



RISK ASSESSMENT AND MITIGATION

NP Studios – Team 8

Team Members

Lucy Ivatt, Jordan Spooner, Alasdair Pilmore-Bedford, Matthew Gilmore,
Bruno Davies, Cassandra Lillystone

Introduction

Performing an assessment of potential risks early in the development life cycle is vital to ensure we are fully prepared and can minimise the damage to the project. For our risk format we have decided to use tables with the following headings: ID, Type, Description, Likelihood, Severity, Mitigation and Team Member.

We ensured that the IDs used were both unique and relevant. This will make it easier to reference risks in other documentation as well as in person during group meetings.

Additionally, each risk will have a description which is detailed and concise. This will prevent it from being ambiguous but keep the meaning clear, reducing the likelihood of miscommunication. Each of these descriptions will then be used to help sort the risk into its relevant category, people, technology, requirements or estimation. This not only helps to further clarify what the risk is but as a team we could use the categories to help during risk generation, reducing the chance that a risk may be overlooked.

Each risk will have a value for both likelihood and severity, allowing us to prioritise planning for the most impactful risks. This is identified as either low, medium, high with background colours of green, orange and red respectively as these colours are commonly associated with these status levels [1]. As well as prioritising planning, the severity rating will also allow us to determine what risk to mitigate first in the unlikely event that two occur simultaneously.

Within the table we have included the relevant actions which we will follow to mitigate the effects of the risk. These actions will allow us to minimise how much the overall project and timeline are affected if the risk occurs. The use of allocating each risk a project, product or business type helps in a similar way. This ensures we know which area of the development process is affected and helps to formulate the mitigation strategy. For instance, a project risk is more likely to be managed internally but if a product risk occurs the client may need to be contacted as this related to their requirements of the software.

Finally, we have assigned every risk a member of the team who will be responsible to monitor the status of that risk. During each 'stand-up' at the beginning of our team meetings (a part of our agile development process), each team member will have the chance to mention if the status of their risks has changed. This could be the likelihood or severity of a risk or that the risk itself has occurred. We will be keeping track of this in our risk status tracker spreadsheet so any team member may access it when necessary. Allocating a small quantity of risks to each team member ensures that they are tracked and monitored continuously throughout the project and ensures that if a risk occurs, there will be at least one team member who already understands the mitigation process for this scenario. The table below is an example of the layout that we will be using for this.

Risk ID	Team Member	Meeting 1 - 7/11/2019			Meeting 2 - 10/12/2019		
		Severity	Likelihood	Notes	Severity	Likelihood	Notes
R_Absent	Lucy	Low	Medium		Low	High	Team member ill so likelihood increased
R2_Hardware	Cassie	Medium	Low		Medium	Low	

Risk Register

Key: **L = Low** **M = Medium** **H = High**

Category: People

ID	Type	Description	Likelihood	Severity	Mitigation	Manager
R1_Absence	Project	Team member doesn't show up to meeting(s).	M	L	Spread workload amongst team members.	Matthew Gilmore
R2_Hardware	Project	Computer hardware malfunctions inhibit software development.	L	M	Use university computers. Download most recent version from GitHub if work lost. Use important styles which were stored on other machines.	Jordan Spooner
R3_Interpretation	Product	Difference in interpretation of product direction.	L	L	Meet to discuss each other's ideas. Clarify with customer meeting.	Bruno Davies
R4_Productivity	Project	Slow productivity due to long time till deadline.	M	M	Meet more frequently towards deadline to make it up.	Cassandra Lillystone
R5_Availability	Project	Team member becomes unavailable for a long period of time, who was responsible for an important task.	L	M	See lecturers for support. Work more hours to make up for it. Help the other team member who had joint responsibility for that task.	Matthew Gilmore

Category: Technology

ID	Type	Description	Likelihood	Severity	Mitigation	Manager
R6_Github	Project	GitHub becomes inaccessible.	L	H	Use last download. Use other tools. Maintain backups.	Alasdair Pilmore
R7_Skill	Product	Team members lack skills required.	M	M	Allocate tasks based on skills of members. Use online learning resources.	Lucy Ivatt
R8_Instances	Project	If more than one person edits the project and both go to save their changes.	M	L	Maintain previous versions of the product and review pushes to GitHub as a team.	Alasdair Pilmore
R9_Engine	Product	Engine we choose may turn out not suitable and we need to change.	L	H	Maximise number of transferable methods. Minimise editing.	Alasdair Pilmore
R10_Bug		Tools we use may get bugs, meaning parts of them are unavailable to use.	L	M	Find another temporary tool to use in the meantime.	Jordan Spooner

Category: Requirements

ID	Type	Description	Likelihood	Severity	Mitigation	Manager
R11_Complex	Product	Requirements become too complex. We realise they are more complex than we first thought	M	L	Look for compromises to reduce complexity.	Lucy Ivatt
R12_Changes	Product	The customer requires additional requirements or changes the specifications of some previous ones.	M	L	Implement a development cycle with bountiful time for unexpected additional developing. Make use of extra time we allowed towards deadline.	Bruno Davies
R13_Missing	Product	Get to near the end of development and realise we have missed a requirement.	M	L	See whether we have time to implement it. If not, meet with customer to discuss.	Lucy Ivatt

Category: Estimation

ID	Type	Description	Likelihood	Severity	Mitigation	Manager
R14_Length	Project	A single task takes longer than we planned it to.	M	M	Organise more group meetings to make up time. Prioritise future tasks.	Cassie Lillystone
R15_Customer	Project	Customer wasn't available to meet us when we wanted to.	M	M	Continue with other tasks. Organise more meetings after meeting customer to make up time.	Cassie Lillystone

References

- [1] V. Shukla, "Standard Risk Matrix Classification Risk Levels and their Color Codes," ResearchGate, [Online]. Available: https://www.researchgate.net/figure/Standard-Risk-Matrix-Classification-Risk-Levels-and-their-Color-Codes-Risk-levels-and_fig1_325441118. [Accessed 11 November 2019].