Week 1 – 29/01/18

Things have been very slow with the unreal project, I’m currently going through Unreal tutorials just trying to get a basic grasp on how it works, on top of that I’m trying to get to grips with C++ and how it functions with Unreal. Suffice to say I’ve not really made any attempt at anything beyond looking at the twinstick template Unreal has for our group project and trying to understand how that works through tutorials. I did add a basic health variable but that’s all.

Week 2 – 05/02/18

We got 4 player input with controllers working in the game but think that Beren may have done something that broke the build we had. The build wouldn’t work or even compile on certain computers. We aren’t sure how or why but it’s most likely due to our lack of understanding of SVN. I made it a priority to learn the basics of SVN using a tutorial on pluralsight and managed to put a new working build on our SVN in the meantime just by deleting the broken one and putting together a new one. Luckily we hadn’t made a lot of changes to the template so it wasn’t a big issue but if something like this happens again down the line it could be disastrous. I’ve urged everyone to learn SVN better so hopefully we won’t have these problems again.

We also started learning about the Arduino’s that we will be using for our Alt Controller projects and it seems really interesting and I think I’ll enjoy it (even if I did blow up an LED instantly).

Week 3 – 12/02/18

In our group project I think we’re going to go down the route of using blueprints more than C++. We’re having to deal with ridiculous compile times just to see more errors in our code. I think these computers are a big part of the problem so I’ve been trying to use my home PC to do more since it seems to compile twice as fast. This makes communication and teamwork more troublesome however but I’m not sure what to do about that. We should probably work somewhere else in the studio with better computers. I spoke to Brian and he said we can use blueprints to begin with because he understands how much trouble a lot of us are having with learning C++ and Unreal fast enough to keep on schedule with what we want in our games. It’s a shame but blueprints do seem a lot more intuitive to me and I’m making much better progress than I was just trying to use C++. I’ve made a basic player spawn system using blueprints but not much else.

We also looked at creating a Serial Interface for our Arduino’s with Al. It was pretty confusing as Al had to speed through setting it up because he had to do it twice, once for those using C# and again for those of us using C++. Hopefully I’ll figure it out later on when I need to use it because it’s apparently going to be essential to our individual projects.

Week 4 – 19/02/18

More SVN issues. One of our lectures in the general unreal workshop recommended we ignore the binaries and intermediate folders, which me and Ryan proceeded to do. Unfortunately this has caused some issues where we can’t load the uproject because it says we’re missing files in the intermediate folder. Not sure why this has happened but speaking to some of the programmers on other teams it sounds like this isn’t a problem unique to our project. I decided it would be easier to just re-upload the last working version so that’s what I did and now it seems to work. Luckily we’ve been given a new specialised Unreal workshop and a new lecturer - Jamie - to help with our projects. With his help I think me, Beren and Ryan have a handle on the SVN side of things now and can advise the others if they have any problems. We’ve suggested that only we programmers deal with changing code. Beren has made a function to change the accuracy of the Cow which is great and with some guidance from Jamie I’ve been able to get the Player Spawn System working properly. Hopefully we can keep up this pace now the SVN problems are fixed.

The C++/C# workshops with Brian are good, even if I don’t understand everything fully. I should go through it more fully in my spare time and make sure I’ve grasped everything.

Week 5 – 26/02/18

This week has been really productive for me. I realise that we’ve made so little progress that we’ll never have a working game by the show and tell presentations in a couple of weeks if I don’t start doing more. With that in mind I started the week by implementing a collection sphere for the characters like in the tutorials we did in December. I thought this would be useful for when we design the powerups which will be a big USP in our game. Later on in the week I was effectively snowed in and couldn’t get into uni so decided to do as much work as I could on the player mechanics and getting the abilities working for each of them over the weekend. It was a shame I had to miss one of the Unreal workshops as they have been really useful so far. The mechanics aren’t perfect and I’m hoping some of the other programmers will look at them and make suggestions on how they could be better, particulary the pig’s shotgun, but for now I’m happy that it’s all functioning roughly as it should.

Week 6 – 05/03/18

Art assets are finally being put into the game! It’s amazing how different the game looks and feels now. It’s still not great but I’m just happy we’ll have something to show in the presentation next week. I’ve continued to work on the different player mechanics and Ryan managed to implement some of the powerups into the game which is great! Beren’s working on the HUD and that seems to be coming along well. I added a night version of the main map and our PO seems to really like it which is good.

