RISK ASSESSMENT AND MITIGATION

ENG12020TEAM24

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Risk assessment and mitigation

Introduction to risk format

The risk assessment is in a tabular format split into risk types; project, product, business and technologies. With a brief description of the risk, the likelihood of said risk, severity and mitigation. The owner of the risk shall be a member of the team tracking and evaluating the likelihood and severity throughout the project.

Documentation Convention

Risk identification and mitigation
The risk assessment is in a tabular format where each risk is given a code, description of risk and assigned to a member of the team to evaluate regularly the likelihood of the risk and severity.
The likelihood and severity are coded as followed:
- **L - Low risk/severity:** minimum impact to the project, most likely no changes to schedule.
- **M - Moderate risk/severity:** impact may delay certain sections of the project, completion is very likely still.
- **H - High risk/severity:** impact will delay the completion of the project, may make completion not achievable, drastic measures to ensure the project will be brought back on track

The table will also include a mitigation that is in place in case of the occurrence of said risk so that there is a contingency plan in place to ensure the completeness of the product.

Who is responsible for which risk is documented by the initials of the one responsible's name or, if it is something for which every member should take personal responsibility is denoted by "All".

The type of risk is associated with how or in which will the risk affect the product:
- Product - negatively affects the quality or completeness of the software.
- Business - affects the team developing the software and the stakeholders involved.
- Project - negative affects or adverse changes to the project's schedule and resources.
- Product and Project - risk involved with requirements, changes to requirements and elicitation of more specific requirements.

Risk planning and prevention
This section will use the identified risks to come up with a prevention plan so that the risk does not occur/ risk mitigation will work.

Risk & Mitigation Table

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Project	Members all get COVID reactions	H	L	Isolate and work virtually where possible	All
R2	Product and project	Misinterpretation of requirements	M	H	Review our requirements with the client and change the requirements.	Mahir
R3	Business	Inappropriate game for University Open day presentation	L	H	Display the product to the stakeholders and redesign the product to their suggestions.	Daniel
R4	Project	Working out of schedule/ lateness. Alternatively, running out of time.	M	M	Delegate the work to more productive members of the team or reduce the scope of the product to complete in time.	Pratham
R5	Product	Library used breaks	L	M	Replace any broken libraries from a stock of backups researched beforehand.	Daniel
R6	Product and project	Requirement changes that requires changes to the software	H	M	Rewrite the architecture of the product to suit the needs of the new requirements.	Mahir
R7	Project	Member is injured to the point where they can no longer work	L	H	Another member of the team must take over their task as we use a 2 or more bus system.	Pratham
R8	Project	One member doesn't contribute/do his part.	L	H	The member will need to be pushed or penalised into doing the task, if not another member must be delegated their task.	Pratham
R9	Product and Project	Poor communication between customer and developers.	L	H	Reschedule another meeting with a different person who can ask questions differently.	Mahir

Risk Planning and Prevention

Identification of the risk and how the team will minimise the likelihood of the risk occurring and preventing product completeness. Followed by the impact the prevention has on reducing the risk.

ID	Risk Prevention	Impact
R1	The team should follow government guidelines to ensure not to catch the virus, avoid in-person meetings for the project and work fully virtually.	M
R2	Thoroughly discuss requirements and update the customer with progress.	M
R3	The game's rating should be PEGI 3 as discussed with the client and follow the ESRBs definition of a PEGI 3 game.	H
R4	Follow the project schedule and delegate a person to keep track of the completeness of deliverables. Weekly reviews of the project's progress.	H
R5	Research various libraries that are valid in use for Java based 2D games with a high popularity to ensure it is supported.	L
R6	Do not rush into the implementation phase of the project, make sure all requirements are received with the customer knowing of our architecture and flow of the gameplay.	L
R7 R8	When assigning roles and tasks to each member, ensure that we do not create a 1-bus system where one member of the team is solely driving a certain section of the project. Make sure at least 2 members are leading a deliverable.	M
R9	Have multiple members in charge of contacting and communicating with the customer if not all, make sure everyone here's the customer so that multiple interpretations of the customers requests are heard to ensure there is no confusion/misunderstandings if one person is wrong.	M

Risk Reviewing Plan

A once-weekly meeting is to be held to review if any of the risks have occurred and to initiate the mentioned mitigations if necessary.
Risk likelihood and severity changes will be logged alongside the date, as well as newly identified risks.

Date: 25/10/2020
Log: Identification of all current known risks (R1-R9)

Date: 18/11/2020, **Author:** Mahir
Log: R4, reduce scope of game. Abandoning FR_IDLE. This is not in the cohort brief but a customer meeting request.