Concept:

As soon as we where told that we would be making a 2D we set out to find what sort of a game we would be making, we ruled out infinite runners and tower defence games as we thought it might be to simple for our project and wanted to be more ambitious with our game, initially we looked into top down shooters, puzzle games and platformers, however when looking into puzzle games we realised that create puzzles can be harder then solving them and decided to not go in that direction as we did not want to spend time that we needed to code to design puzzles. As time went by we narrowed it down to 2 games, Conor’s idea drill Bill and seán’s idea which would later be called untitled zombie blaster, we decided to go with untitled zombie blaster a platforming, side scrolling shooter as we thought drill Bill was very similar to a drill mechanic in Super Mario galaxy 2.

The initial concept was to have an 80’s style protagonist in a woodland mansion infinitely fighting waves of zombies with lots of guns and an 80’s soundtrack to match, originally we where going to have 4x4 box shaped rooms however this would later be changed to have to rooms with varied lengths and heights to create a more diverse landscape.

Our game took influence from games like strike force heroes, call of duty zombies and hotline Miami to create its side scrolling gameplay with a score based system set to the aesthetic and sound of hotline Miami style games.

Rejected Concept:

Our other idea drill Bill was to have a character with a large drill that would dig though the floor to get to different areas and could use the momentum when exiting the terrain to reach higher areas, while we did like this idea of a puzzle platformer we where glad we did not go with it as we found out a few weeks later that an indie game studio had worked on a game called PepperGrinder which was very similar to our idea, and where worried it might look like we tried to copy it.

Meeting Up:

As soon as we had our groups Wiktoria sent out an e-mail to everyone to meet up in the library, Seán, Wictoria, Barry and Conor had already met each other to discuss the game but had yet to meet Alan. When explaining the concept of the game Alan seemed to immediately understand what we where going for in both style and gameplay and added a lot of idea and things that we where already planning and so we set to work on the game. The library provided us with recourses such as white boards and screens that connected to our laptops to help everyone see our planning and code, it also provided us with a set date and time so that no one missed meetings. We also exchanged snap chats and discords so that we could communicate online. (image of library maybe)

First Weeks:

For the first 2 weeks we decided to get a head start on learning corona as we knew that the scope for our game was quite large, we learned the first few tutorials at home and then finished the last one in our labs, this head start gave us extra time in the labs where we were together and working on the code for the game as well as being able to ask questions in the lab.

Starting The Game:

After learning the first few tutorial we dove straight in and got to work on the code.

Seán worked on an “AI” to make sure that making a hoard that would chase the player would actually be possible for us to make sure we didn’t have to change our idea, this was done by creating a 4x4 grid with a player and an enemy at the opposite side of the grid where the player and the “AI” would take it in turns to move and the “AI” would try to find the fastest way of getting to the player using if statements. (image of this)

Conor began work on a rotating arm that would shoot using the images from the space game in the corona tutorials (get conor to talk about rotation) (image of rotating ship)

Alan set to work on making a player that would move left and right as well as being able to jump (get alan to talk about movement code) (image of the square on a platform)

Wiktoria started learning how to add images and animation to the game so that the player and enemies would walk while moving ( get wiki to talk about animation ) (image of guy mcCool)

Barry said that he needed more time to finish the tutorials and continued on the scape game tutorial.

Issues With Rotation:

( get conor to talk about the rotation and getting the bullets to fire past the mouse using eqn of line and issues with ships angle )

The Pitch:

While working on the pitch we decided we wanted a unique pitch that would stand out for the others, we wanted to explain what we planned on doing using what we had already learned and used images to make our pitch distinct ( alan if you want to talk about the pitch here, im not really sure what to say ) (image of the pitch )

After finishing the pitch design we set to work on the talking aspect, we chose Conor to talk as he has worked on talking in front of audiences ( if conor wants to say something here ) we timed him to make sure it stayed within the 2 to 3 minutes that we had as well as discussing what he could say to keep it interesting ( get conor to talk about the pitch )

The Testing Area:

After we had all finished work on the initial code Alan created a test area with a platform above the player as well as below as well as enemies that spawned at random as well as adding coronas physics engine which allowed us to test all of our code, we also used this to create the grappling hook which could lift us to the top platform ( if you want to talk about the grapple hook ) this allowed us to work on new ideas and to see if they would work in the final game. (image of test area)

Issues With The Grappling Hook:

( if alan and conor want to talk about trying to fix the grapple hook )

Game Design Document:

While creating the design document we wanted to keep the theme apparent with the style of the game using influence from other game manuals. We settled on a black background and giving the letters a purple glow to high light the neon colour pallet we where using, we wanted to focus more on the gameplay aspect rather then the story as we knew it wasn’t as important in our game, Witoria drew smaller images to stick with the minimalistic theme of the document( if you want to add anything here ) (image of gdd )

Covid-19:

With the out break of the corona virus we where worried about our project, with out the library we could not meet up in person and we would no long have labs, however we decided to stick with our library time to have group calls on discord this allowed us to still talk and using github we could still see each others code, however we where still hindered as most lecturers also gave us projects that took away from the time we could spend on this project, this became very apparent during the week that our programming project was due as we had much less time for the game, however with hard work and perseverance we power through it.

200 Variable:

On one of the last weeks we discovered that we had hit corona’s 200 variable limit after getting the error: main function has more then 200 local variables, this meant that we had to overhaul all of the code ( get alan to talk about changing the code )

After The Overhaul:

After Alan finished fixing the code he had also fixed several underlying issues, fixing the zombie spawns and created (jump through platforms? Not sure of the name ) which helped deal with our broken grapple hook issue, it also fixed the camera to keep the player in the center which wasn’t working when walking into wall as well as changing the font in the HUD that Seán created, however it left us with a few unresolved issues.

Scenes:

Towards the end of the project we added scenes allowing us to have a main menu and scoreboard to make the game feel more like a game ( get conor to talk about scenes )

Music:

Seán started working on a basic song that we could use in the game using the program Bosca ceoil, after listening to lots of synth music to get a better understanding of it, the inspiration for the song came from a song called night drive by timecop1983 however we changed a lot of aspect like the pacing to make it better suit our game, after a few trials we settled on this version as we felt it suited the game best.

Animation:

(get wiki to talk about animation )

The Final Week:

During the final week we still had to make a few adjustments to the game, this include fixing the movement as the character was sliding around the map, fixing the locations of the vending machines as they where all just 50x50px squares in the starting room, adding the zombie images, fixing the zombie spawns so that they did not spawn above the player at the beginning of new waves and fixing the code for the scenes. ( if everyone wants to talk about there work in the last week )

The Last Day:

By the last day we had resolved most of our issues other then the zombie spawning which Alan had completed, however disaster struck on the last day as Alan’s internet went down and was not able to send us the fix so we had to make do and Wiktoria set to work on recording the game, however at this point we found a new issue when we built the game as the build was in the wrong dimensions which we did not have time to fix, which was annoying as we felt it really took away from our work.

Changes:

Throughout the process we had to change a few ideas, there first major change was the setting we originally intended on setting the game in a woodland mansion however this was changed as we felt an abandoned disco fit the theme better, we also had to remove the grapple hook as the transition to did not work when the camera was trying to keep the player in the centre and the transition.to was trying to move the player from the centre, we also had to remove certain weapons like a portal gun prototype which seán had coded but felt overpowered and also utilised the transition.to code. (maybe add a few things )

Closing Remarks: