

Risk Assessment and Mitigation

Group Name: Team 6

Group Number: 6

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a) i) Risk Format and Level of Detail

Each risk is shown in table 5.1 and has the following information:

- an ID used to refer to a specific risk
- a type (Project or Product) which categorises the risk based on whether it would affect the project or the product
- a description of what the risk is
- a likelihood rating (Low/Moderate/High) for how likely the risk is to occur
- a severity rating (Low/Moderate/High) for how severe the consequences could be
- an explanation of how the consequences of the risk will be mitigated if it occurs

The risks are ordered in the table by ID and type, with project risks coming before product risks, so a risk is easy to locate in the table if you have its ID and if you don't you can find it quicker by only looking at the section of the table for one type. We didn't think there were enough risks for several tables for each type to be necessary. We identified risks first, removing any that we thought had a sufficiently low likelihood or severity to do so, and then thought about how best to categorise them after, choosing 'project' and 'product' as we believed they all belonged to either one type or the other. Having a description means everyone can come to an agreement and common understanding of what the risk is. Both the ratings use a simple low - high scale as it's a small project and the product is a game which is non-critical so more complicated ratings are unnecessary. The information in the mitigation column can detail steps to take after a risk occurs or be used to inform what to do in case a risk occurs in the future. This information does not include specifics for some risks as this will depend on unknown factors such as when the risk will occur.

ii) Risk Ownership Strategy and Reviewing Plan

Almost all the risks are owned by the whole group as they are related to all members of the group. When a risk would be related to a specific member, we thought it was best for that member to be responsible for tracking the likelihood and severity of the risk and bringing it to the attention of the group. For other risks we decide ownership based on who would most easily be able to track the risk and implement the mitigation steps. If anyone believed the information about a risk should be changed, that a risk had occurred or that the mitigation strategy should be changed, they would bring it up in the next scheduled team meeting at the latest or inform and discuss it with the rest of the group using discord.

b) Risk Register

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Project	Member becomes unexpectedly busy over a significant period (a week or longer)	Moderate	Moderate	Distribute at least some of that member's responsibilities among other members for that period	All
R3	Project	Several members or the whole team are too busy to work on the project over the holidays	Moderate	High	No short tasks planned to be in progress when the holidays begin and allow time for more work to be done after the break	All
R4	Project	Member is not suited to a role or task	Moderate	Moderate	Reassign roles or tasks to different members	All
R5	Project	Member takes a leave of absence or stops taking the course	Low	High	Distribute that member's responsibilities among other members	All
R6	Project	Member gets covid/falls ill	Moderate	High	Take Covid tests regularly so it's not spread to the rest of the team and distribute that member's responsibilities among other members	All
R7	Project	Member's internet connection at home becomes unreliable or is lost entirely for a period	Moderate	Moderate	Have all meetings in person and the member goes to the university or uses a hotspot whenever they need the internet for something related to the project	All

R8	Project	Member's computer has a fault and can't be used until it's fixed	Low	Moderate	Member uses a laptop or phone if possible and otherwise uses a pc at the university	All
R9	Project	There's an issue with discord that prevents the team from using it for a period (an hour or more)	Low	Moderate	If resolved within a few hours, the team can use emails to communicate, any important information can be accessed from the google drive, and if the issue persists the team can switch to using a different tool	All
R10	Project	Member's discord account gets hacked	Low	Low	Change password or if the account is lost, make a new one	All
R11	Project	Code changes are lost before saved	Low	Low	Save regularly	All
R12	Project	Files are lost	Low	High	Have multiple copies of files stored in multiple repositories including at least one local and one remote repository	All
R13	Product	The player may come across a missed bug in the game that prevents the player from continuing to play	Low	High	Game will allow the player to restart the game	Tom

Table 5.1

References:

- Project Planning and Risk Management lecture available through the VLE page for the module
- <https://www.castsoftware.com/research-labs/risk-management-in-software-development-and-software-engineering-projects>