21st October – Received notification of who the game designer is. The game designer is Daniel Keogh

Made contact with Daniel, asked for a copy of the design document to be forwarded by email.

Checked with the designer that the name of the game was Star Assault.

22nd October – Read the design document and decided some further research and practice was required by me.

From Oct to November – worked on Unity and got more familiar with the game engine.

Nov 5th opened a git repository for the game.

Nov 6th to 14th More work and research

November 15th started putting game together. Opened up a project. Imported the packages suggested by Daniel.

November 16th added blank scenes, for the levels and the splash screens.

November 20th made a terrain for level 1.

November 25th added skybox to opening splash screen, added buttons as per design document. The buttons are just place holders for now. They will be changed as the game development goes on. They have no functionality at the moment. Downloaded music for the splash screen. Note this will be changed. Using this music to ensure that music played correctly.

Worked on Terrain for Level 1 – this level will be an easy level with not too many obstacles or difficult terrain to avoid. There will be one enemy wave as detailed in the design document.

26th November emailed designer to clarify some healthbar queries.

27th November Created different terrains for all levels.

28th November Created all other displays, ie. Heads up display, end of level displays. Trying to keep as close to Daniel’s original design. None of these have any functionality yet.

Added a health bar, need to add script.

Player needs to be childed to camera, particle system for firing

flight path needs to be set up.

Enemy waves need to be set up – enemies need to fire continuously or at intervals

Powerups and shields need to be added – need to spawn randomly

Need to set up reticle on player. <https://www.google.com/search?safe=active&client=firefox-b-d&sxsrf=ALeKk01P4J9Fd7zjfl06wswtsVRhRQ51cw%3A1606593410799&ei=gqvCX8-nMJWZ1fAP1oOPgAI&q=how+to+set+up+reticle+on+rail+shooter+in+unity&oq=how+to+set+up+reticle+on+rail+shooter+in+unity&gs_lcp=CgZwc3ktYWIQAzoECAAQRzoHCCMQsAIQJzoECCEQClCQZlifnAFguKUBaABwAngAgAF7iAHLDZIBBDEzLjaYAQCgAQGqAQdnd3Mtd2l6yAEEwAEB&sclient=psy-ab&ved=0ahUKEwjP8LHsgqbtAhWVTBUIHdbBAyAQ4dUDCAw&uact=5#kpvalbx=__qvCX5qOFNad1fAPzMW0-A48>

29th flight path set up

30th enemy waves set up – for level 1

1st Dec stuck with player moving too fast and exploding – the player controls seem to be wrong..need to look at properly, see if the movement can be improved.

3rd Dec emailed Daniel, to let him know that I will be fully implementing the game as for PC platform before I move onto adapting the game for mobile, this may impact on the demo for the 16th of December. Daniel advised he was happy enough to see the game developed for PC platform.

4th Dec Added script for player score which adds the score correctly. Only tested on one type of enemy need to add more enemies in other levels with different score amounts.

6th Dec Added powerups to a timeline – need to add code for the power ups to actually do something.

1 power up for health, 1 power up for shield protection.

7th December – plan for today, ensure all terrains on each level have a timeline on them that the player can fly around. Sort out a trigger to move from one scene to the next.

Changed the terrains on levels 2 and 3, wasn’t happy with their complexity. Need to add texture at a later date, for now just want to get the player flying round a timeline on each level.

Wrote a to do list for the game – it’s very long!.

Most urgently player from level 1 flight controls are not working – player can fire, but I can’t control movement -I could but not now!

To Do Scenes

3 levels basically set up -done

Start screen – done – need to add functionality

Between level screens – need to add script for these to work

Pause screen – done – but need to activate it – working for level 1 clicking on buttons. Only works on other levels by clicking esc – buttons don’t seem to be working.

Lose screen – done but need to activate it

Win Screen – done but need to activate it.

To Do Functionality

Portal from one scene to the next when level is complete– not working yet – working now

Scores – carrying from scene to scene

Healthbar needs to function for the player

Enemies firing – at the moment they just fly on timeline

Pick ups - need to fire at the pickups, make sure the pickups disappear off screen and add what ever powerup to the player. Write code for this part

To fix – Player is not flying smoothly on level 1…in fact level one timeline needs to be redone.

Redid level one timeline, player flies better…but still dies just at the beginning, reloads and doesn’t die at the same spot.

Add Multiplayer

Seriously doubt I will have this done by deadline. Working on getting the basics of the game working before I tackle this element of the game.

8th Dec – made a new Timeline for level one but my player dies at the start – no idea why then when reloads doesn’t die!! If the player hits the terrain the player explodes …not sure why player dies with no explosion the 1st time. Will look at the scripts and see if anything in the scripts might be causing this.

Don’t have a script on the player in levels 2 and 3, trying adding playerBehaviour script to player to see if problem is the same with player dying – also want to test if controls are working for the player.

Added script, same error did not occur. Will add collisionHandler script now and see if the same error occurs. Something happened!! The player hit the terrain and the level loaded back to level 1…which means the level loading is working – just not on a portal!!

Adding the script to the player did not replicate the problem! But Player now reloads to start of correct scene now.

Need to work on some other areas for now eg, getting buttons working on start menu and getting pause screen working too. Will also need to fix health bar for player.

9th Dec – fixed portal problem – scenes now change when portal is struck. All portals should have a box collider and isTrigger ticked.

Problems per level

Splash screen is fine but need to separate out the select player option to another scene.

Level 1 player dies very near the beginning – can’t figure out why, player respawns and doesn’t die again at the same spot. After clearing the level the player passes through a portal which brings the player to a level clear scene.

Level 2 – Player didn’t have bullets added to their behavior, added bullets but continuously firing, small setting in particle system needs to be changed, as script should handle the firing of bullets…level 1 player is firing correctly, so will work through the settings.

Level 3 – need to add bullets to player, but won’t until level 2 player bullets are working correctly.

9th Dec Most urgent to do is:

Select single player button working, moves onto the correct scene. Working now

add the score to all screens and for the correct score to persist. Working now

Work on pause screen. <https://www.youtube.com/watch?v=JivuXdrIHK0>

10th Dec Most urgent to do is:

Pause screen is working but not properly – look at this again tomorrow.

Work on heads up screen

Work on player healthbar.

Fix the bullets continuously firing from player…continuous fire coming from the enemy is fine. Though the enemy fire rate should be slower for lower levels and faster for higher levels.