

UNIVERSITY OF YORK
DEPARTMENT OF COMPUTER SCIENCE

ENG1

Group 8 - Magic 8-Balls

Report -

5. Risk Assessment & Mitigation

Group Members:

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5 a) Describe and justify the risk management process followed by your team and the format of your team's risk register (3 marks, ≤ 1 page).

We need a risk management process to identify, analyse and respond to any risk that arises over the life cycle of our project to help the project remain on track and meet our goal. The first thing we did prior to any planning or implementation was conduct a thorough review of the entire project to identify the risks we could potentially face which could impact the success of our project so we could develop proper mitigation measures to reduce the risk of them occurring to begin with.

The risk register is split into several important columns: 'ID', 'Type of Risk', 'Risk', 'Likelihood', 'Impact/Severity', 'Mitigation' and 'Ownership'. The risks have a unique ID which makes it easy to refer to and categorising the risks into either 'Project', 'Product' or 'Technology' related risk helps us be aware of how the risk could occur and where in the project it would affect. 'Likelihood' uses a scale of 'low', 'moderate' and 'high' to rank the risk on the chances of whether it will occur. This ensures that we know what to prioritise the most according to its Likelihood. If we underestimate the Likelihood of an event, we may not take the necessary precautions to avoid it therefore affecting our project significantly or just being an inconvenience. 'Impact' is the expected severity of the adverse effects due to the occurrence of the risk. Evaluating Impact is useful in determining which risks to prioritise to save time. Each risk is assigned to an appropriate group member (in the 'Ownership' column) who continuously monitors and manages the risk to make sure mitigation measures are followed and that the risk is under control. The mitigation plans for each specific risk is under the 'Mitigation' column which details the actions that should be taken in order to reduce or prevent the likelihood of the risk occurring. This is constantly checked upon by the designated member.

The risk management process is an iterative process which is prone to changes throughout the project. We made it an important priority to regularly review and update the risk register throughout the project to ensure it remains effective and relevant and to make any necessary adjustments due to project changes. As a result, it has helped mitigate risks and our project ran quite smoothly.

5 b) Give a systematic tabular presentation of risks (risk register) to the project, their likelihood, impact, mitigation and ownership (7 marks, ≤ 3 pages).

| ID | Type of Risk | Risk | Likelihood | Impact | Mitigation | Ownership |
|----|--------------|-------------------------------------------------------------------------|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| R1 | Project | Not completing enough work every week to meet our deadline | High | High | Delegate tasks in regular meetings and plan out a schedule to ensure work is done. | Kate |
| R2 | Project | Each task taking too long to complete resulting in delay of other tasks | Moderate | High | Plan out how to do task, have deadlines for each task, respective members work together and help each other out if they are struggling | Asude, Sarah |
| R3 | Project | Member of group falling behind/not doing their work on time | High | High | Checking up on everyone in both regular meetings. Communicate on why this is occurring and how we can fix it. Providing support on their work if they require it. | Kate |
| R4 | Project | Unclear project schedule, specification and plan | Moderate | High | Draw up Gantt charts for project schedule, elicit and negotiate requirements with customer and the group through regular customer meetings | Asude, Kate |
| R5 | Project | The same tasks repeated by different group members | Low | Moderate | Using Monday. Tasks can be organised and assigned to. This ensures that no two people are working on the same task if unnecessary | Asude, Sarah |
| R6 | Project | Conflicts between members of group | Low | Moderate | Make decisions unanimously and ensure all discussions are approached in a calm and mature manner | All |
| R7 | Project | Unreadable code which is hard to work with | Moderate | Moderate | Use comments, readable variable/function/class names | Jack, Will, Matt |
| R8 | Product | Bugs and errors in code | Moderate | Moderate | Use GitHub to manage different versions of the code. Regularly check on code to see if it works so you can pinpoint the location of the error in which version easily. Can revert to a previous | Jack, Will, Matt |

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|-----|------------|---------------------------------------------------------------------------------------|----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| | | | | | version | |
| R9 | Project | Lack of communication, causing lack of clarity and confusion. | Low | Moderate | Regularly keep updates on tasks to be done and have been done in group chat/weekly meetings | Asude, Sarah |
| R10 | Project | Upcoming exams causing delay in work progress | High | High | Split up tasks accordingly for each week in time for the deadline taking into account that less work will be done throughout the exam period. | Asude, Sarah |
| R11 | Technology | Loss of work from crashes | Low | High | Use auto-save feature and regularly save work. Make commits often to ensure work is saved on the GitHub. | All |
| R12 | Technology | Buggy game that is not working as intended | Moderate | Moderate | Make commits often so we can revert back to a previous working version without loss of much work and to find the cause and at which point the bug started occurring. | All |
| R13 | Project | Conflicting schedules leading to irregular meetings | Low | Low | Do more regular brief online meeting calls | Kate |
| R14 | Project | Legal issues as a result of using copyrighted assets and resources without permission | Low | Low | Obtain permission/use assets with the right licensing | Sarah |
| R15 | Product | The game does not fit the needs of the customer/ stakeholder | Moderate | Moderate | Hold regular customer meetings to help define and confirm requirements of the game | Sarah, Matt |
| R16 | | | | | | |