Risk Assessment & Mitigation

Our team's risk management process incorporated 4 main points of consideration: identification, analysis, planning, and monitoring. The first thing we did was brainstorm and identify potential risks, ensuring we considered both project related and extrinsic factors that could affect the project. Afterwards it was important to analyse the risks identified, judging each one based on likelihood and severity, which allowed us to prioritise the most significant risks by focusing on those with the highest levels (medium/high) of both factors. Now we had to mitigate these risks, planning ahead in case the risks materialised, which we did by providing a mitigation plan that outlined what we would do to reduce the risk of the specified event occurring. Furthermore, we frequently monitored and reassessed each risk, with the assigned person for each risk responsible for reporting back when necessary. This allowed us to effectively and proactively manage the risks identified, as they don't escalate unnoticed and new risks can be added if they emerge.

The team's risk register is composed of 7 fields: ID, Type, Description, Likelihood, Severity, Mitigation, and Owner. The 'ID' field is a unique identifier for each risk to ensure they are easy to reference in other contexts. 'Type' categorises each risk as either project or product related, and 'Description' provides a brief explanation of each risk. 'Likelihood' refers to the chance of the risk occurring, whereas 'Severity' establishes the potential impact a risk has on the project should it materialise, both of which are classified as low, medium, or high. The 'Mitigation' heading refers to the specific actions planned to minimise the risk of the specified event occurring, and 'Owner' states which team member is responsible for managing and monitoring the risk. The reason why this model is so effective is because these headings satisfy the project's need for clear traceability of each risk, allowing for effective management and proactive changes. See risk register below:

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Project	Work packages are ready	Low	High	Develop a timeline for work package preparation and assign responsibilities.	Owen Jones, Ken Jacob
R2	Project	System Requirements not tabled	Low	Medium	Review the requirements gathered from the client	Bailey Horsley, Rory Ingram
R3	Product	Game Engine not decided	Low	High	Research game engines	Adam Johnson
R4	Project	Website not updated	Medium	Medium	Update the website content regularly and	Abishek Godwin

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					review weekly.	
R5	Project and Product	Architecture phase pending completion	Medium	High	Set deadlines and discuss the designs with the team to finalise the architectural designs	Owen Jones, Louis Polwarth
R6	Project	Risk Analysis incomplete	Low	Medium	Review the concluded sessions and the goal of scheduled sessions.	Abishek Godwin
R7	Product	Implementation not started	Low	High	Once the design decisions are made begin assigning tasks to team members, ensuring work is distributed to improve the bus factor.	Team
R8	Project	Some team members lack familiarity with how LibGDX works	High	High	Watch LibGDX tutorials	Team
R9	Product	Unit tests Incomplete	Medium	High	Write test cases, compare the output with the expected result.Run tests and fix issues	Adam Johnson, Rory Ingram
R10	Project	Implementation Has not met all of the requirements	High	High	Revisit the requirements and adjust the development schedule accordingly	Rory Ingram ,Owen Jones