

Risk Assessment and Mitigation

After having a team meeting, we thought about the various risks that we may face throughout the project and how we were to deal with them before they came up, and how we were to face them if we were to run into one. In the end, we made the decision to create a risk assessment form that consisted of these columns - **ID, Risk and Category, Information and Causes, Likelihood, Severity, Avoidance and Minimisation, and Risk Monitoring and Owner.**

To define and explain our columns -

- **ID** - Created so we will be able to easily reference each risk later in our reports.
- **Risk & Category** - Naming the actual risk and placing it in a category where we feel it fits.
- **Information & Causes** - A simple explanation of a given risk so we can apply it to a real-life situation, as well as what causes said risk.
- **Likelihood / Severity** - A ranking system for us to be able to quickly and easily identify the impact of a risk at a glance, and what the chances of it occurring are. 1 being "Very unlikely/Minimal impact", 3 being "Fairly likely/Fair impact", and 5 being "Very likely/Severe impact".
- **Avoidance & Minimisation** - Discussion of how a risk may be avoided entirely, and/or how we may recover from a risk with minimal losses.
- **Risk Monitoring and Owner** - Identify when a risk is most likely to happen, and how frequently we need to reflect on the project to see if we are at risk of a specific risk. The owner is used to add a specific team member whose expertise is best suited to the risk and its mitigation. This ensured that when a problem did arise, there was a dedicated member of the team focused on fixing it as soon as possible without any fuss. (Key: PM - Project manager, S - Secretary, CI - Client interface, SA - Software architect, WD - Web developer, TC - Technical Consultant). This was added to add clarity and familiarity to the group when the members are looking the the possible risks and how they can mitigate them.

Considering the scale of the project, we felt that these sections were enough for us to be able to accurately identify potential risks without extra, unnecessary details that may confuse us later in the assessment. On top of this, as we will be using an Agile method, this layout was satisfactory in letting us quickly update our risks as they develop and change with our requirements. We also agreed that throughout the project, we will host meetings where we reflect on the progress we have made and how this related back to the risk assessment, giving us the opportunity to monitor the progression of any risks and thus be able to plan ahead for them. Additionally, we will use this time to create a note of new risks that have appeared as the project progressed further.

For a given risk, the assessment needs to be brief and precise and describe the situation in a simple manner - if the risk is hard to understand then we are only going to be more likely to fall victim to it. In some cases, the columns may contain instructions on how to act if the risk occurs, and what steps we should take to mitigate its effects. We felt like this layout was a good compromise between being simple and easy to read, while also providing adequate information and thought into how we can respond to whatever situation we may find ourselves in.

On top of this, we will also have a Risk Manager who will have a general overview of the risks and will keep track of them. They will also host sessions where we discuss our progress and the development of any risk, new or old. The responsibility of any specific risk will be on the individual who is working in that field, so the requirements risks will be on those who are working on and keeping track of the requirements, people risks should be focused on by everyone in the group for themselves and others, etc.