**Code House: A Pythonic Way of Learning Visual Programming**

**Description**

This study is hopes to develop a game entitled Code House, it is game that hopes to teach the logic behind programming through exciting and challenging puzzles. The game would have different levels represented by a variety of rooms each with corresponding difficulty. To ease the learning curve for the students who do not have gaming knowledge the game would have a lot of visual cues to help with navigation.

Code House would teach the C++ programming language as the main learning objective as it is one of the most popular programming languages and is often taught to beginners. Although the game would not focus too much on the syntax but rather the logic behind the lines of code the game would still teach code snippets that are easy to understand through items which serve as clues for the players’ main objective of solving the puzzle. The puzzles would serve as an assessment for the players with each puzzle increasing in difficulty as it uses more advance programming concepts. Solving those puzzles are key to unlocking new rooms which would give more lessons through the said method.

**General Objective of the Study**

The main objective of this capstone project is to design and develop a game that teaches the C++ programming language whilst having a focus of logic first then syntax. The game would hope to teach the logic through puzzles that help increase the players’ skill in logical thinking and problem solving.

**Specific Objectives**

This capstone project will have the following objectives:

1. To design and develop a game that teaches students the logic behind the lines of code in a program. The game must have the following objectives:
   1. Provides the player with enough clues as learning materials to help with solving the puzzle.
   2. Provide a variety of rooms for the player to explore and an intriguing environment that sparks curiosity and creativity within the player.
   3. Provide a smooth game learning curve mechanics to ensure the lessons were taught to prevent giving a stressful learning game environment to the player.
2. To assess students’ learning through engaging logical puzzles that needs to be solved to advance in the game and unlock new rooms and lessons.
3. ISO stuff reserved for later writing…