Risk Assessment and Mitigation

Risk Format

As a team, we discussed the possible risks and how they would affect the final product. We chose two factors to rate risks against, which are likelihood and severity. The different levels can be used in conjunction to work out the overall effect of the risk. If a risk has a high severity and a low likelihood, then it will make a huge effect on the overall project, but due to the relative rarity the overall effect is not at all likely to happen.

We also divided the risks into two separate categories, which are Technological risks and Team-based risks. This allowed us to break down what the actual risks are likely to affect, and how it would affect the entire project. If a risk is team-based, it means that one or many individual group members would be affected by the risk, and so therefore we should be vigilant against this affecting the team. The technological risks are more the responsibility of a single person, and these are either out of our control or things that only one person can control.

We have also included an ID column and a mitigation column. The ID column can be used to identify the risks in later documents and in group discussions. The mitigation column contains our plan of what we can do to mitigate against the risk, and how this would help the risk not be as large of an effect. This includes things such as: having a high bus factor, testing thoroughly and many more.

Risk Assessment

ID	Туре	Description	Likelihood	Severity	Mitigation
1	Technology	Internet services used by team are unavailable	Low	High	Wait until they can be used, find a different service or work offline
2	Team	Covid-19 may mean some people are less comfortable doing work or may have other reasons for not completing assigned tasks	Medium	High	All team members to follow Covid guidelines and make sure the 'bus factor' is at least 3
3	Team	Team members are unable to keep up with work and project is delayed	Low	Medium	Members will discuss workloads and make sure that they can keep up with it
4	Technology	Large bugs in the code prevent the project being finished on time	Very low	Very high	Testing will be thorough and be designed to catch any large bugs
5	Technology	Minor bugs in the code prevent the code	Medium	Medium	Testing to be thorough in order to catch bugs Also have well-written code to make bugs easy to fix
6	Team/ Technology	Team members do not have the full knowledge or skills to be able to implement the project	Low	Medium	Team members will keep up to date on lectures and keep learning

7	Technology	Time required to develop code is underestimated	Medium	High	All sections will be properly planned out
8	Technology	Software functions are not able to satisfy requirements	Low	High	Processes to be planned out from the start, and software well written
9	Team	Bad communication between team members	Medium	Medium	'Bus factor' of at least 3 for every item and constant contact with members
10	Team/ Technology	Different implementations of project cause clashes in code and meetings	Low	Medium	Designs should be finalised in discussions before teams begin
11	Technology	Work is lost due to accidental deletion or technology damage	Low	Very High	All work to be backed up via online services such as Google Drive and Github
12	Technology	A bug goes undetected in the testing phase	Medium	High	Code to be tested as it is built, meaning bugs should not remain
13	Technology	The implementation does not meet the client's requirements	Very Low	High	Multiple meetings with clients will be held to establish exact requirements
14	Technology	Feedback from testers is negative or of low-quality	Medium	High	Testers will be asked to detail exactly what they thought was negative

					about the game, and these will be fixed if possible
15	Team	The team runs out of time to finish the product before being handed in	Low	Very High	The project will be planned out beforehand and times estimated as well as possible