Steamjammer Test Plan

Steamjammer

Steamjammer is a role playing card game where you must select your crew, journey and ship. After selecting these you will have to manage the ship during the journey and will face many challenges along the way which, without your help, will destroy your ship or kill your crew. The Game is currently in Alpha testing stage. (See **Appendix 1**)

Forged Studios Ltd

Forged Studios is a child company of Microsoft Corporation which is based in Stratford, London, England. Forged Studios owns a 1000 square meter office situated 10 minutes from Stratford Rail Station. There are 5 full time staff employed; John 1, John 2, John 3, John 4 and John 5. The budget for this project has been set at $6,000,000 giving enough money to potentially employ more staff or acquire more space to work.

Classification Scheme & Testing Criteria

To define what bugs have the highest priority we must classify them. The factors that are taken into account are; Severity (which can be classified as Severe, Major, Moderate, Minor), Priority (classified by Critical, High, Medium, Low), Type (Audio, Visual, Gameplay etc.) and the distance along the bug lifecycle. The table below is used to help developers decide the order they should work on bugs in.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Severity/Priority | Low | Medium | High | Critical |
| Minor |  |  |  |  |
| Moderate |  |  |  |  |
| Major |  |  |  |  |
| Severe |  |  |  |  |

Black - This classification is not available Yellow - Will be fairly obvious in gameplay so should be fixed before release

Green- Ideally Fixed before release Red - Will stop gameplay completely and Game will not be released until fixed

As mentioned above the bug has a lifecycle that it goes through when it is found by a tester. It goes through many status' including; 'Open', which will be given as soon as it is found, 'Assigned' given when it is picked up or given to a developer, when the developed has fixed the problem it will be given the status of 'Resolved'. After it has been resolved it must be verified, the game will go back to the tester and if the bug can't be reproduced then it will give the status of 'Verified'.

This is the standard line of status; but a bug may also be given the status of 'Closed' if the developer is happy with the progress they have made with it, even if it is not completely fixed. 'Duplicate' will be given if the bug has already been flagged / fixed 'Not a Bug' will be given if the game is working as intended in this situation and 'Will not fix' if the bug is so minor that it will not affect gameplay too severely.

Features to be & not to be tested

As the game is currently in Alpha testing the game must be thoroughly tested on all the core mechanics and key elements before it reaches Beta stage where the 'nitty-gritty' can be improved, as this is the case the main bulk of testing will concentrate on the gameplay so the testers and developers will have a decent idea about what the product will perform and look[[1]](#footnote-1), making sure that It will match the design documentation. Some examples of gameplay to be tested in Steamjammer will be; card selection, player movement, character movement/abilities, enemy/problems and mission difficulty.

Card selection will be tested because it is the first screen the user is face with and also because it is important that the user selects the right characters for the right roles, it will be important that the user can only put the correct amount of cards on the ship and the right type of card on each role.

Player movement will be tested because if the player can't move the screen then they will be stuck looking at one section of the ship and will not be able to move characters to certain rooms so if something is wrong in that room the mission could be failed, the testing will make sure that the player can move all around the map and will make sure it can see correctly into every room.

Character movement and its abilities will be tested for similar reasons to player movement, if the player can't get characters into certain rooms it may destroy the ship in some way and end the mission, testing will ensure that every character can get into every room when the doors are open and will also ensure that the character will fulfill its duties in the room it can.

Testing of the problems the player may encounter will also be important, this will cover any attacks on the ship or anything that is broken within the ship. This will make sure that they occur at the right time & frequency and will cross with Character testing as it will make sure they can be removed or resolved, this will also test that all the doors can be locked or unlocked and perform as they should in this state.

There will also be testing of mission difficulty, this is important as if the first level is impossibly difficult there will not be many people who will be inclined to play the game again. The tests will make sure that the levels are increasingly difficult as you progress through the game and any enemies faced will not kill all of your crew in the first attack.

