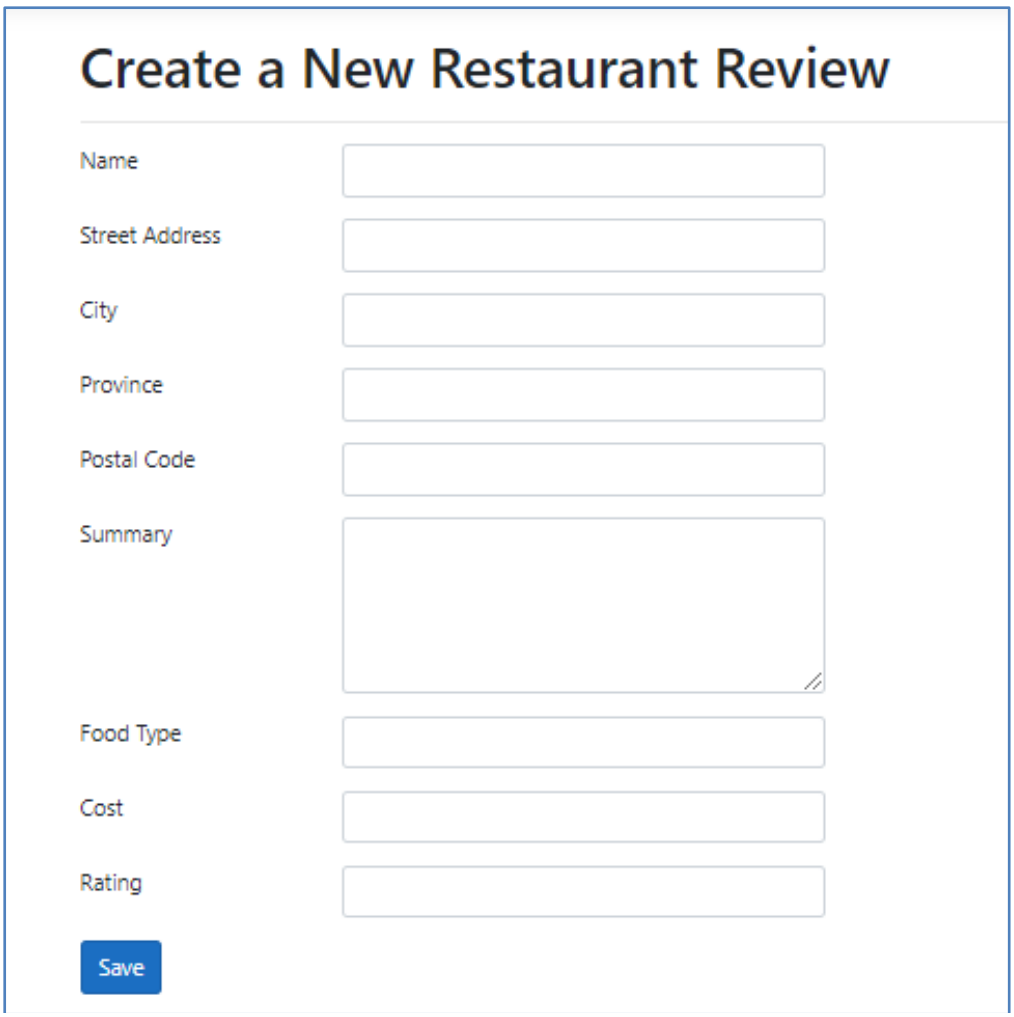


After the user clicks **Save** button, if the updated restaurant review is successfully saved to the server, it returns to the Index view of the application.

- On the Index view if the user clicks the **Delete** link next to a restaurant, the application deletes the review of the restaurant from the server.

  After successfully deleting the specified restaurant review from the server, it returns to the Index view to show all remaining restaurant reviews.

- On the Index view if the user clicks the **Add a New Restaurant** link, the application shows Create a **New Restaurant Review** for the user to enter data of a new restaurant review.



After the user clicks **Save** button, if the new restaurant review is successfully saved to the server, it returns to the Index view of the application to show the list of restaurant reviews including the new restaurant review.