

UNIVERSITY OF YORK
DEPARTMENT OF COMPUTER SCIENCE

ENG1

Group 9 - Kitchen Tossups

Report - Method Selection and Planning

Group Members:

Liam Burnand

Jack Cameron

Cameron Fox

Adam Penny

Eoin O'Connor

Ben Brown

Updated Plan

a) Give an outline and justification of the team's software engineering methods, and identify any development or collaboration tools that the team has used to support the project or the team working. Justify the fitness of the selected tools with the team's software engineering methods and discuss alternatives considered. (3 marks, ≤ 2 pages).

Due to the timeline of the project, we would need more time to complete continuous cycles of development. We therefore, decided from the beginning to use a waterfall methodology. This worked well for us, as we got all of the user requirements at the very beginning, without much need for continuous feedback from the customers, allowing development to be done all at once without requiring major changes.

At the start of the project, we decided to use WhatsApp for team communication. It seemed like a good option due to its ease of access to everyone, however, we decided that it would be better for us to have an option that was accessible on computers as well. We opted for Discord, which allowed us to communicate clearly as we could make separate text channels for different areas of the project, and pin important messages such as links to websites we are using. This kept conversations relevant so that multiple people weren't talking about different parts of the project in the same channel. Discord also has a voice chat and video call option, allowing us to organise group meetings as well.

In order to collaborate with each other on the write-up of the project, we used Google Docs. This allowed everyone easy access to the important documents, such as the user requirements that we gathered at the beginning of the project. This is important because in waterfall we are creating the project with just the user requirements gathered at the start, and these must therefore be accessible easily to everyone. We also used Google Docs for our logbook, which helped us to keep track of all meetings we had, and the purposes of these meetings. It also allowed us to keep everyone up to date, as those who missed the meetings could see what was discussed and what progress was being made.

To collaborate together on code we used GitHub. GitHub allowed easy documenting of the work and meant that it was much easier for everyone to access and work on the code. It also allowed us to track versions so that if we had an issue with one of the versions, we could revert to an earlier one to help in resolving the issue or just revert to a version that did not contain the bug.

We used the PlantUML app to create diagrams for our project, such as our UML diagrams and our Entity Component Diagram. It's a simple application that is easy to understand. We also believe that PlantUML provides the most clear layout for UML diagrams.

Overall, with each app/software that we used, it was important that it was easy to learn and easy to understand, as many people would be using them for the first time, and time was limited to learn how to use them. They all worked well with a waterfall methodology, capable of working without continuous testing and updating of requirements.

b) Outline the team's approach to team organisation, and explain why the chosen approach is appropriate for both the team and the project (2 marks, ≤ 1 page).

Unlike the agile methodology required, we as a team did not have the opportunity to have frequent meetings because of the hectic school schedule, and this is one of the many reasons why waterfall was a better approach for us.

The project had well-defined requirements and a clear end goal, thus we all agreed to use a linear method of software development which follows specific steps and provides a structured process. The waterfall approach also allowed us to work on each step at a time which helped us to stay organised without getting distracted.

A Logbook that we use to keep track of our meetings and critical decisions helped us to manage the process easily. This ensures that the team is on track and that all the information is recorded and easily accessible.

Furthermore, the project was divided into parts and assigned to members to ensure everyone is participating and the development process is running smoothly since each part of the assessment has a responsible person.

Overall, the chosen approach range of tools to support communication, collaboration, organisation, and project management, which helped to ensure that the game was developed efficiently and effectively.

c) Give a systematic plan for the project. Your plan should lay out the key tasks, their starting and finishing dates, as well as task priorities and dependencies. Provide weekly snapshots of the plan on your team's website and discuss how the plan evolved throughout the duration of the project (5 marks, ≤ 2 pages).

We started off with deciding our group name and logo, followed by assigning the roles in the team. Then we had to prepare a list of questions for the customer meeting then we also ended up thinking about the requirements as well. Furthermore, we created a demo of the game for the customer meeting in the third week which differentiated us from the other teams.

After the meeting, we had a general idea of the requirements and the project. After that, we listed out all the tasks of the assessment into Trello and around the last week of November we started to discuss how to divide up the tasks, then finalised assigning the tasks on 9/12/2022, and started to work on our parts individually.

