Mobile Games Development 1 Coursework: Development Blog

25/11

Plan: To create a 2D platform shooter in the style of the Metroid games. The aim is to have a player character that can run, jump, shoot, and turn into a small ball. There should so be enemy’s and platformer style obstacle that the player will have to overcome.

26/11

First was to be able to draw the player to the screen.

27/11

Next was to be able to make the player move.

28/11

The next thing was to be able to animate the player when moving left and right etc.

29/11

Could not get it to work properly.

30/11

Still could not get it to work.

01/12

Managed to get an idle animation to work.

02/12

Got running to the right animation to work. Running left not working.

03/12

Running left still not working.

04/12

Both running animations now work. But the animation goes funny if switching between running left and right.

05/12

Both animations now run smoothly.

06/12

Adding in a right facing jumping animation as well as the ability to jump.

07/12

Left facing jumping animation is completely wrong.

08/12

Left jumping now works properly.

09/12

Added in a sprite change when crouching. The completely messes up all the animations after having crouched.

10/12

Still cannot fix animation issue.

11/12

Taking out the crouching feature just now to work on other parts of the game.

12/12

Created an enemy and got it animated properly (only has one animation).

13/12

Made a platform for the player and the enemy to stand on and made a simple gravity effect so that the player falls after jumping.

14/12

Implemented collision detection between the player and the platform so that the player does not fall through the platform.

15/12

Research different methods of OO programming.

16/12

Researched more methods of OO programming.

17/12

Decided that I was going to try and use prototypes when programming my objects.

18/12

Created two prototypes. One for objects that are alive and one for the objects that are inanimate. Then from the alive prototype made a player prototype and then created the player object from the prototype.

19/12

Made an enemy prototype and from that made two different enemy types; Grunt and Flying.

20/12

Animated both the grunt and flying object (both have one animation).

21/12

Made a prototype for the projectile that the player will be able to shoot.

22/12

Tried to make the player spawn a projectile, did not have much luck.

23/12

Set up the game to draw the projectile at the start of the game (off screen). The on key press move the object to the player’s position. Also incremented the bullets position along the x axis so that it moves.

24/12

Cannot seem to be able to get more than one projectile to fire.

25/12

Set up the projectile up as an array of objects and drew them all at the start. Set it up so that on key press move the projectile to the player’s position. Then the next key press would move the next object in the array and so forth.

26/12

Tried to set up the game so that the player can fire the projectile in the direction that they are facing. Got problem where changing the players direction will change the direction the bullet is travelling even after it has been fired.

27/12

Still unable to fix the projectile issue. Added in movement to the enemy objects. They both now move left and right and he flying ones also move up and down.

28/12

Leaving the projectile issue for now. Added in rotation to the flying enemies so that they rotate 180 degrees when they change direction.

29/12

Put crouching back into the game and fixed the old issue. I just had to make sure I was resetting the players x, y, width, and height between stance changes.

30/12

Set up my floor as an array of prototype objects and put them into the game.

31/12

Went back over the projectiles and manage to get some sort of solution where they fire in the correct direction no matter want way the player faces. This was done my splitting the array in half and have the first have of it only fire when facing right and only move towards the right. The second half of the array would only fire when facing left and would always move towards the left.

01/01

Set up collision detection between the projectiles and the enemies so that the enemies lose 1 hp after they are hit.

02/01

Set up a death function or the enemies so that when they lose all their health they will fall of the screen.

03/01

Changed the flying enemies to only move on the x axis.

04/01

Tried to research how to have a camera that would follow the players movement.

05/01

Kept researching. Still not able to find something that work. Added in a health bar that the player can see on screen that shows how much health the player has.

06/01

As an extremely poor work around I have decided that I will keep the player stationary and have all the other objects move around then player. This does make the code a lot more clunkyer, but so far it seems to work.

11/01

Added in a background image to the game. As all the objects move around the player the background would have to move to. I took the rate at which the objects move at and divided it by ten to give the illusion that the background is further away, like a parallax effect. Added in a door and button. When the button is pressed the door opens and the player can progress through the level. Strange issue where the collision bounds of the door seem to be off somewhat. Put is start screen that shows the controls for the game. Added in a game over screen.

12/01

Put in collision detection between the player and the enemies. Upon collision the player loses one health.

13/01

Set up the game so that when the players health reach zero the game over screen is then displayed.

14/01

Laid out more of the level with platforms at vary height etc.

15/01

Set up the enemy objects as arrays so that I can lay them out though the level much easier.

16/01

Added in sounds and health pick up.

17/01

Made a boss fight. The idea behind it is that it has two attack patterns which the player can learn and use to their advantage. The first the boss will move low and all the way back to the right. It will then charge forward. The player can jump over the enemy to dodge it.

The second the boss will move high up and the towards the middle of the screen. When the boss is moving left towards the middle of the screen the player will have to run towards the boss a crouch. The boss will then move across the player and the player will be unharmed. When the boss gets to the middle of the screen it will fire a laser and move from right to left. If the player does not do the crouch technique, there is no way form the to avoid being damaged. In-between the attacks the boss will move around allowing the player to damage the boss freely.

18/01

Added final parts to the boss fight such a various collision detection, a short death sequence for the boss and a victory screen.

Completed the Mobile games development presentation.