RATIONALE

Canons is a tower defense game in which players place turrets along a predefined path which shoot at enemies to prevent them from reaching the end of the path. The creation of *Canons* was centered around one development question: "**Within a closed system, with set game mechanics, what factors can be introduced to ensure player-engagement over a long period of time**".

Some of the most popular games on App Stores today including Candy Crush, Jetpack Joyride and Clash of Clans, all have one thing in common; they manage to bring players back day after day to play the same game with the same mechanics. The development of *Canons* was focused around exploring what factors contribute to this player engagement over time, and how these factors can be incorporated into the games we develop.

The development process was an iterative one that included playtesting at various points and receiving feedback from players at these points. The first iteration of the game to be developed was a protype that only featured the core mechanics and functionality. On completion, playtesters were asked the question "Would you play this game again?" if they answered no they were asked the follow up question "What could be changed in order to motivate you to play it again". After the first round of playtests the primary feedback that was received is that the game had to be more visually stimulating. Players explained that in order to return to a game numerous times, it has to be aesthetic looking and has to be visually engaging.

After the first round of playtesting numerous changes were made to the game as a result of the given feedback, this included the incorporation of particle effects, animations and the ability to move the camera around so it was not stationary in one position the entire game. Hereafter, a second round of playtesting was conducted and more feedback was acquired. This time, when asked the same questions as before, numerous players still said they wouldn't play the game again because after a while it's repetitive-nature became quite boring. At this stage, the game only had one turret players could purchase and place, and one type of enemy that would move along the predefined path, so it was clear the missing factor was variety. At this point two new types of enemies, with different abilities were introduced as well as a second turret.

A new set of play testers was incorporated during the third round of playtests so that their feedback wouldn't be influenced by the previous iterations of the game. After playing, their feedback was mostly positive but once the investigation was explained to them, a number of them said that in order to bring players back over a long period of time, there would have to be some sort of progression in the game, either through multiple levels or through a highest score for most number of waves survived. As this game is only a prototype, it features only one level but if it were to be expanded into a fully developed game, a multi-level approach would be adopted with levels being procedurally generated.

Looking at all the feedback that was received, it is evident that in order for players to establish a long term relationship with a game in which they return to play it often the game must be visually stimulating, must include a large variety of elements and has to have a system of progression in which players are able to move from one level to the next. *Canons* incorporates several of these factors to create a game that, with a few future improvements, would engage players for a long period of time.