

# Comp 3220, Fall 2017 – Extra Credit Assignment

Due Tuesday, December 12, 2017 at 11:59 pm

## Programming in C# or Ruby

This is an **optional** extra credit assignment that will allow you to receive up to 5% extra credit that will be added to your class total.

For this programming assignment, you will have the option to select either **C# or Ruby** as a programming language to solve the problem below. Please submit your program in a zip file and upload it to Canvas under **Extra Credit Assignment**. Name your zip file using the following format: **cs\_username.zip** OR **ruby\_username.zip** depending on the programming language you select.

Write a program that takes a string value as an input, and checks if the string is valid based on the matching and order of the following symbols within the string: parentheses ( ), square brackets [ ], curly braces { } and quotation marks " ".

A valid input means:

- Any opening bracket (of the types listed above) must have a matching closing bracket.
- Any opening double quotation marks must be closed (just like brackets).
- Nested brackets are allowed, but no overlapping between different types of brackets is allowed:

- For example:

(some [ text ) more text ]

*is not valid*

{this (is [a "valid"] input) string}

*is valid*

- Any brackets between quotations must be ignored.

- For example:

(something "quoted text")

*is not valid*

This "is (ok", "so ] is { this"

*is valid*