

Project Review

Module	SEPR
Year	2019/20
Assessment	4
Team	York Fire Marshalls
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Deliverable	Project Review

Team Management and Structure

Structure

There have been changes to increase team efficiency and adapt to changing circumstances, including the risks and requirements of the project. Initially, we decided to enstate two chairpersons, one secretary, one librarian, and two report editors. [1] Through the project, we found that this structure allows us to work effectively and produce the highest quality product possible. This is reflected by the fact that we have persisted in using this structure in all assessments of this project. [1] [2] [3]

We have altered team roles through the course of the project. At the beginning of the project, we determined roles based on the result of Belbin tests. [1] While these roles worked, we found it necessary to make changes as we developed our understanding of the team and how we worked together. We reassigned several team members to more appropriate roles for their strengths. [2] Specifically, these changes meant giving Daisy the role of secretary, Fred librarian, and Sam report editor. [2] We found that changing roles reduced efficiency as it introduced confusion as people adapted to their role. After a short adaptation period, these roles proved more suitable for the team. After this point, we decided it was not necessary to make further changes to the team roles. [3]

Management

We used the team roles to assign specific tasks to each member more easily. [1] While reviewing assessment 1, we determined that we would work better together with more flexible roles. This encouraged an increase in teamwork and collaboration on the project rather than team members strictly working on their specific role. .

Our management approach included thorough planning of the project, including deadlines and times for meetings. This is evidenced by the use of Gantt charts to organise the project schedule. [1] [2] [3] We were given strict deadlines by the client, to which we added a buffer period to enable us to thoroughly test and finalise the product before submitting to the client. In practice, this meant we set personal deadlines of 3 days before the actual deadline to aim to complete the deliverable by. After completing assessment 1, we felt that this buffer period was not sufficient. We subsequently increased the buffer period to 7 days. [2] This change proved to be important as it ensured that our product was polished and complete before being presented.

As we were not able to reasonably clone the website of Mozzarella Bytes, we chose to instead link to their Assessment 3 documentation on our own website and append our documentation for Assessment 4 here. This is justified as with this setup it is clear which documents relate to which team.

Due to COVID-19, we have adapted our project to enable us to work entirely remotely. Previously our team organised weekly physical meetings, during which we explained large changes to the game to other team members. We now have to host video meetings instead. We found it difficult to communicate updates of this size without physical meetings, thus have increased the meeting frequency to every 3 days, covering smaller changes each time.

Development Methods and Tools

Methods

Our initial choice was to use an agile methodology for this project, and after significant investigation we chose to follow Scrum. We believe that this decision has been proven to be correct over the course of the project, although we have made some alterations to our implementation of Scrum.

An essential element of Scrum which permits many of its benefits is its frequent meetings to review each sprint. As mentioned in the management section of this document, we have altered the frequency of meetings to adapt to remote working due to COVID-19. We made this change as it ensured that our meetings were productive despite being only video meetings. The flexibility of this methodology allowed us to make this adaptation without having any significant negative impacts.

One benefit Scrum gave us is that it provided opportunities for the team and client to engage frequently. This enabled us to update the game according to the client's vision, especially allowing us to adapt when the client requested extra features implemented in the game. This experience justifies our decision to Scrum for the entire course of our project.

We believe that following a Scrum methodology for our project was the correct decision. When investigating different methods, we identified that Scrum is ideal for teams with a size under 10. We also identified that this method would allow us to adapt to changing requirements easily. The requirements of our project have changed significantly, so we believe that choosing this methodology has proven its worth.

Tools

We used a wide range of tools to support our project. There are some tools that we changed or began to use mid-project due to many reasons; including the changing requirements of the project and our further experience in software engineering. The tools we used for the entire project are: Messenger, Google Docs, JDK, LibGDX, Gradle. We persisted with using these tools as they fully fulfilled our intended use of them, and we found better alternatives.

One tool that we began using midway through the project is Firebase. This hosts the generated Javadoc site. We chose to begin using this after reviewing another team's project that we had recently taken over. This is because it provides useful information on how the game works to developers. This makes it easier when working on the game in the future.

We used the IntelliJ IDE at the beginning of our project, but switched to Eclipse soon after. After experiencing both IDEs, we determined that Eclipse provided a better interface for our team to create the game. Our further experience in software engineering helped in this situation as we knew which features we would like in the IDE, so could find one that suited our project more closely.

Initially, we decided to use BitBucket as the collaborative development tool of our project. The decision was made to switch to Github later in the course as it had been as it had been used by a team we took over the project from. A benefit of this is that it saved time, and allowed us to move projects again more easily as we used the same collaboration tool as other teams.

References

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