
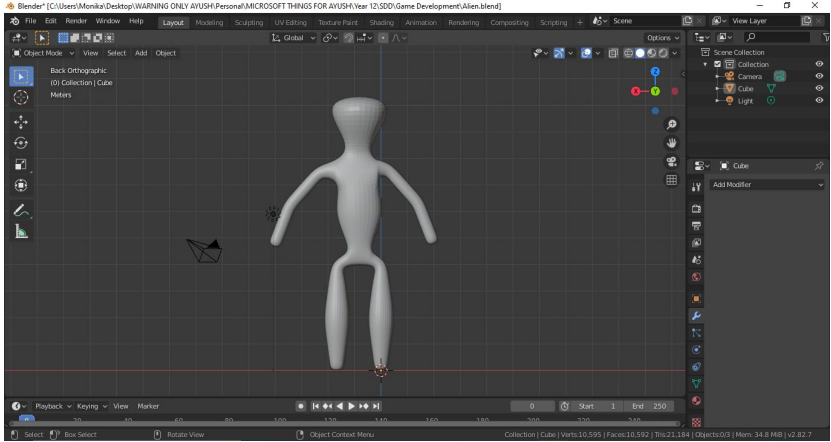
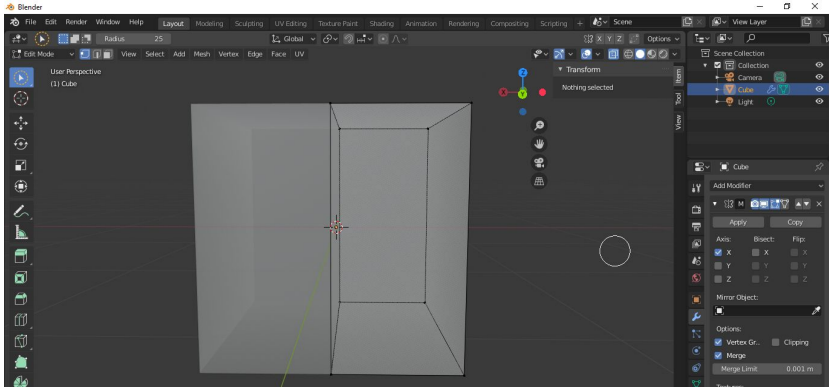
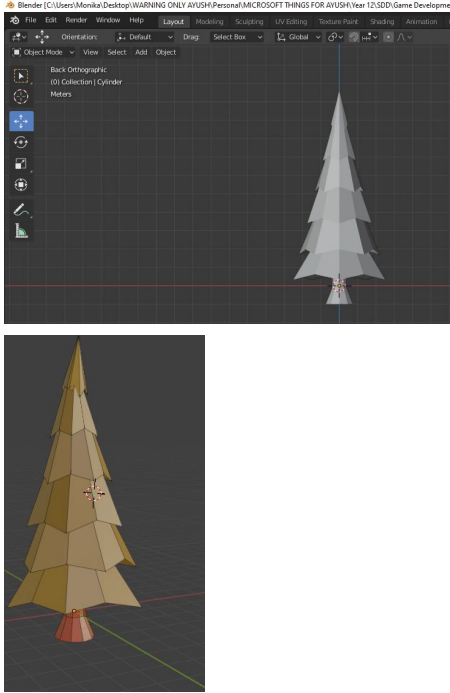
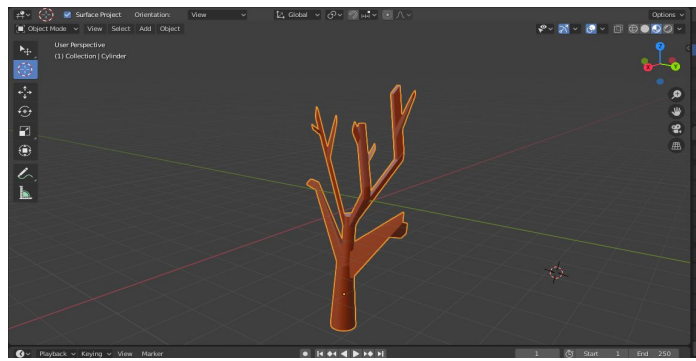


