Design Documents

The design of my term project is very similar to the original iPhone app, Doodle Jump. However, instead of using the iPhone’s gyroscope in order to move the player, my game simply incorporates the arrow keys and spacebar for shooting and “WASD” keys for player two in multiplayer (“a” and “d” keys to move and “s” key to shoot). In order to code this game, I had to figure out how to create a method for side scrolling but upwards instead and only if the player is able to reach higher (the game is not a constant scroller). This proved to be difficult. The next challenge was to determine how to spawn platforms. I chose to incorporate random.randint() to spawn the platforms randomly and gradually increased the distance between each platform by incorporating the current score of the game to determine how far apart the platforms should be. As for the aesthetic design, I found images of the game’s features online and used them in my game, such as the player, the platforms, the monster, and others. After the TP user-study-thon, I incorporated new features such as the ability to shoot monsters (users demanded this feature!). Users also felt the need for monsters to disappear after jumping on top of them. They also wanted to display the winner of the game in the game over screen after a multiplayer round.

Competitive Analysis

Doodle Jump the iPhone app is obviously the exact competitor or similar existing product. Of course, there are many features in the original Doodle Jump iPhone app. Lima Sky, the creators of the iPhone app, have also released online versions that are playable in a browser which has almost identical UI/UX except the player is controlled via the LEFT and RIGHT arrow keys. Other iterations of the game exist online but the gameplay does not differ much as the game is not very complex. However, in some of the versions, the player jumps too frequently which makes gameplay less enjoyable. I prefer the iPhone app version in which the player jumps higher and stays in the air for longer.