Risk Assessment and Mitigation

Cohort 3 Team 4

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Risk management process

In order to guarantee risk-free game development, our team decided to dedicate a meeting to evaluate our requirements to identify potential threats we could face during our project. When doing this, we went through each member's role to make sure we covered a broad range of possible risks relating to each person's job - this helped to simplify the process, as we were able to identify risks we may not have thought of if we didn't break it down.

In order to make a risk register, we needed to analyse our risks against a range of different factors. Our thought process as to how we arrived at concluding said factors and went about evaluating our risks is explained below.

Once we had compiled a range of different risks we could face, we needed to group these into categories for our register. The types we decided on were product, project, technology and team and they are briefly described below:

1. Product - this consists of risks to the product itself that may hinder gameplay for the user
2. Project - this consists of risks to do with our overall structure of the project, including factors such as our organisation and overall teamworking ability
3. Technology - these risks are to do with technical difficulties we could face and include things such as software glitches, coding bugs, performance issues etc
4. Team - this includes internal risks to do with our team's performance

The other headers we included in the register were:

- ID. By assigning each risk an identification number, this header will create an ordered list of our risks, so they're easier to identify and manage.
- Type. Each risk will be grouped into one of the types described previously so we know what area the risk relates to.
- Description. This will be a brief explanation of what the risk entails to make it clear what each one involves.
- Likelihood. By assigning 'low', 'medium' or 'high' to each risk, we are able to see which risks we should be particularly aware of in comparison to the others. Although we will be cautious of all of the risks on our final list, some may be more likely to cause damage than others, so we felt it necessary to include this header.
- Severity. Like the 'likelihood' header, we are also using the 'low', 'medium' and 'high' groupings for this header too; this will help us understand how serious damage to our project would be if this risk were to occur.
- Mitigation. This header describes how we could go about preventing the risk.
- Owner. By including this header, the risks are easier to manage, as each one is assigned a member to oversee it and make sure it's prevented.

Risk register

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Team	Communication issues can lead to delays and poor execution of the project	Medium	High	By using multiple methods of online communication, there will be at least one way we can convey information to each other when not in person. We will also have regular meetings two times a week to make sure everything is on track.	Kiran
R2	Technology	Using software that isn't complementary	Medium	Medium	We will make sure to research and decide on our software before beginning the project to make sure they're compatible.	Ben
R3	Product	Poor maintenance of code	Medium	High	All of our members will be involved in coding, some more than others. Due to this, all members will be able to assist each other and can conduct regular reviewing of the code. We will also make sure to add comments throughout our code so we can keep track of progress.	Dash
R4	Technology	Bugs in unfamiliar libraries can cause us to fall behind schedule	Low	High	We will be sure to look into the external resources we use prior to using them to make sure they're safe and we're familiar with them.	Charles
R5	Team	Lack of meeting attendance can affect decisions made by the team	Low	Medium	Within our documents on GitHub, we will be tracking attendance of members during our meetings to	Abualhassan

					make sure expectations are met. If members cannot make it, we will be sure to share information that was discussed online.	
R6	Technology	Struggling to use game engines can delay progress	Medium	Medium	We will use game engines that have a broad range of information about them online so we can use these resources to assist us.	Ben
R7	Project	Not keeping documentation up to date	Medium	Medium	We will update our documentation to summarise the outcome of each meeting, as well as making sure to keep track of progress of tasks each person has been assigned.	Hannah
R8	Team	Difference in member strengths can cause imbalances in workload	Low	Medium	Prior to starting, we will identify strengths of members so we can assign everyone tasks they're confident with.	Harley
R9	Project	Poor organisation	Medium	High	Our team has set up GitHub repositories to make sure we are organised with the tasks that everyone has to complete - our meetings involve updating these with what we have achieved and what is next to do. Two meetings a week will make sure targets are being met.	Kiran

R10	Technology	Code errors may cause crashes	High	High	As we will be using new software, it may be more difficult to get the gameplay working, so we will be sure to use resources to help, as well as regularly reviewing where we're up to as a team.	Abualhassan
R11	Product	Requirements being too tricky to meet	Medium	High	Although we have an initial list of requirements, through using an iterative approach, we will be able to go back and check throughout making the game, so that we can manage and keep up to date with them.	Hannah
R12	Product	User interface that's too difficult to navigate	Medium	Medium	We will review our interface after creation to see if it's user friendly, whilst also meeting our requirements.	Cassie
R13	Technology	Insufficient code testing	High	High	Test plans will allow us to check our code thoroughly against a criteria; regular debugging will help this process go smoothly.	Dash
R14	Project	Lack of client meetings	Low	High	We value that feedback is important so by scheduling regular client meetings, we will be able to see if we are on the right track and are meeting the requirements necessary.	Cassie