SoundBullet: Testing

Self testing

Most of the testing was performed by myself during the implementation phase. Each time I added a new feature, I would test it by playing the game and trying out the feature. Though this verified individual features, such as the dual-guns upgrade, I rarely played the full game through due to the time it takes for each stage. As such, game-wide properties, such as how suitable the career difficulty is throughout the game, were largely ignored until the group testing sessions.

Throughout self testing I became quite good at playing the attack-planet mode, and I found that it was far too easy. I increased the difficulty accordingly so as to make the game more challenging However, in the group testing sessions it became clear that getting started in the game was too difficult. New players should ease into the game with an easier difficulty setting, and the difficulty should steadily increase over the course of the game.
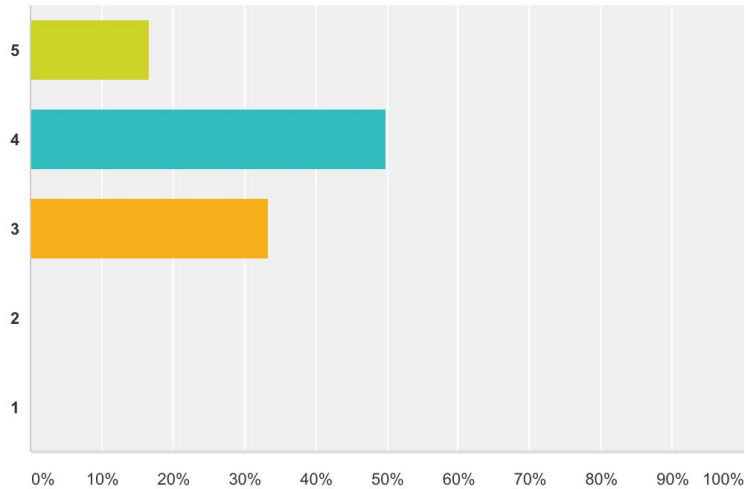
Group testing

My testing group, members: 120008200 (jr79 - myself), 120022239 (tg33), 120006063 (ajw28) met on a few occasions during week 12 to test each other's games. These testing sessions provided invaluable feedback on my game, and helped point out problems which I had overlooked.

Before group testing commenced, I created a web based survey in SurveyMonkey for my groupmates to complete (https://www.surveymonkey.co.uk/r/NFNY7B7). This survey consisted of six multiple choice questions and three comments boxes. This online tool allowed me to easily collect and process responses from both my group, and volunteers. The results of this survey are described question by question:
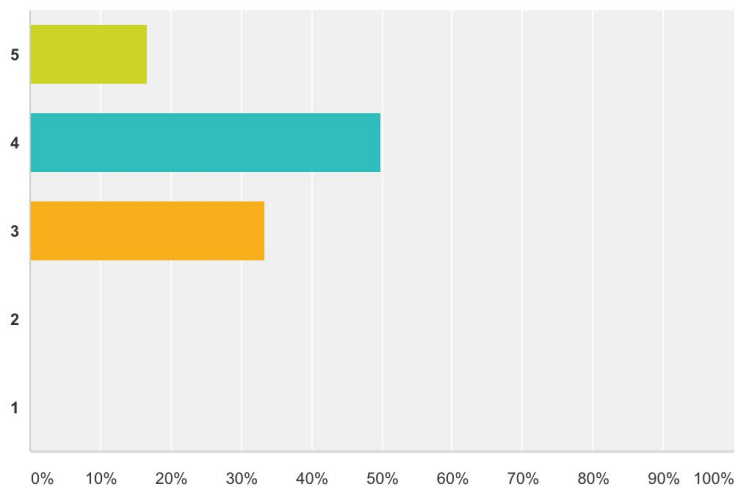
Q1

When asked "How responsive were the spaceship controls", testers indicated that the responsiveness of the spaceship was good, with the majority of testers giving it a rating of four out of five:
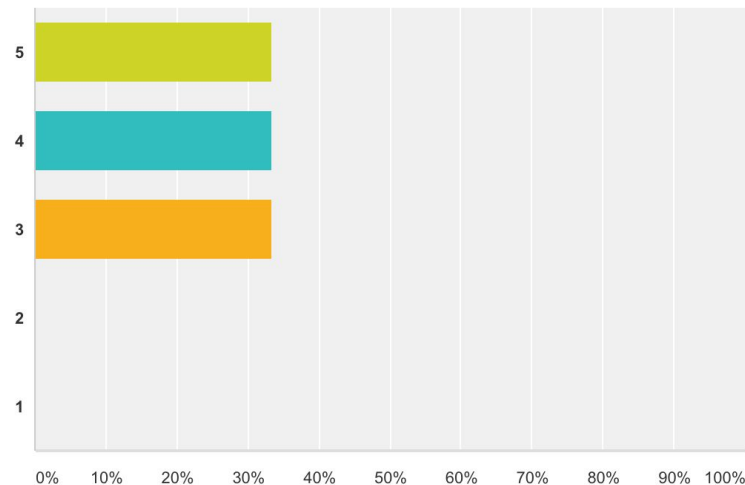
Q2

"How was the spaceship movement speed?" also had good results, indicating that the players were generally happy with the movement of the spaceship:

