

Original Requirements: [Req1](#)

Updated requirements: [Req2](#)

We decided that 'Requirements Elicitation and Negotiation' needed updating so added the following in order to better justify what methods we would use to elicit our requirements:

We are designing a game for the customer so it needs to be what they desire - rather than what we want in a game. Despite this we can suggest ideas to them and explain to them in meetings why we think certain gameplay choices should be made. Upon reflection, this method of requirements elicitation was an effective method - although we found more efficient results through emailing the customer due to their fast and detailed replies.

Using a survey is a fast way to acquire input from the players to see what they want in a game. Using this method allowed us to make better decisions as we had input from players - rather than just our group of 6 making a decision. Prototyping is a good method to give a visual representation of what our vision is, in order to show our ideas to the customer as well as to give us better understanding of how it would work and what extra things would be needed.

We made changes to the introduction explaining requirements were elicited and negotiated by adding more detail as to why we chose these methods as well as reflecting on how well they worked. This gives the reader a better understanding of our decision makings and how we arrived at the requirements that we included in our document.

New			
ID	Extends	Requirement	Justification
B1.8	A2.4	The system must end the game when the user doesn't have enough resources to travel.	The requirements needed this addition as it was vital to have a specified end to the game, that is not winning.
B2.4	A2.8 A4.3	The game should always display ship statistics such as health.	This was needed to improve ease of gameplay and make the game more intuitive.
Updated			
ID		Change	Justification
B1.1		Original: The game should have a short demonstration to help with first play Updated: The game should have a user manual to help with play.	This was amended to factor in the fact that we believe a user manual is a comprehensive way to learn to the play the game. We also felt this was a better option than a demonstration as it enables the user to always reference it, not just for first play.
A2.9		Movement in requirements classifications: A4.4 becomes A2.9	We decided to move A4.4 as in our feedback it was suggested it was in the wrong place. It was decided that it was a functional user requirement and placed under the Invariant subsection.

Methods and Planning:

Updated Plan: [Plan](#)

In general, our tools and methods have remained the same as our software choices turned out to be effective, using StarUML for the architecture proved helpful so we kept using this. Using GitHub continues to be exceedingly helpful in organising our schedule and monitoring version control. The use of scrum worked well for both effectively producing work and fitting our team dynamic.

One change we have made to our original plan for scrum is starting each meeting with a discussion of what needs doing. By doing this we can split the role of the scrum master slightly and reduce pressure on the scrum master as well as making the organisation process more democratic.

Having considering and attempting to use a method of a fixed number of meetings a week we found that this did not work effectively - as different modules demanded more or less of our time such as over the exam period. Because of this, we switched to a variable number of meetings per week. This avoids meetings where almost no progress has been made since the previous one due to group members having other priorities.

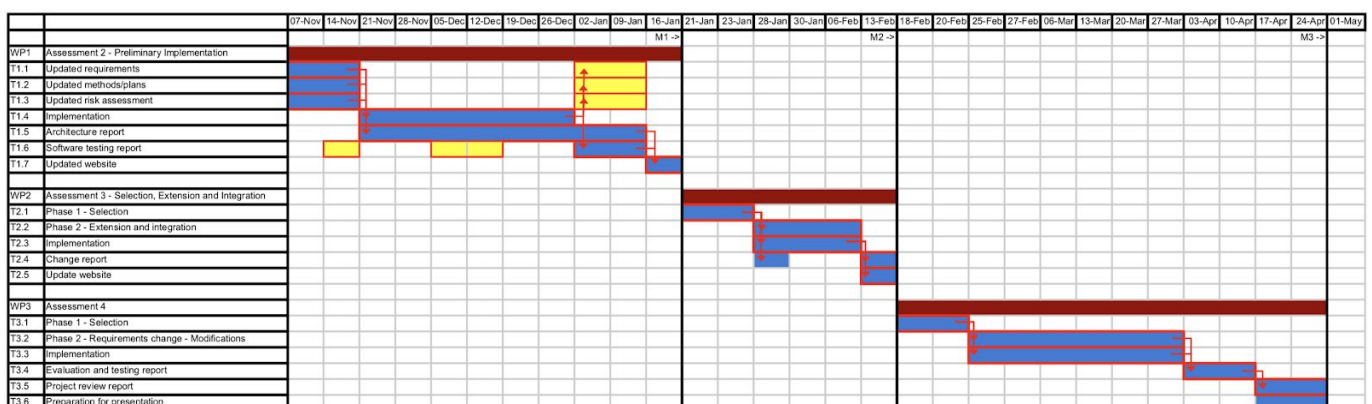
For our plan for assessment 2, we moved the updates of methods and plans, requirements, and risk assessment to after the implementation portion of the assessment has been completed. This is due to it being difficult to see what changes need to be made until we have worked on the project sufficiently. It is better to make the changes as we see fit then record them at the end.

