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| **ID** | **Identified Risk** | **Owner** | **Categories** | **Consequences** | **Likelihood** | **Impact** | **Mitigation** |
| **1** | Workload increase/Tired out | PM | COMM / PROD | Can result in developers getting overworked and can lead to sloppy work |  | **3** | Agree on comprehensive schedule for remaining tasks allowing for rest periods/days. Allowing for non-rush based progression throughout the assignment. |
| **2** | Getting sidetracked through development and design | PM | SCHED | This will result in loss of time and bulking up of the program which will cause multiple risks to happen |  | **3** | Focus/complete tasks related to requirements. Optional/superfluous tasks after. |
| **3** | Bugs within program | SA | PROD | This can slow development progression and can also lead to loss of marks |  | **2** | Thorough testing and use of continuous integration tools will alert the team to the presence of bugs so they can be resolved as soon as they are created. \* |
| **4** | Being too overly ambitious | S / PM | COMM / SCHED | Making the game too hard to code up and putting a lot of stress on the developers of the game resulting in a possible failure due to lack of working game |  | **4** | Certain requirements may need to be reevaluated/changed at each development sprint if they are deemed too time-consuming. |
| **5** | Art not fully completed | CI | PROD / TOOL | Can lead to an annoying looking game style and code result in errors if a call is made for a sprite that isn't real |  | **2** | We will have backup art from third-party sources should the art not be completed on schedule. |
| **6** | Miscommunication within the team | PM | COMM | Can create a spiral of problems later down the line and means people will have to do work which can set off other risks |  | **4** | In the meetings, actions for members are written explicitly. Oversight is also used to check whether a member is not wasting their time. |
| **7** | Absenteeism of people within the group | S | COMM | Because people hold such personalised roles it will be hard to add another person's role onto someone else which will result in other risks becoming a reality |  | **4** | During our meetings, each member will give an update on their current job so that if they are absent for any reason, another group member can easily assume their role. |
| **8** | Missing project requirements | PM | SCHED / COMM | This will result in missing the specification set by the customer which may result in a lower mark |  | **3** | We contact the customer to confirm and update the requirements regularly. |
| **9** | Lack of commitment | PM | COMM | This will result in the same way as basically an absenteeism |  | **4** | By having regular meetings the group can judge how committed people in the group are and adapt accordingly. |
| **10** | Team member disagreements - small | PM | COMM | Can result in minor feuds losing time and possible commitment issues |  | **2** | Whenever a disagreement occurs we the group votes on the topic. If of a social nature SEPR leaders will be contacted on how to proceed. |
| **11** | Changes to specification/thoughts/design | CI | COMM | Can result in massive changes and delays to the schedule and will result in a lot of more extra work |  | **4** | At the beginning of the project we briefly drafted the entire project, and before we work on each section we discuss it in a group reducing the likelihood of change on already completed work. |
| **12** | Lack of knowledge | TC | TOOL / PROD | This may result in non-optimal deliverables, affecting our ability to meet the requirements. |  | **2** | We will make sure to consult the project manager(s) (expert) on jobs that we are not entirely sure about. We will clearly outline any assumptions in the documentation. |
| **13** | Losing access to working computer | PM | TOOL | Affected group members would be unable to complete their work. |  | **4** | If no suitable alternatives are available (university, friends, etc) then that member’s work would be reallocated for the period required to regain access. |
| **14** | Game running slowly | SA / TC | PROD | This will make the game annoying and frustrating to play, resulting in a bad product to be released |  | **4** | Software developers will be in charge of checking whether the game can run on multiple types of machines, and our code will be changed accordingly. \* |
| **15** | Internal/group deadlines missed | S | SCHED | This will result in parts of the project being done late and might lead to a spiral affect other pieces of work being in on time |  | **3** | Regular meetings to keep track of deadlines and if a deadline is missed multiple members are assigned to complete the task. |
| **16** | Submission deadlines missed | PM | SCHED | Depending on how long we leave it for can result in zero mark |  | **5** | Assignment deadlines are recorded and submissions are planned for in advance. |
| **17** | Large team disagreements | PM / CI | COMM | Can result in a loss of a team member and can result in loss of work |  | **3** | In the case of a large team disagreement, we would contact the SEPR lectures requesting information on how to proceed. |
| **18** | No backup/loss of work | PM | TOOL / SCHED | Result of loss of marks and best case losing of time |  | **5** | We have a back-up on the cloud and google drive. We will also be creating local back-ups just in case we need to go back further than 7 days like google drive allows for, or if someone empties the trash folder. |
| **19** | Unreadable code | SA | COMM / PROD | Same as team miscommunication and can also lead to bugs in the code |  | **3** | Comments will be used to explain code but will also be held strictly to the design as to not make as confusing. **\*** |
| **20** | No way of tracking changes to the code | SA | TOOL / PROD | The design of the code would have to be changed and loss of time would be created also result of possible errors/bugs |  | **3** | We are using GitHub, this will allow us to use commits when we upload new code to be able to keep track of changes. **\*** |

**\*** We will be using git repositories made with GitHub to store and manage access to our code. We intend to have a 2 branches; one for production (working, stable code) and development (in flux, may require documentation, etc..). When merging commits from our development branch, we will make sure to create pull requests so that the changes can be verified and understood by all developers. This will ensure all code in our production (master) branch will be fully working and documented.