Change Report

Formal Approaches to Change Management

In order to reduce the time learning new tools and implementation techniques, the team limited their search to projects using LibGDX and not using Box2D. As no projects in our cohort used JMonkey, only two projects were not looked at due to them relying on Box2D for their lighting or collision detection.

We then looked at each project that was remaining, testing their game and looking through their documentation and testing reports to see what requirements the group had completed, or not completed and if their architecture was somewhat sensible. We additionally rejected any games which had not already implemented zombies at this stage, not wanting to waste time on completing prior milestones.

The team ultimately decided on adopting Geese Lightning's project based on the above observations. After this, the team was split into three groups of two people: one to make a list of implementation tasks using the requirements and current implementation, one to make a list of changes required for the documentation and by the documentation, and the last to make a list of the additional graphics needed to complete the project. The following team members were assigned to each group:

Group 1 - Merry Boyes & Matthew Hibbert
Group 2 - Eleanor Bracegirdle & Iszy Kilkelly
Group 3 - Jacob Adams & Emma Phillips

The individual groups then implemented the changes that had been documented. The small groups allowed members to work closely with each other, providing feedback on work before it is reviewed fully by the rest of the team. This enabled changes to be implemented quickly and effectively.

We wanted to avoid making any big changes to the core functionality of the game in order to continue Geese Lightning's work and game design. Additionally, we wanted to avoid causing any major errors through being unsure of the functionality in any way. To do this, Group 1 tried to build upon the current classes that had been implemented and continued the same style the previous team had implemented when creating new ones, as their basis was reasonably strong. This was done to maintain internal consistency in the code. The main architecture of the game was not changed to ensure large errors were avoided.

Since the inherited project is similar to our own, in that it followed the same requirements given in the brief and had an Agile Methodology, changes to the task allocation, risk management and overall planning were minimal. The timeline and context for the inherited project were identical to our own, which meant we could easily adapt our previous development methodology to suit the new assessment requirements.

Change Justification

Testing Report

The Test Leaders decided that they would completely adopt the testing style of Geese Lightning to ensure the testing method continued to match with the implementation style of the project and saving time completely rewriting the testing already completed. New tests were added to accommodate the new features to match Assessment 3 and 4. The Test Statistics section was updated for these new tests, with the justification for failed tests removed as none existed. The pictures on Page 3 were updated. The Requirement Testing Document was updated in accordance with the changes of the Requirements document.

A few grammatical errors in the document were fixed. The format of the page, mainly font size and style, was changed to ease reading for some team members. The header was adapted to include our team name, so other groups could tell whose project was being adapted by which group. These changes have not been highlighted so not to confuse the reader.

Testing Report: [Testing Report](#)
Requirement Testing: [Requirement Testing](#)
White Box: [White Box Tests](#)
Black Box: [Black Box Tests](#)

Methods and Plans

As the team were originally following an Agile approach, and the SCRUM framework, only one change was needed to the Method Selection. This was the statement of having "two to three meetings a week", which the team decided would likely not be possible with their other time commitments. This was changed to "one to two meetings a week", to ensure that there was constant development and communication without pressuring the team.

For the Tools section, the group had prior experience with the software ASANA, and extremely little with GitHub project boards. Consequently, the Work Management tool was changed to ASANA so to save time during the change in projects. Additionally, as the team had already set up and assigned tasks through ASANA, it could have caused tasks to be assigned incorrectly if a transfer was attempted, a risk which would be easily avoided through continued use of ASANA. The Graphics Production tool was changed to Paint.net due to the Graphics Designers having not experienced Gimp before and still being able to continue the graphical style of the game. The group agreed to adopt Slack as an addition to the in-person meetings, due to an increased amount of illness in the team members. ASANA, GitHub and Google Drive were all linked.

As the Gantt Chart already covered Assessment 4 and was logical and expansive, no changes were needed. The remainder of the document also did not need to be changed for Assessment 4, as the methodology did not need to be changed to deal with the Requirement changes Assessment 4 will bring.

The alternate team roles were assigned to the team members who were previously completing similar tasks, so to ease the transition to Geese Lightning's product. A few changes were made to the description of the team roles to further explain and expand their role. This fits with the Agile Approach Geese Lightning were taking, and so does not bring any problems.

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Method Selection and Planning: [Methodology](#)
Gantt Chart: [Gantt Chart](#)

Other Document Changes

Requirements

N6 was adapted from requiring an 8-bit aesthetic to requiring a pixel-art aesthetic. This was due to the fact the group decided the product was not properly following an 8-bit aesthetic to begin with; a unanimous decision was made to change this to requiring a pixel-art aesthetic, which was present and could be continued via the graphic designers.

F3 and F4 were adapted; the zombies and players were decided not to need special abilities so not to reduce the need for power-ups, and due to the player and zombie statistics acting as their abilities. The concept of basing the zombies on societies was removed, as the wide range of societies would be hard to show in 16-bits, and might reduce the zombie apocalypse situation of the game.

The brief required a Points System and specified safe areas, which had not been mentioned in any of the requirements. Therefore, F11 and F12 were added to address these Brief requirements.

Requirements: [Requirements](#)

Risk Assessment

Due to the Risk Owners being assigned to specific roles, which are assigned in the Methods document, no changes to the Risk Owners needed to be made as the assignment was logical and understandable.
The Risk Assessment had the same classification, similar risks, likelihoods and impact severity to our previous document. The Risk Owners met to discuss whether the Risk Assessment was comprehensive enough and covered the same risks as our previous document. We decided to add one additional Risk (No.18), due to the chance of "Reduction in Productivity" occurring having increased with the course's workload increasing and having experienced difficulty working on Assessment 2 prior to examinations.

Risk Assessment: [Risk Assessment & Mitigation](#)