DHARMSINH DESAI UNIVERSITY,NADIAD

FACULTY OF TECHNOLOGY

DEPARTMENT OF COMPUTER ENGINEERING

B. TECH. SEMESTER - VI

Subject: CE619 - SERVICE ORIENTED COMPUTING

Project Title: Restaurant Review System

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- Date: 30/03/2022

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CERTIFICATE

This is to certify that the project entitled as "**Restaurant Review System**" is a bonafide report of the work carried out by

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Of Department of Computer Engineering,Semester VI, under the guidance and supervision of **Prof. Prashant M. Jadhav** and **Prof. Ankit P. Vaishnav** for the subject **Service Oriented Computing** during the academic year 2021-2022.

Contents:

1. Abstract

2. Introduction
    a. Give brief Introduction
    b. Technology/Platform/Tools Used

3. Software Requirement Specification

4. Design Documents
    a. Use Case Diagram
    b. Class Diagram

5. Implementation Details

6. Testing

7. Screen shots

8. Conclusion

9. Limitations & Future Extension

10. Bibliography

1. Abstract:

In today's modern culture most of the people are very habituated with outside food so they go outside for lunch or dinner in restaurants. So if they want to go to a very good restaurant then they can find a good restaurant on this website.On the basis of review of the restaurant they can decide which restaurant they want to go.Registered user of a website can also give review on a basis of some criteria.We have tried to develop the application that user does not face any difficulties while using it.

2. Introduction:

a. Brief Introduction:

Many People don’t know about good restaurants near them.Now you don’t have to worry about finding a good restaurant,as you can access this website and see the restaurant details and their rating of their food,service etc. near them.Restaurant Review System is an application that helps to find a restaurant of their match and choice.

b. Technology/Platform/Tool Used:

- Windows Communication Framework(WCF)
- .NET Framework and C#
- Visual Studio
- MySQL Database
- Github Repository

3. Software Requirement Specification:

1. User's Account:

R1.1 Sign Up

- Description:Users are required to enter the necessary details in signup form in order to create an account on this website.
- Input: EmailAddress,Password and Confirm Password
- Output: Confirmation Message

R1.2 Login

- Description: In order to give rating or review to the restaurant user needs to login to the website through their registered credentials.
- Input: EmailAddress and Password
- Output: Redirect to Page that contains list of Restaurants and review to the restaurant that you gave earlier.

2. Restaurant:

R2.1 View Restaurant

- Description: When User Login or not logged in user is able to see all the restaurants that are available in this website.

R2.2 Add Restaurant

- Description: In order to add a restaurant to the website first admin needs to be logged in into the website.After that admin is able to add the restaurant to the website.
- Input: Restaurant Name,Email Address,Contact Number,City,Cuisine Category
- Output: Confirmation Message

R2.3 Update Restaurant

- Description: You can also update the details of existing restaurants.
- Input:Enter the updated detail of restaurant
- Output: Confirmation Message

R2.4 Delete Restaurant

- Description: Admin can also delete an existing restaurant which is not available or closed.
- Input: Select a restaurant
- Output: Confirmation Message

3. Restaurant Review:

R3.1 Give Review

- Description: Users can give a review of a restaurant in the form rating out of 10 on the basis of different criteria.
- Input: Rating on the basis of different criteria
- Output: Confirmation of Review Recorded.

R3.2 Update Review

- Description: Users can update the review of the restaurant that they gave earlier.
- Input: Updated Rating on the basis of different criteria
- Output: Confirmation of Review Updation

R3.3 Delete Review

- Description: Users can delete a review of any restaurant that they gave earlier
- Input: Select a Review
- Output: Confirmation of deletion of review

R3.4 Get Review According to User

- Description: Review must be shown to the user according to the userid when they logged in.
- Input: User Id
- Output: List Of Review given by user

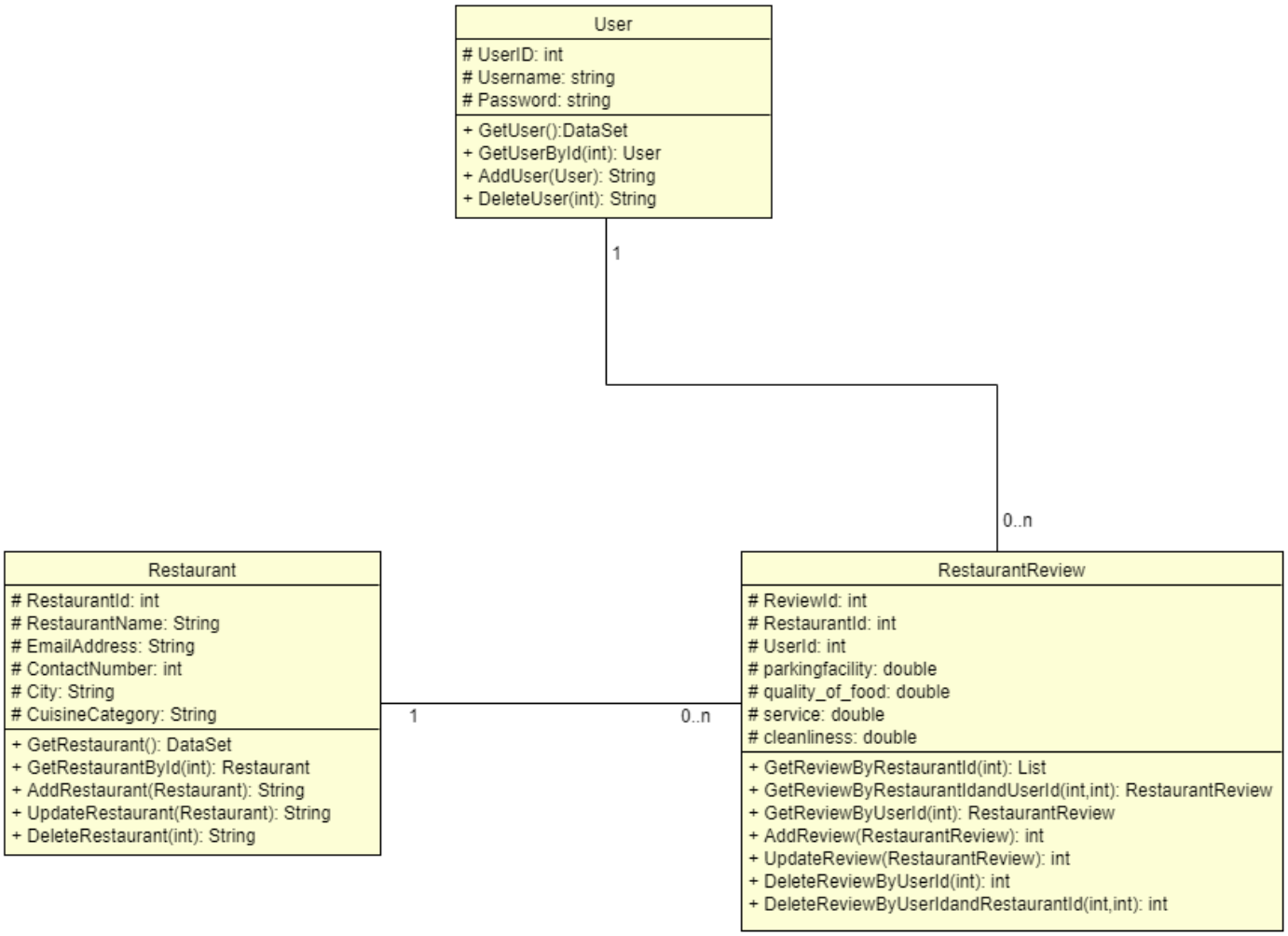
R3.5 Get Review According to User and Restaurant

