Risk Assessment and Mitigation

Team 14 - Taken On By Team 15

Joe Wrieden

Benji Garment

Marcin Mleczko

Kingsley Edore

Abir Rizwanullah

Sal Ahmed

Preface

This document is intended to be read by the system engineers as well as the customer. The document will be added as the plan will evolve (refer to version history for this document's various iterations), and as new risks may arise due to changing circumstances.

- v0.1 Risks reviewed.
- v0.2 Risks have been revised and edited. Our risk management process added to the introduction.
- v0.3 Additional risks added.

Introduction and Justification

Risk management consists of the initial identification of potential risks, then the mitigations or avoidance strategies that can be put in place for them, as well as constant monitoring of risks by individuals to whom risks are allocated. It is essential for these measures to be put in order for risks to be quickly raised in frequent meetings (and perhaps averted) as their likelihood increases, while also having ways to deal with the risks if they do indeed occur. After we identified risks, we broke down the risks into different categories to provide readability.

We have decided that for our main risk table, six headlines give us the power to properly explain a risk, assess it, and provide a way to mitigate it.The "ID" column helps us to more easily refer back to our risks at a future date. Another column "Type" has been added. This makes the risks easier to group and assign an owner, as certain people will prefer to handle certain types of risks. The columns "Situation" and "Influence" have been merged under the name "Description". The reason for this is there is no need for two columns to explain the consequence for a risk. Just the one column saves space and improves readability. The next two columns are "Severity" and "Likelihood". Each cell in these two columns is assigned a numerical value, you are able to quickly see which risks pose the biggest threat and how likely they are to occur. This is a big advantage because it's easier to see which risks need to be focused on and looked out for. The "Mitigation" headline gives a solution to the problem. Figuring out solutions to most problems that could possibly arise before the project is started will save us a lot of time when we do encounter problems. Finally the "Owner" headline is there so that the risks are divided between the group so that workload is reduced and problems that arise or may soon arise are easily spotted and mitigated.

We decided to use a tabular structure to illustrate the risks for the whole project. We have a column of the id of the risk , the type of risk it is , a description of the risk , the severity of the risk and the likelihood of the risk occurring. The levels of risks and likelihood are broken down to three levels for likelihood and severity: low(L), moderate (M) and high (H). Severity shows the impact that a risk may have. Likelihood shows the chances of the risks occurring. There is also a Mitigation column which shows how the risk can be dealt with then there is also a solution or alternative about how to deal with it.

Tabular Presentation of Risks

Risk Table

ID	Type	Description	Severity	Likelihood	Mitigation	Owner
1	Project	Task might not be finished on time - task dependencies will be especially problematic in that we won't be able to focus on the tasks dependent upon incomplete preceding tasks	M	M	Maintain a set time for finishing the rest of the task	Abir Rizwanullah
2	People	Teammate might have extenuating circumstances some special situation - they will miss the process and cant finish the task	L	L	Our team will always set at least 2 teammates to finish one task, ensuring a higher bus factor, therefore even if one of them can't do it, another teammate might finish it on time	Sal Ahmed
3	People/ Project	A teammate is unable to understand the task question and is stuck	M	M	If a teammate doesn't feel clear about a task, they can post them into Discord or just email tutor to make sense about that task	Marcin Mleczko
4	Project	The work does not satisfy the task - affecting the group's mark in the assessment	H	M	Our team usually shares what they did at the beginning of the discussion and checks about those works, so if this situation occurs, we will know it and modify it	Abir Rizwanullah
5	People	One of the teammates never participates in tasks which will leave more work for the rest of the teammates	M	L	If it does happen, we will contact our tutor about the situation and distribute the tasks out equally.	Marcin Mleczko

6	Product	Some details of the game may not be implemented in the end, which will result in the games and requirements not being met	M	M	If it happens, we will specify the requirements missing in implementation. in part B of the Implementation document	Benji Garment
7	People	Noone in the team may have good enough programming skills to effectively implement required features	H	L	Contact stakeholder / module leader. Ask for extended deadline or have two people learn the code in a very short space of time	Joe Wrieden
8	Product	Features implemented are not to the stakeholders satisfaction	H	L	Stay in contact with stakeholders and ask for them to review current work.	Sal Ahmed
9	Technology	User's computer has an outdated or incompatible version of Java and is unable to execute the game reliably.	H	M	Ask about users specifications and ask them to update	Benji Garment
10	Project	Team may be too ambitious and add features that are not necessary, using time and resources	L	L	Delete the extra features	Joe Wrieden
11	People	A team member who is programming a certain aspect of the game stops communicating.	H	L	Contact module leader. Also, comment out the code so the other coders can carry on	Kingsley Edore
12	People	Documentation team falls behind and needs another person from the coding team to help them catch up, or Vice Versa	M	M	The two teams be in constant contact and enable for members to move between groups to balance workload	Kingsley Edore