Milestone 4

For this module, I intend to make a Legend of Zelda-like game, which is a top-down action-adventure with puzzle elements. I plan to have multiple enemy types which have different behaviours, a melee and ranged weapon for the player to fight with, as well as a range of intractable items that have different actions e.g. keys or items needed to solve a puzzle elsewhere.

Milestone 5: Due 26.11.18

The requirements for this milestone are to create functionality that:

* Supports collisions.

The new code changes that will be implemented:

* Has a utility vector2D class.
* Has a black boxed world system for: player, enemies, weapons, collectibles, background etc...
* Game Loop has been set up.

To test that this has been achieved:

* The functionality before the code changes works the same.
* The game loop draws and updates all entities regardless of what they are.
* The game loops update is only updated when needed not every frame.
* The player collides with walls, enemies etc… without passing through.

Milestone 6: Due 10.12.18

The requirements for this milestone are to create functionality that:

* Collectables are able to be drawn to the screen and collected.
* A score is displayed to screen and updated when something is done.
* Melee and ranged combat for the player implemented.

The new code changes that will be implemented:

* Add collectables to the world model.
* Give score information to different actions.
* Give the player melee and ranged mechanics.

To test that this has been achieved:

* Collectables are collected when the player moves over them.
* Score is displayed to the screen and updated when collectables are collected, enemies are killed etc…
* Ranged and melee attacks for the player work with both the keyboard and controller.
* Both attacks are able to kill the enemies.

Milestone 7: Due 19.12.18

The requirements for this milestone are to create functionality that:

* A user interface displays different information to the screen like health, mana etc…
* An openable inventory to store different key items.
* Various enemies with different AI.

The new code changes that will be implemented:

* A user interface needs to be implemented to show information graphically to the user in the world system.
* Need an inventory class to display the key items held by the player.
* Set up various different enemies with different AI behaviours.
* Set up a variety of key items that can be stored within the inventory that have different uses.

To test that this has been achieved:

* The user interface updates information like health, mana etc… accurately.
* Each of the different enemies follows its AI programming.
* Enemies are able to attack the player, move towards player or around rooms.
* Key items are accurately displayed within the inventory and are gone when used.
* The inventory appears and disappears as requested by the player.

Milestone 8: Due 6.1.19

The requirements for this milestone are to create functionality that:

* Set up a main menu that appears upon booting up the game.
* When the player dies go back to the main menu.
* The ability to save progress within the game and to load an old save file.
* Give sounds to the game.

The new code changes that will be implemented:

* The game will detect winning and losing conditions and jump back to main menu.
* Be able to read and write to a save file location.
* Implement appropriate sounds for different actions.

To test that this has been achieved:

* When the player dies check that the game goes back to the main menu.
* When a new game is started everything is reset.
* Save a game with some progress close the game re-open and start the saved game and check that everything is the same.
* Check that correct sounds are played when given action is performed.

Extra’s if time allows.

Items that I would like to implement if I complete the other milestones ahead of schedule:

* Togglable Map
* Interpolation
* Input system
* UI system
* AI system
* Sound system
* Complete game