- Description: If user wants to show a earlier review of particular restaurant then they can do this
- Input: User Id and Restaurant Id
- Output: Review Of Particular Restaurant of Particular User

4. Design Documents:

A. Use Case Diagram:

B. Class Diagram:



C. Data Dictionary:

- Restaurant Table:

Field Name	Data Type	Field Length	Constraint
Id	INT	-	PRIMARY KEY
Restaurant Name	NVARCHAR	50	NULL
Email Address	NVARCHAR	50	NULL
Contact Number	BIGINT	-	NULL
City	NVARCHAR	50	NULL
Address	NVARCHAR	200	NULL
Cuisine Category	NVARCHAR	50	NULL
Image Name	NVARCHAR	100	NULL

- Restaurant Review Table:

Field Name	Data Type	Field Length	Constraint
Id	INT	-	PRIMARY KEY
Restaurant Id	INT	-	NULL
User Id	NVARCHAR	128	NULL
Parking facility	FLOAT	53	NULL
Quality of food	FLOAT	53	NULL
Service	FLOAT	53	NULL
cleanliness	FLOAT	53	NULL

- User Table:

Field Name	Data Type	Field Length	Constraint
Id	NVARCHAR	100	PRIMARY KEY
Username	NVARCHAR	200	NOT NULL
Password	NVARCHAR	200	NOT NULL

5. Implementation Detail:

a. Module Created:

- RestaurantService: This service provides all the operations related to restaurants like add restaurant,delete restaurant,update restaurant detail, get restaurant,get restaurant by id etc.

- RestaurantReviewService: This service provides all the operations related to restaurant review like add review,delete review,update review,get review by user id,get review by restaurant id and user id etc.

- Host Application: This is a windows form application Which is used for hosting the service that is required for our project.

b. Interface Prototypes which are implemented by major service functionality.

- IRestaurantService.cs:

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Linq;
using System.ServiceModel;
using System.Text;
using System.Threading.Tasks;

namespace RestaurantReviewSystem
{
    [ServiceContract]
    public interface IRestaurantService
    {
        [OperationContract]
        DataSet GetRestaurant();

        [OperationContract]
        Restaurant GetRestaurantById(int id);

        [OperationContract]
        string AddRestaurant(Restaurant restaurant);

        [OperationContract]
```

```
        string DeleteRestaurant(int id);

        [OperationContract]
        string UpdateRestaurant(Restaurant restaurant);
    }
}
```

- IRestaurantReviewService.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.ServiceModel;
using System.Text;
using System.Threading.Tasks;

namespace RestaurantReviewSystem
{
    [ServiceContract]
    public interface IRestaurantReviewService
    {
        [OperationContract]
        List<RestaurantReview> GetReviewByUserId(int
id);

        [OperationContract]
        int AddReview(RestaurantReview review);
```

```
        [OperationContract]
        int UpdateReview(RestaurantReview review);

        [OperationContract]
        int DeleteReviewByUserId(int id);

        [OperationContract]
        int DeleteReviewByUserIdandRestaurantId(int
userid,int restaurantid);

        [OperationContract]
        List<RestaurantReview>
GetReviewByRestaurantId(int restaurantid);

        [OperationContract]
        RestaurantReview
GetReviewByRestaurantIdandUserId(int restuarantid,int
userid);
    }
}
```

6. Testing:

Unit Testing: Test each module of the website that makes the entire application.

Test No. 1:

Test Description: Enter the restaurant Id of that restaurant that is not present in the Database.
Input: Id
Expected Output: Record Not Found.
Actual Output: Record Not Found.
Remark: Pass

Test No. 2:

Test Description: Try to Give Rating to the Restaurant without login.
Input: Click on “Review” Button
Expected Output: Message Displayed. “**You need to login/register for food review**”
Actual Output: Message Displayed.“**You need to login/register for food review**”
Remark: Pass

Test No. 3:

Test Description: Try to login.
Input: Email Address and Password
Expected Output: Go to the restaurant list page
Actual Output: Go to the restaurant list page
Remark: Pass

Test No. 4:

Test Description: After log in to the system try to give a review to the restaurant on the basis of criteria
Input: Give Rating to the restaurant out of 10
Expected Output: Success Message
Actual Output: Success Message
Remark: Pass

Test No. 5:

Test Description: Add Restaurant After Admin login to the website.
Input: Restaurant Name,Photo,Restaurant Contact Number,City,Cuisine Category
Expected Output: Success Message
Actual Output: Success Message
Remark: Pass

Test No. 6:

Test Description: Change Password for admin
Input: Current Password,New Password,Confirm New Password
Expected Output: Success Message
Actual Output: Success Message
Remark: Pass

