Jamie Bovell

Learning Journal 2「Programming」

Attach Player to a Moving Platform – 02.11.2021

One of the first issues I faced was that even though the player was a child of the platform they still would slip off once it began moving. I fixed this by animating the movement of the platform instead of using a platform movement script. Additionally, the 'Update Mode' inside the animator component must be set to 'Animate Physics' for better results.

Another issue I ran into when making this script was that the player was still a child of the platform after jumping off of it. I solved this issue by setting the players transform parent to null using OnTriggerExit'.

Quest Items – 05.11.2021

One of the first problems I encountered was that the player was unable to obtain the quest item despite being in contact with the quest items sphere collider. This issue was quickly resolved by using 'OnTriggerStay' instead of 'OnTriggerEnter', as this allows the player to pick up the quest item whenever they are inside of the sphere collider instead of just when they enter.

Another problem I faced was that I was referencing every quest item game object in the inspector, this however became very repetitious and would be a really unrealistic method to use for games on a larger scale. Instead, I opted to use 'other.gameObject.tag == "Player"' as it allowed me tag all game objects of the same type with the same tag. This meant that you I was able to place many new prefabs into a scene without referencing it in the inspector every time.

An additional predicament I encountered was that the script was only keeping count of the number of objects you had collected but not the total amount of a certain type you needed to have collected them all. So, I made a new int called 'totalQuestItemCount' for each type of quest item.

However after doing this I realised that the amount of quest items in a scene needed to be entered manually which could take a considerable amount of time so I decided to set the value of each 'totalQuestItemCount' variable equal to the amount of game objects in the scene with a specific tag. Example:

'totalQuestItem1Count = GameObject.FindGameObjectsWithTag("questItem1").Length;'

Progression Checkpoints – 09.11.2021

One of the first problems I faced was that the player was being teleported into the ground when respawning. This was because the player was being teleported to the middle of the checkpoint as opposed to being teleported on top of it. I solved this problem by moving the spawn locations higher above the ground. Another way this could have been solved is by creating a new vector 3 with a Y-axis of around 5, then adding this to the player spawn position.

Another problem I faced was that the player would run into issues when respawning if they had a character controller component. I solved this by disabling the character controller on the player before respawning and re-enabling it once the player had been teleported.

Timed Platform – 12.11.2021

One of the first issues I faced was that the platform was unable to return to its original position as I was destroying the platform that had the script attached to it as a means to make it disappear. So, I decided to change the method I used to make the platform disappear. I decided to change the transform position of each platform to a hidden position and return it to its original position after a certain amount of time.

Another issue I faced was that the box two colliders (Collision box collider & Trigger box collider) on the platform were conflicting with each other. The standard box collider was used so the player can jump from one platform to another and the trigger box collider was used to make the platform disappear.

This issue caused the player to slowly descend from the air when attempting to jump from one platform to another as the layer of this platform was set to ground which set the player's velocity to zero, this occurred as soon as the player came into contact with the trigger box collider. Having two different colliders on one game object also meant that the player had to make contact with both colliders for the platform to disappear. I solved this issue by removing the collision box collider and changing the layer back to default, I then created an empty game object that's a child of the original platform and added a Collison box collider to it, and set its layer to ground. This also allowed me to raise the height of my trigger box collider meaning that the act of the player coming into contact with the trigger would be sooner, giving it a better feel.