Date	Activities Completed	References
26/02/2020	<ul style="list-style-type: none"> - Task was received 	
28/02/2020	<ul style="list-style-type: none"> - Made a sample Tron Game using tutorial found online - Refreshed memory using Unity 2D, getting used to the C# coding perspective and Unity's assets 	https://noobtuts.com/unity/2d-tron-lightcycles-game
1/03/2020	<ul style="list-style-type: none"> - Researched several assets which give an idea of how scenes and characters will look like and function - Had a look at a few 2D and 3D versions of Tron games made in the past and had a feel of the gameplay and controls - Using a website, created a fully working 2D unity C# Tron game with multiplayer access (2 players) - Had a look at open-source code for a previously made Tron game 	https://noobtuts.com/unity/2d-tron-lightcycles-game (8) Unity Game Dev Full Tutorial - 3D Snake Game - YouTube gltron / Code / [r2102] /trunk (8) TOP DOWN SHOOTING in Unity - YouTube
2/03/2020	<ul style="list-style-type: none"> - Juggled between Tron based game, contra based, snake 3D or top-down shooter - Chose to go on with Tron based game - Contemplated on how to make AI for single-player mode in-game: Got some advice from teacher and classmates 	https://assetstore.unity.com/top-assets/top-free
3/03/2020	<ul style="list-style-type: none"> - Changed idea to coding a rail shooter FPS - Watched sample games from the same genre (Time Crisis, House of the Dead, Virtua Cop) - Watched tutorials on how shooting works in Unity 3D 	https://www.youtube.com/watch?v=THnivyG0Mvo https://www.youtube.com/watch?v=hSF3vD6l6rA https://www.youtube.com/watch?v=OZsUNE9l9Mc
4/03/2020	<ul style="list-style-type: none"> - Thought of innovative and capturing name for the game: "Survival Sense" - Started working on documentation and part A of assignment - Finished the "Game Information" section of Part A for the assignment - Started on "System Development Approach" section of 	

	Part A for assignment	
5/03/2020	<ul style="list-style-type: none"> - Continued to work on System Development Approach section - Watched video on how to make camera shake in Unity when certain actions are performed <ul style="list-style-type: none"> - In my case, when the player shoots an exploding barrel, the world shakes a little 	https://www.youtube.com/watch?v=9A9yj8KnM8c
6/03/2020	<ul style="list-style-type: none"> - Completed System Development Approach Section - Watched video on how Grenades/Bombs can be created in Unity, thrown, blown up and affect the environment in the most real way possible - Watched video on how to make crates shatter/break when some type of force is applied (in my case either the player shooting the crate or the bomb blowing it up) 	https://www.youtube.com/watch?v=BYL6JtUdEY0 https://www.youtube.com/watch?v=EgNV0PWVaS8
7/03/2020	<ul style="list-style-type: none"> - Started working on Gantt Chart - Reading through Game Information again, I decided to edit some of my paragraphs and add a little bit more information 	
9/03/2020	<ul style="list-style-type: none"> - Completed Gantt Chart - Watched video on how to have gun follow mouse movements to aim in the game 	https://www.youtube.com/watch?v=tCIZS1uw0K4
10/03/2020	<ul style="list-style-type: none"> - Proof-read through game information section and received advice from classmate to improve certain sections 	
11/03/2020	<ul style="list-style-type: none"> - Some more information added to the software development approach section - Gantt Chart exported into PDF file format - Link to Logbook added to file 	
12/03/2020	<ul style="list-style-type: none"> - Part A being submitted - Watched tutorial on how to use certain features in Blender to create game assets - Started making one of the many game assets for my project (the coffin for the zombies to come out off) 	https://www.youtube.com/watch?v=ICBP-7x7Chc
14/03/2020	<ul style="list-style-type: none"> - Worked a little bit more on coffin game asset - Started on Data Flow Diagram (Level 1) 	https://www.youtube.com/watch?v=ICBP-7x7Chc

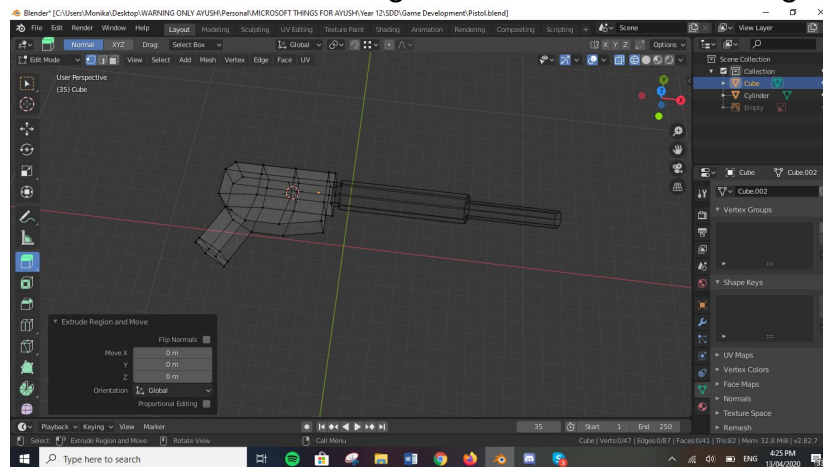
		
15/03/2020	<ul style="list-style-type: none"> - Made an alien-looking character with the help of a tutorial, along with some of my own creativity 	https://www.youtube.com/watch?v=wCi8ZbTBP1w
16/03/2020	<ul style="list-style-type: none"> - Worked more on the Data Flow Diagram (Level 1) 	
19/03/2020	<ul style="list-style-type: none"> - Looked further into making structure charts and asked peers for extra help 	
22/03/2020	<ul style="list-style-type: none"> - Worked further on creating a character from before (alien character) 	
27/03/2020	<ul style="list-style-type: none"> - Had a look for appropriate music that would fit in with my game - Finished Data Flow Diagram (Level 1) 	https://www.zedge.net/find/ringtones/sedge
3/04/2020	<ul style="list-style-type: none"> - Had a look at and attempted to make a simple loading screen in unity <ul style="list-style-type: none"> - This will be used as the basis to create a more aesthetically pleasing loading screen 	https://blog.teamtreehouse.com/make-loading-screen-unity