Assessment 1 Tasks

Segment 1 (Nov 9 – Dec 9)

Task	Person	Status	Date	Priority
Github	All	Done	9/11/22	Medium
Prepare questions for customer meeting	All	Done	16/11/22	High
Demo of the game for customer meeting	Jack	Working on it	16/11/22	Low
Find the team logo	Sarah	Stuck	9/12/22	Low

Segment 2 (Nov 30 – Dec 10)

Task	Person	Status	Date	Priority
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Decide which platform to use for UML	All	Done	30/11/22	High
Create class diagrams	Jack, Asude, Will	Done	30/11/22	High
Discussed how much everyone should complete until the new year.	Jack	Done	10/12/22	High

Segment 3 (Dec 9 – Dec 23)

Task	Person	Status	Date	Priority
Finalised and assigned everyone's roles	All	Done	09/12/22	High
Decide on who is doing which part	Jack, Asude, Will	Done	23/12/22	High

Role	Person
Architecture	Asude and Kate
Method Selection and Planning	Asude and Will
Risk Management	Sarah and Kate
Requirements	Sarah and Matt
Implementation	Jack and Will

Segment 4 (Christmas Break) (Dec 15 – Jan 14)

Task	Person	Status	Date	Priority
Fix movement	Jack	Done	15/12/22	High
Add second chef	Jack	Done	15/12/22	Low
Fix Chef-Chef collision to avoid sliding	Jack	Done	15/12/22	Medium
Outline team's approach for software engineering methods	Will	Working on it	03/01/23	Medium
Outline the team's approach to team organisation	Asude	Working on it	20/12/22	Medium
Describe and justify the risk management process	Sarah	Working on it	21/12/22	Medium

Write a succinct introduction explaining how requirements were elicited and negotiated, and why they are presented as they are	Sarah	Working on it	23/12/22	High
Added FRs and NFRs to Requirements	Matt and Sarah	Working on it	05/01/23	High
Started at Use Case Diagram	Kate and Asude	Working on it	10/01/23	High
Improved the UML diagram	Asude and Kate	Done	30/12/22	High
Draw chef sprites	Jack	Done	23/12/22	High
Give a systematic plan for the project	Asude	Working on it	14/01/23	Medium

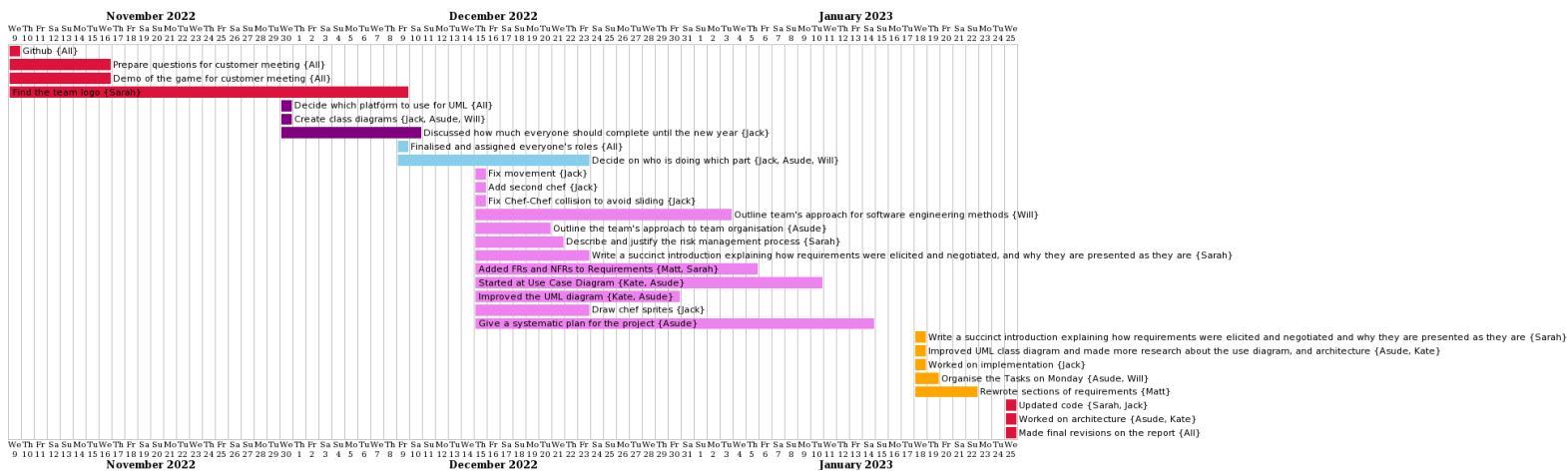
Segment 5 (Jan 18 – Jan 22)

