IT211 Lab 1
Score: _____/12 v1.3

The purpose of this lab is to familiarize you with the syntax and conventions of JavaScript, particularly in comparison to C#.

Specifications

Read the full handout before beginning.

In this lab, you will receive a project in C#. You will convert the project from C# into JavaScript. Create a new Node.js project in the "code_conversion_js" folder. The directory is not empty, so click the "Create from Existing Sources" option when you get a warning.

Maintain the structure of the source code as closely as possible during the conversion process. Ensure that you use appropriate JavaScript equivalents for C# constructs. For example, use arrow functions for expression-bodied members. Also, preserve the file structure, ensuring that JavaScript files mirror the class separation present in the C# project.

When converting C# properties, transform them into JavaScript properties. Remember proper encapsulation rules.
https://www.w3schools.com/js/js_object_accessors.asp

Follow proper casing conventions: use camelCase for variables and functions, and PascalCase for classes. Note that classes remain PascalCase in JavaScript.

After construction, seal objects so new properties can't be added to them.

Use the .mjs extension for JavaScript files to signify them as ECMAScript modules. Ensure that file names are in lowercase for consistency. This choice facilitates cleaner exporting and importing syntax.

Use getter and setter methods to replace the getters and setters used for the C# properties.

Submission

The submission for this lab is the commit ID you want graded. Please submit the commit ID on Canvas.

Tips

- Use the JavaScript functions in the "Random JavaScript" page in the "Misc" module in Canvas.
- Use the `instanceof` keyword to determine if a variable is a certain type. See the "Exception Handling" slide in the syntax slides to see an example.
- You can debug your code by clicking on the bug icon to the right of the play button.
- Syntax is available on Canvas. Avoid using search engines or AI for this assignment.
- When extending a class in a different file, you have to import the class you want to extend from its file.