Risk Assessment and Mitigation

Part A - Introduction

To identify the risks to our project the team brainstormed a list of anything that could potentially be a problem to our group, aided by some of the categories suggested by the Project Planning Risk Management lecture (product, project, business). We then cut down the list by removing anything with extremely low probability of occurrence or any risk we believed to have negligible impact on our project.

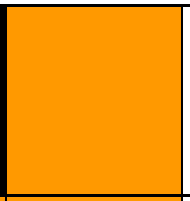
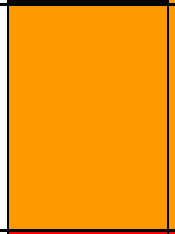
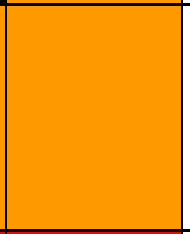
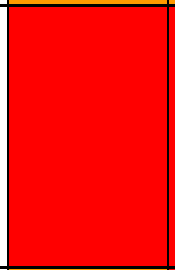
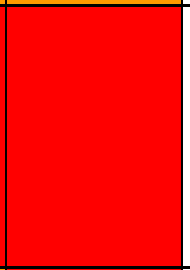
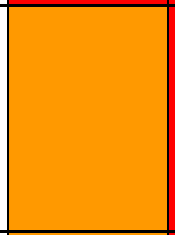
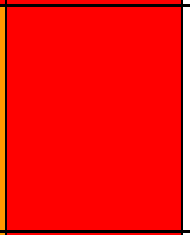
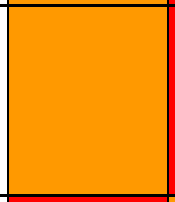
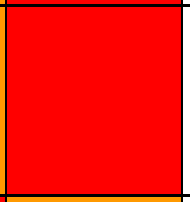
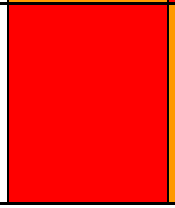
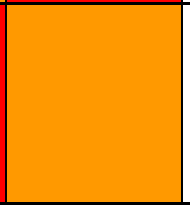
We further used the Risk Management lecture to help us design a tabular presentation for the list of risks that we had decided upon. We began by looking into different risk registers, but didn't feel as though all mentioned subcategories, such as those used in PRINCE2, were necessary, and thus decided we would be better served from our own tabular presentation. We used a paper from the Project Management Interface [1] to aid us in categorising severity and likelihood, which therefore allowed us to clearly view the danger any particular risk could have on our project - however additionally decided that having the same number of likelihood and severity options was advantageous for comparing risks and consequently decided that slightly more detail was preferable in this case. We decided to colour code both likelihood and severity with the same colour code for easy comparison:

- **Yellow for Low Probability/Minimal Risk**
- **Orange for Medium-Low Probability/Medium Risk**
- **Red for Medium-High Probability/High Risk**
- **Black for High Probability/Critical Risk.**

To combat the risks we have discovered, we planned mitigation strategies, both as a prevention strategy and then, should the risk occur, to minimise the damage it can do to the project. We felt as a group that avoiding redundancy was a key strategy we could use to minimise risks. By removing single points of failure for critical tasks we feel more confident that we can reduce the impact of any one particular risk. Another strategy we will employ is risk monitoring, where inside of the 'Mitigation' column of the table each risk will have an assigned owner - whose job is to re-assess the risk on a regular basis and report back during our weekly meetings.

Part B - Risks

ID	Category	Description	Severity	Likelihood	Mitigation
1	PROJECT	Lose a group member - short term.			Share all tasks out as evenly as possible once aware of absence. Owner: Taylor
2	PROJECT	Lose a group member - long term.			Make sure that all critical tasks have multiple points of failure, then share remaining tasks out equally, assigning new team roles if necessary. Owner: Alex
3	PROJECT	Delegate tasks unsuitably (eg. Too much/little per person)			Ensure all tasks are well planned and discussed by the team prior to delegation. Make team aware at meetings if workload too large. Owner: Duc
4	PROJECT	Lack of communication within the project team			Converse at regularly appointed meetings, as well as having multiple other means of contact should they be necessary Owner: Mehti
5	PROJECT	Underestimate the time needed for certain parts of the project			Plan all tasks to be completed in advance of the deadline, so that the team will have a chance to tackle any unforeseen problems. Owner: Duc

6	PROJECT	Losing project work/documents			Ensure backups are available for all project files and are regularly updated to the current versions. Owner: Taylor
7	PROJECT	Lack of organisation within the project team			At regularly appointed meetings, we will plan the work that should be carried out by each group member before we next come together. Owner: Alex
8	PROJECT PRODUCT	Overambitious ideas that we don't have the resources or skills to complete.			Keep the project relatively simple whilst trying not to undertake too many steep learning curves (especially for non-essential elements). e.g. learning new graphical software. Owner: Bradley
9	PRODUCT	Issues with the graphical work, as none of the team has worked with graphics previously			Give extra time to learning the process, so that if any issues arise there will be a safety net so that the product is less likely to be delayed. Owner: Taylor
10	PRODUCT	The program having many more bugs than expected			Regularly test the program code, so that any faults can be easily located. Owner: Duc
11	PRODUCT	The lack of synchronised vision and end goal throughout the team			Constantly refer back to our requirements, assessment briefing, and self-made goals to decide what tasks to pursue and what to aim for. If at any point unsure reach out to group for clarification.

					Owner: Bradley
12	PRODUCT	Possibility to breach legal legislation, especially regarding copyright			Laws are taken into account throughout the development process and any content acquired from outside sources must have their licenses obtained. Owner : Mehti
13	PRODUCT BUSINESS	Client does not approve of the end product			Schedule regular meetings with the client, updating them on the teams progress and asking if they have any thoughts they wish to contribute to our production process. Owner: Mehti
14	PRODUCT BUSINESS	Requirements/Brief being changed mid-process			During regular meetings with the client, ensure we are kept well up to date on any developments, as well as using an agile scrum process, allowing us to change our team focus relatively easily. Owner: Matthew
15	BUSINESS	The end product does not meet the specifications			Consistently refer to our table of requirements to ensure that the project is proceeding acceptably according to the original briefing. Owner: Bradley
16	BUSINESS	Realise upon release that the product is not appropriate to the user base (eg. Too simple/complex)			Refer to the user survey results for data on the preferences of the average user, as well as consistently testing the product (if possible with help from target market) to ensure there are no blatant problems. Owner: Matthew

References:

[1] Pmi.org. (2018). Risk analysis and management. [online] Available at: https://www.pmi.org/learning/library/risk-analysis-project-management-7070 [Accessed 5 Nov. 2018].