

Risk Analysis Report

Risk Identification	Affects	Mitigation	Analysis	Monitoring
Lack of communication	Conflicts; missed deadlines; low morale	Weekly meetings; ensure we all communicate regularly	Work from other modules meaning not enough time to focus on this project (medium)	Check everyone has seen any developments; regular meetings; ensure if someone isn't present, we catch up with them
Poor tool and language choice	Deadlines missed; low quality work; stress	Go through all possible options and choose the tools and language that everyone agrees would be best unanimously; help those with less experience	Poor communication (high); inexperience with language/tool (medium)	Review progress frequently; help those struggling by giving them 'easier' or fewer tasks
Incorrect time allocation for tasks	Deadlines missed; rushed work; complacency	Set reasonable deadlines everyone is happy with; update deadlines on the go when necessary	Poor communication (high); bad time management (high); poor planning (medium)	Check development regularly; raise and respond to any concerns over the deadlines; distribute workload effectively
Game doesn't work on certain machines	Limits usability; doesn't meet client requirements	Develop product to be used on multiple machines; test frequently on different devices	Poor planning (high); poor communication with customer (medium)	Frequent testing on different machines; communicate with client
Workload mismanagement	Conflicts; missed deadlines; low morale	Make sure everyone is happy with their roles and workload; distribute work responsibly	Poor communication (high); poor planning (high); unreasonable expectations (medium)	Frequent updates on task progress; share workload for larger tasks; communicate
Poor planning	Missed deadlines; unhappy customer; low quality work	PERT charts to track progress; weekly meetings to discuss progress;	Poor understanding of client expectations (medium); poor communication with team and client (high)	Check client specification regularly and compare to development; update/create PERTs regularly; team meetings weekly
Conflicts	Low morale; deadlines missed; poor work	Resolve any conflicts; frequent communication and meetings; teamwork	Poor communication (high); uneven workloads (medium);	Raise and address any issues and problems when they arise; check everyone is happy during the team meetings; team building
Missed deadlines	Low morale; unhappy client; development falling behind schedule	Review progress frequently; raise any concerns with meeting deadlines; set achievable deadlines	Poor communication (medium); bad planning (medium); unrealistic workloads and deadlines (high); other work (low)	Weekly team meetings and daily communication to track progress; allow slack time between tasks
Illness	Missing uni, meetings; unable to work; Fall behind	Share workload of the unwell member; flexibility in deadlines and meetings	Poor communication (medium); luck (high); cold weather (high)	Communicate when unwell and its affect on performance; change meetings and workload to accommodate
Traffic, trains and buses	Missing uni; missing meetings; lowers morale; lateness	Plan ahead by checking disruptions before leaving; communicate with team	Poor travel planning (high); misfortune (medium)	Inform of any disruptions to team; alert team when you will be late/ miss events
Other coursework	Less time for this project; fall behind schedule; stress	Alert teammates if other coursework is time consuming; share workload; be flexible with schedule	Poor communication (medium); time management (high); stress from workload (low)	Inform teammates of any struggles or priorities; allow flexibility for catchup time; keep up with meetings/decisions

Throughout the project, we have updated and reviewed the risk sheet accordingly. We have found it to be a valuable asset in our risk management, and we have managed to mitigate many of the risks, so they had the least effect possible on the outcome of our work. Some risks were avoided, such as the 'poor tool and language choice', due to positive communication at the start of the project, and it set us up nicely. Other risks, such as illness, couldn't be avoided but were mitigated and caused little damage. Weekly meetings and a conscious effort to reduce risks aided us in completing a successful coursework project.

We found our time allocations for tasks were sometimes off, usually allowing too much time. However, certain aspects of the project had too little time allocated to them, such as bug fixing and UI updating, which caused delays. Even with mitigation, such as regularly checking progress and expressing concerns, they overran and caused some delays. This would've been very detrimental, but one of our other risks 'poor planning', was strongly mitigated and we had very good planning, which allowed us slack time to handle delays.

Other coursework was a big risk later on during the semester and impacted the amount of work produced. It wasn't a significant disruption but was noticeable as a lot of our time was spent on other projects, meaning some of the later tasks in PERT were delayed by a day or two.

Many risks were interconnected, and any that did materialise often had a knock-on effect, both positive and negative, on other risks. Realising this towards the start of the project meant that the risks were always in our thoughts and were spotted as soon as they began to develop momentum, preventing any major escalation. This massively helped us work effectively and produce a strong project.