| <u>ID</u> | <u>Risk</u> | Risk Information <u>& Causes</u> | <u>Likeli-</u> ness | Seve- rity | Avoidance / Minimisation | Risk Monitoring | | |
|-----------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | | People | | | | | | |
| P1 | Member missing / unable to work - short term | Someone may not be able to do their share of the workload due to illness and personal reasons. Can lead to issues reaching team goals. | 2 | 3 | Give notice if/when and why you're not going to be able to make it. The missing person(s) will then be updated on Messenger on what was discussed/agreed and what they have to do for their workload. Work will be on Drive or Github. | This can come up out of nowhere, so not much can be done, but note that illnesses are more likely during the Winter season, etc. | | |
| P2 | Member missing - long term | It's possible that someone drops out of the course / University or is unable to attend due to a string of illnesses and personal issues. | 1 | 5 | Discuss the matter with the Course Leader, but otherwise, the designs/requirements may need to be simplified and the workload may need to be altered to avoid stressful situations. | Try to discuss how every module is going for each member to see if there are any issues. | | |
| P3 | Member not doing work outside of lab | A member might only do work in SEPR labs, which can lead to us falling behind on our overall goals. This is at an increased risk over the holiday periods caused by family commitments and change of environment | 5 | 3-4 | Discuss the matter with them to see why they aren't doing their work, potentially altering the workload if they're struggling. | Regular checks in meetings to see if assigned work is being done. | | |
| P4 | Member motivation failing | Members may become worn and tired of the course / project and lose enthusiasm, so work quality and delivery may suffer. Over the holidays, this could be | 4 | 2 | Avoid hardships by planning ahead, otherwise things like complimenting people on their work and keeping each member's workload varied may help in the long run. | Take note if anything has happened in the group to make them feel like this, reflect how we feel like the project is going regularly. | | |

| | | especially prevalent caused by distance, lack of direct pressure from the group and especially added pressure of forthcoming exams | | | | |
|----|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| P5 | Friction between Members | Two or more members could have a falling out or argument, potentially leading to work not being done and meeting time being wasted. | 2 | 2 | Try to break up any conflicts or seek a compromise as soon as possible. Keep meetings civil, possibly seek advice from module leaders. | Keep note if anything is slowly building up over time. Discuss in meetings. |
| P6 | Member having extensive family commitment s | Members may have extensive family commitments which means they cannot fully participate in group schedules sessions and keep up with their workload. This is caused by most people going home for the holidays | <mark>4</mark> | 2 | This is unavoidable, to minimise the risk acknowledge it is difficult to continue to work efficiently surrounded by distractions. Alter the schedule to account for this and plan for increased workload after holidays are over., | This is unavoidable, maintaining open communication with the group about issues allows this to be dealt with quickly. |
| | Tools & Technology | | | | | |
| T1 | Computer / Software crashes | A random crash may disrupt a member's workflow, while also potentially losing data / work in the process. | 2 | 1-3 | Back up regularly and push work regularly and keep everything on Drive/Github. Software like Word can also save work from crashes, etc. | Completely random, but some software may be known for crashing. |
| T2 | Member not having correct software or tool to do work with | A member may not have access to a PC at home, or have the specs or space to download and run the tools we use to create the game, so they will not be able to do their work at home. | 2 | 3 | Discuss this beforehand to see if everyone can work in their own time at home. Otherwise, they may need to do this all in Software labs, and thus their workload may need to be specifically tailored for this. | Discuss at meetings to see if everyone can run any new software and if anyone will be unable to get to a computer system for a period of time. |

| ТЗ | Difficulty in creating or obtaining assets for game | No one in the team is an artist or musician, but we will need art and music assets for the game. This means we may struggle to create them ourselves, or struggle to find free non-copyrighted assets to use. | 4 | 2 | The group shouldn't be awfully picky on the art or music we create, and members should start to research websites where such assets can be found in advance. | This will come up around the middle of the game's development, monitoring should start right before development begins. | |
|-----------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--|
| T4 | Code being of a poor standard | The code is poorly written and has no / limited comments, making additions and edits difficult for members. | 2 | 3 | Remind programmers to keep it up to an acceptable standard, have several people review the code before it's moved to the main branch. | Discuss code quality all the way through its development in meetings. | |
| T5 | Code's version control not being kept up | A member may not use Git as intended, leading to copies of the main code being created, all containing different levels of completed work. | 2 | 4 | Make sure everyone knows how Git and Github works, and say in Messenger if you have updated something that others need to be aware of. | Discuss the code's version control all the way through its development in meetings. | |
| T6 | Member not having access to wifi for an extended period of time | Caused by visiting family over the holiday period in a place without wifi, so they will not be able to complete their work | 3 | 3 | Attempt to allocate this member work which will not require internet access, such as designing graphics and writing up meeting notes. | This would be known in advance therefore a discussion could be had to find the most appropriate work to be allocated. | |
| | Requirements | | | | | | |
| R1 | Changes in Requirement s | The team may receive new requirements after a meeting with the stakeholders, meaning that we will have new tasks to focus on, while older requirements may no longer be relevant. | 5 | 2 | Respond quickly by understanding what the new requirement entails and make a clear plan in how to implement it into our project. Keep a clear plan of all requirements. | Discuss any new requirements in meetings and how they affect old requirements regularly. Someone may be in charge | |

| | | | | | | of requirements. |
|----|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| R2 | Creative differences between members | In discussing ideas, two or more members may have clashing ideas where neither one wants to back down, causing a stalemate where the idea discussion halts. | 4 | 2 | A large portion of this will be finding a compromise, which may be suggested by another person in the group. Don't forget the KISS principle. | This can come up throughout the entire development, so discuss ideas in meetings and find an agreement. |
| R3 | Unacceptabl e quality of work created | Work, notably reports and code, may be created at a standard that's unacceptable and thus will have to be fixed or completely remade by another member. | 2 | 5 | Review and read through each piece of work submitted by other members to see if it's of acceptable quality. If it's of poor quality, discuss the matter with them and the rest of the team. | Discuss this regularly whenever a piece of work is handed in. |
| R4 | Non-require ments being focused | One or more members may focus on implementing something that isn't necessary and isn't a requirement, wasting time and effort while we still need to finish off compulsory work. | 2 | 4 | Make sure everyone understand what the requirements are and what they have to implement. If each member and what they're doing is kept track of, this can be detected early and fixed. | Someone with a specific role, potentially a leader role, may need to keep track of what work is being done by everyone else. |
| R5 | Running out of time | As there's a lot of work to do, it's possible that we could run out of time and have to submit unfinished work, or cram work at the end. | 3 | 5 | Using the Scrum method, split up work into pieces and make sure we achieve them in good time in our sprints. Keep track of what's on our current assessment, when it's due, and what's on the next one, in case we need a headstart. | Keep track of deadlines and the work that was finished/not finished on time. May need to assign this risk to specific role. |
| R6 | Requirement being a lot more difficult to achieve | We could be overambitious and take on requirements that are too difficult for us to implement, meaning that we will have to change requirements with the stakeholders. | 3 | 3 | This is more difficult to gauge and will be discussed and agreed on in meetings. Arrange meetings with stakeholders or discuss the situation with a lecturer if we are unable to find a way around the requirement. | This will come up throughout the development of the program, discuss progression in regular meetings. |