Market Research

This covers the market research and competitor analysis. It must demonstrate that there is a viable market and that you can devise a plan to be at the competition in that market for sales. It should include the sections listed below.

Target market

The market to which you are planning to sell the product or service. Include the size of each market segment, the rate of change (growing, shrinking), and characteristics of potential customers.

- Our game can be categorize as an arcade game. Also, our game is emphasis on sensory and motoric skills such as reaction, speed and accuracy.
- Anyone who have Iphone or tablet, since our game only available on Apple store. ~70
 million potential users
- Age from 7 to 30 would be our biggest growth
- Age from 30 and above would be our lowest growth

Profile of Competitors

Analysis of the competitors in this market. What are the competing products and services? What kinds of companies are in that market? What are the advantages and disadvantages of the current competitor product offerings?

Most of our competitors most likely will be other arcade game that is currently on the apps store. The most popular arches games in the apps stores right now are Candy crush Saga, Subway Surfers, Temple Run, Fruit Ninja, Despicable Me: Minions Rush, etc. One thing that these five games similar to our game is all games emphasis on players sensors. Since our game is endless run type of game, most of our competitor will be Subway Surfers, Temple Run,and Despicable Me: Minions Rush. Not every endless run games can play on any devices. For Subway Surfers, players need to have the latest version of the iOS. The objective of the games is for the players to continues running endlessly. While running, players have to protect himself all the time and also collect as many items as possible. The games have to be played on a mobile platform with touch screen feature. As of right now, our competitors have advantages on us over, gameplay upgrade, visual and graphic. The also have significantly larger budgets, time and developers to work on the game.

Competitive Advantage

What are the benefits to customers of your products over the competitors listed above? This could include unique features, price, new technologies, better value, or even greater compatibility with other services.

Our competitors have not allow players to customize their character. With our game players can customize their character with latest and popular items in this year. For example, instead of your player's character running on its feet, player's character is riding a hoverboard or a jetpack. For our game we want the players to connect to the game and their character in the game. Greater compatibility may also be a benefit - we aim to be compatible with as many versions of iOS as possible.

Create a single image (or slide) detailing the market analysis. Infographics are graphic representations of information intended to visually present information that can be quickly and clearly understood. They take advantage of the enhanced capabilities of the human visual system to see patterns and trends.

Findings of the Retrospective

Our first iteration of our project went fairly well, but could have been more successful. We initially had some problems with uploading our project to github, because our project is Unity-based. Once we figured that out, it became much smoother for different people to work on different parts of our game and seamlessly integrate all of them. We had some communication problems, but our slack channel is really helpful, and we use it almost daily. Another problem we've had is that it seems to be really difficult to work on huge chunks of our project at a time, because everyone's schedules of work from other classes is so different, so we are going to find one day in the next sprint cycle where we can work for more than a few hours at a time and hopefully knock a big chunk of our coding. Some things that worked really well in our first iteration include, pair programming the base of the game and assigning different people to code and debug different parts of the game.

Updated/Additional Requirements

As the project moves forward, new user, functional, and non-functional requirements should come into focus. Add these to the Project management tool.

USER REQUIREMENTS

- 1. The user shall be entertained by a side-scrolling game that tracks distance run, bananas collected, and total score.
- 2. The user shall tap the screen to jump and avoid obstacles.

- 3. The user shall enter a unique username before playing.
- 4. The user shall be able to view their top score on the home screen.
- 5. The user shall be able to view the global top 100 scores, top 100 bananas collected, and top 100 distances run..

FUNCTIONAL REQUIREMENTS

- 1.1. The game shall consist of a gorilla moving with the screen at a constant rate.
- 1.2. Bananas shall appear at random places within the game.
- 2.1. Obstacles shall appear at random places within the game.
- 2.2. The character shall be controllable in the vertical direction.
- 3.1. The username shall be the unique key that identifies each user.
- 4.1. The game shall store each user's top score on that user's local machine.
- 5.1. The software shall include a database stored on a web server that consists of a top 100 scores table, a top 100 bananas collected table, and a top 100 distances run table.

NON-FUNCTIONAL REQUIREMENTS

- 1.1.1. The gorilla character shall be loaded into Unity as a sprite.
- 1.1.2. The total score shall be calculated upon completion of each run.
- 1.1.3. The total score shall be a linear combination of distance run and bananas collected.
- 1.2.1. The number of bananas collected shall be tracked throughout each run.
- 2.1.1. The game shall end when the character collides with an obstacle.
- 2.2.1. Anu upward force shall be imparted upon the character when the screen is tapped.
- 3.1.1. There shall be a user input box on the homescreen that takes in the username.
- 3.1.2. Every username shall be stored in a database on the web server.
- 5.1.1. The game shall compare the user's score from each run to each of the top 100 tables on the server.
- 5.1.2. The database shall be updated accordingly upon any user completing a run that puts them in the top 100 of any of the three categories.
 - 5.1.3. The three tables shall be related by username.

Create a two (2) week Sprint / Waterfall cycle. Create a document describing the results from the planning (snapshot of the PM tool charts).