4/04/2020	<ul style="list-style-type: none"> - Worked on new characters for the game - Started making crates and exploding barrels 	https://www.youtube.com/watch?v=Ljl_QFs9xhE
6/04/2020	<ul style="list-style-type: none"> - Played some “Virtua Cop” getting a feel of computer rail shooter games - Started on Data Flow Diagram (Level 2) 	
8/04/2020	<ul style="list-style-type: none"> - Discussed further with peers about additional things that can be added in Data Flow Diagram (Level 2) - Worked more on the Data Flow Diagram (Level 2) 	
10/04/2020	<ul style="list-style-type: none"> - Finished work on Data Flow Diagram (Level 2) 	
11/04/2020	 <ul style="list-style-type: none"> - Created a tree for the environment of the game for a more aesthetically pleasing gameplay - Created a dead tree 	https://www.youtube.com/watch?v=ZXo0aBLW6hC



13/04/2020

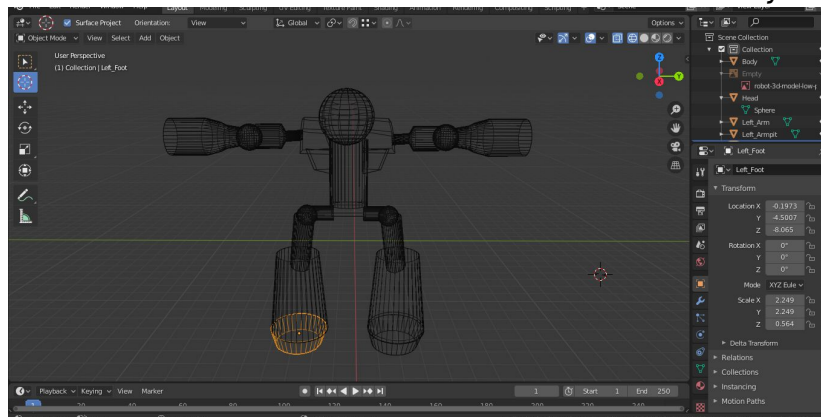
- Created model of a gun that will be used in the game



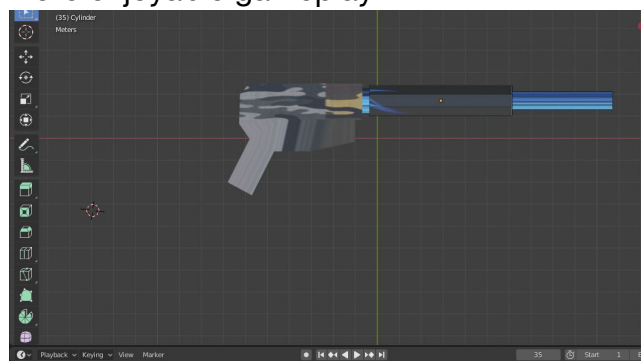
<https://www.youtube.com/watch?v=olroTfty0zk&t=3s>


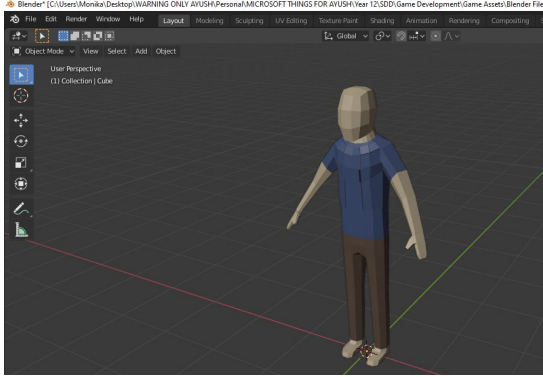
14/04/2020

- As per my game, the enemies that appear in the “Mechatronic Madness” level are, as the name suggests, robotic looking obstacles. Fo that I started and created a model of a robot that will be used as the enemy



- Added textures to the gun for a better aesthetic view and more enjoyable gameplay

