# **STIHOWE Program Architecture**

## **Main Architecture Principles**

* 1. Decoupling.
     1. As many interfaces as possible, keep classes small, interchangeable, and reusable.
  2. Asynchronous where possible
     1. Obviously most player interactions not included.
  3. A focus on code reuse and portability

## **Naming Conventions/Syntax/Capitalization**

* 1. NO LINES LONGER THAN 80 CHARS
     1. Set a line/stop/ruler at 80!
  2. Pascal Case (e.g. MovePlayer, Attack)
     1. Functions
     2. Classes
     3. Enums
     4. Namespaces
     5. Script Names
     6. Instances of singletons (hopefully none!)
     7. Static objects
     8. Constants
  3. Camel Case (e.g. playerController)
     1. General member variables
  4. All Caps
     1. Macros
  5. “m\_” Prefix
     1. Global script variables.
     2. *Note*: *This is to make distinct what is global (and possible set from outside the script) and variable values that are set inside the script programmatically. It also dissuades the use of global variables when you can explicitly see how many are used!*

## **Namespaces**

## **Polish List**

* 1. Player
     1. Camera
        1. Middle mouse reset camera position behind player
     2. Movement

## **Bug List**

* 1. Player jumping
     1. When coming down from jump, horizontal movement seems to stutter, or looks weird like it’s not smooth. This is just visual so I could be wrong.

## **Locomotion & Player Movement**

* 1. Planar movement
     1. Sprint
     2. Dash
  2. Jumping
     1. Double jumping
  3. Dodge(?)