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| Risk | Risk Statement | Response strategy | Objectives | Likelihood | Impact | Risk Level |
| GitHub | Any source code pushed to GitHub could potentially contain information that hackers would find useful when trying to maliciously alter the project. The source files could potentially contain hard-coded login credentials which could allow for data leaks. | Use stronger passwords and usernames than just “admin” or “root”, and keep them regularly updated. | Reduce the likelihood of hacking and data leaks. | Medium | High | Medium-to-High |
| Planning | If planning is not conducting correctly and clearly it could cause multiple errors and/or slip ups when it comes to creating the program, either from misinterpreting the task or objectives, or even creating a completely wrong project. | Using well laid out Kanban boards on websites like Trello and GitHub will help to lay out any plans clearly and easy to read reducing any risks that could result from poor planning. | Reduce the likelihood of errors due to unclear or bad planning | Low | Medium-to-High | Medium |
| Illness | Illness is normally something to consider even in the best of situations, due to losing time on projects from missing people due to illness. However with the current situation of Corvid 19, this threat is much more substantial, threatening to take a person out of a project for over 2 weeks. | Steps must be made to minimize chances of becoming ill, as well as preparing for illness as well. Planning with some time spare in case of lost time elsewhere can help. Also reducing the risk of a person catching Corvid 19 is also vital. This can be done via social distancing and good hygiene. Also the ability to work from home cuts a lot of impact from this. | Reduce lost time due to illness. | Medium | Medium | Medium |
| Knowledge | One risk with an individual project like this is that said individual might not have all the necessary knowledge to complete the project. Bottle necking projects due to lack of understanding. | This is solved on multiple fronts, first is working hard to learn all the knowledge given to us by our trainers and use our time wisely to learn. Also, with access to our cohort and up to 4 or 5 trainers at a time, there is always someone to go to for help here. | Reduce time lost and errors due to lack of knowledge or understanding. | Low | Low | Low |
| Technology | With this project covering various technologies from github to eclipse and Jenkins to Nexus, there is always the possibility for errors and trouble interfacing with these. This can cause large periods of wasted time and effort and potentially threaten project progress. | Planning with time to spare can help accommodate any of these issues should they arise. Also, with the access to both our cohort and trainers, there will likely always be someone that can help to solve the problem more efficiently and easily. | Reduce time and energy lost to faults and errors with the various technologies to be utilised in the project. | Low | Low | Low |
| Security | With the possibility of the database project storing not only customer information, but also user passwords, database security needs to be considered. Low security could cause leaks of user passwords and customer details, breaking customer confidentiality laws. | Using MySQL security protocols in the project would help to encrypt and data in the database so it can only be accessed by the right people. Making sure all passwords used while setting up the program are secure will also help massively. | Stop password and customer details leaks and hacks. | Medium | High | Medium-to-High |
| interface | The end product interface must be user friendly and easy to work and use. While I or other software developers may understand what is happening the average end user may not, making an unclear interfacing system unusable. | Making sure that everything is laid out to the user in a nice and clean fashion, and also easy to read and use will allow for any end user to use the system, even without documentation, allowing for maximum value from the system. | Stop the project from becoming unusable to the average end user. | Low | High | Medium |
| End-User Expectations | Failure to manage end user expectations is a problem that could happen right from the start and impact everything to the end. Not understanding fully and correctly, what the end user wants, can cause a huge waste of time and effort and may even make the project unusable for the users situation. | Making sure to read over all documentation on required features for the project is vital and should be done multiple times and carefully. This document should also be used as reference when planning and progressing to always keep the goals fresh and so there can never be any misinterpretation. | Making sure the end product matches the end users requests. | Low | High | Medium |
| Schedules | With my inexperience as well as unfamiliarity towards the planning stages of coding, making a schedule that is realistic and feasible is going to be difficult. Unrealistic schedules could cause incorrect time allocation and thus lots of wasted time or even lots of tasks to do with not enough time to do it. Reducing the likelihood of the project being completed by the deadline. | Strong communications between me and my trainers, who have far more experience with this then I can help me to make sure time is allocated properly and realistically so that schedules can be followed and completed on time. | Reduce the likelihood of an incomplete project due to poor schedule management. | Medium | Medium | Medium |
| Testing | With automated testing, there is always the chance that errors can slip through the cracks, or the testing may not be coded correctly to detect all errors and problems. This could cause an unfinished product to be sent out as completed, as bugs within the code may not have been found and thus solved. | Using an automated testing technology like Junit can help to make testing set up clear and easy to read, thus reducing the likelihood of missing tests. Also, potentially adding a layer of user testing may help to catch errors that a computer is poorly suited to finding. | Reduce bugs and errors in code at launch by using proper and thorough testing. | High | Medium | Medium-To-High |