

Risk Assessment
Group 12
Team 12

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As a team we sat down and identified potential risks, categorising them into one of 5 categories (Project, Product, Product and project, Business & Technology). This helped us to identify which team members each risk may affect based on our allocation of roles. For example illness is likely to affect everyone whereas a bug within the game engine is likely to affect just the team members working on the implementation. Further this helped us identify an 'Owner' for each risk, someone who can reassess the risk regularly this process becomes more useful when the owner is close to the risk itself. Following this we then marked each risks' likelihood and severity on a simple scale of low, medium or high. Finally we have written a short sentence on how to mitigate the risk. All our risks come with an appropriate ID & descriptions.

ID	TYPE	DESCRIPTION	IMPACT	LIKELIHOOD (L/M/H)
R1	BUSINESS	Illness affecting one or more members	They may not be able to contribute as much or not be able to attend meetings for duration of illness.	H
R2	PRODUCT	Game Library license change	Would leave us not being able to use the game engine as planned, setting the implementation back a considerable amount	L
R3	PRODUCT	Change of requirements	Depending on which requirements are changed and by how much this could have a varying impact on development, if we are unable to change the product then the requirements wont be fulfilled.	L
R4	PRODUCT AND PROJECT	Miscommunication between customer	The end product may not match or live up to the customers expectations.	L
R5	PRODUCT AND PROJECT	Team member stops attending meetings	Increased work load for other members	M
R6	PRODUCT AND PROJECT	the project runs slow in the customer's hardware	The customer would not be happy with the end product	L
R7	PROJECT	Disagreement between team members	Could cause delay to parts of the project, and affect the confidence and productivity of the team	H
R8	PROJECT	Scheduling delays	Knock-on effect with other tasks that are dependant on those that are delayed	H
R9	PROJECT	bugs in implementation	Will slow down implementation, taking time to find and fix the bugs.	H
R10	PROJECT	Team member gets hit by a bus	We would be one member short, remaining team members may be unproductive for some time due to trauma. Higher workload for the remaining members.	L
R11	PROJECT	Accidental deletion of project files	Files that have been completely lost would need to be remade	M
R12	TECHNOLOGY	Merge conflict between different versions	Parts of code may be required to be re-written to solve these.	M
R13	TECHNOLOGY	Issues in interoperability between libraries	Would require a change in libraries or	M
R14	TECHNOLOGY	Poorly written code committed to the repository	May result in failures or errors in the system	M
R15	TECHNOLOGY	Reach limitations in the chosen game libraries	Some requirements may not be met	L

SEVERITY (L/M/H)	MITIGATION	OWNER
M	Make sure at least 2 people are responsible for each task and more people are informed about said task	ALL
H	Very low likelihood, no mitigation in place asid	James
M	Reassess the work needed to fulfill changed requirements and allocate time	Daniel
M	Checkin with customer about the direction of the project before sumbission	Daniel
M	we split said members tasks and responsibilities between the remaining members	Daniel
M	Make every effort to reduce complexity Ask customer about hardware constraints	Daniel
M	Discuss options and find a 'middle ground' that team members can agree on, discussing all pros and cons of each point from an objective point of view	Daniel
L	Reassess priorities weekly to stay on top keep the most relevant task	Vanessa
M	Utilise code reviews and follow best practices for easy debugging	Daniel
H	Look both ways before crossing, and have a high bus factor for each task, aleast one other person is informed, preferably more.	ALL
H	Use version control and backups	Matt
M	Maintain encapsulation between code files; Ensure only one person works on one area of the code at a time	Daniel
H	Research Libraries in depth before use	Daniel
L	Ensuring all members follow best practices and code reviews are conducted	Daniel
M	Research Libraries in depth before use and follow best practices	Matt