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|  | |  | | | |
| Project: | | Lost in space | | | |
| Team No.: | | 5 | | | |
| Class: | | CSE 3310; Spring 2018 | | | |
| Module: | | Test Plan | | | |
| Deliverable: | | Test Plan Document | | | |
| **Version:** | | | **[1.0]** | **Date:** | **[04/06/2018]** |

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**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Version number*** | ***Date*** | ***Originator*** | ***Reason for change*** | ***High level description of changes*** |
| 1.0 | 04/06/2018 | Andrew Hernandez,  Umair Hafeez,  Deep Patel,  Shreyash Shrivastava | Initial draft |  |
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# 1. Introduction and Plan of Approach

Project overview:

The project that team 5 is building and developing is a still-screen unity based shooter game based in space. The primary goal of the user is to take control of the user ship and protect it from getting attacked by the incoming objects such as asteroids and bullets from the incoming enemy ships.

# This mobile-based android application will have very basic controls, which will be a slider to control the position of the user ship and touch to fire the bullets at the incoming threats. This project will be completed by early May 2018 with the requirements, processes and infrastructures, and the assumptions and constraints as highlighted below in the document.

List components that will be covered in your Test Plan:

* AI
* Save
* Ships
* Canvas
* Controls
* Debris
* Sound
* Score

Include any assumptions and anomalies that you have in your Test Plan (e.g. missing components):

# 2. Test Cases: “AI”

**Project Name:** Lost in space

**Test Case Name:** AI

**Test Case Id**: CSE3310/Spring 2018/Team5/AI

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | User doesn’t attempt to kill the AI ship. | AI should continue to attack user until either the user’s or AI ship is destroyed. | Pass |
| TC2 | TaUser ship is destroyed by AI. | “Game over” screen should appear, game will end and the AI will be deactivated. | Pass |
| TC3 | AI ship is destroyed by user ship. | AI entity will be deactivated and AI ship will be destroyed. AI will be reactivated at set time with a new ship. | Pass |
| TC4 | AI ship is hit but still has hitpoints left over. | AI should act as normal and continue to fight user’s ship. | Fail AI ship does not have health |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 3. Test Cases: “Save”

**Project Name:** Lost in space

**Test Case Name:** Save

**Test Case Id**: CSE3310/Spring 2018/Team5/Save

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | De The game ends with a score lower than the high score. | DeScore displayed remains the previous highest score. Score of current game is also shown. | Pass |
| TC2 | The game ends with a score higher than the high score. | DeScore displayed as highest is changed to new high score. Score of the game is also shown. | Pass |
| TC3 | The game exits before ending. | … The score displayed is unchanged from the previous high score. Score of exited game is lost. | Pass |
|  |  |  |  |

# 4. Test Cases: “Ships”

**Project Name:** Lost in space

**Test Case Name:** Ships

**Test Case Id**: CSE3310/Spring 2018/Team5/Ships

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | De AI is left alive for the duration of the game. | De The Ai should track the player, and get better as time passes. However, a second AI should not spawn. | Fail difficulty does not scale. |
| TC2 | DeAI is killed and time passes. | Another AI should spawn and fight the player. | Pass |
|  |  | … |  |
|  |  |  |  |

# 5. Test Cases: “Canvas”

**Project Name:** Lost in space

**Test Case Name:** Canvas

**Test Case Id**: CSE3310/Spring 2018/Team5/Canvas

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | De The first Canvas gameobject is off aspect ratio | DeThe canvas should not distort when changing screen orientation. | Pass |
| TC2 | DeThe play screen gameobject does not have correct layering | DeThe canvas layering should not be above any of the other game objects. | Pass |
| …. | … | … |  |
|  |  |  |  |

# 6. Test Cases: “Controls”

**Project Name:** Lost in space

**Test Case Name:** Controls

**Test Case Id**: CSE3310/Spring 2018/Team5/Controls

## 

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Re Moving controls are not working correctly | DeThe move controls should send correct signals to the game, and hence move the gameobject appropriately. | Pass |
| TC2 | DeThe push is not able to fire the lazer | DeThe push button should be able to fire a laser on the screen. The laser object should travel through the entire screen before disappearing. | Pass |
|  | … | … |  |
|  |  |  |  |

# 7. Test Cases: “Debris”

**Project Name:** Lost in space

**Test Case Name:** Debris

**Test Case Id**: CSE3310/Spring 2018/Team5/Debris

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | DeThe debris does not collide with the player | DeThe debris should collide with the player and create an impact. The impact should lower player health appropriately. | Pass |
| TC2 | DeThe debris causes less damage to the player as planned | DeThe player health should be impacted by the debris hit. The damage caused should be in proportion to the current score. | Fail  Difficulty does not scale |
| TC3 | The debris does not stop in the presence of the AI ship | … The debris should stop the AI ship. The AI ship and debris should not be present at the same time. | Fail Changed in final build. Both can occur. |
| TC4 | The debris speed is not a function of the score attained | The rate of debris generation and the travel speed on the screen should be a function of the speed. | Fail  Difficulty does not scale |

# 8. Test Cases: “Sound”

**Project Name:** Lost in Space

**Test Case Name:** Sound

**Test Case Id**: CSE3310/Spring 2018/Team5/Sound

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | DeSound off | DeAll in game and menu audio, including music, and sound effects is muted | Fail sound option is bugged |
| TC2 | DeSound on | DeAll in game and menu audio is turned on | Fail sound option is bugged |
|  |  | … |  |
|  |  |  |  |

# 9. Test Cases: “Score”

**Project Name:** Lost in Space

**Test Case Name:** Score

**Test Case Id**: CSE3310/Spring 2018/Team5/Score

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | DeHealth is greater than 0 | De+1 is added to score per second | Pass. |
| TC2 | DeHealth is equal to 0 | DeGame ends, and if the ending score surpasses the previous highest score, then the new score is set as the highest score | Pass |
|  |  | … |  |
|  |  |  |  |