# SSAD Assignment 3 - Code Review

Zubair Abid, 20171076

Code Review of the Assignment: **Mario**

1. Number of Lines Reviewed: **1159**

2. Number of Classes: **16**

3. Number of Methods: **52**

4. Number of Bugs Identified: **2**

5. Number of Code Smells Identified: **6**

## 1 Bugs

Major/Minor bugs found and fixed

| Bug Number | Short Description | Status |
|:---:|:---:|:---:|
| *#1* | Player can play Levels 3+, although only levels 1-2 are defined | Fixed |
| *#2* | Game crashes on non-numeric input during level selection | Fixed |
| *#3* | Jump fails randomly on testing with pytest | Not Fixed |
| *#4* | Movement Right and Left has a random delay, found with pytest | Not Fixed |

## 2 Code Smells

Code Smells found and fixed

| Code Smell | Short Description |
|:---|:---|
| Comments | Missing File Docstrings, some missing module Docstrings. Most Class docstrings present. Unnecessary comments, lack of required commenting in parts of the file. Code is not clear in several parts |
| Dead Code | Unused Imports in backgrounds.py, main.py, maps.py, people.py, screen.py. Useless super() invocation in objects.py, class Thing is a useless delegator class |
| Long Method | maps.genlevel(): too much configuration detail is present at the module level and should be abstracted out; gamestate.change_ state() has too much branching |
| Long Parameter List | people.py, screen.py |
| Middle Man | Thing is a wrapper class and has no functionality |
| Indecent Exposure | "Private Variables" aren't private, can be accessed for several files and classes |