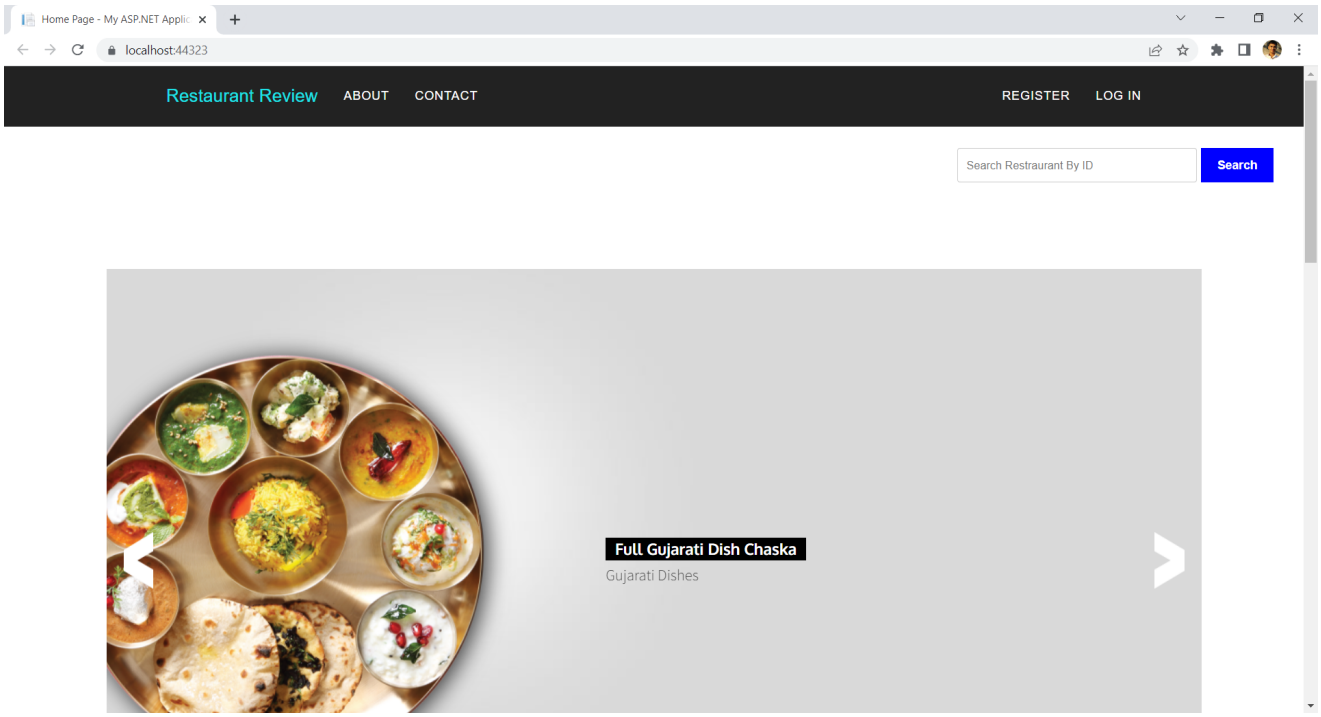
Test No. 7:

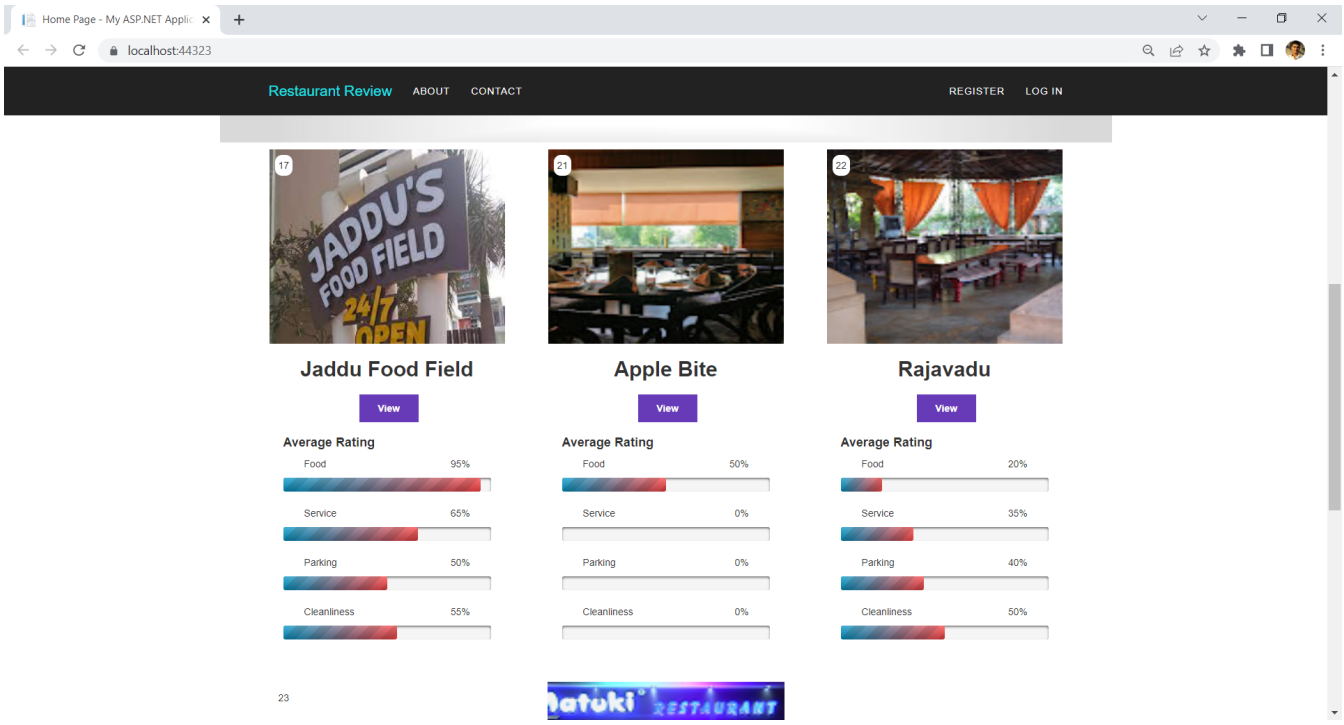
Test Description: Delete Restaurant
Input: Click on “Delete” Button Click
Expected Output: Success Message
Actual Output: Success Message
Remark: Pass