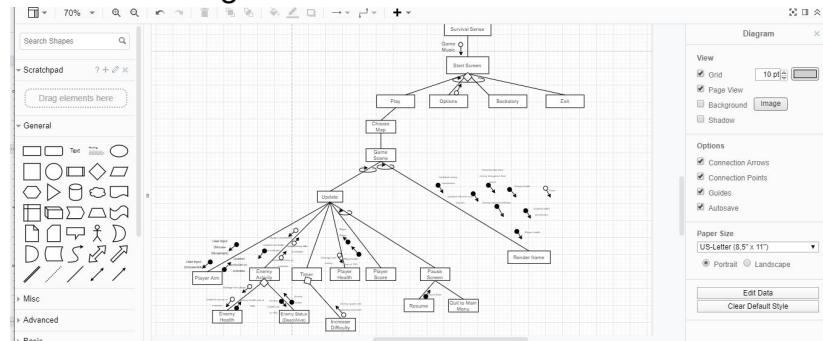


15/04/2020	<ul style="list-style-type: none"> - Talked to peers for feedback about game assets I have made and am planning to make - Started looking for sample zombie characters that can be put into my game 	
16/04/2020	<ul style="list-style-type: none"> - Stated creating a zombie character that is to be implemented into the game 	
17/04/2020	<ul style="list-style-type: none"> - Started work on Structure Chart - Made a terrorist character for the “Terror or Error Map” 	https://youtu.be/aAO4C_8y0w8

18/04/2020	<ul style="list-style-type: none"> - Looked for appropriate music and soundtracks that can be used in-game - https://www.youtube.com/watch?v=WIM2wf6OHKk (Theme when opening up game) - http://soundbible.com/325-Ricochet-Of-A-Bullet.html (when a bullet is fired) - https://www.freesoundeffects.com/free-track/gun-cock-466508/ (Gun Reload) - https://www.freesoundeffects.com/free-track/gun-empty-466509/ (Empty Gun) - https://www.youtube.com/watch?v=ObMUZyq5pBI (death sound effect) - https://www.youtube.com/watch?v=8JySDiW0psM (sound when hovering house over “Mechatronic Madness” map) - https://www.youtube.com/watch?v=Rvi6c8toWJM (When hovering over “Terror or Error”) - https://www.youtube.com/watch?v=v5ISBJc1wFk (When hovering over “Dead Or Alive”) - https://www.youtube.com/watch?v=MunWSqTgQLs (When hovering over “Human Hazard”) - https://www.youtube.com/watch?v=X_iAw_0-WRo (when in-game for “Terror or Error”) - https://www.youtube.com/watch?v=ueJZCHqIDZc (when in-game for “Dead or Alive”) - https://www.youtube.com/watch?v=IFoEHkw4OLk (when in-game for “Human Hazard”) - https://www.youtube.com/watch?v=tEPR0kc5cE8 (when in-game for “Mechatronic Madness”) - https://www.youtube.com/watch?v=mNn34ErU6kM (winning music) 	
19/04/2020	<ul style="list-style-type: none"> - Continued work on the structure chart 	
20/04/2020	<ul style="list-style-type: none"> - Consulted with teacher and peers concerning several aspects of the structure chart - Substantially worked on the Structure Chart - Downloaded relevant music - Using Audacity, trimmed audio and downloaded relevant parts of music <ul style="list-style-type: none"> - Jotted down the exact time of the trimmed music that is used (Exact to 3dp) 	
21/03/2020	<ul style="list-style-type: none"> - Received an extension for the submission for part B - Confirmed that I had seen the notification 	

23/03/2020

- Worked a lot on structure chart and looked at previous examples and student examples as a guide to see if I'm on the right track