Task	Person	Status	Date	Priority
Write a succinct introduction explaining how requirements were elicited and negotiated, and why they are presented as they are.	Sarah	Done	18/01/23	High
Improved UML class diagram and made more research about the use diagram, and architecture	Asude and Kate	Done	18/01/23	High
Worked on implementation	Jack	Working on it	18/01/23	High
Organise the Tasks on Monday (T COULD BE CAPITALISED FOR SOME UNKNOWN TASK DOCUMENT WE AREN'T AWARE	Asude and Will	Working on it	19/01/23	Medium

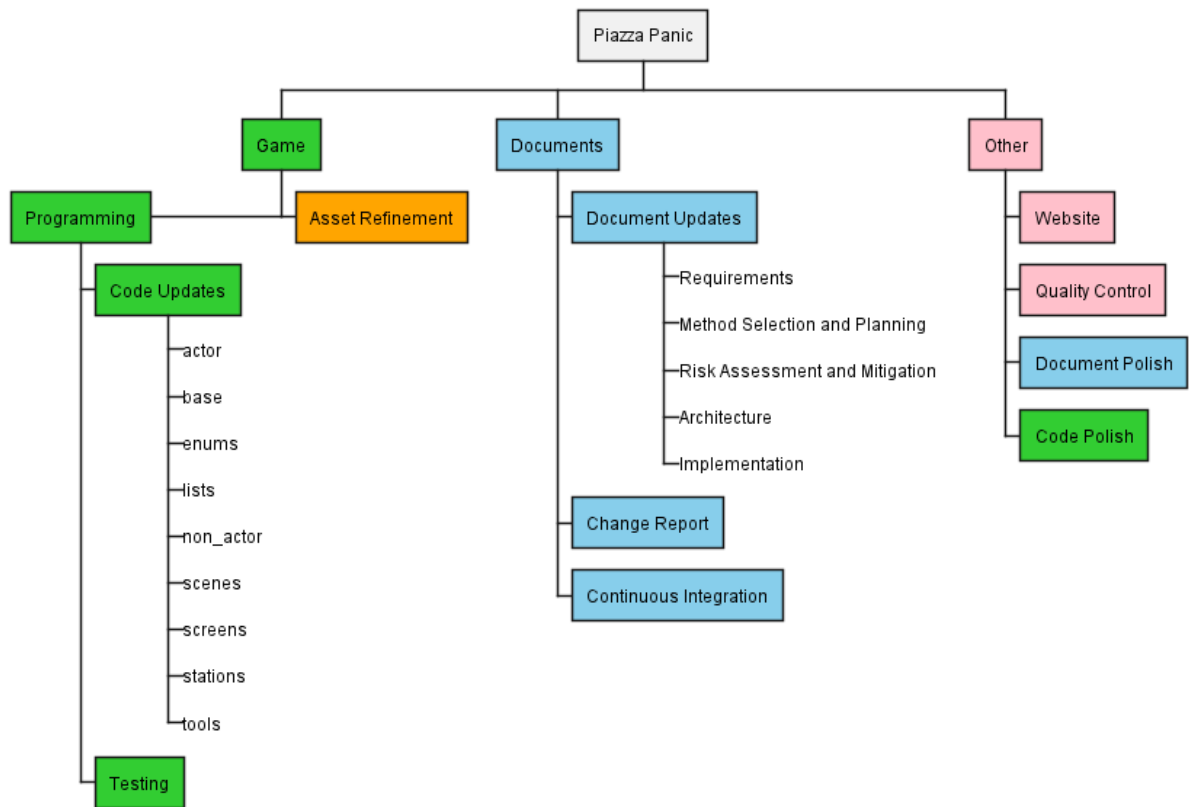
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Rewrote sections of requirements	Matt	Done	22/01/23	High

