Module	SEPR
Year	2019/20
Assessment	2
Team	MiKroysoft
Members	Daniel Crooks, James Rand, Irene Sarigu, Alfie Jennings, Charlotte Clark, Jasper Law
Deliverable	5c Risk Assessment and Mitigation Update
Website	https://mikroysoft.github.io/

Risk assessment and Mitigation

The table below explains the changes from the Risk assessment and mitigation document in assessment 1 (url: https://mikroysoft.github.io/Risk1.pdf) and this assessment. All the changes we made are changed in the likelihood of a risk happening and these are highlighted in yellow.

   	Addition
   	Changes
   	Removal

Prior to implementation for assessment 2, the risk table was updated during a team meeting reviewing assessment 1 feedback.

For the remainder of the assessment, our risk table was updated through a combination of continuous change suggestions during development, and bi-weekly team meetings (hosted through Slack during the Christmas holidays) to review suggestions and add further changes.

We are aware that these risks will change again as we further progress through the assessment, however we believe that this is the best evaluation of our risks currently.

Risk ID	Type	Description of Risk	Likelihood	Severity	Management	Owner
RA_DIFF	Project	Planning/Management tool is too difficult to understand and we are unable to use it.	Med	1	**Avoid:** Familiarised ourselves with the management tool before deciding to use it. **Mitigation**: Read documentation to guide how we use the tool or seek another management tool if reading the documentation does not work.	Irene
RA_NEED	Project	Planning/Management tool doesn't meet our needs.	Low	1	**Avoid:** Looked at what the management tool had to offer before deciding to use it. **Mitigation:** Read the documentation to see if there are any other features that can be used or seek another management tool that meets our needs.	Irene
RA_LIB	Product	Graphics libraries for the project are too complex to understand and use.	Med	4	**Mitigation:** Research into the graphic libraries we use before relying on them.	Daniel
RA_ABSENT	Project	A team member is absent and cannot present their work that other members may be dependent on.	Med	1	**Avoid:** Comment code and share work on GitHub. **Mitigation:** Frequent meetings will minimise the severity of single absences. Absentee must communicate with present team members to inform others	Daniel

					of their absence and catch-up.	
RA_REQ_CHANGE	Project	Requirements change at the last minute.	High	3	**Mitigation:** have continuous communication with stakeholders and frequent meetings. As well as referring to the requirements documentation regularly through the project.	Charlotte
RA_TOOL_CONFUSION	Project	Using too many management/planning and communication tools causing confusion and poor communication. Meaning team members don't receive important information.	Med	2	**Mitigation:** Pre-assign tasks and have a stand-up in each meeting. Also agree on a preferred method of communication, with which all team members are familiar.	Irene
RA_TEAM	Project	Team dynamics don't work as expected leading to conflict and poor communication.	Med	3	**Avoid:** Underwent a team building session in SEPR Lab 1. **Mitigation:** Remain professional and communicate about the project. If a dispute distracts from the project, a group discussion should be held to resolve the issue.	Irene
RA_EFFICIENT	Project	Team does not work efficiently under pressure.	Med	4	**Mitigation:** Assign internal deadlines to manage workload. Try and avoid absences, as well as give extra time if needed	Irene
RA_KNOWLEDGE	Project	Team lacks technical knowledge to work on a given task.	Low	4	**Mitigation:** Attend all labs and lectures available and follow up with independent research.	Daniel
RA_HARDWARE	Technological	Experience hardware problems whilst working on a task, resulting in work being lost.	Med	3	**Mitigation:** Use GitHub to allow access to all points in development. Ask for advice to fix hardware problems and use university computers so work can be accessed from server.	Daniel
RA_REQ_USER	Project/Product	The team misunderstands the user requirements, or the requirements are not detailed	Low	5	**Mitigation:** Hold regular meetings with the stakeholders and regularly refer to the requirements. Code may need to be refactored to meet requirements.	Charlotte