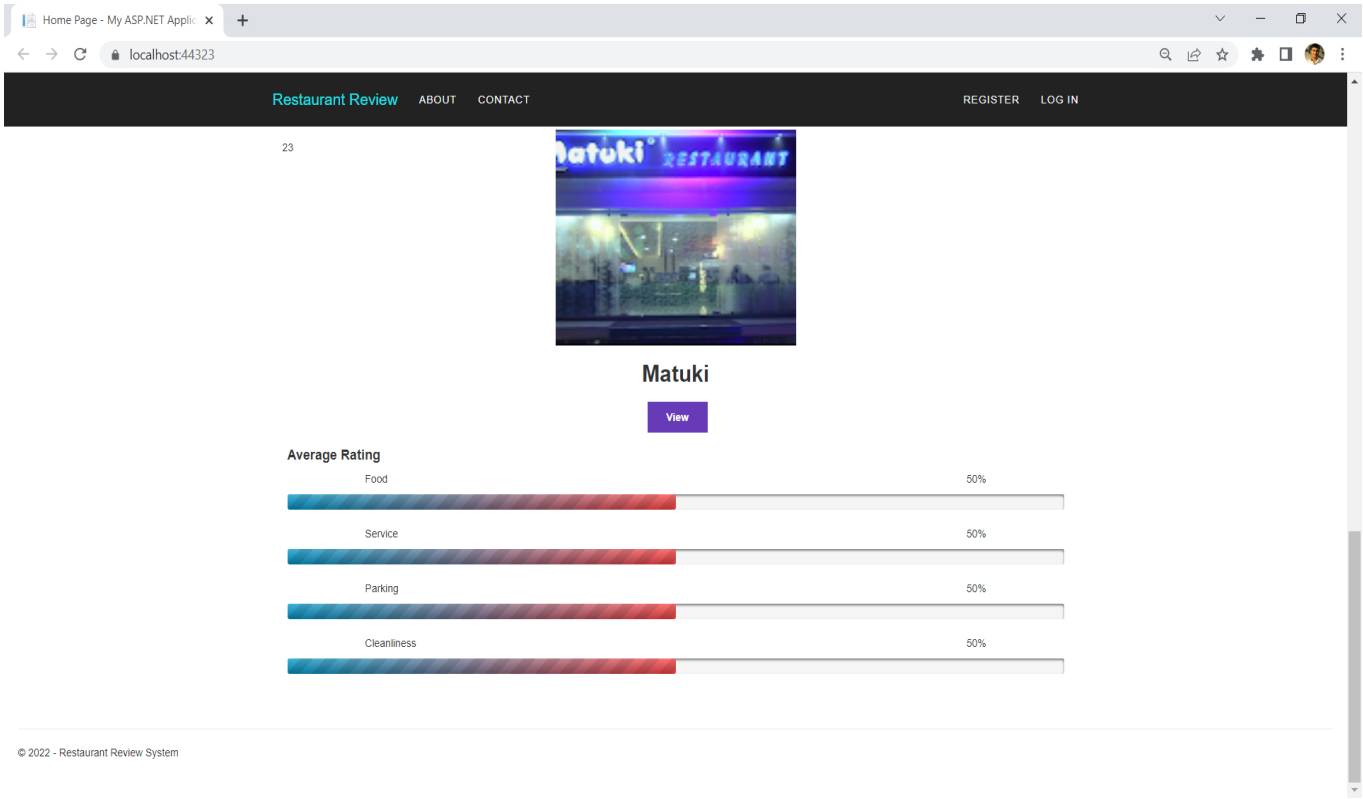
Test No. 8:

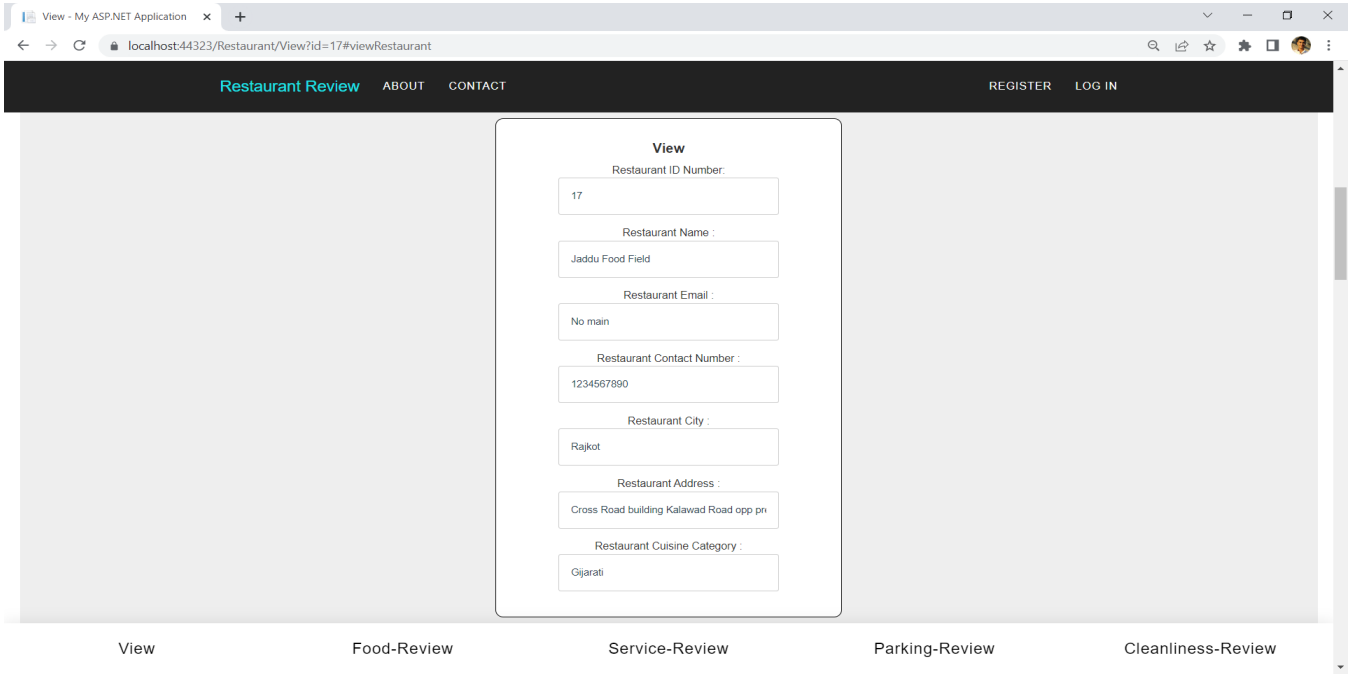
Test Description: After Selecting Restaurant Click on update button
Input: Enter Update Information
Expected Output: Success Message
Actual Output: Success Message
Remark: Pass

