Risk Assessment and Mitigation

Introduce and justify your risk format and level of detail (3 marks, ≤ 1 *page*).

There are 4 main steps to our risk format:

- Identifying the risks that we could potentially run into
- Assessing the risks that are most relevant and the biggest danger to our project
- Have plans in place to mitigate or reduce the severity of the risk before it happens
- Regularly look back to our risks to ensure there are no new risks we have identified and also that we are not running into any of our already existing risks

To begin with we organised a group meeting to identify our risks, we thought through each aspect of the project, and worked out what could potentially be a problem. We recognised there was a difference between risk and uncertainty and acknowledged that we weren't going to be able to identify every problem that could come up because a lot of them were uncertain, therefore unidentifiable. We started by writing down all the risks in a Mural board and then next to them identifying how we could mitigate them. Everybody in the team provided suggestions so overall we had a range of different ideas we could use to help reduce the risk. Then we filtered the most relevant ones. To analyse the risk, similar to risk planning, we used the Mural board next to each of the risks and each discussed the likelihood of each and their severity if they were to happen. We came to agreements as a team about each one and made sure everybody understood why there was a risk and why it was important it didn't happen. Every other week we had our 'Stand up' where we'd come together and discuss the progress and risks. We went through our list of risks and discussed whether we'd been close to any or run into any, and if so, how they were mitigated or how we could mitigate them moving forward. We recognised that we needed to keep re-evaluating how we were progressing in alignment with the risks.

Having all the risks outlined enabled us to always keep checking them to ensure we're not running into them. We also had our mitigation plans in place which meant if we felt we were running into any of the risks, we had a plan in place to solve the problem. Being proactive rather than reactive ensures that we are able to meet our deadlines and not have any problems that could potentially put the project at risk.

We regularly reviewed our risk assessment to identify any new potential risks that may have arisen within the development of the project, or risks that may not have been identified before.

Type refers to the type of risk that is being listed, they could be a 'Project', 'Product', 'Product and Project' or 'Business' risk. The majority of our risks are either Project or Product risks because our product isn't made for commercial purposes.

Likelihood and Severity can be measured through L, M and H, which are explained below. A risk may be most worrying if both the Likelihood and the Severity are both High, or one is Medium and the other is High, meaning there should be more focus on those areas to make sure everything stays on track.

L = Low

M = Medium

H = High

ID	Type	Description	Likelihood	Severity	Mitigation	Owner
R1	Project	Members of the team may be unavailable	M	M	Organise meetings well in advance to ensure everyone can make it, if someone can not make it ensure they are given a brief of what was discussed.	Joel
R2	Product and Project	Not reach the given deadline	M	H	Constantly re-evaluate progress in bi-weekly team meetings	Charlotte
R3	Project	Lack of technical skills in game development	H	M	Make sure to take tutorials on LibGDX so we all know what we are doing	Arslan
R4	Business	Loss of intellectual property	L	M	Use GitHub to store code and make sure that when new features are being implemented, new branches are created so code isn't overwritten. Google Drive to store documents	Joel
R5	Project	Change in requirements of the customer	L	L	Using an agile development approach, we can constantly re-evaluate what the customer wants so we are dynamic in able to adapt our code	Anuj
R6	Product	Game could be difficult to understand	M	M	Make sure there is a help section or test on users to make sure it's easy enough to play	Will
R7	Product	Controls aren't obvious enough	M	M	Include in the game help menu, there could also be a choice of controls the user wants to use	Charlotte
R8	Product	Could be too much on screen to look at - confusing	M	L	In bi-weekly meetings, check together that it doesn't look too cluttered	Anuj

R9	Project	Not meeting the requirements of the customer	M	H	In meetings, re-evaluate current position in project and how that compares to the requirements of the customer, and how we are going to get to the final destination	Will
R10	Project	Members of the team may be struggling with their assigned task	M	M	Have regular meetings in which we discuss the tasks delegated to each team member and how they are getting along with them	Arslan
R11	Product	There may be bugs within the game that may not be identified	M	M	Everyone will regularly play the game multiple times to test the product ensure any bugs are identified	Everyone
R12	Product	Poor code quality	M	M	Use pairing to code, a method in which one person would code and the other would watch, this increases the chances of better ways for the code to be written to be identified amongst many other benefits	Everyone