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| Risk | Risk Statement | Response strategy | Objectives | Likelihood | Impact | Risk Level |
| Machine Crashing | If the machine was to crash during the project period then it could severely impact the amount of work that can be completed. As well as this, there are chances that files could be corrupted and not saved resulting in loss of work. | Constantly save all work and ensure that the machine works correctly and is not in use constantly e.g left on throughout the night | To prevent the loss of work and completion of the project. | Low | High | 7 |
| Jmeter | The group is relatively new to Jmeter therefore errors within the application may take a little longer than expected to complete. In addition to this, running the tests can sometimes be time consuming and decrease the speed of the machine. | Look over any gaps in knowledge with lectures that have been covered. Ask for advice within the team. | Reduce the likelihood of creating errors. | Medium | Medium | 5 |
| Github | There is a possibility that our GitHub can become compromised and our core source code and database are exposed for stealing data. A huge breach of data privacy. | Ensure that passwords and usernames are kept as safe as possible and not sent to anyone outside the group. | Reduce chances of being vulnerable to cyber attacks. | Medium | High | 8 |
| Internet Failure | A loss of service or slow connection can reduce the amount of work that we as individuals or a group can complete. | Have alternate methods of connecting to the internet. For example, use an ethernet cable if there are slow speeds. | Reduce time wasted by lack of internet connection and slow production of work. | Low | Medium | 4 |
| Illness | One or many of us may potentially fall ill due to COVID or potentially a less serious illness. Therefore, this can put a hindrance on the amount of work that can be completed | Ensure that your hygiene is maintained and if you visit friends or people outside of your support bubble that you keep your hands washed and take proper precautions. | Reduce likelihood of loss of work due to illness. | Low | Low | 1 |
| Bootstrap CDN Outage | As bootstrap files are hosted on an online content delivery network it is possible that they will be unreachable. | Download minified versions of the bootstrap files used in the project so that they can be reached at all times. | Mitigate the effects of a CDN outage for required project files. | Low | High | 7 |
| Time Mismanagement | A possible risk is that we are not able to organise our time efficiently to make sure that we deliver a workable product on time. | Ensure jira board stories are followed and kept up to date so that everyone can see what the next tasks are. | To reduce the time spent on tasks that are less important and focus on the bigger hurdles that are present. | Medium | High | 8 |
| Denial of Service Attack | A denial of service attack is when a malicious attacker wants to make a web resource/network/ web application non-functional. By flooding and overloading the server with web traffic rendering the application unusable or slowing it. . | Authenticate requests with authentication tokens and limit the amount of requests that can be made while a user is logged out. The application should undergo accurate non-function tests and employ good security practices. The server backend can also block vulnerable ports | Reduce the likelihood of a malicious attacker overloading the server by sending numerous requests | Low | High | 3 |
| Project Bugs/ Feature Creep | Errors in the coding aspect which could cause bugs to appear in the project. In addition with feature creep, spending too long trying to implement a feature could take time away from other more important functions and could also potentially break features. | Utilise Sonarqube & Junit to ensure best practices. As well as maintaining good code, testing and eliminating bugs in the project. Utilise QA Community, W3 Schools and other web sources to look at aspects of Java or other technologies on how to utilise it. Reach out for assistance and guidance. Get the basic required functions and project working and up to a good standard, make a backup and then if I have time extend and expand on the project. | Limit the numbers of bugs and other coding errors that appear in my project. Ensure I meet the require project specification to a good standard. | Medium | Medium-High | 4 |

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|  | | Impact | | |
| Low | Medium | High |
| Likelihood | Low | **1** | **4** | **7** |
| Medium | **2** | **5** | **8** |
| High | **3** | **6** | **9** |