SAD Group Project Individual Reflection Report

My role in the project

My primary role in the project was design and architecture, while I also contributed to drafting the frontend and finalising the user interface including adding navigation between pages and visual theming.

Before work started on the implementation, I was involved in extensive discussions about the architecture of every layer of the stack, where we discussed what technologies we thought would best fit the project. While these discussions were ongoing, one of our group members began implementing a test backend and this resulted in myself nor anyone else being as involved with the development of the backend as we could have been, as he took a solo approach to implementing the Mongo database and its Node.JS API.

During this time, the rest of the group continued to finalise the design and I played a major role in this process, initially drafting user stories and a few SMART requirements. As others finalised these I worked on most of the diagrams whilst engaging in discussions about data privacy, the scope of the project, and specifics of user roles.

Throughout the design process I maintained a comprehensive understanding of the desired architecture both at the high and low levels and used this to both create diagrams and advise other group members on design specifics, which I believe helped keep design artefacts consistent both with each other and the technical implementation.

As we finalised the design, the back-end was coming along and I helped draft the front-end in React, however we would eventually switch to Vue as we decided for various reasons (discussed in the group report) that it was a better fit for the project.

As is often the case, despite our best efforts to stick to the design when creating the technical implementation, the real architecture differed slightly from what we initially planned, which meant amending some of the design artefacts. I attempted to ease this process by explaining to the back-end team details of the diagrams and what may need changing based on my understanding of any technical issues which had affected the implementation. This proved useful as we reconciled design with implementation quickly and effectively.

How I worked in a group, lessons learnt and what I would do differently

I believe that, despite the difficulties we faced as a group and our imperfect delegation of responsibility, I contributed a large amount to the design of the solution and played a major role in keeping everyone on the same page when it came to specifics. Additionally, I contributed to the front-end when I was able to, and helped transform it from a technically functional but disconnected system into a well-labelled, navigable one.

After completing this project, I have a much better understanding and appreciation of what steps should be taken at an early stage of group work in terms of organisation and communication about progress checkpoints. I believe we would have worked more effectively as a group if, instead of remaining mainly as separate teams working on different parts of the project and only reconciling our work towards the end, we had worked collaboratively on every stage of the work, as this would

have forced us to maintain better communication throughout the project and would have ensured everyone had a better understanding of the solution architecture, resulting in higher quality design artefacts and greater ease of implementation.

I did establish a GitHub repository for version control very early on in the project but sadly it did not end up being used for our eventual implementation. Given the chance, I would more strongly encourage group members to use version control from the start as this would have improved our effectiveness as a group significantly.

The biggest weakness in our group's approach to the project was distribution of work. I believe this was due to a lack of communication, and, given the chance to undertake the project again, I would be much more assertive in making sure we as a group hit regular progress checkpoints and I would be more proactive in explicitly distributing work between group members if no one else rose to this task.