

Lab 14. Final Project Lab

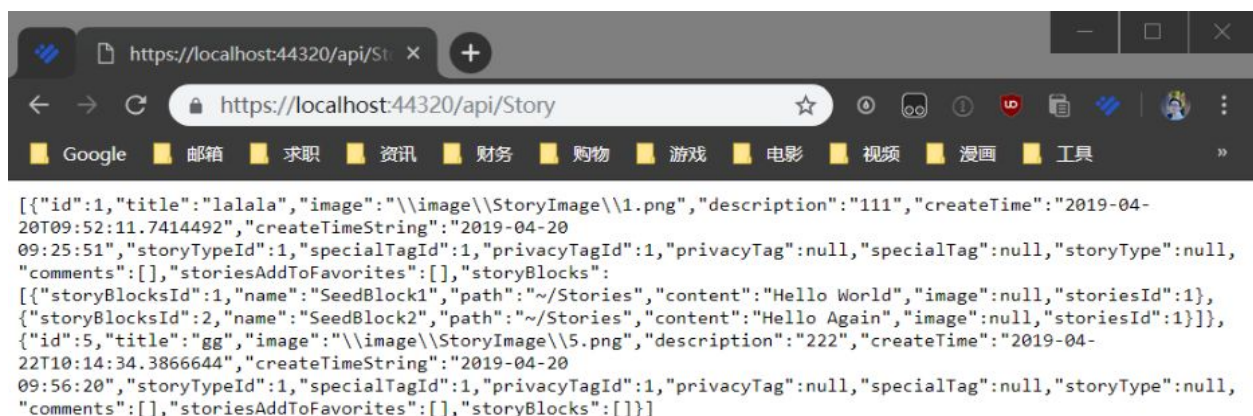
Task

Integrating Website, Webservice, and Webservice Client.

Solution

1. Add a WebApi and a WpfApp project to current Asp.Net Core MVC solution.
2. Since we have already created the database using Code-First Method in the MVC project, we can access the database in the new Api project by creating the EF model using this command: "Scaffold-DbContext "Server=(localdb)\mssqllocaldb;Database=Blogging;Trusted_Connection=True;" Microsoft.EntityFrameworkCore.SqlServer -OutputDir Models"
3. In the WebApi project, implement Get, Post, Put and Delete methods for the Stories Model and the related StoryBlocks Model, so that by running this project, we will have the ability to upload, replace, and delete any of the story blocks or complete stories in our database.
4. By typing the corresponding api url in the address bar, we can retrieve the data from our database. Take the GET APIs for Stories Model as an example:

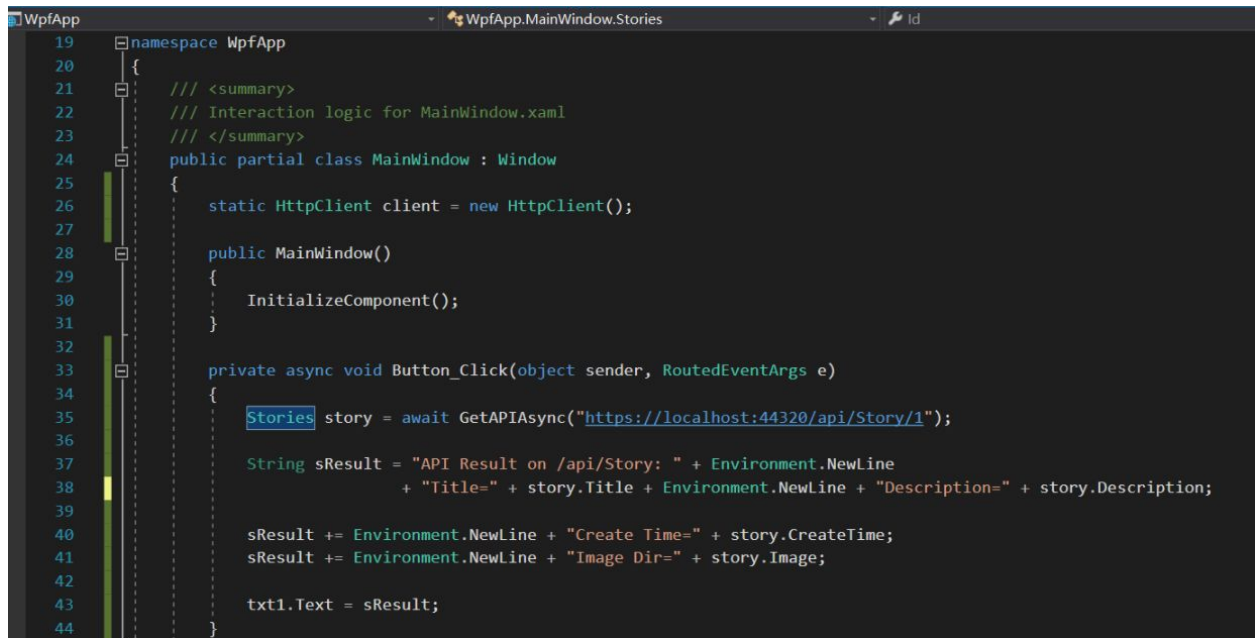
URL: <https://localhost:44320/api/Story> (Get full story list, 2 records are retrieved)



URL: <https://localhost:44320/api/Story/1> (Get the Story with id 1)



5. After implemented APIs, we will now develop a WPF client project to consume the APIs in WebApi Project. As a quick example, I have added a button and a TextBlock to the main window and tested the Get api to display some of the attributes of the story with id 1.



```

45
46 public class Stories
47 {
48     public int Id { get; set; }
49     public string Title { get; set; }
50     public string Image { get; set; }
51     public string Description { get; set; }
52     public DateTime CreateTime { get; set; }
53 }
54
55 static async Task<Stories> GetAPIAsync(string path)
56 {
57     Stories story = null;
58     HttpResponseMessage response = await client.GetAsync(path);
59
60     if (response.IsSuccessStatusCode)
61     {
62         story = JsonConvert.DeserializeObject<Stories>(
63             await response.Content.ReadAsStringAsync());
64     }
65     return story;
66 }

```

6. Run the WebApi Project first and then WpfApp. Before clicking the button:



When the window shows up, click on “Get Stories” button and the following result will be displayed in the TextBlock:

