

ENG 1 - Risk Assessment

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The Risk Register above states the list of risks which our team could encounter in this project. It breaks them down into 3 groups: Person. These risks relate to the members of our group, the process of making the game, the process of scheduling and managing our workflow, and the relationship between not only our team, but the work each member does. Technology: These risks relate to the issues regarding the technology our team uses in the project during the implementation stage.. Gameplay: These risks relate to the issues we may encounter in the implementation stage of our project, more specifically, the user experience of the game.

Each risk has been given a specific code related to whichever section of risks it is in so we can easily identify which risk we may encounter if any of the above events occur, and then when it does occur, we will look towards the mitigation section of the table to see what measures have been put in place to help mitigate this problem.

The likelihood and severity sections have been colour coded for our ease of use so we can see which risks are not only more likely to happen, but also have the highest impact. This has been done so we can preempt any issues arising by prioritising those events with a higher severity and higher likelihood combined, instead of potentially spending time trying to prevent less significant issues which are less likely to happen.

Some of these risks are things we can prepare for in advance, some will be discovered throughout development and testing. For those which we can prepare for in advance, we have already put the measures into place and discussed with our team what will occur if one of the risks has occurred. Take P1 for example. We can prepare for the event of someone not meeting a deadline for whatever reason, and so we have already identified and put the measures into place to make sure that if a deadline isn't met, we as a team can handle it. For a risk such as G4 however, it isn't something that we can prepare for in advance, as much as we would need to react to it if it happens, and as such, if we get to a stage and risk G4 has occurred, we will then consult the Mitigation section for G4 and see how to handle it.

For some of these risks, there may be multiple ways to undertake the mitigation task, or there may be a disagreement on which way is best to do it. In this scenario, we will enact P6 "a disagreement in the team" on what to do. We will consult our team leader on which way is best to perform the task, discuss the potential methods involved in solving the task, and then they will choose a final decision which we must stick to. If this results in a member of the team having a falling out and becoming uncooperative, we will consult P7 and enact on that in order to keep the flow of the project's development moving forward.

If a problem is discovered and is not on the risk register, communication with the team immediately is vital in order to make sure that it is dealt with swiftly and with as little trouble as possible. In the event of this happening, another entry into the Risk Register will be added to make sure that if the event ever happens again, the team knows how to respond to it with as little fuss as possible.

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
P1	Person	Any member of the team is unable to complete their work, due to health or personal reasons	Low	High	Each essential job is shared between two members, allowing the other to cover the work of the person missing, also resulting in high bus factor	Hasan
P2	Person	Any member not being able to download or use essential software	Medium	Low	Any software that is required can be downloaded and used on the lab computers	Hasan
P3	Person	Lack or miscommunication of key information, leading to misalignment on client needs	Medium	High	Establish regular communication in meetings, using tools to measure progress (Gantt Chart) and hitting key targets that the client wants	Hasan
P4	Person	Delays in tasks, due to a member not completing their assigned tasks	Low	High	Tracking each members progress, with weekly checkups, to make sure that the work is being completed to a high standard	Hasan
P5	Person	A member is unable to attend a scheduled meeting	Medium	Low	Every member is in a group chat together, and if one member is unable to attend a meeting, we will communicate with them either within or after the meeting in order to decide one what they will do	Isaac
P6	Person	There is a disagreement in the group regarding how to undertake a	Medium	Medium	We have assigned an informal "team leader" who's say is final in regards to decision making, be it a creative choice or an architectural design decision.	Isaac

		certain task				
P7	Person	A member becomes uncooperative with the group	Low	High	We are having 1-2 meetups per week to discuss and update progress. If one member isn't cooperating, we will be able to split their workload amongst the rest of the group in order to make sure the tasks are complete, and report them to our higher ups	Isaac
T1	Technology	Game performance issues for low-end systems/all systems	Medium	Medium	Provide a way for the player to adjust the graphic quality, and optimise game assets to reduce strain on a system	Hasan
T2	Technology	Random events causing crashes or stuttering	Medium	Medium	Testing and fail-safe measures should be implemented to stop the game from crashing	Hasan
T3	Technology	Random events causes unexpected behaviour in the game	Medium	High	Thorough testing of random events, as well as this, clear conditions and priorities should be used to start the random event	Hasan
T4	Technology	Game is unplayable on certain devices due to software conflicts	Low	High	We are using LibGDX which natively supports the ability to play on Windows (7+ only), Mac and Linux, and we will make sure to bundle the download with the correct version of Java to eliminate any issues there	Isaac
T5	Technology	Certain inputs may crash the game	Low	High	If the game is trying to read an input which it by default doesn't recognise, it could cause errors. Adding Try-Catch statements and other related error handling to stop catastrophic errors from occurring	Isaac

G1	Gameplay	Poor UI	Low	Medium	Implement early testing of UI in the game. Give to someone who has not played to see if it is intuitive	Hasan
G2	Gameplay	Random events being too difficult/frustrating	High	Medium	Balance the difficulty through play testing the game or implement a difficulty slider	Hasan
G3	Gameplay	Lack of depth in gameplay	Medium	High	Thorough playtesting of the game will show if there is any dull areas, furthermore new mechanics or randomised objectives would help	Hasan
G4	Gameplay	Obscure win condition	Medium	High	Provide simple and clear feedback to the player, allowing them to understand how to improve	Hasan
G5	Gameplay	Random events being too similar	Medium	High	Provide a wide range of random events, with varied consequence which would keep the game fresh	Hasan
G6	Gameplay	Controls being annoying to use	Medium	Low	Allow the player to customise their keybinds in the options menu	Isaac
G7	Gameplay	Game being too difficult	Medium	Medium	Add a difficulty option in to the game to allow the player to choose whether they want a casual playthrough or a more challenging one	Isaac
G8	Gameplay	Language not being understood	High	Medium	Make sure that each object, task, event and everything necessary has an icon/image as well as the text, so people who might not understand English can still see what things are	Isaac