7. ScreenShots:

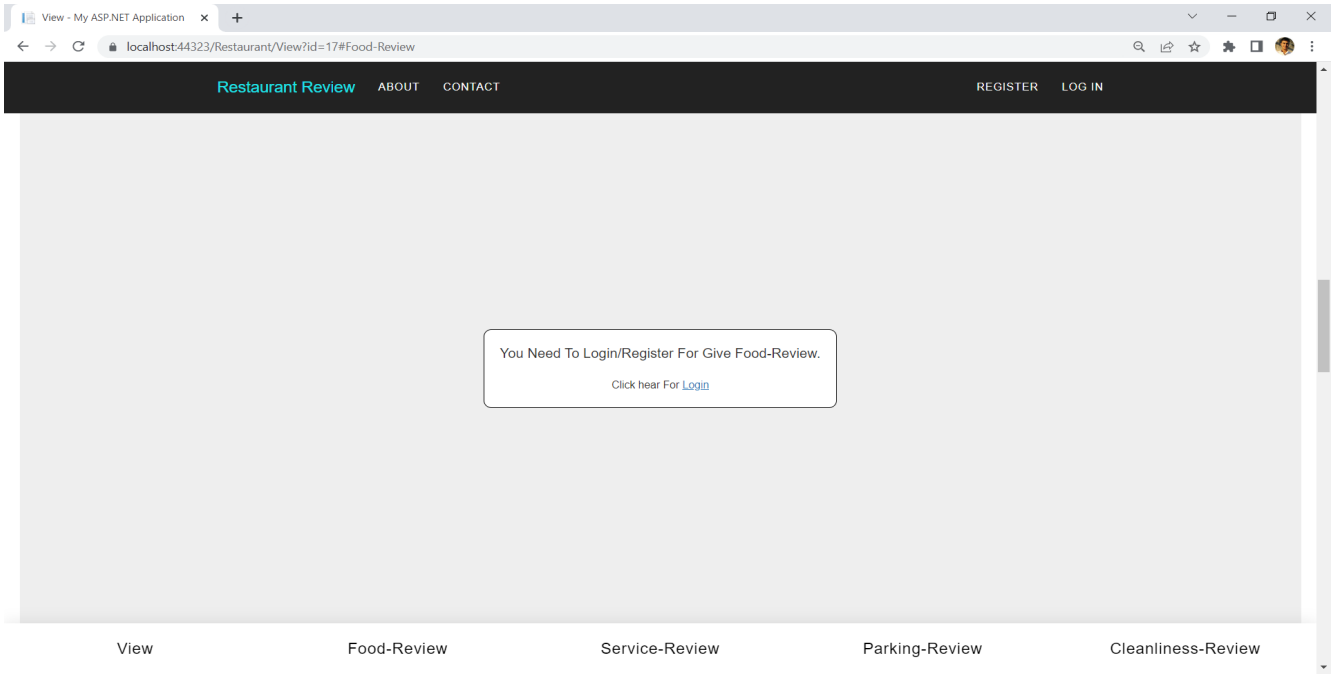


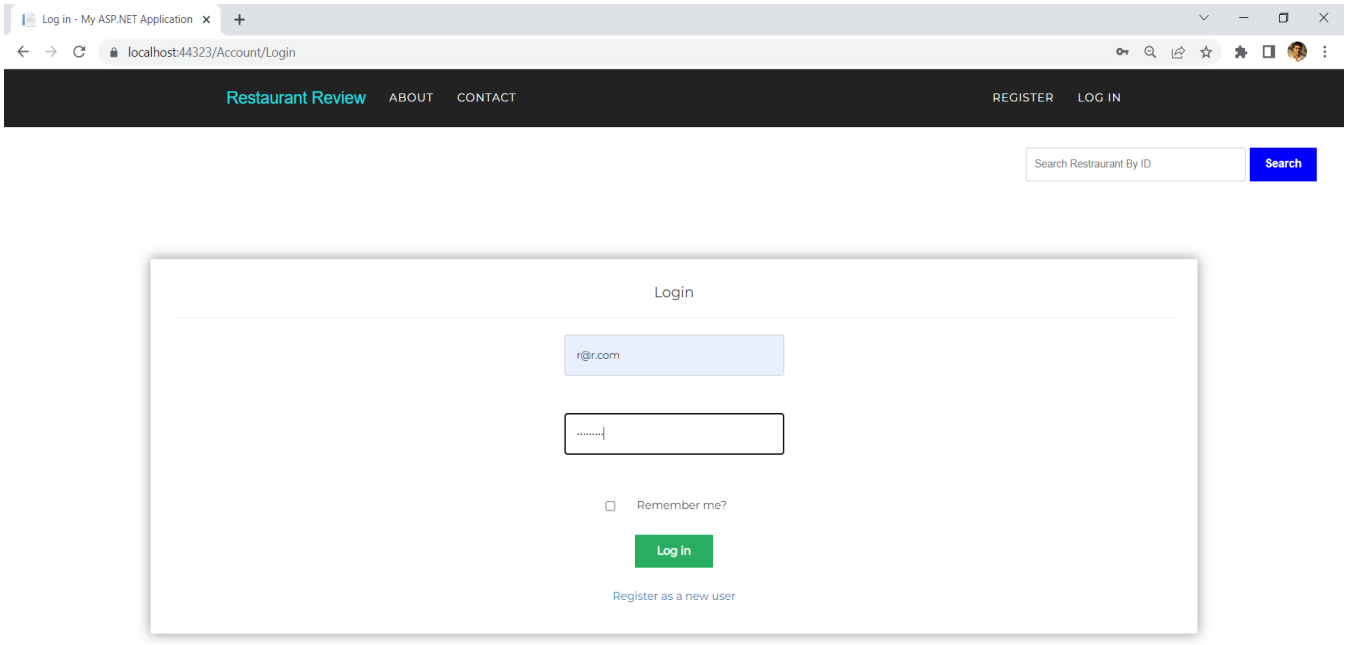






View Food-Review Service-Review Parking-Review Cleanliness-Review