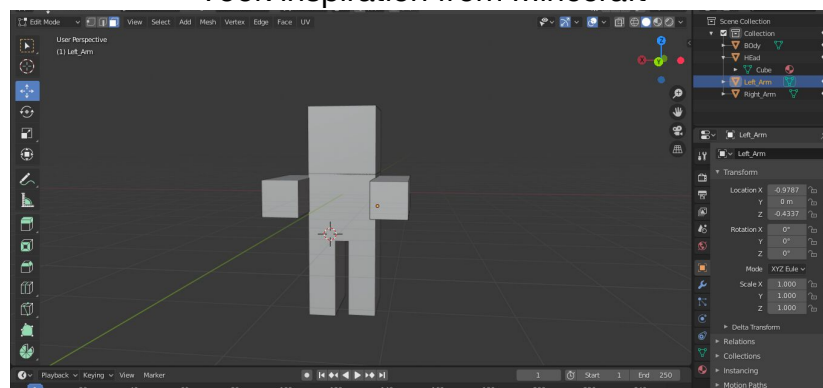


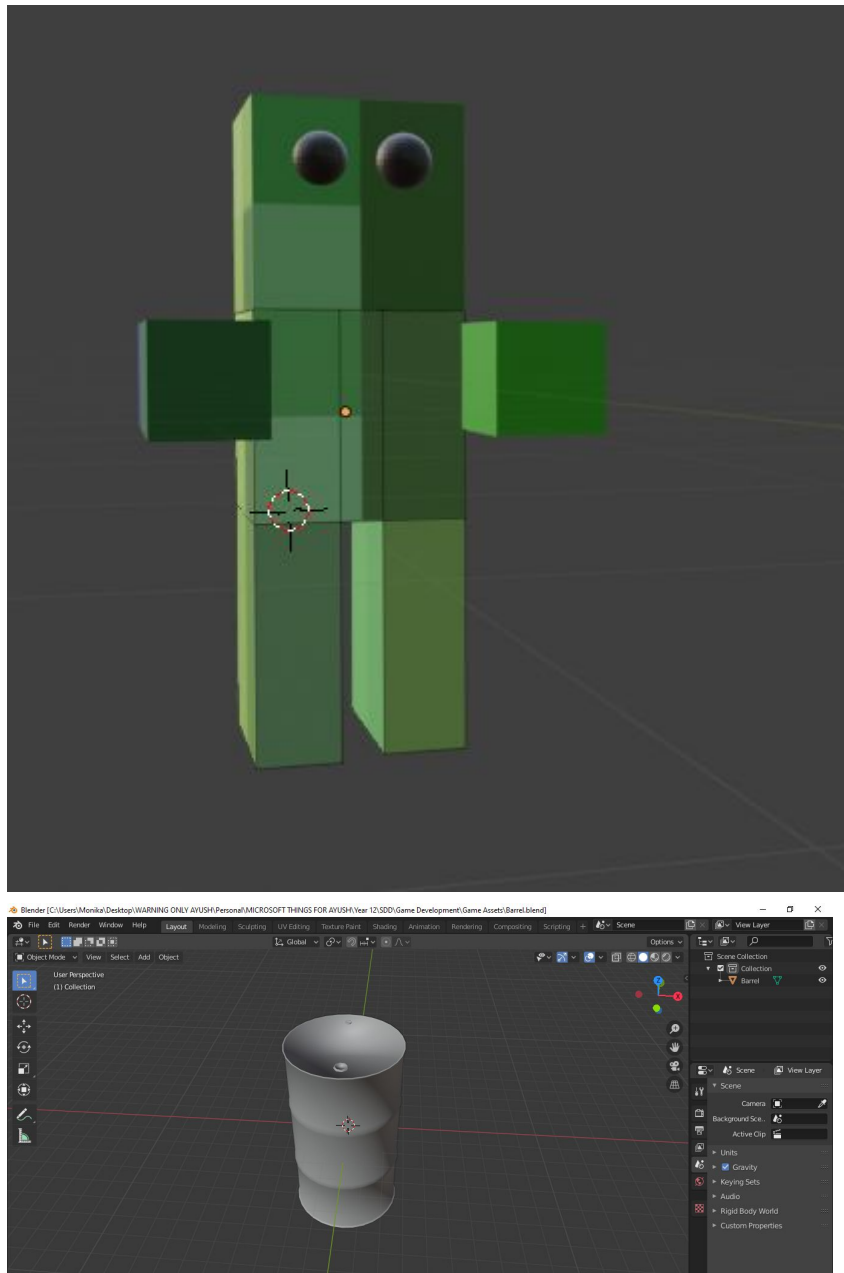
24/04/2020

- Finished working on the Structure Chart
- Found flaws in previously finished Structure Chart and fixed them
- Found more flaws and fixed them
- Fixing DFD Level 1

25/04/2020

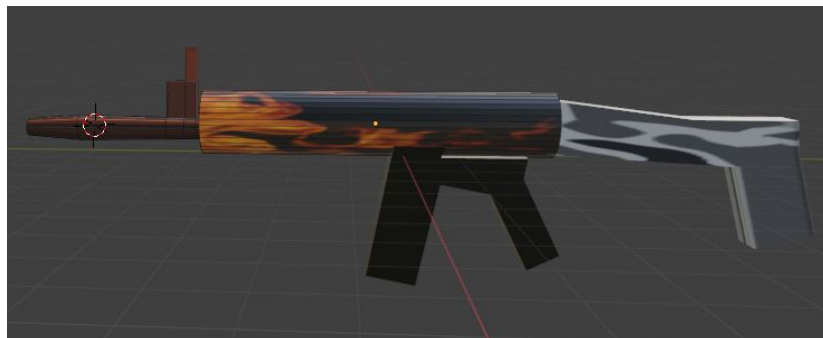
- Made an exploding barrel
- Made another zombie (Easier to animate)
 - Took inspiration from Minecraft





26/04/2020

- Improved Data Flow Diagram Level 1
- Had a think of extra assets that can be made
- Created Machine gun which will be used in game to give players a variety of guns to obtain



