Developer Diary

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Mobile Applications Development 3

## First Reaction to the design document –

My reaction after receiving the design document of the game at the start I though that the game was mediocre designed game there was a lot of in game actions added in the document such as saving loading and how it all should work over all the designs weren’t very clear and it was hard to understand what type of game play it will have. At this stage I realized that I would have to develop this game close to the designer and have plenty of meetings and also ask a lot of questions and make a clear path of what’s most important in the game what to get done first and what to leave toward the end of the game. I di think that there was many features in this game saving loading passwords game play upgrades and much more. This then made e realize that it would be very hard to get all of this done in the time that I had to get this done.

## To Do list

* Player Movement
* Player Shooting
* Enemy Movement
* Enemy Shooting
* Damage Control
* Lives Control
* Death Control
* Different Levels
  + Different Difficulty
* In Game Menu
* Options Menu
* Death Restart
* Enemy Bullets difference Player Bullets
* Speed of play
* Upgrades

## Main Game Features

Player should be able to move, jump and shoot at the same time while moving across the map moving from level to level.

Enemies able to shoot at different speeds, move towards the player and make it as difficult as possible for the player to get past.

There should be a main menu and in game menu on all levels. Main menu can determine which difficulty you start on and the sound.

Once the game is finished you should be back where you started the main menu before you go again.

Enemies have a certain amount of health die when that health gets to zero similar with the player but when the player dies, he gets respawned at the start of the current level

The levels should have a save checkpoint and load checkpoint in it where player can save its position and load it when it dies.

# Scene Layout

MAIN SCENE – MAIN MENU

Play Game

Options

QUIT GAME

Quit

LEVEL 1

Game - L1

Options

Quit

LEVEL 2

Game – L2

Options

Quit

LEVEL 3

Game – L3

Options

Quit

# Meetings

## First meeting – 8/10/19

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My first meeting with my customer was on a Tuesday at 12.10 on the 8th of October 2019.

I texted Ulton on the 7th asking him to meet with me to talk about the game and to ask him questions about the game.

I met with him outside the canteen we got coffee and we started talking about the game. I wanted to ask him is the game set vertically or horizontally and he explained the game to me and which way the player moves and which way the enemy moves. This was very helpful it made me understand the game much more and already started thinking of ways to do it.

I also asked Ulton when the assets for the game will be available to me.

He explained to me that he was in the process of making them and that I will receive them very soon once they are done.

Few days later I received the assets such as the players and guns and power ups.

## Second meeting – 22/10/19

Our second meeting we decided to meet at the same time in the same place as our first one.

Over the first few weeks I was working on player movement and enemy movement in conjunction to shooting and killing.

In this meeting I had shown Ulton a prototype of the enemy shooting and player shooting with movement. I wasn’t completely done wit h the health aspect of the game at that moment, but I explained how it was going to work and when I was going to do it.

Earlier in the week I had received the assets for the game I asked Ulton about them and I wanted to add few assets myself to make the game a tiny bit more representable.

He was fine with that request, but we decided that with every asset I add I’ve to show it to Ulton before I add them in.

## Third meeting – 5/11/19

During the third meeting I had shown Ulton what I had done at the time which was two levels with the last one in the making. Having the enemy and player movement shooting and health done I showed him the platforms I had created. He was pleased with my design and the movement across the platform with the joystick asset added into the game for the android device.

I had the in-game menu designed but without the main menu it couldn’t navigate just yet. I showed him the design for my main menu and the plan for the next few weeks to have the game nearly completed and have a prototype working on android device and the PC.

We were both happy with the progress and decided on two more meetings for the progress to keep going.

## Fourth meeting – 3/12/19

In this meeting most of then work was complete I had added the saving loading, main menu in game menu the options (sound and difficulty). I also showed Ulton the scene layout and how the scenes connected in the game.

Now that all the levels were complete Ulton tried playing the game through the levels and although he had liked it we discovered few bugs in it where the game crashed although we knew that these weren’t very big bugs/errors they had to be dealt with. We decided to meet up at the end of the week when the game was due but as we found out that the deadline was extended we decided to do it on the 9/12. The main reason for this last meeting was Ulton wanted to see the game on an android device and wanted the bugs/errors fixed.

## Fifth final meeting – 9/12/19

This was our final meeting it was held in the usual spot outside of canteen. We met during our break like always.

In this meeting I showed Ulton the final game how it looked and what features it has and what changes came into play the bugs fixed. It was a meeting for me the (developer) to see if I met the costumers request and his standards.

Overall Ulton was happy with the final speck on both platforms the PC and the android device.

Obviously, we both knew that with more time the game would have been much more enhanced.

I was very happy working with Ulton on this project he was very supportive of my ideas and my developments that I had added to his game. It was a very good experience working alongside the designer and have both of our ideas come together.

# Problems – Solutions

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| AREA | PROBLEM | SOLUTION |
| * ENEMY KILLING | The enemy life was going down the bullets were colliding with the enemy, but the enemy didn’t disappear, and I was missing a death effect. | The way I got around this problem was where I created a method Die and called it when health was at 0. For the death effect I added an effect “Particle system” so user knows when and enemy is killed. |
| * PLAYER DYING | Once the player died and there were other enemies trying to shoot the player the game crashed saying “object destroyed but still trying to access it”. | After a bit of research online I had figured out that I have to check for null before killing it. |
| * MAIN MENU | I had problem with the background and buttons the buttons were hidden behind the background image, | It turned out that the problem was the layers and the buttons were set to be behind the image therefore I changed the layers of both and the buttons were Infront of the image. |
| * PAUSE MENU | After the pause scene was designed and created and buttons were in. when the menu was in play the buttons were clickable, but nothing was happening after the click. | It was a click event that I was missing on the buttons that’s why I had this problem I added the click event and it worked perfectly. |
| * CHANGING SCENES | Changing scenes caused me trouble when it wouldn’t allow me to move from level 2 to level 3. | The reason for this not working was that when I added my last level, I never added it to the build path. Once this was done it was fine |
| * PLAYER MOVEMENT | My player movement was fine it was the flipping the character when he goes the opposite way, I couldn’t understand how to do | After a lot of research, I figured out that I needed to create a flip function where it flipped the character and call this in the movement method |

# Different Difficulty Levels

## First Level-

The first level is for the user to get used to the controls and get used to shooting and moving across the map using these controls

There is two enemies in level one smaller and one bigger. To get to the next level you need to kill both and get to the end point which is a cave.

## Second Level –

Second level gets a bit harder with more enemies in the round and one enemy moving towards the player making it more difficult for you to get past this level

## Last Level –

It’s the most difficult level in this game as the enemies are scattered everywhere their health is doubled and there is a boss at the end with 5 times more health then the enemies in level one plus his shots are much faster a shot every half a second.

To get past this level you need to think strategically and use your surroundings to your advantage remember you only have 4 lives in each level.

***Good Luck!!!!!!***