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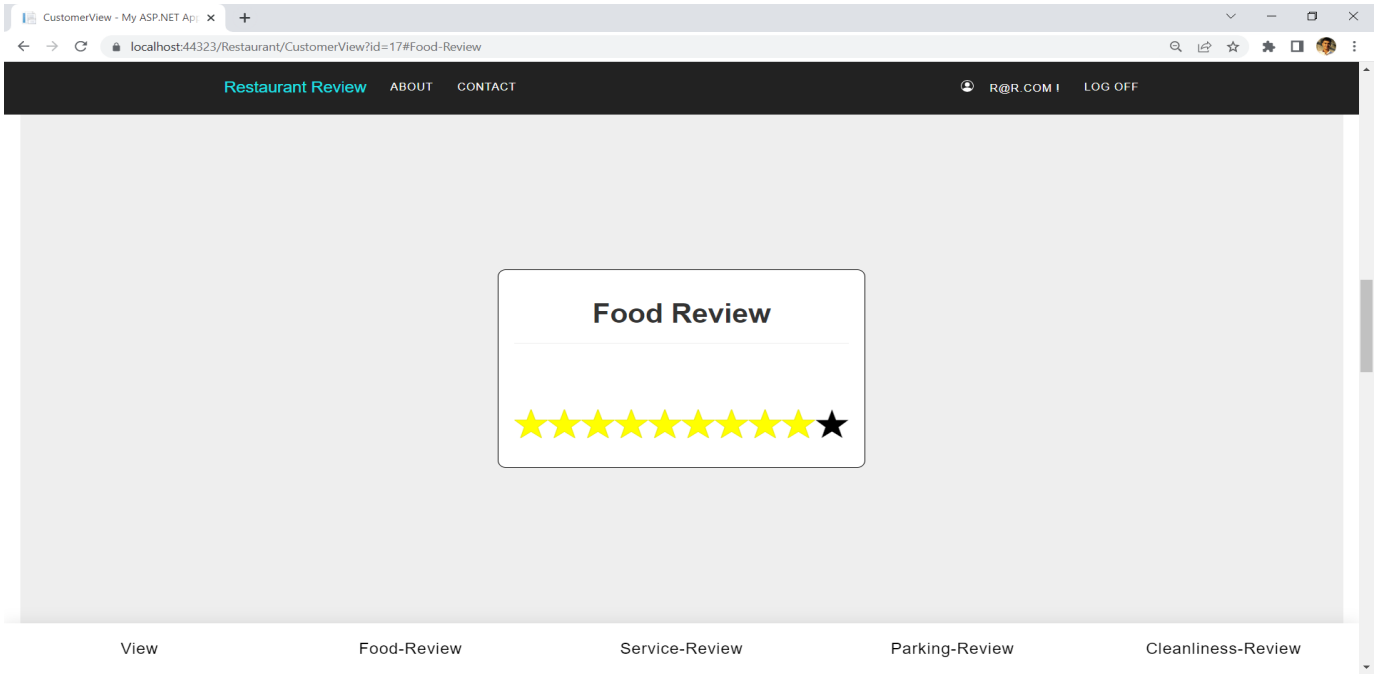
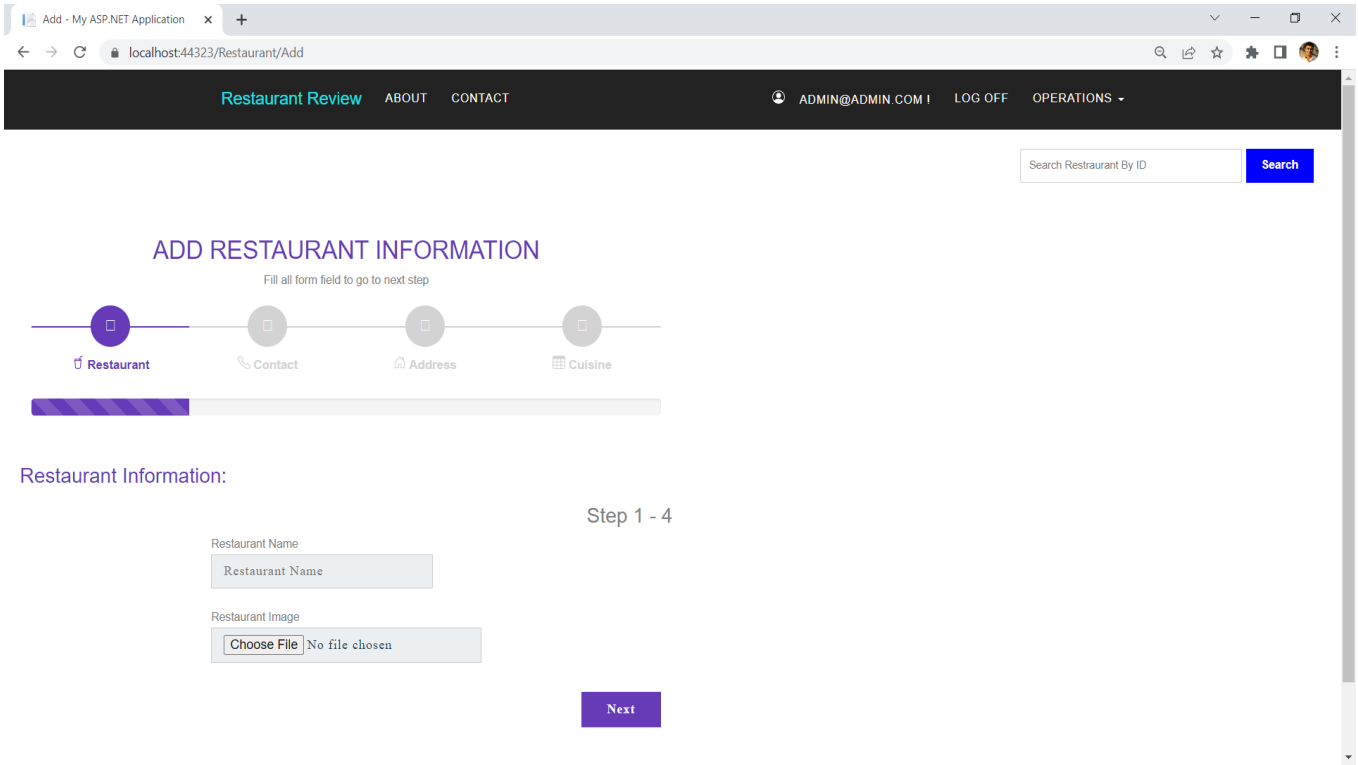
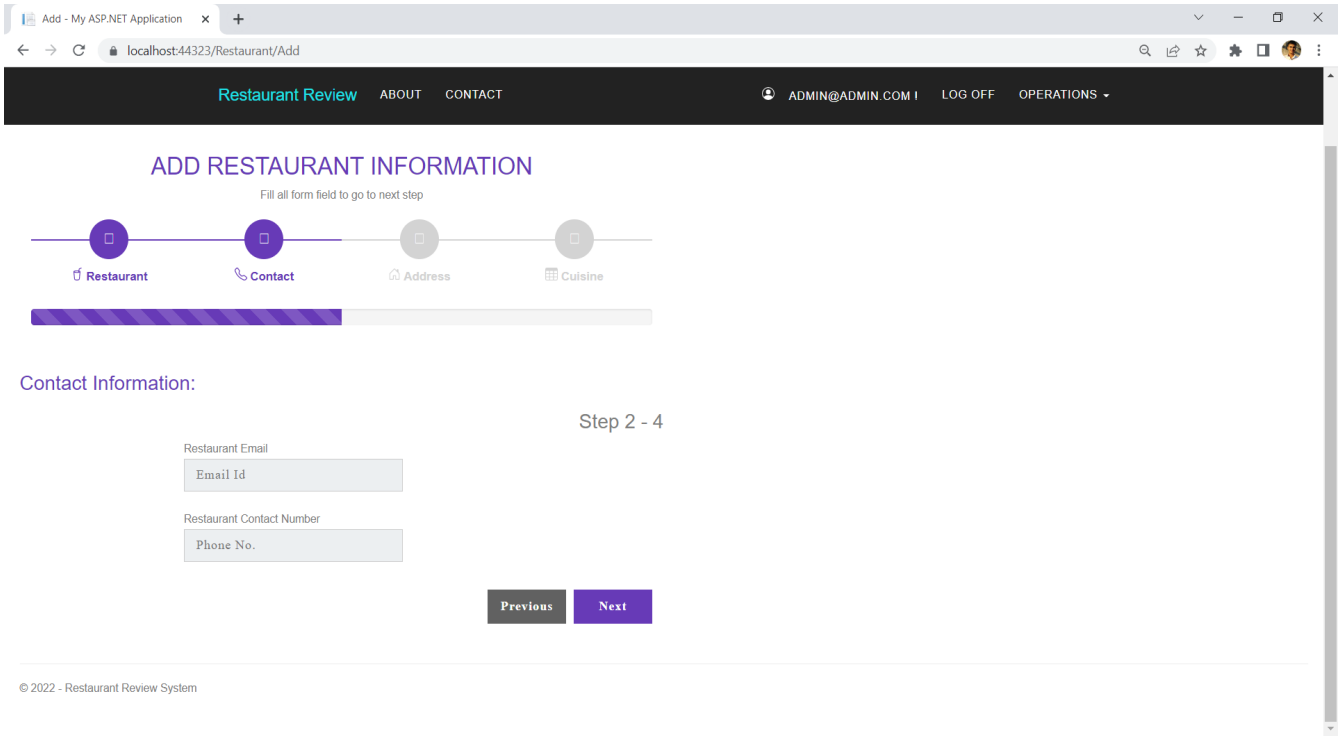

