## **University of York**

# **Department of Computer Science**

# Risk assessment and Mitigation Deliverable Deliverable

Team 19:
Julia Kunikowska
Jack Longmuir
Justin Mendon
Luke Roberts
Douglas Sword
Andrea Zhu

Deliverable submitted for Team assessment 1: Engineering 1 - COM00019I

Module Leaders:
Prof. Dimitris Kolovos
Dr Javier Camara Moreno

# **Introduction and justification**

The ID column is used as a way for someone to be able to quickly reference a risk, rather than having to use the entire description when referencing the Risk.

In the Type column there are 3 different possibilities, each for a different category of risk: Technology, Product and Project.

- We chose these 3 categories as they are able to cover all the different areas that
  risks could appear in whilst not being too precise or too general so it is easy to
  understand what they cover.
- Product is for risks which affect the completeness and quality of the final product.
- Project is for risks which will affect the completion during the development phase and is likely to affect the schedule and distribution of tasks.
- Technology is for risks related to the software and hardware being used.

Both Likelihood and Severity use a rating of Low(L), Medium(M) and High(H) with a color code for easier identification where green is low, orange is medium and red is high.

For Likelihood this relates to the chance of the risk occurring, with the chances of occurring roughly being <25% for low, 25-75% for medium and >75% for high.

- For Severity the ratings correlate to the impact it will have on the project, with low being very little impact and causing few issues overall.
- Medium severity is for risks which have a larger effect on the project, but are not serious enough to stop the project completely.
- High severity is for risks that can cause the project to fail or will need to be addressed immediately if it were to occur.

### Risks, Likelihood, Impact and Mitigation

| ID | Туре    | Description                         | Likelihood | Severity | Mitigation   |
|----|---------|-------------------------------------|------------|----------|--|
| R1 | Project | Main programmer becomes unavailable | M          | Н        | Make sure multiple people know how the program works and are able to carry on without one person |

| R2 | Technolog<br>y | People aren't able<br>to run the game on<br>their hardware                       | L | M | Make sure that the game is able to run regardless of the kind of hardware                         |
|----|----------------|--|---|---|---|
| R3 | Technolog<br>y | Mismatching Java<br>versions cause<br>errors in code                             | M | M | Make sure everyone is on the same version before beginning the project                            |
| R4 | Product        | Last minute changes to requirements cause the project to not be completed fully. | L | M | Check with customer about any changes to requirements regularly                                   |
| R5 | Technolog<br>y | Lose core code<br>needed for project<br>to run through<br>corruption/deletion    | L | Н | Keep backups of the project and require people to review code before merging with the main branch |
| R6 | Project        | Key members<br>become<br>unavailable   | M | M | Have multiple people capable of working on each part of the project                               |
| R7 | Product        | Key part of the project gets missed  | L | L | Document what is being worked on  |
| R8 | Project        | Don't complete<br>key requirements<br>in time                                    | M | Н | Plan the project beforehand and leave extra time for unexpected problems.                         |

| R9  | Project | Try to add to much to the project and miss out key requirements | L | Н | Get key requirements finished first   |
|-----|---------|---|---|---|---|
| R10 | Project | Lose<br>documentation<br>files                                  | L | M | Keep backups of files and use an online service to save them ie. google docs. |
| R11 | Project | Documentation is incomplete/ incorrect                          | M | L | Have peer review of important documentation                                   |