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| **Risk** | **Risk Statement** | **Likelihood** | **Impact** | **Response** | **Objective** | **Risk Level** |
| MongoDB breach | When MongoDB is poorly authenticated or left open to the internet, unprotected and without a password it can fall victim to malicious attacks including ransomware, wiping the whole database, or even exposing sensitive information. | High | High | Make sure the database is encrypted and authenticated at multiple levels, with complex passwords and 2 step authentications. | Using a monitoring tool to detect anomalies and errors within the database and network, encrypting data at the rest phase, roll based access control. | 9 |
| File Corruptions | Files can get corrupted transferring to client side. This halts progress, the team having to deal with the corrupted file rather than progressing. This could lead to work having to be redone or lost entirely. | Med | Low | Have multiple local and remote copies of the application. Saving carefully and often. | Provide multiple backups of the files on local and on remote systems. Saving working files on cloud hosting. | 2 |
| Connection/Internet Failure | Without a stable internet connection, pushing and pulling updates and amendments is not possible. Being unable to communicate with the team, losing precious time to progress on the project. | Low | Med | Have an alternative method of connection to the internet like a mobile hotspot, backup router etc. | Installing multiple routers, making sure anything to do with the network is only able to be amended by the admin. | 4 |
| Hardware failure | Lost work and inability to complete the project on time. | Low | High | Regularly backing up with physical and cloud storage, this way if one Storage device fails, or if one workstation is unable to be used to always have a plan b. | It will cause a major issue, but this can be resolved by pushing regularly to remote repositories. | 7 |
| Time mismanagement | It can be difficult to track and manage the time when working with multiple people, If not managed properly team members can feel lost, spending too long on | Med | High | Using concise story points and time tracking on the Kanban board will help structure tasks, how long they take and who is doing what. | To reduce time spent on less important tasks and deliver the project in a complete state and on time. Efficiently delegating tasks between team members. | 8 |
| Protection of the data that has been pushed to Remote (GitHub) | Any code pushed to GitHub could potentially contain information that hackers can use when trying to attack the application. This can result of data being leaked or application taking offline. | High | Low | Regularly updating passwords and making repositories private with only the team being able to see. | Leaving the sensitive information out of public repos, proof-reading the code. Complex passwords and 2fa for GitHub. | 3 |
| Bootstrap link unavailability | Bootstrap CDN is used to deliver the online content. There’s a chance of version update or version gets no longer supported. | Low | High | Download the latest version of bootstrap used to create the application so that they can be readily available at all times. | The latest versions of software ensure there won’t be any unsuspected errors or dependency fails | 7 |
| Cross-Site Scripting (XSS) | Cross-Site Scripting enables attackers to inject client-side scripts (The same way as in MySQL) into web pages viewed by users and may be used to bypass access | Med | High | By making sure you minimise the use of http code as inputs. Sanitizing and validating user-generated content. | Ensuring the users of the site won’t be able to add in any html or input that could be considered a malicious. | 8 |
| Burnout | Not managing your work stress levels and overworking yourself can result in exhaustion, demotivation, mental distance, irritability. | High | Med | Making sure that efficient breaks and time away from the workspace is had, getting up, stretching, getting yourself moving and rehydrating are all great ways to take a break. | Having someone to keep track of breaks, to reduce overworking. Its healthy to take time out, away from the workspace. | 6 |
| Lack of technical understanding | Not being fully trained, having learned the basics of concepts but still needing a little help to continue working efficiently. This could cause tension between team members. Understanding and patience are nice to have | Low | Med | The user/team member should make it their top priority to get all the work they can do, done. Having a well-managed team to help out and delegate appropriate tasks for them | As the user catches up, they should start to feel those initial shortcomings fall by the wayside as more other important tasks are carried out. | 4 |
| Data Protection/GDPR | Handling sensitive customer and client details. When dealing with any information from | Low | High | If data given by the user contains a full name, occupation, address, physical characteristics, etc. It must be stored in accordance with the data protection act. It must be stored on a separate secure server, only accessed by authorized users. | Not following GDPR/Data Protection laws could result in a large fine, and a damaged reputation to others around in the tech sector. At worst even jail time. Taking care in complying with all the rules is crucial. | 7 |
| Depreciated library | Unfortunately, a library of very useful code and documentation can eventually lose relevance. The product not being kept up to date or supported with new versions can cause errors to existing programs and create new errors where there were none before. | Med | High | Making sure the libraries the team are using are within date, and do not pose any hidden risks or problems that we were unprepared for. | Researching alternative libraries with similar functionality, uninstalling any unsupported dependencies | 8 |
| GitHub merge conflicts | A merge conflict happens because git is unable to automatically resolve the differences in code between two commits. Git doesn’t know what code to keep and which to override. As a team of five people sharing one git repo, merge conflicts are bound to happen. | High | Med | Communicating effectively between team members. Making small commits instead of big changes. | Using tools like GitKraken that can visualize the conflicts, push, and pull changes often, do not always put your changes at the end of a file. | 6 |

