GSE 2020 Programming Style Guide

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# Variables

## Globals

Only to be used when absolutely necessary.

# Naming

CamelCase will be used as a basis for all naming in the project. All variables/functions/scripts/macros/enums etc. should be given appropriate names which allow their use to be determined without having to read through the whole code. playerHealth is a good variable name for the player’s health. myInt is not, and Health wouldn’t quite suffice.

## Variable naming

CamelCase will be adapted to have lowercase starts to private variables and UpperCase starts to all public variables. E.g:

Private int playerHealth;

Public int PlayerDamage;

The exception to this is all GLOBAL and MACRO variables. These should be in all CAPS to quickly determine that this is a GLOBAL variable and should not be used lightly.

## Namespaces

Namespaces should be named appropriately to the system they control.

Namespace SaveLoadSystem

Namespace AISystem

# Punctuation

## Curly Braces

All curly braces will be on the new line

If(myCondition == true)

{

Executable Code

}

# General rule of thumb

The following is a general ruleset to help improve code quality and performance of the program.

## Things to avoid

Avoid wherever possible to use the following in an update loop. Move it to start if you can. This will be updated over the course of the semester.

|  |  |
| --- | --- |
| **Function** | **Notes** |
| GetComponent<>() |  |
| GameObject.Find() | This extends to all hierarchy-searching functions |
| Camera.Main | This ***is*** a hierarchy searching function |
|  |  |
|  |  |

## DRY Principle

Don’t Repeat Yourself. If you’re repeating code, make a function. If you are repeating code that someone else has written, we should have designed it better. Bring this up as soon as you can and we can implement a new design or you can work with the other party to create a single function for you to use rather than have it twice.