27/04/2020

- Added more features into Data Flow Diagram Level 1

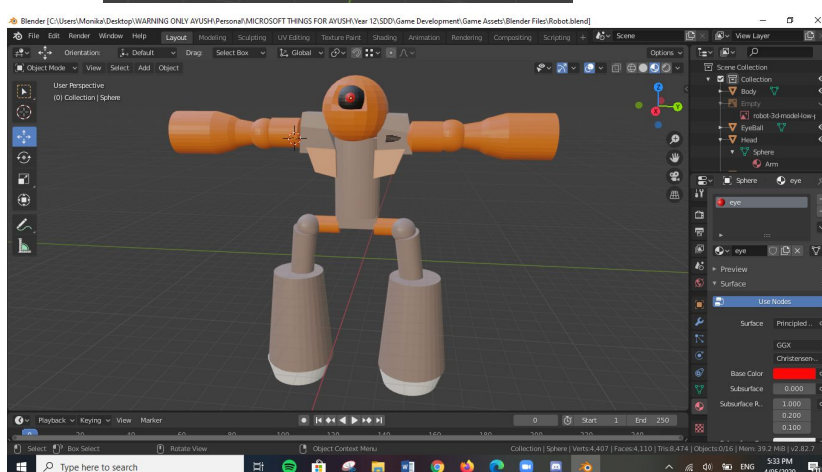
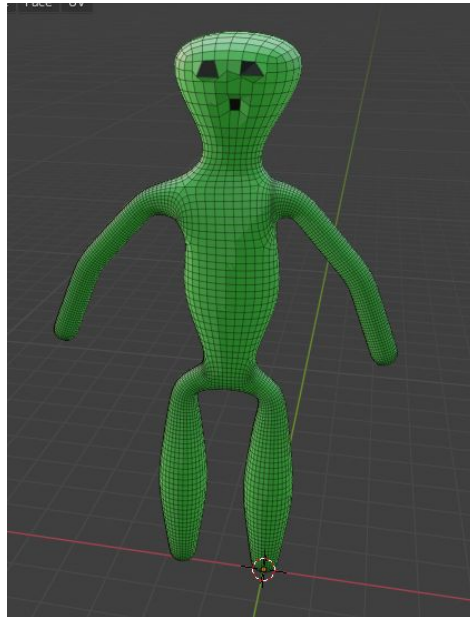
28/04/2020

- Created a sniper rifle to be used in the game



29/04/2020

- Added colour to alien and robot blender files

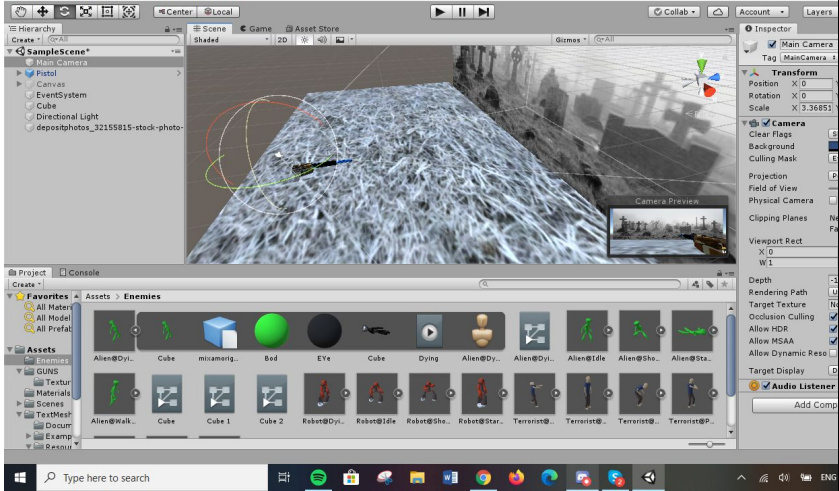


<https://www.youtube.com/watch?v=zua2AfUonYU>

30/04/2020

- Using Mixamo, made animations for when the alien and robot are dead, and a shooting animation for the robot

