Learning Journal

**10/02/2021**

Today I learnt how to create a package in unity in order to create compressed and focussed mechanics easier to share with others. I’ve begun looking into what mechanics I would like to create into packages that could be useful to others or myself later down the line.

I think I’m going to stick to easier mechanics that I already know but are used often just to make it easier to get early and common mechanics out of the way that little bit quicker in later projects.

**16/02/2021**

I’ve completed my first unity package. I went for general player movement within a 3D space using horizontal and vertical key bindings on a keyboard. This mechanic is used a lot, even in my projects, so I felt like this was a good one to start with. The actual coding wasn’t too hard since I have done this before, but it was making sure I was keeping to the package file standards and making sure that there were no outliers making their way into the package that would cause errors.

With the success of this package, I feel like dealing with similarly connected mechanics so that they can bounce off one another and possibly be used in the game project later on.

**24/02/2021**

This was quite a productive week as I was able to create two packages. I went for a player camera movement that was clamped on the y axis as well as a toggle torch package for when a character might have a torch that they can turn on and off at the press of a button.

**02/03/2021**

I’ve finished my last package which I went for a pause menu. This is a commonly used mechanic which isn’t too hard to set up but can be quite tedious to do over and over again. It was a bit strange to make on its own as an individual package but after a bit of time I was able to create the package.

**10/03/2021**

This week I just wanted to finalise the packages and make sure they worked, so this was a bit of a lesser productive week than normal. I had to make sure that all of the documentation was correct for each one and that there were no problems when importing them.

**17/03/2021**

Today I looked into what I might do for the game project. I started to try and piece together what I could make with the packages I already had at hand and what might be needed to create a multi-linked package game.

After some planning and looking into possible ideas, I decided on a maze-like game utilising most of my packages. I would need some more mechanics in the form of packages and I’m reluctant to try and find already made ones, rather wanting to make my own. I’ve begun looking into the mechanics that I will need to test and make.

**23/03/2021**

This week was quite a lot of research and testing of different mechanics to see what would work in my game project.

I have started working on additional packages that I can use for the project following the same structure and format as the ones I have previously done. This did take quite a while as I am having to isolate certain mechanics that might work better already apart of something bigger. I managed to push through with it however, the main problem maker being the UI element parts which are a bit weird on their own.

Some of these mechanics I found that I could potentially use or tweak for my final project next year that could possibly create a better design for my idea.

**13/04/2021**

After a bit of time off, I had to refamiliarize myself to the making of packages. It didn’t take too long to get back in the swing of it but trying to isolate mechanics and create the actual packages did. A coin pickup score UI mechanic was one of the more challenging ones to create into a package so that it could work independently, but after a couple of tries and attempting to test different lines of code I was able to create the mechanic into a package that could be used in the project.

**20/04/2021**

I’ve begun work on the game project. Importing the packages was a success as they also seemed to import properly and didn’t seem to have any problems or errors surface. Next step is to start putting these packages together and connecting them with other scripts.

**27/04/2021**

Continuing on with the project, I ran into a couple of problems, mainly with the fact that some of the package mechanics I had changed to suit an isolated package caused some problems code wise when trying to create the linking scripts. One of the main ones was the game over and winning UI screens as well as the score UI. With some adjustments to the code and use of static bools I was able to connect them and get them to work in the project.

**04/05/2021**

Continuing with the project. I am finalising some parts and making sure that the code works togethers intended. I have encountered some minor problems again with the score UI but overall, the project does work. The use of static bools was working nicely with the UI elements, there is some jerkiness occasionally with the camera movement but not so much that it is unplayable. Some tweaking of the code and parameters should fix it.