Risk Assessment and Mitigation

Cohort 3 Group 6 - Carbon Goose

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For the updated risk assessment, our team refined and expanded our risk management process, incorporating lessons learned from the risk assessment performed by the initial team. The approach continued to focus on identification, analysis, planning, and monitoring, ensuring a comprehensive and structured approach to risk management.

We revisited the identification phase, focusing on risks that could come from new implementations and unexpected problems during development. The team conducted additional brainstorming sessions to ensure both ongoing project risks and newly emerging risks were captured.During analysis, each risk was assessed for likelihood and severity, prioritizing those with the most significant potential impact. This step helped us focus on high-priority risks while still keeping track of lower-priority ones.Mitigation efforts involved the creation of action plans tailored to the nature of each risk. These plans were designed to lower the chances of risk happening or reduce their impact if they did. We also assigned specific responsibilities to team members to ensure clear accountability and effective monitoring throughout the second assessment.Risks were frequently reassessed, with new insights integrated as the project progressed. Regular updates to the risk register and ongoing team discussions allowed us to manage issues and adapt to project requirements.

The risk register includes risks identified in the second phase of the project. Each entry was carefully documented with unique identifiers, clear descriptions, and actionable mitigation plans.

Risk Register Format: Our risk register is a tabular document that includes the following columns for each risk:

- ID: a unique number assigned to each risk for tracking purposes.
- Type: the category of risk (Project, Product, or Business).
- Description: a brief explanation of the risk.
- Likelihood: an estimate of how likely is the risk to occur (low, moderate or high).
- Severity: an estimate of the impact it would have on the project (low, moderate or high).
- Mitigation: steps to take to reduce or manage the risk.
- Owner: the person or persons in charge of mitigating the risk depending on roles.

Risk Register

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Project	A computer from the team breaks/stops working.	Low	Medium	Use a computer from the university labs/get the computer fixed. Save work often.	Entire team
R2	Project	Timeline slippage, time is wasted	Medium	Medium	Try to plan ahead on timings, ask for assistance	Entire team
R3	Project	Requirements	Medium	High	Make sure to	Owen

		are not met or with errors.			regularly reference the requirements throughout development. Check requirements after being added.	Jones,Adam Johnson
R4	Product	Getting bugs in the code.	High	High	Increase testing coverage and conduct thorough quality review during user evaluation.	Owen Jones, Rory Ingram, Louis Polwarth
R5	Product	Having engine limitations. For example: a computer cannot run a program because of its system.	Low	Medium	Try using another computer. Or look at what options you have for your system.	Entire team
R6	Product	Having unoptimised code	High	Medium	Check code in pull requests, and ensure code is working without memory leaks or similar.	Adam Johnson, Louis Polwarth
R7	Business	Getting ill. For example: catching a cold or getting an injury.	Medium	Low	Try to work as long as you are capable. Delegating your work to a teammate, ensure work is available online.	Entire team
R8	Business	Teammates may have disagreements.	Medium	Medium	Ensure people feel listened to, and try to find solutions between members. Ask for help from lecturers	Entire team
R9	Business	Having	Low	Medium	Sit down and	Entire team

		miscommunications between the teammates			listen carefully to each other's opinions, and have a third person as a moderator.	
R10	Project	Delay in receiving editable deliverables from the selected team reducing productivity	Low	High	Contact the team early as possible to set clear deadlines for update deliverables.	Entire team
R11	Product	Unit testing files incompatible with the project	Medium	High	Ensure testing frameworks are compatible and conduct integration	Louis Polwarth, Rory Ingram
R12	Project	Lack of understanding of code from the selected team by team members causing misinterpretation of code and delayed progress	High	High	Conduct code walkthrough sessions and refer to documentation. reviewed.	Entire team
R13	Product	Game incompatible with certain code editors	Low	Low	Use standardized tools for development and testing. Conduct tests on different devices to pinpoint the source of error	Owen Jones,Louis Polwarth
R14	Project	Incomplete user evaluation participants' list	Medium	Medium	Confirm participants well in advance and maintain a backup list.	Rory Ingram
R15	Product	Illogical events	Low	Low	Clear	Owen Jones

		causing user confusion			instructions and on-screen prompts could be added. Feedback from user evaluation should be reviewed.	