Risk Assessment

Mario

GROUP 28

Joseph Frankland

Anna Singleton

Saj Hoque

Leif Kemp

Shi (Lucy) Li

Hugo Kwok

5(a) Introduction

Before starting the risk register, as a group we communicated different categories of risks. Using these a list of all possible risks was generated from which we discarded very low likelihood/severity risks.

We decided to give risks numerical IDs as they would be easy to identify and go back to if it was necessary to reference them somewhere else in the project. The type column was used so when we were coming up with possible risks we could think through different lenses and have a wide range of risks so we can manage every possible situation we could think of. The description column is quite simple, it describes the possible risk. An impact column is present to explain the possible effect done to the project and product if the risk were to happen. The likelihood and severity columns are used to measure each risk's chance of happening and the intensity of the worst effect to the project using a high, medium and low scale. Mitigation is our strategy for preventing the risks from occurring as what we think is the best course of action for it. We also need an owner column to identify the person who is responsible for that risk.

After identifying the risks and what they could do to the project we decided to give ownership of risks to members of the team. Members were put in charge of a couple of categories for ease of control, and their responsibility is to manage the risk by reassessing the likelihood and severity of them at different regular intervals throughout the project.

5(b) Risk Register

Risk ID	Type	Description	Impact	Likelihood	Severity	Mitigation
R1	Technology	Game engine runs slowly on customer hardware	May lead to inadequate loading times and under performance	L	M	Test on customer hardware in early stages
R2	People	Team member(s) not engaging with the work	Deadlines may not be met, possibly causing team dysfunctionality	L	M	Set multiple members on a specific task
R3	Product and project	Drastic requirements being added or changed	Will require revamping of schedule - and deadlines	L	H	Regular meetings with customer in order to allow for new requirements to be added without heavily affecting schedule
R4	Product and Project	Data being mishandled / lost	This could lead to progress being lost, possibility of needing to restart the project	M	H	Have proper documentation for backup to be backtracked later if necessary
R5	People	Slow response from customer or team members	Lower productivity in team as specific information may be required to progress	M	M	Frequent meetings involving all members and the customer
R6	Estimation	Miscalculation in scheduling	Delaying and panic may lead to lower quality work	M	M	Plan ahead and leave ample time before deadline
R7	Estimation	Underestimating difficulty of implementation	May lead to missing deadlines on delivering the project due to uncertainty	L	H	Plan ahead and learn the tools in the library before implementation
R8	People	Team members being unable to come to an agreement	Less efficient workflow and team dysfunctionality can lead to slower progression	L	L	Use voting system for decision making if necessary

R9	Technology	Major programming errors causing massive bugs	May lead to further delaying in schedule due to fixing bugs/errors	**L**	**H**	Frequent backups and weekly peer reviews in order to ensure the quality of code
R10	Technology	Updates to LibGDX causing code to not work as before	Further delaying in schedule / possible restart of implementation stage	**L**	**H**	Persist with one version of LibGDX
R11	Project	Lockdown causing communication problems as in person meetings no longer possible	May lead to people unsure on what they're doing. Teammates unable to raise concerns on the project	**M**	**L**	Arrange online meetings and develop a work schedule that does not always require members to be in person
R12	Product	Scope creep, thinking of adding too many or too complicated unnecessary features	Overcomplication as well as possibility of not completing project in timeframe	**M**	**M**	Have a priority list on what features to implement corresponding to each requirement and keep things simple
R13	Project	Lack of organisation for team members unsure what they're meant to be doing	No synced workflow inevitably leading to an incomplete project	**M**	**M**	Use a gantt chart to organise tasks and have a list for each member's tasks
R14	Product and project	Data theft from outside sources	Project ideas could be lost/stolen - Credibility of work may be lost	**L**	**H**	Use password protected cloud drive and do not share data to any third party

5(b) Key *(Likelihood and Severity)*

L	-	Low	-	Green
M	-	Medium	-	Orange
H	-	High	-	Red

Justification of the Key
We chose three levels to classify severity and likelihood because it is a sufficient number of ways to signify different levels of these factors. It doesn't overcomplicate this register leading to a more efficient way of managing the risks as less time would need to be spent thinking about a large amount of levels and its validity for a specific situation.

5(b) Classifications
Technology - This type of risk is related to the technology we choose to create the game and also what we have to work with in regards to development and running the actual game.
Product - This type of risk is related to the final outcome of how the product works and runs.
Project - This type of risk is related to the inner workings and processes of how the project runs, teamwork, management of resources etc.
Product and Project - This type of risk relates to things which would affect both the management of the project as well as things that will affect the final product.
People - This type of risk is related to things that directly affect the members of the team and their ability to work efficiently.

Risk ID	Owner
R1	Saj
R2	Joseph
R3	Hugo
R4	Hugo
R5	Joseph
R6	Saj
R7	Saj
R8	Joseph
R9	Saj
R10	Saj
R11	Joseph
R12	Hugo
R13	Joseph
R14	Hugo