Q3

Question three: "How sensible are the key bindings? (w,s,a,d, spacebar)" returned mixed results, with some testers indicating a preference for the arrow keys over "w,s,a,d" keys:
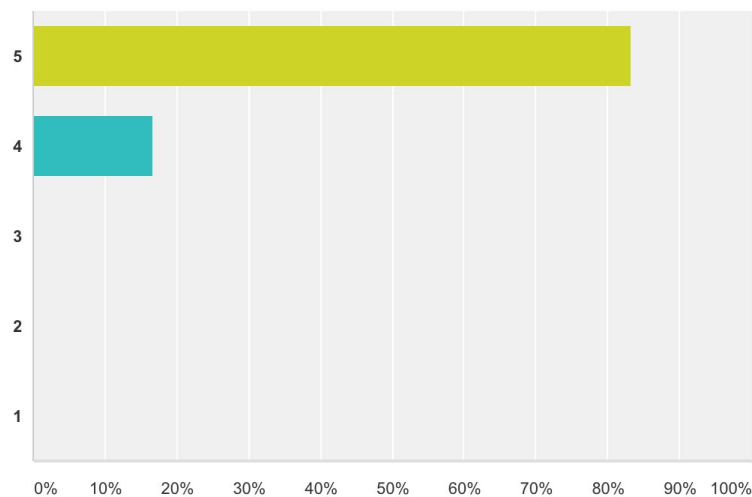
Q4

When asked what they would improve about the spaceship, the only comment from the testers was about the limited number of upgrades at the workshop. As mentioned in the implementation essay, my plan was to have more upgrades but these were reduced due to time limitations.
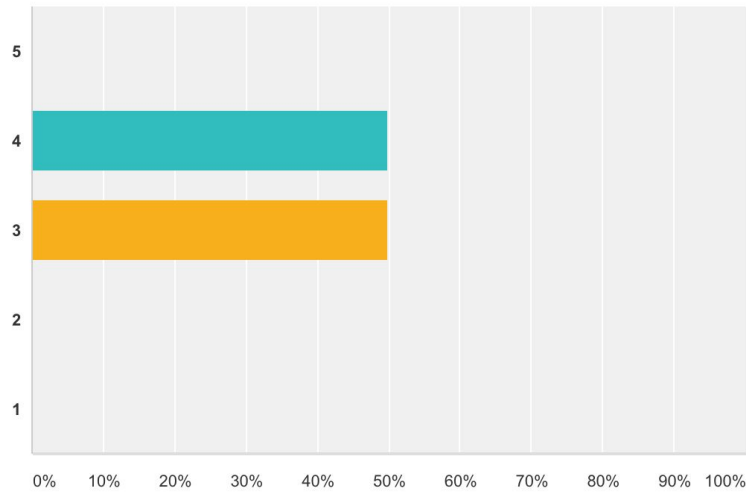
Q5

Question five asked "How difficult was early gameplay? 5-Too difficult, 1-Too easy"

This was possibly one of the most useful results from the group testing sessions. Almost all of the testers indicated that the game difficulty was too high at the beginning of the game, making it difficult to get started. . In response to this, I lowered the maximum fire rate of enemy ships and decreased their starting health. Feedback (discussed later) identified that a full song length is too long a time to spend on planet-attack mode. This was shortened which also helps to lower the difficulty of early gameplay.
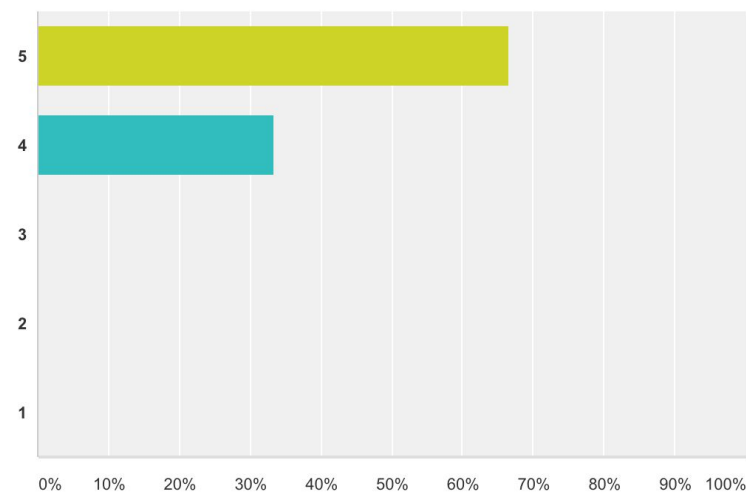
Q6

Question six asked how difficult the later gameplay was. The results for this question were much better with most people giving a rating of three to four:

Q7

Question seven asked testers to rate the game visuals. The results for this question were very positive, indicating that the testers enjoyed the game's visuals.

Q8/9

Questions eight and nine were open ended questions, asking if users encountered any problems whilst playing the game, or if they had comments or suggestions of how to improve the game experience.

One of the problems that the testing group identified was that the full length of a song (typically over four minutes) is a long time to spend in planet-attack mode. Players prefer a shorter time with a higher difficulty in planet-attack mode. It was also pointed out that some songs have a long introduction with a low amplitude, resulting in enemies which do not fire

missiles at the start of the song. In response to this, I implemented a function which clips the beginning of longer songs so that time on planets is never too long, and players are not waiting for long introductions before gameplay begins.

One of the team members added a comment that it was difficult to identify which planet was the home planet in the universe. The home planet had a green ring around it similar to other planets in the empire, making it difficult to distinguish. In response to this, I changed the colour of the ring around the home planet to a light blue, indicating that this planet is special. When a player hovers his/her pointer over the home planet, the info box explains that this is the location of the player's workshop and to travel there for ship upgrades and repair.