CST8259 Web Programming Language II

Lab 6

Objective

Create and consume Web (WCF) Services.

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 week's lab sessions after the due date.

Requirements

1. Create a ASP.NET Web (WCF) service **ResturantReviewService** which provides the following services:

   o **GetRestaurantNames** – Return an array of restaurant names in your restaurant_review.xml files.

   o **GetAllRestaurants** – Return a List of **RestaurantInfo** objects, each contain the following data of each restaurant in your restaurant_review.xml files:

     ▪ Id – An integer (you can use the restaurant's sequence number in the XML file if the restaurant does not have an id attribute)

     ▪ Name – A string

     ▪ Address – An object with properties of Street, City, Province, and Postal Code

       For simplicity, all Address' properties are string type.

     ▪ Summary – A string

     ▪ FoodType – A string

     ▪ Rating – An integer

     ▪ Cost – An integer

- o **GetRestaurantById** – It accepts an integer as a restaurant's id (you can use a restaurant's sequence number in the XML file as its ID if the restaurant does not have an id attribute), retrieves the restaurant with the given id from the restaurant_review.xml files and returns a **RestaurantInfo** object contain the above listed data of the restaurant:

- o **SaveRestaurant** – It accepts a **RestaurantInfo** object. Find the restaurant whose id (or sequence) in the restaurant_review.xml file is the same as **RestaurantInfo** object's Id property. It updates the name, address, summary, and the rating of the restaurant in the restaurant_review.xml with the corresponding data given in the **RestaurantInfo** object.

Hints:

- Reuse part of your lab 3 to read/write the restaurant_review.xml

- Use the following to get the path do the xml file stored in the project's Data folder:

```
string xmlPath =
        HttpContext.Current.Server.MapPath("~/Data/restaurant_review.xml");
```

2. Following Power Point Slides **Deploy ASP.NET Web (WCF) Service to IIS.pptx** to deploy the Web (WCF) Service **ResturantReviewService** you created in step 1 to the Microsoft Internet Information Service (**IIS**).

3. Revise your lab 3 to create an ASP.NET MVC Core web application as the client of the Web (WCF) service **ResturantReviewService** which you deployed to your laptop's **IIS** in step 2 to get the information about the restaurant reviews to complete the same functionality as required by Lab 3.

Notes:

- For simplicity, change the province dropdown to a text input field.

- The restaurant information (names, addresses, ratings, and summaries) should come from the Web Service deployed on IIS.

- You can use **RestaurantInfo** as Model class for both Overview and Edit Views.