Code Challenge



Multi-bracket Validation.

Specifications

- Read all of these instructions carefully. Name things exactly as described.
- Do all your work in a public repository called <u>data-structures-and-algorithms</u>, with a well-formatted, detailed top-level README.md.
- Create a new branch in your repo called multi_bracket_validation].
- Your top-level readme should contain a "Table of Contents" navigation to all of your challenges and implementations so far. (Don't forget to update it!)
- This assignment should be completed within the <u>challenges</u> subdirectory of the repository.
- On your branch, create...
 - C#: a new .NET Core console project named MultiBracketValidation .
 Within your Program.cs create a new static method outside of Main() following the naming conventions below. Call your newly created method in Main() once complete.
 - JavaScript: a folder named <u>multiBracketValidation</u> which contains a file called <u>multi-bracket-validation.js</u>
 - Python: a folder named <u>multi_bracket_validation</u> which contains a file called <u>multi_bracket_validation.py</u>
 - Java: a folder named <u>multibracketvalidation</u>] which contains a file called <u>MultiBracketValidation.java</u>]
- Include any language-specific configuration files required for this challenge to become an individual component, module, library, etc.
 - NOTE: You can find an example of this configuration for your course in your class lecture repository.

Feature Tasks

- On your main file, create...
 - C#: a method called <u>public static bool</u>
 MultiBracketValidation(string input)
 - JavaScript: a function called multiBracketValidation(input)
 - Python: a function called <u>multi_bracket_validation(input)</u>
 - Java: a method public static boolean
 multiBracketValidation(String input)

Your function should take a string as its only argument, and should return a boolean representing whether or not the brackets in the string are balanced. There are 3 types of brackets:

• Round Brackets: ()

• Square Brackets: []

• Curly Brackets: {}

Example

Input	Output
<u>{}</u>	TRUE
{}O{}	TRUE
()[[Extra Characters]]	TRUE
O{}[[]]	TRUE
{}{Code}[Fellows](())	TRUE
[{{}}]	FALSE
	FALSE
<u>{(})</u>	FALSE

Consider these small examples and why they fail.

Input	Output	Why
_{	FALSE	error unmatched opening [remaining.
)	FALSE	error closing arrived without corresponding opening.
[}	FALSE	error closing]. Doesn't match opening ().

Requirements

Ensure your complete solution follows the standard requirements.

- 1. Write unit tests
- 2. Follow the template for a well-formatted README
- 3. Submit the assignment following these instructions

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