**CS 504 – Software Engineering**

**HOP05 – Blazor Page Application – Menu Configuration & Secure Connection**

11/01/2020 Developed by Kim Nguyen

Center for Information Assurance (CIAE) @City University of Seattle (CityU)

 Icon

Description automatically generated

**Before You Start**

* Version numbers may not match with the most current version at the time of writing. If given the option to choose between stable release (long-term support) or most recent, please choose the stable release rather than beta-testing version.
* This tutorial targets Windows users and MacOS users.
* There might be subtle discrepancies along the steps. Please use your best judgement while going through this cookbook style tutorial to complete each step.
* For your working directory, use your course number. This tutorial may use a different course number as an example.
* The directory path shown in screenshots may be different from yours.
* If you are not sure what to do or confused with any steps:
  1. Consult the resources listed below.
  2. If you cannot solve the problem after a few tries, ask a TA for help.

**Learning Outcomes**

Students will be able to:

* Continue customizing Blazor Application
* Adding pages to navigation menu
* Establish secure connection to web app

**Resources:**

* Microsoft | ASP .NET - <https://dotnet.microsoft.com/apps/aspnet>

**Blazor App – Adding new pages to navigation menu**

**Please move the Blazor App folder from “Module 4” folder to “Module 5”.**

(Under the Hands-on Practice folder)

Last week, we have created a new page called “Todo” in the Blazor Application, however, in the main menu, there no navigation to this page yet.

Graphical user interface, application

Description automatically generated

1. Open the Blazor App project in VSCode. Under Shared folder, add the following line of code to the NavMenu.razor file to let the Todo page show up on the navigation menu:

Text

Description automatically generated

1. Run the app, Todo page should show up in the menu:

dotnet watch run

Graphical user interface, application

Description automatically generated

1. Go back to Todo.razor file, modify your code to add counting the number of undone to-do items (by default, IsDone is equals to False)Text

   Description automatically generated
2. Run the app, you should see the total number of to-to items:

dotnet watch run

Graphical user interface, application

Description automatically generated

1. Add some items to see the total number changed:

Graphical user interface, application

Description automatically generated

**Secure connection**

Have a look at the URL of the website, right now, our connection to the website is insecure:

Graphical user interface, text, application

Description automatically generated

1. Let’s fix this issue, there’s 2 ways we can do this. One is to edit the lauchSettings.json file to match following:

Text

Description automatically generated

As you can see, we added another connection that’s https on port 5001. It’s simple as that!

Another way is to run the application using the following command (this is not a good and convenient way):

dotnet run --no-launch-profile

What --no-launch-profile does is, the application will ignore the launchSettings.json file and runs on default settings, where one http connection on port 5000 and one https connection on port 5001 are provided.

1. In the Terminal of VSCode, run the app with either dotnet run --no-launch-profile

command or dotnet watch run, you should see another url with secure connection (https) showing:

Text

Description automatically generated

1. Open the web app using that url, you should see our connection is now secured:

Graphical user interface, text, application

Description automatically generated

1. **In your own word, explain why secured connection is necessary (Export your answer to PDF file, then save in the same Module 5 folder)**

First of all, I was able to see the https in the browser url, but it has a red strikethrough on it. Apparently this means that both secure and non-secure elements are being displayed on the page at the same time. This is probably caused by all the css, javascript, and other assests used by the blazor app. Apparently in order to make this error go, we need to use local assets and we need to use relative link to access them.

**Push your work to GitHub**

Open the terminal from the VSCode by hitting the control + ~ key, make sure you are in the right path, for example: /Desktop/CS504/HOP05-YourGitHubUsername/Module 5

Type the following command:

git add . (to copy all changes you have made)

git commit -m “Submission for Module 5 – Your Name” (To add a message to your submission)

git push origin master (to upload your work to Github)