

Key: Updates

Risk assessment matrix	High Severity	Medium Severity	Low Severity
High likelihood	High	High	Medium
Medium likelihood	High	Medium	Low
Low likelihood	Medium	Low	Low

ID	Risk Type	Description	Likelihood	Severity	Urgency	Mitigation	Owner
R1	Product	Clashing code written by multiple team members	M	M	M	<ul style="list-style-type: none"> - If an overlap is deemed likely (e.g. two tasks cross over in purpose) discuss with the team before starting. - Use GitHub to keep track of all versions of the project and to merge code edits. 	BS
R2	Technology	GitHub, where our source code and website is hosted, goes down.	L	H	M	<ul style="list-style-type: none"> - Back up code on local devices or in the cloud. - Assign a member of the team to remind everyone to back up their work weekly. 	JB
R3	Project	Team member illness	H	L	M	<ul style="list-style-type: none"> - Edit documents on Google docs so other team members can take over if necessary. - Meeting notes will be taken and uploaded to the Google drive ASAP to allow the absent team member to catch up. - Communicate with the team via Messenger to stay updated on the state of the project. 	ALL
R4	Product	Change in Client Requirements	H	M	H	<ul style="list-style-type: none"> - Maintain regular contact with the client to recognise change in requirements as soon as possible - Have a change management plan to modify the risk register, requirements and project plan to accommodate new requirements 	AN & JB

						<ul style="list-style-type: none"> - Ensure code is modular and well documented so it can be easily adapted to accommodate changes. 	
R5	Project	Team member leaves the group	L	H	M	<ul style="list-style-type: none"> - All critical tasks are assigned to a minimum of two people so if someone were to leave there would be a team member who understood that part of the project and could teach someone what was required if needed. 	ALL
R6	Technology	Features of the application framework becomes deprecated	L	M	L	<ul style="list-style-type: none"> - Adjust the Gantt Chart to add time to learn and implement newer functions/elements of the library - Plan time to rework the code if necessary 	AN & SY
R7	Project	Not meeting client requirements	M	H	H	<ul style="list-style-type: none"> - Follow recommended practices to elicit requirements - Hold meetings to discuss, validate and update requirements with the client regularly - If conflicting or ambiguous requirements are noticed clarify them with the client as soon as possible - Keep the client involved in all stages of development 	AN
R8	Product	Developing the wrong software functions	H	H	H	<ul style="list-style-type: none"> - Follow requirement engineering techniques to make sure requirements reflect the client's needs - Peer review the tests to check they test the required functionality - Frequently communicate within the development team so all members are clear on the functionality required 	SY

						<ul style="list-style-type: none"> - Implement the core functional requirements before coding additional features - If there is uncertainty whether a feature is needed clarify with the client before coding 	
R9	Project	Project is poorly managed	M	H	H	<ul style="list-style-type: none"> - Research methodologies to choose the one that best suits our project - Assign a team owner to oversee the project and a SCRUM master to ensure we are adopting the agile methodology - Monitor group progress using the Gantt chart every three days; modify the plan if necessary - Hold a group meeting to discuss solutions/ reallocate roles if the current management system is inadequate - Expectation that team members will vocalise if they have been assigned too many/ few responsibilities 	LM
R10	Project	Team members lack the technical skills to complete the project	L	H	M	<ul style="list-style-type: none"> - Research and practice Java in their own time - Plan plenty of time to implement the code 	ALL
R11	Project	Ineffective communication between team members	M	M	M	<ul style="list-style-type: none"> - Use GitHub projects to allocate tasks - Expectation that every team member should participate in our virtual SCRUM every two days - Provide a way to communicate as a team (Facebook messenger) - Ensure each member is clear on their role/task before leaving meetings. - Hold regular in face meetings as well as virtual SCRUMS 	ALL

R12	Project	A team member could get stuck on their task, causing the project to be delayed	M	M	M	<ul style="list-style-type: none"> - Allocate roles according to team members' strengths and preferences - Work on tasks as a team wherever is reasonable - Keep an open dialog between group members to allow us to help one another 	LM
R13	Product	Not all parts of the product are tested thoroughly, preventing the product from working as intended.	M	H	H	<ul style="list-style-type: none"> - Requirements will be analysed prior to testing to allow suitable tests to be designed. - A traceability Matrix will be used to ensure that all requirements are fully tested. 	BS
R14	Project	Team members in different locations may make communication difficult and make it harder to keep an awareness of what each team member is doing.	H	M	H	<ul style="list-style-type: none"> - Multiple forms of communication, including social media and shared online collaboration spaces (e.g. Google Drive) will be used to keep up with each other - An up-to-date copy of all deliverables will be stored in a shared area 	ALL