Our plan for assessment 3 now includes dividing the existing code up into sections so each person is responsible for that segment. In assessment 2, we found that having someone who thoroughly understands a section is very important and this will be even more important when working with unfamiliar code.

The Gantt chart has been updated - as shown by the yellow boxes - to better reflect our intentions throughout the project and has been included below.

We added time to reevaluate our updates after we had implemented our code - doing this allowed us to have a better idea as to what was actually required in each section - such as in the requirements where we made multiple changes. As well as this, we also added in more time to test our code as we had not accounted for creating tests before or during the implementation of our game. This allowed us to take advantage of methods such as test driven development, which is discussed further in the testing report.

Risk Assessment:



Link to updated risk assessment: [Risk Assessment](#)

Besides editing the actual risks in the table below, we added colour coding to our 'Likeliness' and 'Severity' tables so that it was easy to establish the risks' overall importance from just a glance. To ensure risks are well managed, we allocate time at the beginning of meetings to offer a chance for members to come forward with concerns so the risks can be mitigated. If members do not feel comfortable talking openly about their concerns, the meeting chair has suggested that they can privately message so that the concerns are not revealed but the risks will be handled so they do not affect other group members. As well as this, we now understand which members' are likely to be most affected by certain risks. This allows for the schedule to be altered to avoid these occurring.

The most serious risk we faced was the lack of motivation which was prevalent over the holiday period. This was understandable and could not be avoided completely, it was reasonably simple to fix as we just amended our schedule to focus more tasks after exams, with extra meetings and group study sessions. It seems no other changes were necessary.

Reference	Risk	Justification
Edited Risks		
P3	Original: Member not doing work outside of lab Added to risk information & causes: This is at an increased risk over the holiday periods caused by family commitments and change of environment	This was extremely difficult over the holidays, caused by family commitments and change of environment therefore we felt it was important to add this to our risk assessment. The likeliness increases to a 5, as family commitments are often all consuming and do not allow for good work to be done. The severity remains same as was able to edit schedule to fit after exams. The avoidance was the same, shift workload to help combat this.
P4	Original: Member motivation failing Added to risk information & causes: Over the holidays, this could be especially prevalent caused by distance, lack of direct pressure from the group and especially added pressure of forthcoming exams	We found it particularly difficult to keep effort levels throughout the holidays consistent for all group members, this was caused by distance, lack of direct pressure from the group and especially added pressure of forthcoming exams. The likeliness increases to a 4, as it was easy to become demotivated away from the pressure of university. The severity remains same as was able to edit schedule to suit after exams. We felt the risk monitoring was sufficient to deal with this regardless of the increased likelihood.
New Risks		
P6	Members may have extensive family commitments	This was important to add as it would mean they cannot fully participate in group schedules sessions and keep up with their workload. This is caused by most people going home for the holidays.
T6	Member not having access to wifi for an extended period of time	Caused by visiting family over the holiday period in a place without wifi, needed as a member went to Spain where he did not have internet access for over two weeks.