Team M.E.M.E Official Coding Style Guide

A mixture of the Google C++ and Java Style Guides for C# programming in the Unity Game Engine. Written by Judson James.

General Styling

• **80 character limit per line** -- this is so it prints on paper nicely.

• Tabs are **two spaces** -- this is so it looks compact.

• In-Line Bracing -- again, makes it look compact.

• Do **NOT** use "magic numbers" -- it makes the code look more defined.

Code Styling

- Variables
 - All **primitive** variables will use the **lower camel-case** naming convention.
 - All **object** variables will use the **upper camel-case** naming convention.
 - o If using a **private variable**, assign a "p" at the beginning of the name and start the rest of the name in camel-casing.
 - o If using a **global variable**, assign a "g" at the beginning of the name and start the rest of the name in camel-casing.
 - If using a **constant variable**, use the "CONSTANT CASE" naming convention.
 - All parameter variables will follow their primitive/object variable naming conventions.
- Functions
 - All **user-made** functions will use **upper camel-case** to differentiate from built-in functions.

Documentation

- Inside Documentation
 - Inside every script there should be a section at the top under the "using" Unity base inclusions, there should be a documented header containing:
 - Name of Author(s)
 - Date the Script was last modified
 - General Purpose of the script
 - Inside the class, all private variables should be listed after the class declaration
 - Before every function, comment one line such that it includes :
 - [function declaration] : [brief description of function]
 - This includes the "Start" and "Update" functions
 - Before every loop, complex boolean, or switch:
 - If it does four or more statements, explain what it is doing in one or two lines.
 - For every block of code that is associated with an action, separate it with an empty line before moving to another action in the function.

- Outside Documentation
 - o Script's External Documentation
 - There won't be a README.md for every script, but there will be a separate documented file that will be used to explain everything within a script.