

Risk Assessment

Group 8 Members

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The risks to the project are presented in the table below, with the following information about each one:

- An ID- to identify individual risks
- Type- To quickly identify specific risks
- Description- a quick explanation of the risk
- Potential consequence- explains what could go wrong and why this risk needs solving
- Monitoring- shows whether the risk is happening, indicating if it is of immediate concern
- Likelihood and severity- allows the team to make a judgement about how much of a priority this risk is in solving or preventing
- Mitigation - details the steps that need to be, or are being taken to prevent the risk from happening.
- Owner- shows who is responsible for either solving the problem or arranging for it to be solved

There is significant detail about the risks to the programming and game itself because each item can affect the overall game, and are distinct issues. The likelihood and severity of the risks are also included because this tells us which risk to prioritise in mitigating, and each item has an 'owner'- without one, the responsibility can be unclear, causing the issue to not be solved.

Risk Register

ID	Type	Description	Consequences	Monitoring	Likelihood	Severity	Mitigation	Owner
R1	Technology	AI interaction proves infeasible to implement	Opposing ships will behave differently	not currently happening	H	H	Fake AI via scripted interaction	Harsh
R2	Product	NPC targeting of player ship not enough or too challenging	Game may not be enjoyable	unknown - ship combat not implemented until assignment 2	L	M	Player test gameplay and adjust parameters	Harsh
R3	Technology	AI decision making too slow to be convincing	Game may not be enjoyable	not currently happening	L	M	Fake AI via scripted interaction	Harsh

R4	Technology	Physics engine being unstable	The Player and projectiles may not interact with the other elements in the program correctly.	not currently happening	M	M	With testing ensure its stable enough and/or make it difficult to get into an unstable situation	Harsh
R6	Technology	Cost of high res textures cause high loading time	Game may have a large loading time, which may cause the user to think the program is broken	not currently happening	L	L	Minimal resources are loaded (possibly on another thread) or compression used	Harsh
R7	Technology	Large maps and complex algorithms cause low fps	Game is harder to run on low specification computers	not currently happening	M	H	Optimisation Frustum culling more simple AIs	Harsh
R8	Technology	Rendering during movement may stutter/lag/flicker	Graphics look slightly worse than they would if you pay close attention	not currently happening	L	L	Rendering optimisation	Harsh
R11	Technology	Tile map rounding error causing visual artefacts	The game runs without any errors, but a lot of visual artefacts	not currently happening	H	M	pad texture atlas that is used for the tile map	Harsh
R12	Product	AI not being as advanced as it could be	The AI is either too good or bad. Making the gameplay worse for the user.	not currently happening	M	L	Fake AI via scripted interaction	Harsh
R14	Estimation	The team misjudges how long different tasks will take	The deadline is missed or the work is of a lower quality	not currently happening	M	H	The team will work together closely to make sure everyone is working at a good speed and encourage others to keep working.	All
R15	People	Bad team communication	Elements of the project may not be done and others duplicated	not currently happening	M	H	The team will ensure that they Keep updated with the discord server so they know what needs doing.	All

R16	People	Maintain communication with old team	Could get confused by their code or documents	Not currently happening	M	M	If there is any slight confusion contact the previous team to see if they can help explain it to us	Harsh
R17	Technology	Ensure enough testing for our code	Not enough code coverage and thus could have more undetected bugs	Not currently happening	M	M	Write enough tests for our code	Harsh