Practical Gaming 2024

# Name of Student…. Rokas Balzaravicius

# T Number …. T00225541

# Name of Project …. Forest Of The Living Dead

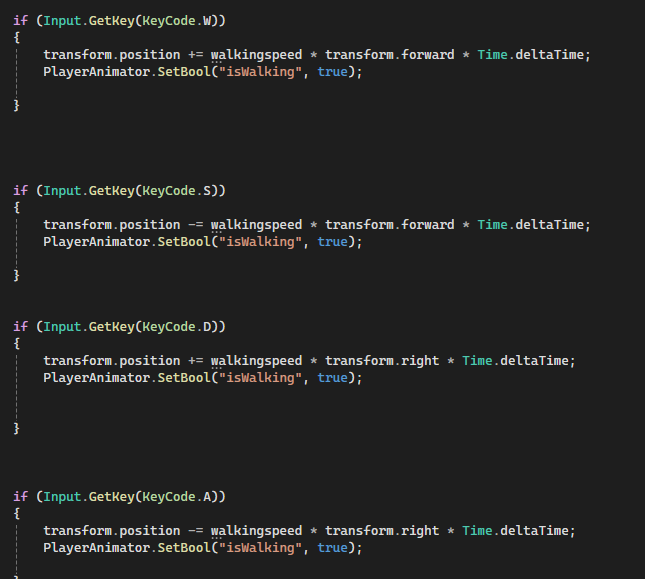
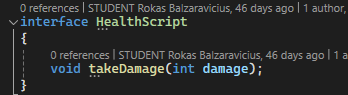
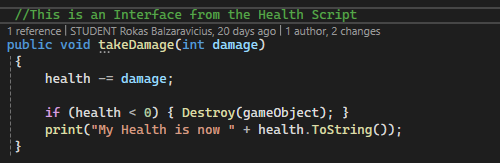
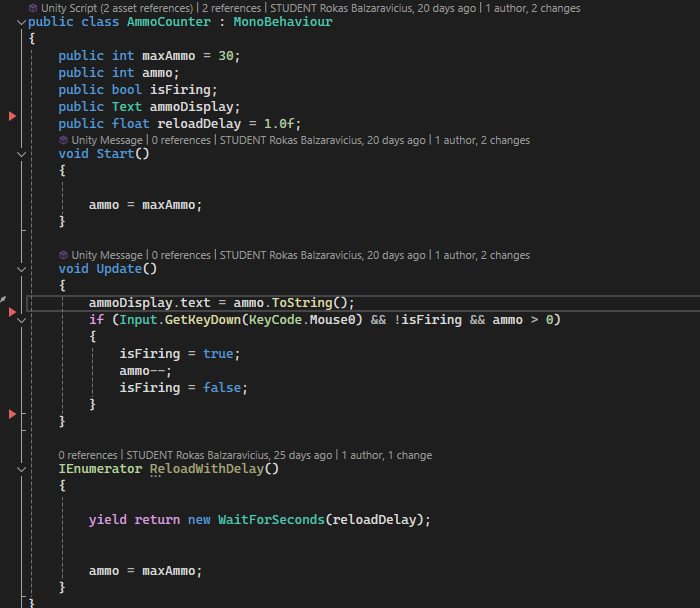
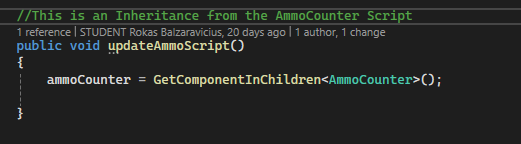
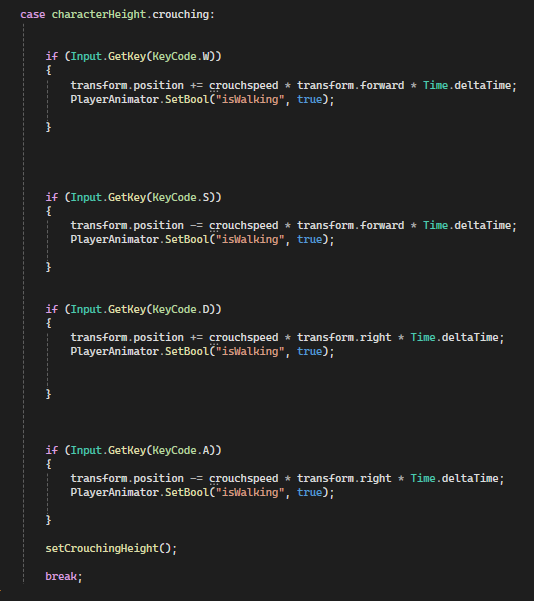
# Gameplay

Describe how to play the game here, specify keys/mouse etc. what needs to be done to unlock further features etc.. i.e. a walkthrough which covers all of what is to be seen to be marked.

**To play this game you use the W, A, S, D to move the character around. To look around you use the mouse. Sprinting is done by pressing the left shift key. Shooting is done by left click and aim is done with holding the right click. You can inspect the weapon while holding the F key. You can reload the gun while pressing and holding the R key. To crouch in the game, you press and hold left ctrl key. Switching Weapons can be done by using the numbers 1 and 2.**

# Coding

Under each of the following headings, please describe the concept, why is it or isn’t it useful/needed, where do you implement in your project, you may provide screenshots or cut and past code segments etc..

* **Frame Rate Independence**
  + Frame Rate Independence is when objects in your game move based on some criteria other than which rendering frame you are on.
  + Frame Rate Independence is very useful as it can make your game look smoother, more realistic and more immersive.
  + I Implanted Frame Rate Independence in my Character movement script to make my character move
  + 
* **Interfaces**
  + An Interface will define method and property names that anything using them is required to have.
  + An interface is useful as it allows a user to carry out a task within the game world either through direct input or through an action.
  + I implemented interface in my health script which affects my character and the zombies in the game.
  + 
  + 
* **Inheritance**
  + Inheritance allows you to create new classes that inherit the attributes and behaviours of existing classes and modify or extend them as needed.
  + Inheritance is useful as the ability to reuse code from the base class in derived classes which avoids duplication and redundancy.
  + I implemented Inheritance by making a ammo counter script which will also be used in player movement script so I used inheritance to not include repetition.
  + 
  + 
* **Case pattern**
  + A case pattern is a selection statement. When the switch executes code of one of the conditions based on a pattern match with the specified match expression.
  + A case pattern is very useful because it makes the design process cleaner and more efficient.
  + I implemented a case pattern in my player movement script for the function to crouch.
  + 
  + 
* **Observer Pattern**
* **Polymorphism**
* **Communication between scripts/game objects**
* **Instantiation and Prefabs**
* **Magic Numbers**
* **Model Animation**
* **Self-made models and or animations**
* **Interactions between objects/scripts**
* **Propper code placement**
* **Code repetition**
* **Feature 1**
* **Feature 2**
* **Feature 3**