Method Selection and Planning

Team 21:

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A)

For this part of the project we used the scrum agile method as the game we are developing is a small project made by a small team. We chose to stick to this method as it allows for:

- Flexibility in the work being done as it gives the team time to develop each stage of the project and make any changes necessary to it at any time.
- Fair amounts of time spent on each stage of development in the project.

This method involved splitting the development process into "sprints" which were all around a couple of weeks long depending on which stage of the project we were working on. At the end of the current "sprint" the group would hold a meeting to discuss:

- any updates on development and if there were any issues concerning the work being completed.
- What needed to be complete during the next "sprint".
- What needed to be updated on our Gantt charts

The collaboration tools used by the team includes:

Tools	Justification	Alternatives considered
GitHub	We used GitHub as a File sharing tool and collaboration workspace to upload our code onto. This allows team members to easily access and edit each other's work.	
Discord	We used discord as a tool for remote communication and used it to hold our sprint meetings. It was effective as all members could attend and were able to share their screens.	Slack, WhatsApp.
Google Docs	We used google docs as our main writing tool so we could collaborate on certain documents.	Overleaf
PlantUML	We used it to write the code for the Gannt charts. In order to help	

	track our progress in each development stage	

B)

Our team organization approach and structure was similar to the SCRUM approach. However, the roles changed slightly more to suit the type of project and team we were working with such roles included:

- The team leader/ scrum master: who typically organized the meetings and took charge of the conversation.
- Development team which was a role taken by many of the team members which included people mainly writing the code and working on the documentation.

Developing the code for the game and working on the documentation was split equally between the team. Each deliverable had a main person working on it as well as a shadow to ensure that the main person was working on the deliverable. The shadow also helped proofread and research the topic of the deliverable. This type of approach was taken as this is a large project with many different components and not all group members can simultaneously work on a single part.

Scrum meetings were typically held twice a week (on Friday and Monday) to keep track of this process and make sure the group was working as intended.

C)

The table displays the tasks with the start and finish dates as well as the priority with 5 being the highest priority:

Task	Task start	Task end	Priority	Dependencies
Testing:	02-03-2022	03-05-2022	4	Implementation
Write a list of tests based on old requirements	02-03-2022	11-03-2022	3	
Write a list of tests based on new requirements	11-03-2022	14-03-2022	3	
Implement manual testing + report	15-03-2022	03-05-2022	4	
Implement unit testing + report	15-03-2022	03-05-2022	4	
Implementation:	18-03-2022	03-05-2022		
Decide on new code and features to add to the game.	02-03-2022	17-03-2022	4	
Code updated version of the game.	18-03-2022	03-05-2022	5	
Write report.	18-03-2022	03-05-2022	3	
Change report:	25-03-2022	03-05-2022	4	Implementation
Write requirements.	25-03-2022	02-05-2022	4	
Write architecture.	25-03-2022	02-05-2022	3	
Write method selection and planning.	25-03-2022	02-05-2022	3	
Write risk assessment and mitigation.	25-03-2022	01-04-2022	3	
Continuous integration:	09-04-2022	02-05-2022	3	Testing and implementation
Write report explaining continuous integration.	09-04-2022	02-05-2022	3	

Snapshots on the website:

https://lyrenhex.github.io/ENG1-Project-Part2/v2/snapshots

The plan evolved throughout stages of development as we initially wanted to do testing alongside coding. However, that wasn't very practical and was time consuming. Instead, we split the testing into batches after certain parts of coding were complete. Other changes we made to our plan include:

- The amount of time we thought we would need to complete certain tasks.
- Harder tasks being split into smaller simpler tasks.
- Reviewing and editing the documentation and testing based on the changes made to implementation.
- New ideas being brought up and added to the implementation.

Bibliography:

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