Homebound

Development Journal | Scott Mackenzie 1277194

16/09/2015

Work Log

31st August (1 hour)

Looked in to Marmalade and the possibility of using it for the assignment. Looked further in to how I could integrate my existing code from assignment 1 in to this. Not to convinced.

4th September (2 hours)

Compiled all the lab content to do with the game boy advance. Quite liking the API. Had a bit of trouble compiling the samples but turned out to be a pathing problem.

14th September (2 hours)

Decided on using the game boy advanced dev kit from the labs. Looking at different types of games I could make while potentially using my already existing code from the first assignment. In particular the map editor that I made. I think I can make it work. Also completed most of my game pitch.

16th September (4 hours)

Attained permission to use the GBA kit. Completed my game pitch finalized my game idea and started thinking about how I want to go about development.

- First create the 'world' using my map editor.
- Create all entity's including the barriers, comets and turrets.
- Have all the above functionality and then start working on the animations, particles and sounds.
- Add in the main player ship on top of the game and add in collision, sound, animation for the player.

23rd September (3 hours)

Started reverse engineering the examples to try get images to the screen. Spent a lot of time understanding the pcx conversions. Can now change the example so it shows what I want it to show.

24th September (5 hours)

Started new project for my game. Worked on having a menu screen that halts and waits for input. Input is working. Swaps between two pictures to show highlighting. Created a high score screen that is blank. Created a scrolling background of stars*.

Next I am working on generating turrets to appear at random places. And to make collision detection for them. And then a points based on time.

25th September (6 hours)

Changed scope of game somewhat. No longer using the 'barrier' idea and now going for more a dodge the incoming wave of asteroids idea.

Added in a player and enabled left and right movement. Player's sprite is just a green triangle at this stage as a placeholder. Using the same method I used to draw the player I have created an asteroid sprite that will scroll down the screen toward the player. Unsure how to draw them randomly to the screen just yet so for the time being just one can be on the screen at a time.

28th September (6 hours)

Had a breakthrough with choosing colours that can be drawn to screen using current palette. Started using the application Usunti which is basically like paint but it's a lot easier to see available colours and how they will show on the screen.

Because of the above I worked on every image to make them all using the same palette which will save time in the game loop from not having to re allocate it every time I need to draw something.

In terms of gameplay I added in firing of a bullet from the player at this stage I haven't made collision detection for the bullet apart from it turns of if it goes off the top of the screen.

29th September (8 hours)

Tidied up every image to make them look good. Created new nicer looking sprites for all objects.

Added in collision between bullet and asteroid, asteroid and player. The colour of the player changes to indicate it has been hit.

Added in a pause screen while in game you can press the start button which will pause the game and bring up a pause screen. You can then press the B button to continue.

Added in the in game HUD. This shows the players health which will decrease if the player is hit by an asteroid. It also will show the players score. To get this showing I created sprites form numbers 0-9 and then created a method that will print the number entered. Hundreds, tens and ones all get placed in a hard coded spot on the HUD.

Added a win and lose condition including as game over screen. You win if you get to 999 points and you lose if your health decreases to zero. If either of these events are triggered the game over screen will pop up telling you your score and then you can press A to continue to the main menu and play again if you want to.

Added in a credits screen that just shows my name and student-id to the main menu. You can press A to continue back to the main menu.

Worked on adding sound. At this stage the only sound is when you fire a bullet in game.

30th September (6 hours)

Worked on development journal.

Started tuning the game difficulty. At this stage if you hit 250 you will noticeably see the asteroids moving faster. Will likely add this in to increase at 500 and 750 points also.

At this stage you gain 5 points for destroying an asteroid.

Worked more on adding sound. At this stage will likely be a sound to indicate the asteroid blowing up.

All menus and screens were tidied up to give a uniform feel across the whole game.

Added in turrets. These grant 10 points when destroyed. To fit the turrets in I have restricted the parts of the screen where the asteroids can be spawned and leave the edges just for turrets.

1st October (4 hours

Spent a bit of time trying to get turrets to fire. But it ended up causing problems.

Spent the morning tidying up code and getting ready for presentation