		enough.				
RA_ MAINTAIN	Product	We write unmaintainable code and cannot develop the code, or add new features.	Med	4	**Mitigation:** Follow coding conventions and comment efficiently.	Alfie
RA_BASIC_ FT	Product	Focus too much on extra features, without completing important basic features.	Med	5	**Avoid:** Determine the basic features needed before programming. **Mitigation:** Remodel code so that basic features are included, team members may need to put in extra time to ensure this.	Alfie
RA_INT_ DEADLINE	Project	Not meeting internal deadlines set by the team.	High	3	**Mitigation:** Team members should work independently to meet deadlines agreed upon.	Irene
RA_COM_ USER	Project	Poor communication between the team and user.	Med	3	**Mitigation:** Communicate frequently with the user and refer regularly to the user requirements throughout project development.	Charlotte
RA_CRASH	Product	Game crashes whilst user is playing, progress is lost and user cannot complete the game.	Low	5	**Mitigation:** Test regularly throughout development, to find bugs and fix accordingly.	Jasper
RA_ARCH	Technolo gical	The designed architecture is unable to support requirements	Low	3	**Mitigation:** design architecture for new requirements and adapt if needed.	James
RA_DIFF	Product	Game is too easy or too complicated for users	High	1	Adjust the difficulty of game elements as required.	Jasper
RA_GOAL_ MET	Product	Game goal (or methods to reach goal) are unclear to the user.	High	3	Highlight the relevant tools or game elements. Refactor tutorial mode to include the required information.	Jasper
RA_UI	Product	The UI is too complex, lacks features, or interferes with the gameplay.	Med	4	Adapt the UI as required.	Jasper

RA_STORY	Product	Storyline is hard to follow, unclear or interferes with gameplay.	Med	2	Adapt implementation as required.	Jasper
RA_PROD	Product	Team chooses a product for assessment 3 which isn't suitable for our technical knowledge.	Med	5	**Mitigation:** Speak to the previous product owner and research into used features to gain a greater understanding.	Charlotte
RA_FAIL_ PROD	Product	Team chooses a product for the assessment 3 which hasn't been tested and has bugs.	Med	5	**Mitigation:** Talk to previous product owners about their project and consider their presentations. **Solution:** Manually test code to find bugs and address accordingly before progressing with development of code.	Charlotte
RA_TIMEMA	Project	Our Team spends more time on developing rather than testing, producing a product with bugs.	High	5	**Mitigation:** Code reviews and tests whenever a new feature is added.	Irene
RA_CLEAN	Technolo gical	Team doesn't keep the code clean, making it difficult to maintain code.	High	3	**Mitigation:** Code reviews before merging to dev.	Daniel
RA_ARCHI	Technolo gical	The abstract architecture isn't suitable therefore a new architecture needs to be developed.	High	3	**Mitigation:** Spend some time understanding the project and checking its architecture before starting coding.	James
RA_TEST	Technolo gical	Testing frameworks for the project are too complex to understand and use.	Med	3	**Mitigation:** Research the testing frameworks.	Daniel
RA_GOAL	Project	Game goals are unreachable.	Low	5	**Mitigation:** Reassess goals to make them realistic.	Daniel
RA_MICRO	Project	The team experiences micromanagement	Low	3	**Mitigation:** Divide the work prior to the start of the meeting so that we all know what we were doing	Irene

RA_GIT	Technological	Git is too difficult to understand and we are unable to use it.	Low	5	**Mitigation:** Spend some time on training	Irene
RA_OS	Technological	Team experience problems with tools due to different OS	High	5	Find different tools with the same features	Daniel
RA_ABSTRACT	Technological	Code is too abstract to test it efficiently	Med	5	Make code less abstract and try to test it	Jasper
RA_PLAN	Project	Team doesn't plan efficiently for assessment 3	Med	3	As soon as this is noticed, have a planning session	Irene
RA_SMALLP	Project	Team plans too granularly therefore does not have the big picture of the plan	Med	3	Have a planning session to define a big picture plan for the assessment	Irene
RA_WRONG_TEST	Technological	Team uses a testing approach which is not appropriate for the project	Med	5	Understand why testing approach doesn't work and find a better one	Jasper
RA_DESCRIPTIVE_TEST	Technological	Testing is not descriptive enough	Med	3	Check the code, write different, more descriptive tsts	Jasper

Our team came up with more potential risks, however these were all predicted to have a very low likelihood of occurring or lowest severity. The very unlikely risks are available on our website (https://mikroysoft.github.io/WEBSITEriskassessment.pdf)