

HU Fall'19 Web and Mobile Dev – Assignment 4

Released: 19th Nov 2019

Due: 1st Dec 2019 11:55 pm

Please refer to:

- SalariedTaxRates.xlsx
- Assignment4Client.rar
- Assignment4APITemplate.rar

The purpose of the assignment is to provide an income tax calculator for salaried individual for tax year 2019-2020. A template Web API (Assignment5 Template) and a sample client (Assignment5Client) are provided.

How to run the sample code:

1. Compile both the projects in separate instances of Visual Studio 2015/17.
2. Run the template project by pressing Ctrl+F5 or F5. It will show an error msg as the controller and verb is not specified. Please ignore and note down the port number of the IIS express that is running.
3. Make sure the port number noted down in step 2 is specified correctly in the Client's CalculationManager model class.
4. You may want to verify that template is working correctly; Change the url in step 2 to <http://localhost:56601/api/TaxCalculator/CalculateTax?yearlyIncome=760000&RemainingPeriods=8&TaxPaid=156> (where 56601 should be replaced by the port number where IIS Express is running) and verify that the API returns something.

The assignment includes carrying out the following:

1. Finalize the contract (API call parameters and return values) between the client and web API and if needed, make changes.
2. Implement the web service/API method which currently returns an arbitrary value
3. The current implementation calculates the number of remaining month's parameter (remainingMonth) incorrectly. This needs a fix.
4. Upon successful completion of the web API, the client should output detailed response rather than tax per month.
5. Currently client code has API endpoint hard-coded in the source. Modify the client code to store the API endpoint (localhost:56601) in web.config and retrieve it from there.
6. Beautify the client form to use the styles available with bootstrap or a style sheet of your choice.

YOU CAN DO THE CLIENT PART AS A .NET DESKTOP APPLICATION OR AS AN ANGULAR CLIENT APPLICATION.

NO COPYING PLEASE