**8th February**

<https://www.youtube.com/watch?v=YMj2qPq9CP8>

Loading bar in unity - followed brackeys tutorial, loading bar works and loads level.

Loading bar loads too quickly and can't be seen properly, find a way to delay load of the scene that i am aiming to load so that the loading bar animation bar can play fully.

Added and tested the loading bar in my 3DL level and the loading bar takes time to load and the slider can be seen sliding across the bar and shows the level loading. Finally, I added a text element to the slider that displays a percentage that represents how much of the level has loaded, this was done to make the load bar not so boring and dull looking.

**15th February**

<https://forum.unity.com/threads/advanced-object-pick-up.339739/>

For my next package, i want to make something that would allow the player of a game to pickup an item, that item is then brought closer to the players view and they are able to rotate the item and then it is placed down where it was picked up from originally - this is something i wish to use in my agp.



To start with, I found this unity forum answer and started to use the answers to write my code out. I encountered a few problems while using this answer, one of the biggest problems came with using the UnityEvents script, this wasn't able to be found for most of the time i was working on the package and kept producing errors. After searching online, i found that i needed to add in this line of code to the using section: once i added in this line of code, the scripts connected and linked and everything worked as intended. The next steps I want to take with this package is allowing the user to rotate the picked up item while they are holding it and then to add this script to a character controller to make sure the position that the item moves to when picked up is correct.

I put this script onto a character controller that I had made last semester and put it to the test. I had to do a few bits differently for it to work. Firstly, i had to make the final position gameObject a child of the player camera, this is so that the item would move towards the players face once picked up, i also changed the rotation speed to 0 as the item would move in a funny way once picked up and i want the player to be able to control the rotation of the item. I also reduced the raycast length to 10 as you were able to pick up the item from far away.

Finally, I added a small square on the ui in the centre of the screen to be used as a reticle. Next i want to add in the ability for the player to rotate the picked up item themselves, i may also need to find a way to pause the character movement while they perform this, just to make sure that controls dont clash and that no issues occur.

**16th February**

<https://www.youtube.com/watch?v=-dFrjAPgiT0&t=283s>

Used this tutorial to get the game object to rotate when it has been picked up by the player, rotation works fine, but when the player lets go and stops rotating, the object's position does not reset. I need to look into this for a solution.

I also need to to find a way to pause the character controller when the player picks up the item, while the rotation works on its own, when put with the character controller, it does not, i think this is because the player uses the mouse to look around and this is taking priority over the rotation of the object.

**19th February**

Found a to reset the rotation of the picked up gameObject after it is dropped by the player, this works perfectly in the test file and also in the first person controller that i made last semester and are testing out this package in. Still getting a problem in the first person controller section where the camera rotation is being used at the same time as the rotation of the gameObject, need to find a solution for this.

Tested out using .setActive (true and false) to pause the player camera movements on mouse up and down, this ended up deleting the camera in game after the player lets go of the mouse. Looking into solutions for this or a new method so that the object rotation takes priority over camera rotation when the object is picked up.

<https://answers.unity.com/questions/1257525/pause-a-script-without-pausing-the-whole-game.html>

Found a solution to the problem with the help of this unity forum answer, i decided to look into pausing the player while the grab object script was active and i found a way to pause a whole script. 

I added this function to the grab script and attached the player movement script, this allowed me to pause all player movement when the gameobject is picked up as this is under both a GetKeyDown and Up. This has resulted in the effect that I want, the player picks up a gameObject, they can rotate the gameObject and inspect it, while all other player input has been disabled, until the player lets go on the button they pressed to pick up the gameObject.