1/05/2020	<ul style="list-style-type: none"> - Edited Data Flow Diagram Level 2 - Started coding some of the players and their movement 	
2/05/2020	<ul style="list-style-type: none"> - Tried animating the barrel for it to look like it were exploding but it didn't work too well so I need to look at more videos - Added dying animation to terrorist <ul style="list-style-type: none"> - Added terrorist taking gun out animation 	
3/05/2020	<ul style="list-style-type: none"> - Played around with unity, finding ways to make my game - Animated and coded more of the characters - Downloaded all objects as .fbx files - Referenced URL for textures 	
5/05/2020	<ul style="list-style-type: none"> - Made further changes to some of the animations 	
10/05/2020	<ul style="list-style-type: none"> - Created a sample storyboard of how my game will set out and how the game will progress from screen to screen 	
12/05/2020	<ul style="list-style-type: none"> - Downloaded backgrounds for the menu screens, game screens, etc 	
13/05/2020	<ul style="list-style-type: none"> - Watched a video on the basics of making an fps game in unity 	https://www.youtube.com/watch?v=0fGB2H1AGP8 https://www.youtube.com/watch?v=phM3PFBF12Q
18/05/2020	<ul style="list-style-type: none"> - Received marks for Part B submission of assignment 	
19/05/2020	<ul style="list-style-type: none"> - Watching video on coding and creating a menu screen 	https://www.youtube.com/watch?v=zc8ac_qUXQY
20/05/2020	<ul style="list-style-type: none"> - Continued working on menu screen for game - Added visual feedback for when mouse is hovered above buttons and clicked - Created a logo for the menu screen - Finished making a sample menu screen which provides visual feedback and transitions to appropriate pages 	
21/05/2020	<ul style="list-style-type: none"> - Managed to import all assets into unity <ul style="list-style-type: none"> - However when importing models such as guns and barrels, unity for some reason didn't load the textures in so I used an online tutorial to convert 	https://www.youtube.com/watch?v=Icd_IXG0XxI

	the textures into materials which can be directly put on through the unity engine	
22/05/2020	<ul style="list-style-type: none"> - Downloaded images to have as backgrounds for the maps 	
24/05/2020	<ul style="list-style-type: none"> - Adjusted camera and started making map for “Dead or alive” 	
25/05/2020	<ul style="list-style-type: none"> - Started creating game screen for “Mechatronic Madness” 	
26/05/2020	<ul style="list-style-type: none"> - Coded rotation of gun with mouse movement - There were problems with my model being off the axis so it took me a while to modify the code for it to work properly across the x - axis 	
27/05/2020	<ul style="list-style-type: none"> - Made game screen for all 3 other maps 	
29/05/2020	<ul style="list-style-type: none"> - Tried coding the up and down rotation of gun but for some reason it wasn't working so asked peers for advice and still came to no solution 	
30/05/2020	<ul style="list-style-type: none"> - Imported CrossHair, replacing cursor 	
1/06/2020	<ul style="list-style-type: none"> - Had a very good idea to change an aspect of the game to make it simpler for me and player <ul style="list-style-type: none"> - Using the GTA Vice City Logic of showing the current gun in the top right of the screen, I did that and have a spinning object on the top right showing the player what gun they are using - Selected specific crosshair for specific gun 	
2/06/2020	<ul style="list-style-type: none"> - For some reason, the gravity on my enemies didn't work properly so it took me a while to fix it and not have the object fall through the ground 	https://www.youtube.com/watch?v=ydjpNNA5804

	<ul style="list-style-type: none"> - RNG enemy spawn location at startup 	
3/06/2020	<ul style="list-style-type: none"> - Started coding and making particle effect and multiple raycast for exploding barrel - Spawn locations weren't working as well as expected so need to alter that code 	https://www.youtube.com/watch?v=BYL6JtUdEY0
4/06/2020	<ul style="list-style-type: none"> - Attempted to make an enemy health bar. Didn't work properly so I took inspiration from the game "Virtua Cop" with the enemy simply dying from one shot - Raycast onto enemy making it leave the screen <ul style="list-style-type: none"> - Have to change it to first play dying animation then leave the screen 	https://www.youtube.com/watch?v=u_SvMqFjNml&feature=youtu.be https://www.youtube.com/watch?v=2tkNfsYIENs
5/06/2020	<ul style="list-style-type: none"> - Spent the whole day trying to rng a new enemy in a random position with the animation working on multiple enemies but it just wasn't working <ul style="list-style-type: none"> - Through the help of my peers, we figured a way to achieve this 	
6/06/2020	<ul style="list-style-type: none"> - Made a scene where players can choose which map they want to play <ul style="list-style-type: none"> - When the player hovers their mouse over the map they want, a relevant audio clip is played with it - The task that took me 5 hours to figure out yesterday was improved upon today by making the code a little better - Added comments to scripts - Added the dying + raycast to the TerrorMap 	https://www.youtube.com/watch?v=MjH5rsmYmQY
7/06/2020	<ul style="list-style-type: none"> - When a player shoots, a gunshot sound is played almost instantaneously - Tried respawning enemy in a random location after it being destroyed <ul style="list-style-type: none"> - It didn't work - Created a countdown timer that counts down from 3 <ul style="list-style-type: none"> - The next step for this is to have the game paused until the countdown says "GO!" - Changed crosshair to make it more responsive <ul style="list-style-type: none"> - There was a problem with the previous crosshair with the centre of it not being the exact position of the mouse click - Added gunshot audio to all maps - Coded dying animation with raycast for the last map (Dead or Alive) - Set out the entire Dead or Alive map - Added music to all maps - Evened out all the volumes for all the music files <ul style="list-style-type: none"> - Background Music - Choose Map Music - GunShot Sound 	https://www.youtube.com/watch?v=TPKDWsgt4dw&t=136s https://answers.unity.com/questions/497117/how-to-respawn-ai-enemies-after-destroy-gameobject.html https://forum.unity.com/threads/how-do-spawn-the-object-player-after-i-destroyed-it.331763/ https://www.youtube.com/watch?

