

Risk Assessment

Group 29
Shard Software

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Likelihood and severity are rated as low, medium or high. Colour coding is used for each of these, with green indicating a low significance and red a high significance.

Likelihood

- **Low** likelihood risks will happen rarely. It is unlikely that these will be encountered by most users and will mostly only be done deliberately.
- **Medium** likelihood risks will happen some of the time. They are not likely to be done by someone with no knowledge of the game, but may be done accidentally.
- **High** likelihood risks will happen often, and be done accidentally by someone with only minor knowledge of the game.

Severity

- **Low** severity risks have only a minor detrimental effect on the game or project. These can usually be fixed easily and quickly.
- **Medium** severity risks have a larger detrimental effect. They may have a more lasting effect on the development of the project, or be more difficult for the user to ignore.
- **High** severity risks have a major effect on the project, or may prevent someone from playing the game at all. They may have a long process to recover from or cause lasting effects to the overall project.

Risks are sorted by severity, followed by likelihood. This means that they are generally sorted by overall significance.

Risks also have a risk type associated with them.

- **Technology** risks are related to the game's software or hardware; these mostly refer to the way the users play the game when it is completed.
- **Design** risks are related to issues with the overall design of the game, such as its controls and its appearance.
- **Personnel** risks relate to problems arising from the development team and stakeholders.
- **Implementation** risks relate to the creation and programming of the game, and risks that arise during development.

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Personnel	Developers becoming unavailable during development	Medium	High	Assign multiple people to critical components to avoid single points of failure	Programmers
R2	Implem.	Elements of the project not being fully complete before the deadline	Medium	High	Ensure the game is at least functional; don't try to be overly ambitious to the detriment of the overall game	Everyone
R3	Technology	Game not working properly on university hardware on open day	Low	High	Conduct proper testing on multiple operating systems and computers; test on university hardware before the event.	Programmers
R4	Technology	Users playing the game in a way that causes it to crash	Low	High	Conduct testing to find crash conditions; ensure that these conditions cannot be reached during normal gameplay.	Programmers
R5	Design	Game cannot be played by certain users due to control problems	Low	High	Make sure controls are simple and can be easily learned within gameplay	Programmers
R6	Design	Game cannot be played by certain users due to UI problems	Low	High	Ensure all graphics are clear to all users, eg. differentiate enemies by symbols rather than colours to help colourblind players	Designers
R7	Implem.	Scope creep; adding too many new unnecessary features beyond the	Medium	Medium	Ensure that the project brief is complete before adding extra features, don't keep working on a	Designers

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
		scope of the project			particular feature beyond diminishing returns	
R8	Personnel	Specifications or requirements changing during project development	Medium	Medium	Maintain frequent communication with clients, ensure any requests are made with enough time to act upon them.	Everyone
R9	Implem.	Development tools and libraries not working as expected	Medium	Medium	Be familiar with documentations of the tools being used; change or find workarounds if needed	Programmers
R10	Implem.	Code becoming difficult to read or update when picked up by other developers	Low	Medium	Ensure code is written clearly and complex code is commented	Programmers
R11	Personnel	Product not being to the satisfaction of clients	Low	Medium	Maintain frequent communication with clients, ask for feedback after major changes are made	Everyone