Week 7 – 12/03/18

Well the Show and Tell was a bit depressing, I don’t think our game was the worst but there were a lot that were better than ours. Sam and Max did a good job presenting it though, I just wish they had more to show off. Communication hasn’t been our teams’ strong point, I was hoping that my contributions would incentivise other members to start working more but with the exception of Ryan, that doesn’t seem to have happened. I’m slightly worried that I’ll end up doing too much because nobody else wants to. On the plus side, Jamie gave me some help with the shotgun ability and gave me a piece of code that works really well for that mechanic. It’s much more efficient than my way of doing it and that’s been really useful for me to help me recognise that using C++ can be much better than relying on blueprints just because they’re easier.

Week 8- 19/03/18

I spent most of my time over the weekend and the start of this week doing my Software Engineering Essay. I found it particularly difficult researching my topic about test-driven development (TDD) in games. There appears to be very little academic research in the specific subject of games using TDD so I had to use a lot of grey literature to find out more information. This also meant that reaching a definitive conclusion was near impossible considering how opinions on TDD in the games industry vary significantly from person to person.

I’ve started to work on the sheep melee attack again. There were some issues with the first attempt at making it so I’m trying another way. Basically the way it works is by spawning an actor (the weapon) that collides with another character and causes damage. The problem is it doesn’t follow the sheep when the sheep is moving so I’m trying to make the weapon a childactor of the sheep and turn the visibility and collisions of the weapon on/off as an attack.

26/03/18

02/04/18

Week 9 – 09/04/18

So I think me and Maddie (our main artist) are the only ones who did any work over the last 3 weeks. I’m hoping everyone else was just too busy over Easter or have been working on things that just haven’t been put into the SVN yet but I think people just aren’t motivated. On the plus side, working on the game myself has meant that there have been no SVN issues or conflicts. So there’s that. Maddie’s been a machine over Easter though and I’ve managed to implement a load of her new art assets so the game is looking sooooo much better. I used one of her textures, cropped and recoloured it and added them to several of the meshes that don’t have textures because I suspect the artist who made them won’t bother making textures for them. It looks decent though so it’s fine if they don’t, it’s just a bit annoying. I also made a few of the level assets we have into destructible ones so that the players can open up the play space a bit during the round and hopefully alter the tactics of the match. I changed the camera position based on feedback we’ve had and also because a completely top-down view doesn’t do justice to all the effort Maddie’s put into the awesome art assets we now have. I then added a health bar and ability cooldown bar under the players and a particle affect for when the players get hit by an attack. It’s been really fun branching out into learning about these other systems in unreal.

I’ve also spent a lot of time designing my alt controller for comp140. I started with trying to learn Blender because I heard it was good for making 3D models that could then be 3D printed as I thought I could 3D print most of my controller. After trying to learn Blender I decided to fall back on using SketchUp as I had used it before and I felt like I wouldn’t be able to learn Blender quickly enough. Having modelled the controller, I then sent the main part (the Cannon) to one of the technicians to see how long it would take to print. I’m glad I did this sooner rather than later as I learned it will take significantly longer to print than I imagined (2 days). Hopefully it will get printed over the weekend but I’ve now decided to make the base and support out of wood instead. This will be more physical labour but hopefully it will look better and I’ll have more of a sense of achievement if it goes well.

Week 10 – 16/04/18

I’ve added a small crosshair to the characters to denote the direction of fire. We really should have been playtesting the game more as these small suggestions really help and should have been thought of sooner. The music added a lot of character to the game and its surprising how much more professional the game feels now. I still think the shooting sounds are a bit loud though. Things were quite stressful during the end of the week. One of the other programmers was supposed to implement the scoring system, a vital part of our game, but didn’t and nobody could contact them so while I was busy at home over the weekend working on my individual Alt-controller project (due in on the same day as the group project) I was asked if I could help with that as well as helping a bit with the menu system and the build getting broken at the last minute. I did what little I could and luckily Brian was able to figure out my mess of a system and help Max implement it without me. I don’t mind the idea of Crunch but when it’s because other people have been lax in their involvement before, it can be a bit frustrating. I think for our next project it would be beneficial to make sure everyone has a basic understanding of the engine, especially the designers. This is probably down to bad communication from me and the other programmers.

Over the week I spent a lot of time physically building my alt controller. I hope I will get marked mainly on the controller rather than the game to go with it as I’ve not really given myself enough time to make a decent game in C++.

Week 11- 23/04/18

So my alt controller and group project are both handed in. I’ve continued working on my alt controller game after submitting despite knowing it won’t affect the grade I’ll get. I didn’t give myself enough time and wanted to prove to myself that I could have done better if I managed my time better.

Summary

The fact I was relied on to make large parts of the game myself with little constructive feedback was a big problem. The nature of our game (multiplayer) doesn’t lend itself to easy playtesting. It’s hard to know what is needed if you’re the only one working on it, especially if you need other people with you in order to playtest basic things about the game.

Week 13