Along with the testing of gameplay there will be basic testing of graphics and compatibility. The basic graphics testing will make sure that there are currently placeholders in the place of all graphics that will eventually be in the game, this will ensure everything is programmed to have a graphic in the game when they have been designed. As the game will be released on various platforms it must be tested on all intended platforms e.g. IOS, android and PC.

As previously stated the game is currently in alpha testing so features that will be tested will not include; audio & visual elements, level design and performance (to an extent). I have decided to not test audio & visual elements because they can easily be inserted into the game when designed as they will have placeholders (placeholder testing stated above) and if some of them are missed off after beta testing they will not affect gameplay greatly.

Level design will not be specifically tested as the key elements of the level design have been tested in other ways, there will be no testing of length of levels, where the enemy will attack, which crew members will become zombies, etc. This is because I think it is more important that they happen in any order and work correctly before they are tweaked for enjoyment, this is a similar reason why I am not extensively testing the performance of the game at this stage, as I think it is important that all the features are implemented in the game then if the game is slow it can fixed in beta testing.

Resources & Responsibilities

With the testing being as extensive and detailed as it is the hardware required will be of high quality, with John 1 -5 all receiving high end computers and tablets to carry out the testing. As well as having the John's employed by the company to test the game, Forged Studios will also be using agencies to hire 3 more members of staff that will be in control of hiring and firing, assigning bugs to developers and an employee to answer questions regarding the game design.

The John's will all be given a gameplay element to test as there is five key elements to be tested and 5 Johns. As there a few other elements to be tested there will be 2 more people to be employed to carry out the further tasks, but as these are shorter tasks they will then move onto becoming deputies to the Johns and will assist them if they are in need of any help. All of these extra employees will also receive high end computers to assist the development of the game.

Schedule

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tester/ Weeks | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| John 1 | Card Selection |  |  |  |  |  |  |  |  |
| John 2 | Player Movement |  |  |  |  |  |  |  |  |
| John 3 | Character Movement |  |  |  |  |  |  |  |  |
| John 4 | Enemies |  |  |  |  |  |  |  |  |
| John 5 | Level Difficulty |  |  |  |  |  |  |  |  |
| Extra 1 | Compatiblity |  |  |  |  |  |  |  |  |
| Extra 2 | Basic Graphics |  |  |  |  |  |  |  |  |

**Purple = Assisting any tasks that are yet to be completed.**

Risks

As with any project there are a few risks involved with the development of this software, one example of this is poor productivity from the employees, as there has been given a long schedule for the game to be tested the extra employee's may spend longer on the simpler tasks meaning they will not be able to assist with the original employee's and the tasks could overrun the schedule. To prevent this from happening ensure that the right people are employed and the right tests are assigned to the right people.

Another risk that is involved with this project is 'Project Inflation'[[2]](#footnote-2). As the game develops more and more tasks may become apparent that weren't accounted for when the schedule was designed so the project may overrun the schedule, or if a major task is discovered the testing and schedule will have to be re-designed and restarted

**Appendix 1**

Steamjammer has many characters that you can use for each position, each with different skill levels for each different task, the ability for this will increase if you use them, all with different potential. This means that you can use a certain character that may not be the best at a certain task but may outgrow the current best. So card selection will be an important part of the game. This is also key when the descriptions of the characters comes through as certain characters will be less willing to carry out tasks if they are higher class, this means they will have less energy and have to rest more.

You will receive coins for completing missions and the condition of the ship will affect the amount of profit you receive from the haul as you must fix your ship completely before you can start another task. Coins will also be collected from automatically picking up salvage from the journey. Another way coins are collected is from 'Pirate Ships' that you may encounter along the way, as if you defeat them you will receive a bounty payment.

1. Alpha vs Beta Testing (2011) - Luke Freiler - '<http://www.centercode.com/blog/2011/01/alpha-vs-beta-testing/>' - Accessed 06/08/2015 [↑](#footnote-ref-1)
2. The Top Five Project Risks - *Mike Griffiths* - '<http://www.projectsmart.co.uk/top-five-software-project-risks.php>' - *Accessed 08/04/2015* [↑](#footnote-ref-2)