**28th February**

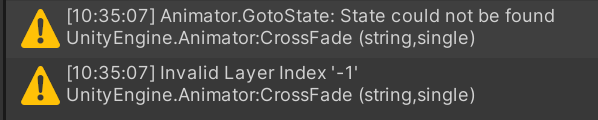
<https://www.youtube.com/watch?v=_tYF5VAJdQ4&list=PLD_vBJjpCwJsqpD8QRPNPMfVUpPFLVGg4&index=2>

For my third package, i want to make a third person character controller that i can use for my agp game for next year. I looked online for tutorials and found a tutorial series by a person named Sebastian Graves, i have decided to follow this series of tutorials as i have used tutorials from this guy before and his tutorials are very good and help to explain clearly what to do and what different pieces of code mean.

Encountered a few problems with code where things were not working as intended, checked back through the code and found i used vertical instead of horizontal.

**1st March**

Continuing work on the third person controller - adding in the ability to sprint and also walking if player is using a gamepad to play, will also be adding in jumping, the ability to fall and land and also so that the player can use stairs and sloped terrain.

When the player is sprinting, the animation is not playing properly and the player appears to fly across the world, this could be an issue with the animation itself, but its something to look into. Another bug i ran into was when the player jumps, they are unable to move after they land, the jumping animation also does not play and i get this warning message, this is something else that i need to look into and fix.

Found and fixed the issue, the problem was in the code, i had the playTargetAnimation set to “Jump” and the name of the animation that i wanted to play in Unity was called “Jumping”. Because of the name difference, the isJumping bool would never be set back to false and the player would be stuck in a constant state of landing and unable to move.

Third person controller is complete, animations are still a bit janky in places, but i think thats due to the ones that i have downloaded, so will look to replace these at a later date. After completing this controller, i decided to try and start importing some packages that i have previously made, starting off with the object inspector, this gave me an issue right off the bat, the controller that i have just made uses the new input system and the object inspector uses the older input system. This gave me loads of errors due to the mix of input systems, this means that i will either have to make a new character controller, using the old input system for my agp mechanical demo, or see if i can convert the object inspector scripts to be able to be used with the new input system. Both have their benefits and drawbacks, this will be something i need to look into.

**4th March**

Decided to keep agp as a first person game and work from the package that i created last semester and implement to pickup and rotate item scripts - also created a dialogue system today where you walk up to an npc and dialogue boxes appear with text and and avatar image for the npc. The text boxes and text within the box has also been animated to fade in and out at the beginning and end of the conversation.

**14th March**

Inventory system - <https://www.youtube.com/watch?v=AoD_F1fSFFg>

Been working on an inventory system package to work with my agp, for the most part this tutorial has been easy to follow, but there have been points where parts are not explained as clearly as they could be and some parts are missed out, meaning that ive had to google a few bits on the side.

Followed the tutorial and got it to work how i wanted, this tutorials uses a button to open and close the inventory, but ive changed mine to use the Tab key, this caused a couple of issues for me and meant i needed to run a method in the script rather than in the editor as shown in the tutorial.

**15th March**

Inventory system, continued - <https://www.youtube.com/watch?v=tJ_ycboPFmY&t=22s>

Started following a new tutorial that allows you to select an item from your inventory and then use a render texture and a camera to be able to view the inventory item in a 3d space and allow for the player to rotate and inspect the object.

Been having a few issues with making this tutorial work with the script that i already have for my inventory system, managed to get the render texture and camera set up, but struggling with working out how to make the items in the inventory able to be selected. They are buttons and use scriptable objects and spawn in as a prefab, maybe this has something to do with why i cannot select them? The tutorial that i am following has items already inside of an inventory.

**21st March**

Got help with the inspector inside inventory script, ended up using a different script that spawns the prefab at an empty game object that is in front of the camera rather than spawning into the world using an xyz location in the script itself. Also ended up replace the on mouse drag event with an on drag (PointerEventData eventData) and changed the rotation of the prefab to rotate using the x and y axis and this helped make it work better.

**22nd March**

Taken the loading bar package that i made and importing it into my agp demo - looked at a few different tutorials to see how to implement this and making a few changes to make the loading screen more interesting.

**29th March**

Decided to resort back to original loading bar that i made after trying a few different tutorials - couldnt get some of the other, more complex loading scenes to work, so decided to stick with something simple for now.