CustomerView - My ASP.NET Ap
localhost:44323/Restaurant/CustomerView?id=17#Food-Review
Restaurant Review
ABOUT
CONTACT
R@R.COM !
LOG OFF
Food Review
View
Food-Review
Service-Review
Parking-Review
Cleanliness-Review


Add - My ASP.NET Application
localhost:44323/Restaurant/Add
Restaurant Review
ABOUT
CONTACT
ADMIN@ADMIN.COM !
LOG OFF
OPERATIONS
Search Restaurant By ID
Search
ADD RESTAURANT INFORMATION
Fill all form field to go to next step
Restaurant
Contact
Address
Cuisine
Restaurant Information:
Step 1 - 4
Restaurant Name
Restaurant Name
Restaurant Image
Choose File
No file chosen
Next


Add - My ASP.NET Application
localhost:44323/Restaurant/Add
Restaurant Review
ABOUT
CONTACT
ADMIN@ADMIN.COM !
LOG OFF
OPERATIONS
ADD RESTAURANT INFORMATION
Fill all form field to go to next step
Restaurant
Contact
Address
Cuisine
Contact Information:
Step 2 - 4
Restaurant Email
Email Id
Restaurant Contact Number
Phone No.
Previous
Next
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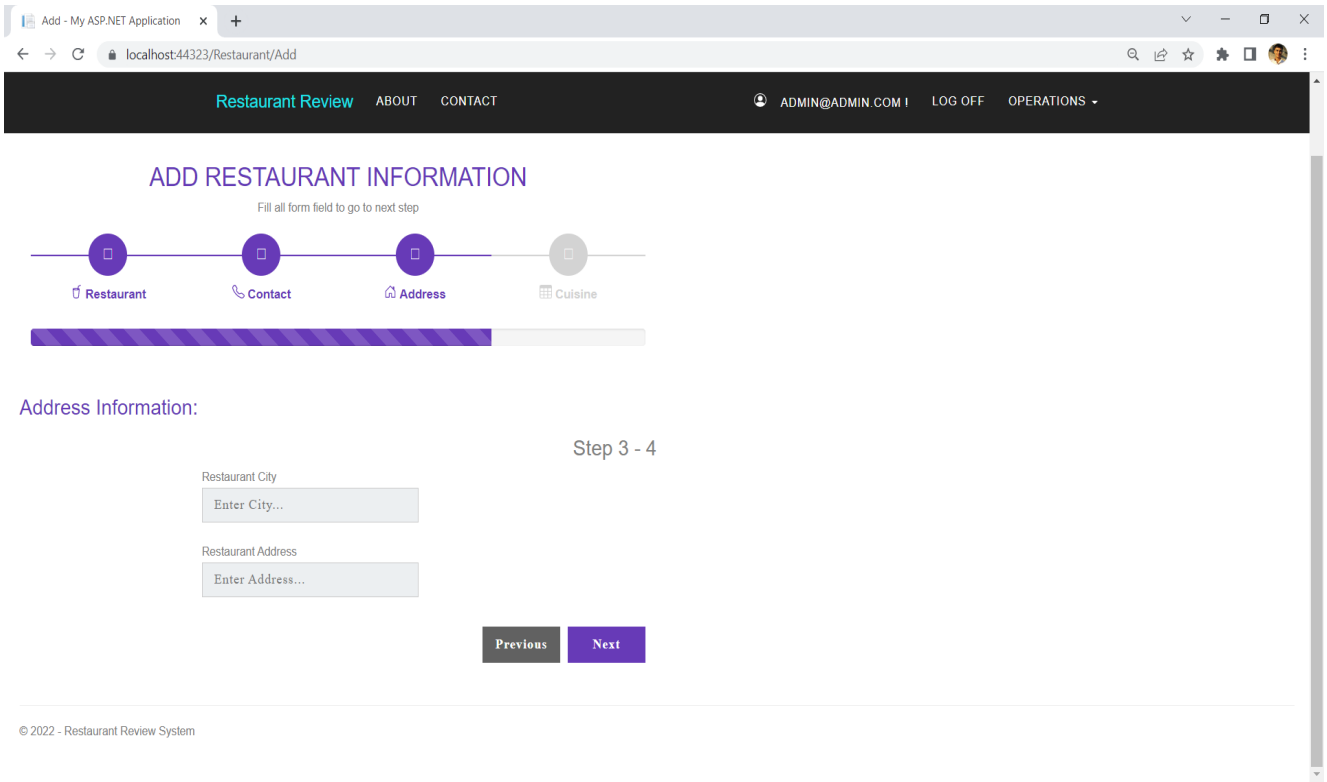
Add - My ASP.NET Application
localhost:44323/Restaurant/Add
Restaurant Review
ABOUT
CONTACT
ADMIN@ADMIN.COM !
LOG OFF
OPERATIONS
ADD RESTAURANT INFORMATION
Fill all form field to go to next step
Restaurant
Contact
Address
Cuisine
Address Information:
Step 3 - 4
Restaurant City
Enter City...
Restaurant Address
Enter Address...
Previous
Next
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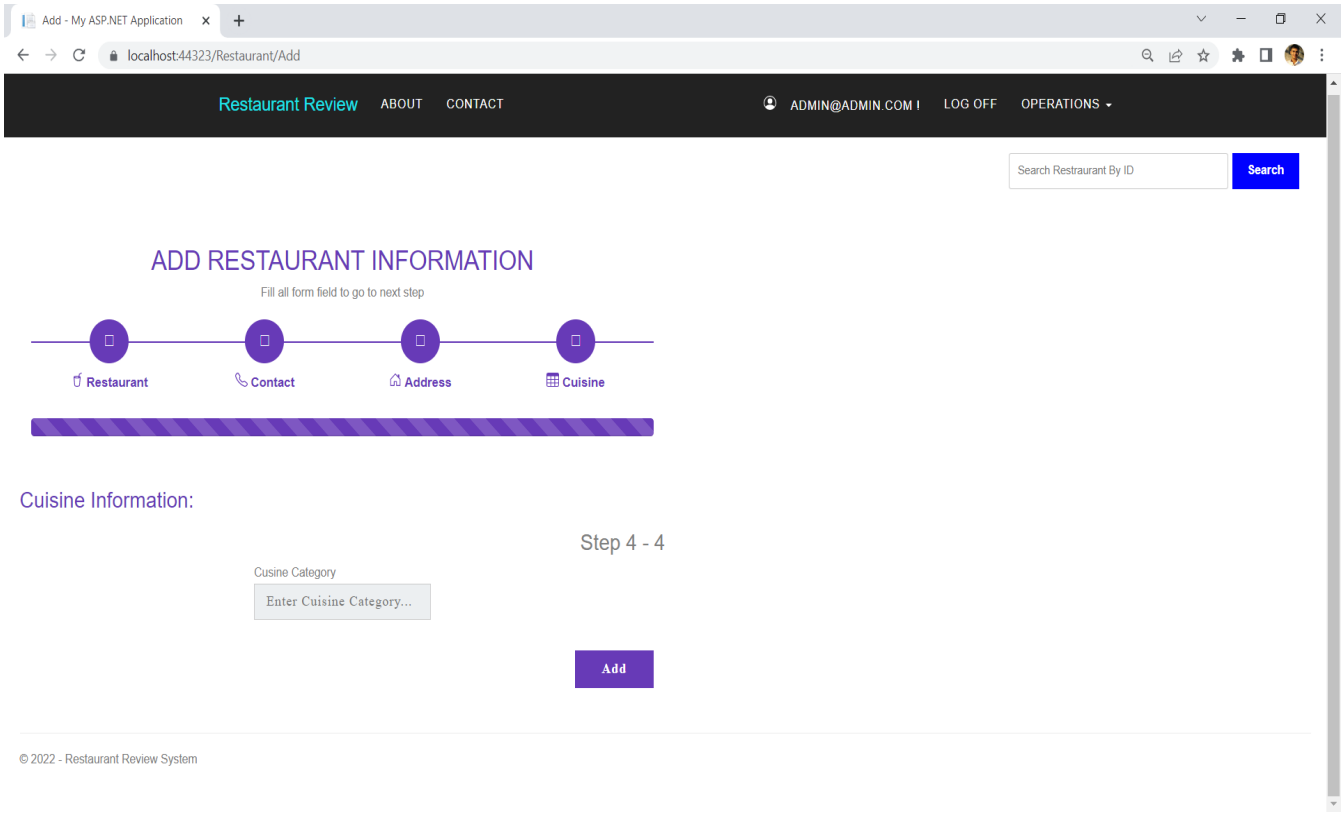
Add - My ASP.NET Application
localhost:44323/Restaurant/Add
Restaurant Review
ABOUT
CONTACT
ADMIN@ADMIN.COM !
LOG OFF
OPERATIONS
Search Restrauran By ID
Search
ADD RESTAURANT INFORMATION
Fill all form field to go to next step
Restaurant
Contact
Address
Cuisine
Cuisine Information:
