## Risk Assessment

Impact vs Likelihood

| | Negligible | Minor | Moderate | Significant | Severe |
|---|---|---|---|---|---|
| Very Likely | 🟩 | 🟨 | 🟧 | 🟥 | 🟥 |
| Likely | 🟩 | 🟩 | 🟨 | 🟧 | 🟥 |
| Possible | 🟩 | 🟩 | Internet cutting out. | Database corruption. | Complexity |
| Unlikely | 🟩 | Losing my local repository. | 🟩 | Computer breaking. | Missing the products deadline |
| Very Unlikely | 🟩 | Procrastination. | 🟩 | Misinterpreting the project requirements. | Bugs in the production code. |

Potential risks are:
My computer breaking.
Internet cutting out.
Local repository being deleted or corrupted.
Database being corrupted or modified in a bad way.
bugs in code making it past test and into release.
Missing the deadline.
Misinterpreting the project specification.
Procrastination.
Complexity

My computer breaking – I feel that my computer breaking is an unlikely but significant risk because it is getting rather old and starting to slow and is partially damaged to prevent this risk from becoming a reality I will make sure to take good care of my computer especially during this project but in case it happens I have backed up all of my lessons so that I can take a spare computer and setup my project environment again if this does happen the code base wont be affected since its stored on git the only major loss is time because of the tight deadline I feel that spending one day maybe two recreating my development environment is a significant risk because of the time lost.

Internet cutting out – I feel that my internet going down is a possible but only moderate risk because it has happened before during previous projects and even during my time at QA and it does lead to a lack of productivity since working on projects becomes harder and in some scenarios it becomes impossible, to make sure that this doesn't happen I make sure not to place to much strain on the internet and to stop this being a big problem I have kept a local repository so that my code is always accessible and if it does happen all that I can do is try resetting the internet and waiting for it to come back online whilst I work on parts of the project that aren’t internet dependent.

Losing my local repository – I feel that my local repository being corrupted is an unlikely and minor risk but it has happened before and it does lead to losing that days work because I have to pull the online version of the repository, to stop this from happening I can check all code before I run it and make commits often to GitHub so that if it happens I lose a few hours worth of work rather than an entire days worth of work if it happens anyway I can try to recover my local repository or pull the last commit from my online repository on GitHub.

Database being corrupted– I feel that my database being corrupted or modified is a possible risk because this has happened on older projects where I lost power to my computer whilst using Xampp and then the database is corrupted and becomes unrecoverable to stop this from happening I will make backups of the database including backing the schema up on GitHub so that if the database is lost I can use the backed up schema to recover the database and I can backup the actual database so that the data lost is only the data between when I lost the database and the last backup rather than all of the data, but if this does happen the loss isn’t major because its not a production database with client information its a small application which doesn't contain any sensitive information.

Bugs in code making it into production – I feel that bugs in my code making it past the tests is a severe but very unlikely risk because an important part of the project is reaching at least 80% test coverage but logical errors won’t be as easy to catch and could possibly make it through testing, to stop this from happening I can make sure to test as much of the application as possible and to craft the tests around the project to ensure that any mistakes are caught and fixed and I can use my application to ensure that everything behaves as I expect it to just as an extra precaution.

Missing the deadline – I feel that missing the deadline is an unlikely but severe issue this is a possibility because I might forget to do something or spend too much time trying to add features that aren’t required and then not finish the minimum viable project, to stop this from happening I will focus on the minimum viable product and finishing that and then for any additional content that I want to add I will evaluate how capable I am and how long it will take and then use that to determine whether I think that I can feasibly add the extra feature, if this happens anyway I will try to salvage the product and stop the unfinished feature from affecting my overall product.

Misinterpreting the project specification – I feel that Misinterpreting the project specification is a very unlikely but significant risk because what I take from the specification could possibly be different from what the person whom wrote the project specification in trying to say to stop this from happening I have taken notes when the lecturers went over the project specification and I have made sure to think about how everything is going to work together to ensure that the system I intend to design is the same as the system the project specification is describing.

Procrastination – I feel that procrastination is a very unlikely and minor risk since I would say that I’m usually very good at staying focused but if I were to procrastinate then I would lose time in the project and that is a risk, to stop this from being an issue I will make sure to take breaks regularly to stay sharp and to try to focus on the project if this happens anyway I will allocate extra time to the project to gain back the lost time.

Complexity – I feel that complexity is a possible and server risk I would say that due to my experience with web development and back end experience this wont be that big of a problem but a lot of new concepts have been introduced and the chance of the project becoming too complex to finish is a possible risk, to ensure this doesn't happen I will comment my code and follow my my ERD and make sure to follow naming conventions and OOP conventions to make sure that the code I’m writing is understandable if this does happen I can revert to an older repository before I have lost track of what I am doing to ensure that my project doesn't become too complicated.