		time_continue=249&v=lgM2MZ-Sk4&feature=emb_logo
8/06/2020	<ul style="list-style-type: none"> - Added a laser to the robot which is shot at the player every time the shooting animation is played by the robot - Added an orb to the alien which is shot at the player every time the shooting animation is played by the alien - Added bullet to the terrorist 	
9/06/2020	<ul style="list-style-type: none"> - Added a rng shooter on terrorist - Instead of destroying object (which also destroyed the script which could not be accessed again), using peer and teacher help used a different technique of "SetActive(false/true)" which simply hides the object from the screen - Applied this feature to all maps - Made the code design a lot cleaner and added comments - Starting to make a high Score table which stores player name 	https://www.youtube.com/watch?v=iAbaqGYdnyI https://www.youtube.com/watch?v=4xNz23Wlfo&t=530s https://www.youtube.com/watch?v=PEfGcw1_KRc
10/06/2020	<ul style="list-style-type: none"> - Created a working pause screen for my game - Assigned pause screen to all maps - Fixed audio issues 	https://www.youtube.com/watch?v=JivuXdriHK0
11/06/2020	<ul style="list-style-type: none"> - Since my respawning feature for some reason, even after endless tries, was not working I decided to hardcode the number of enemies in - For some reason the bullets/lasers/orbs that were attached to enemy attacks were not working as 3d objects even after countless attempts, so I decided to simply have them shooting PNG files - Hardcoded almost all the Mechatronic Madness Enemies in - Made sure player can see cursor after exiting to menu 	
12/06/2020	<ul style="list-style-type: none"> - Continued hardcoding enemies in 	https://answers.unity.com/questions/593570/how-do-i-check-if-all-the-objects-are-destroyed-th.html
13/06/2020	<ul style="list-style-type: none"> - Added a countdown start timer to all maps - Finished all components of Mechatronic Madness and Human Hazard 	https://www.youtube.com/watch?v=3MlaoiahvI

14/06/2020	<ul style="list-style-type: none"> - Finished all maps and enemy shooting animations - Made the countdown a lot better - Changed the logo symbol - Made the menu screen and choose map screen a lot more aesthetically pleasing <ul style="list-style-type: none"> ● Only things left to do is: <ul style="list-style-type: none"> ○ the player score part and ending the game when all enemies have died ○ Score UI when player kills enemy ○ Delay between enemy respawn ○ OPTIONAL: <ul style="list-style-type: none"> ■ Transitions ■ Timer ■ Crates breaking <p>The main parts can all be achieved by the end of tomorrow and if not then definitely by tuesday, giving enough time for multiple tests</p>	
15/06/2020	<ul style="list-style-type: none"> - To give the game more of a arcade-rail shooter feeling, I took inspiration from newer arcade games which apply the players camera into the game so in the future if this game were to turn into multiplayer, each player would have their face showing which player they are - Added a wait for seconds script which allows enemies to respawn after some time (Delay between enemy respawn) - Changed the PNG's for Terror or Error and Human Hazard to actual 3d models <ul style="list-style-type: none"> - The one for Human hazard was taken off the internet - Started adding a GameOver Scene - Added a player score (Score UI when player kills enemy) 	https://free3d.com/3d-model/corona-virus-194438.html https://www.youtube.com/watch?v=QbqnDbexrCw
16/06/2002	<ul style="list-style-type: none"> - Added a second level to each map where enemies shoot faster (effectively increasing difficulty) - Created more transition screens - Pretty much 98% finished <p>Left to do for tomorrow's double and a little bit of time after school</p> <ol style="list-style-type: none"> 1. Player name show (20 mins max) DONE 2. Get rid of score counter (5 mins max) DONE 3. Music for level 2 (5 mins max) DONE 4. Game over screen {Win/Lose} (30 mins max) DONE 5. Player Health (15-20 mins max) DONE 6. Game Description in options/help menu (5 mins max) DONE 7. Restart button (10-20 mins max) DONE 8. Make code neater <p>Optional</p> <ol style="list-style-type: none"> 1. More transitions 2. Aesthetics 	

17//06/2020	<ul style="list-style-type: none"> - Finished project - Input name added - Music updated - Player health added - Aesthetics made a little better - Added comments 	https://www.youtube.com/watch?v=UnEDxN0DEa4
18/06/2020	<ul style="list-style-type: none"> - Sending the game in 	

FILE LINK:

<https://docs.google.com/document/d/1TUv3WInt-pCxDErZPRQJMYyn9GUIntTLmYPwPiHj1Bc/edit>