Segment 6 (Jan 25)

Task	Person	Status	Date	Priority
Updated code	Sarah and Jack	Done	25/01/23	High
Worked on architecture (spelt as is)	Asude and Kate	Done	25/01/23	High
Made final revisions on the report	All	Done	25/01/23	High



Assessment 2 Tasks



Game Tasks

Task		Person	Status	Date	Priority
Code Updates	actor	Liam, Jack	Done	25/04/23	High
	base	Liam, Jack	Done	18/04/23	Medium
	enums	Jack	Done	04/04/23	Medium
	lists	Liam	Done	29/03/23	Medium
	non_actor	Liam, Jack	Done	11/04/23	High
	scenes	Liam, Jack	Done	11/04/23	Medium
	screens	Liam, Jack	Done	25/04/23	Medium
	stations	Jack	Done	25/04/23	High
	tools	Liam	Done	18/04/23	High
Testing		Adam, Cameron	Done	02/05/23	High
Asset Refinement		Cameron	Done	02/05/23	Medium

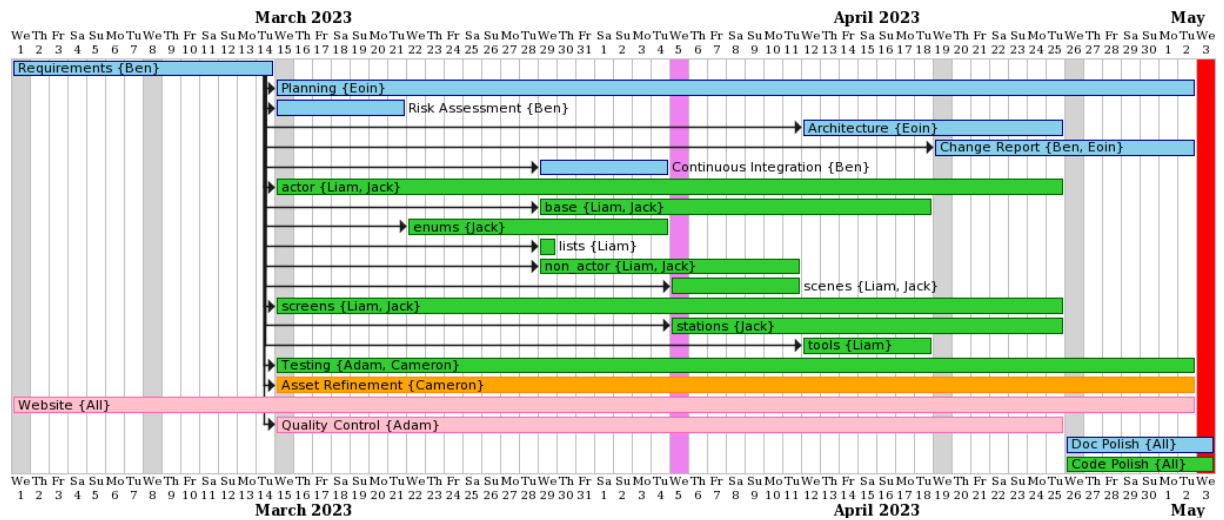
Document Tasks

Task		Person	Status	Date	Priority
Document Updates	Requirements	Ben	Done	14/03/23	Medium
	Method Selection and Planning	Eoin	Done	02/05/23	Medium
	Risk Assessment and Mitigation	Ben	Done	21/03/23	Medium
	Architecture	Eoin	Done	25/04/23	Medium
Change Report		Ben, Eoin	Done	02/05/23	High

Continuous Integration	Ben	Done	04/04/23	Low
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Other Tasks

Task	Person	Status	Date	Priority
Website	All	Done	02/05/23	Low
Quality Control	Adam	Done	25/04/23	Medium
Document Polish	All	Done	03/05/23	Low
Code Polish	All	Done	03/05/23	Low



[*Detailed weekly snapshots of the plan are on github](#)