Step 4 - 4
Cusine Category
Enter Cuisine Category...
Add
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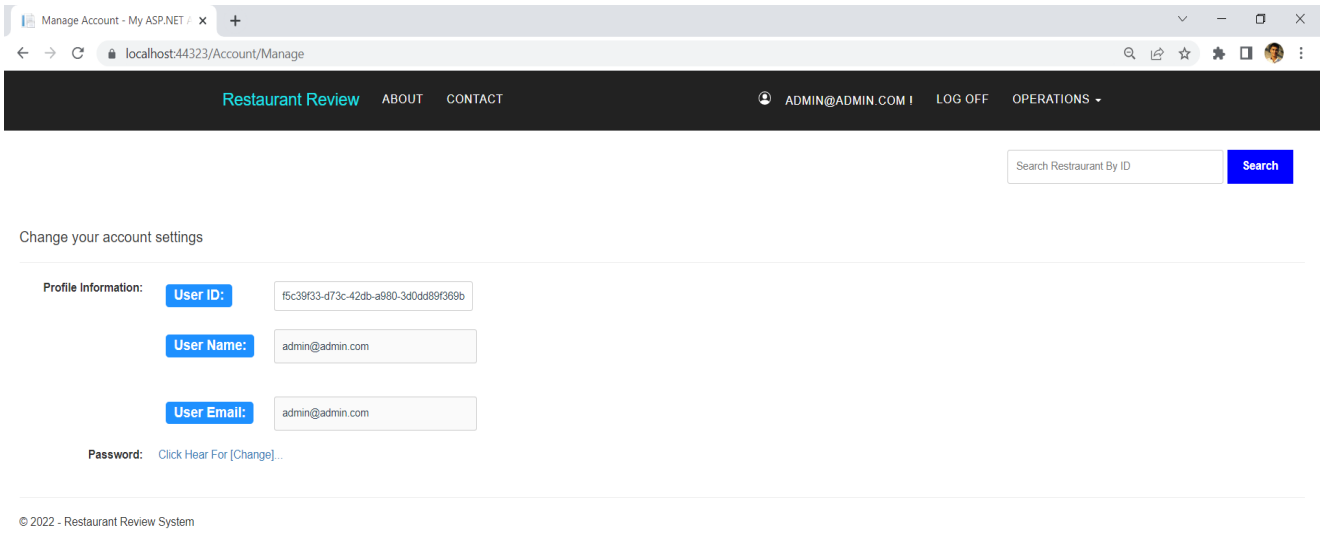
Manage Account - My ASP.NET A
localhost:44323/Account/Manage
Restaurant Review
ABOUT
CONTACT
ADMIN@ADMIN.COM !
LOG OFF
OPERATIONS
Search Restrauran By ID
Search
Change your account settings
Profile Information:
User ID:
f5c39f33-d73c-42db-a980-3d0dd89f369b
User Name:
admin@admin.com
User Email:
admin@admin.com
Password:
Click Hear For [Change]...
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8. Conclusion:

Restaurant functionality and restaurant review functionality is implemented successfully.With the help of that we are able to do all the activity related to the restaurant like add,delete,update etc and we are also able to do all the activity related to the restaurant review like add,delete,update,view etc.After implementing this website we assure that user able to find the best restaurant for their dine and after that user can also share their review about restaurant.So using user feedback we are able to improvise user experience of the website.

9. Limitations and Future Extensions:

- Limitations:

    - It is still not possible to use machine learning algorithms for recommendation of restaurants using user's preferences.
    - There is no menu for a restaurant on this website.

- Future Extensions:

    - The application can further develop to advance booking for a table in restaurants.
    - We can also add a menu for each restaurant.
    - We can also add the online food ordering system for users to order food from a restaurant like zomato and swiggy.

10. **Bibliography:**

- https://docs.microsoft.com/en-in/
- https://www.c-sharpcorner.com/
- https://codepen.io/