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**Mobile Applications Development**

**Project Diary and Test Plan**

**Developed on 2019.2.15f1**

**Game name – Pinball2D**

This is a clone and tweak approach on a parabolic trajectory shooting game such as Angry Birds

**Initial prototype level**

I began the project by creating a level with the exact same design as the customer had sketched out. I did this as to have a basic prototype running and have something to build on.

The pinballs, when hit by the ball are destroyed**.** I added a Particle System effect for when the pinballs get destroyed.

I added two more balls from the prefab I made for the first ball and put them inactive until the previous ball got fired.

**Fleshing out the Level**

Once I had the prototype up and running, I worked on a win condition. In the design spec from the customer, its outlines a point based system for each level to be won.

I added in a points-based system where everytime a pin has been destroyed, the points score is increased by a certain amount (10 per pin for now but will add other objects to destroy for varying amounts of points)

Once a certain amount of points is collected by the user, it goes to an end-of-level splash screen. From this splash screen, I will add a button to load into the next level (once I have the next level made)

As the design spec I received from the customer was fairly bare-bones, I contacted him and set up a meeting. During this, I discussed what he would view as an acceptable win condition for each level (how many points collected or how many pins destroyed)

I also added in a settings menu button (For now, this button just goes to the main menu settings page but hope to design an in-game settings menu). I also added a skip menu button, and have been trying to get this to appear after a certain amount of failed levels but have been unable to do this so far.

**Adding in more Obstacles and Destroyable Objects**

Now that I was happy with the general layout of the level, I wanted to add some more objects and obstacles to the level to make them more engaging for the player.

I contacted the customer for the game and discussed additional objects to destroy for different amounts of points and we decided on a gold coin and a golden pin. The golden pin would be worth the highest points, with the gold coin worth the second highest.

We also discussed obstacles and how there should be a few different obstacles with different functions. We agreed on one that cannot be destroyed or moved, one that can be moved and another that can be broken and destroyed.

**Creating more levels**

At this stage I was happy with my initial level. There was a varying amount of obstacles and objects. It was now time to create more levels.

As per the design document I received from the customer, there should be three levels for the game.

I designed out two more levels and tried to make them become increasingly difficult. To add more to the games difficulty progression, I also made it so that the higher the level, the more points the player needs to score to progress.

I also added a splash screen for the end of each level that goes onto the next. If it is the final level, I will add a button that returns to the main menu (Main menu not created yet so will have to come back to this)

**Creating the Splash Screen and main menu system**

Now that the in-game levels are mostly complete, I concentrated on creating a splash screen and main menu system. The splash screen is fairly basic with the game title and a few images along with a “Click Here” button that goes onto the main menu.

The main menu also has the game title and a few images on it along with a button that starts the game on level one and a settings button that goes into a settings menu.

The settings menu has a return to main menu button, a difficulty settings button (difficulty settings not yet implemented) and audio settings (audio settings not yet implemented)