

1 Personal Reflections

1.0.1 George Brighton

1.1 Matthew Flint

Our first challenge was picking a topic that could sustain us throughout the entire year. We came up with a number of good ideas but ultimately decided to settle on a system for the Emergency Services as we had some vague knowledge that the current one was not very good and we thought it provided enough scope to really be able to explore.

I initially thought that with such a large system currently in place and it being used in a very publicly central service that it would prove relatively easy to research what the current system did, how it worked and any problems associated with it. This was not the case, obtaining information of this kind proved extremely difficult and very little of it is accessible via the internet (making the task even harder). Eventually we did find that the current system was so bad that there was already another (command point) being developed to take its place.

This placed us in a dilemma, from which we took a long time to decide how to proceed. We were unsure whether we wanted to build a system better than the current one, though as command point was already in development this seemed rather pointless. Then we looked at improving on command point, however it seems that in the most part they designed and developed the system well and left us little scope to do this. Eventually we decided that we should improve upon the system by thinking of new and innovative features that could benefit people using the system on both ends of an emergency. This proved to be a good direction to proceed in as it gave us a large scope to think of new ideas to help the current system and allowed us to be more creative in our design.

We now had an idea of what to do but were not very sure about how to start the project. We wasted a long time deliberating with no real organization until we finally decided to employ an agile scrum approach and delegate certain tasks to different people. Once this was done and we had a clearer idea of the direction we were heading in things started to move along but very slowly. This project took a long while to get going but once it did finding the next task to do was easy.

The amount of time and effort put into producing this document was considerable, this is the project that I have been a part of and easily ate up hours on weekends especially towards the end of the project.

Overall I feel that we have produced a good report that a software development team could take and produce a system from. The project was not without its challenges but we have overcome them as a team and made it through.

1.2 Deyan Genovski

1.3 Martin Mihov

At the beginning of the module, I had a really vague idea about what was intended to happen during the year. While choosing a topic, we all came up with good ideas and we all wanted to focus on a community project, rather than a commercial one. This helped us identify and agree on a topic quickly. After doing a bit of research, we found out that the current way that the handling of the emergency calls works is outdated and has a lot of issues.

Having decided on a topic, we did further research and we managed to identify even more and more issues with the emergency services systems. By the middle of the first term, I was a bit more confident that what we were doing was going to be interesting, as well as challenging. It turned out to be both, but rather more challenging than I first thought. I found out that researching a topic was not as easy as I imagined. And this was especially the case with the emergency services, as most of the information online was outdated. This caused us to contact people working at the emergency services in order to actually get some feedback on the current systems.

Having identified many issues, we were ready to start thinking of solutions to the problems. The various technologies that I have learned during my time in university and I faced during my work experience, helped me to identify many solutions. Some of them turned out to be not very efficient, however, others were really innovative. By the end of the first term, we managed to focus on specific issues and choose several solutions that we were going to include in our software design, with which I was really happy.

During the second term we started actually designing our solutions and as we were not sure what we were going to end up with, we decided to go for an iterative approach. During my time in university, I learned about several software engineering approaches, however, iterative approaches were not famous with producing quality documentation. This made me do research on what was the best way to keep our approach iterative, while keeping a good log, which I could later use in the final report.

Apart from that, while designing the technical details of the solutions we chose, I did a lot of research of available technologies which were required for a specific part of the solution. This improved my general knowledge about how various things work and what are some of the state-of-the-art technologies out there. Documenting and evaluating the choices that we made through the second term, improved my confidence with software design.

Working in a team was another challenging task that I faced during the module. Being in a team of 5 people meant that we had to organize ourselves and split the tasks, so that each of us was assigned an equal amount of work. We tried to use everyones best skills in order to do what was best for the project. Having regular meetings and ensuring that everyone was happy with what was going on and the decisions we made, was very important, in order to work efficiently. In some cases this was very difficult, as some of the tasks were totally unrelated and sometimes I felt like we were working on different projects. However, in my opinion, everyone from my team did very well, showing impressive knowledge and skills in some part of the module and showing weaknesses in others.

Looking back at the project, I see a lot of things that could have been done better, both in terms of organization and in terms of software design approach. However, identifying those mistakes, make me feel confident about the skills that I have gained throughout the module. With this experience I will be able to be more efficient in my future projects. Apart from that I will be able to identify possible problems or conflicts earlier during a project, which will give the opportunity to deal with them easier and with less impact to the project.

1.4 Robert Zlatarski

At the beginning of the module, we were given a task to choose a project, on which we should later on produce a software design. We had some good ideas, but we all agreed that we should focus on something that could improve peoples lives. Then we came across on how emergency situations are handled nowadays and saw a lot of weaknesses and the use of outdated technologies. We decided that we should create a product, which would ease up and improve how emergencies are handled. There was still the question, should we improve the current system or create one of our own. On mutual agreement, a new system was chosen to be built, which had to be easily extendable.

Doing a lot of research, conducting different surveys and speaking with professionals, we faced different problems and factors that could impact the functionalities of our system. I did not have any idea of how emergencies were handled in the UK and I learned a lot of new interesting stuff on the current systems. We all split the work equally and had regular meetings two or three times a week to discuss our progress and combine our ideas. Eventually, by the end of the first term, we had a clear vision on what we were going to build, having accepted a lot of different innovative ideas and refused others.

At the beginning of the second term, we had to start writing up the documentation. We faced problems with choosing the software design methodology, as we had to pick either an iterative agile approach or waterfall model. Eventually, having put a decent amount of research, we decided that we should use an iterative approach. Then we started working and researching the technologies that we were going to use. It was not easy to pick the right technologies for our product. Having gone through a lot of studies and tests, we had pick those, which would suit our project the best.

We all put a decent amount of work on the document that we produced, facing different problems and learning interesting new stuff. Sometimes, organizing ourselves was not easy, as we had other university duties and some people were busier at a certain time than others. Nevertheless, we were spending quite a lot of time working on it, especially towards the end of the term. Working in a team of five people was sometimes a bit challenging to me. Sometimes our documentation was a bit inconsistent and those were the main things, which we discussed and did in the meetings we had. Having eventually handled that, we were making a good progress. By the end of the Easter break, most of our documents were ready and had to be structured together.

Overall, I am happy with the product that we have created. It turned out to be a system that could really save peoples lives and improve the current way of how emergency situations are handled. I have gained a lot of useful experience and improved both my team working and software designing skills. Moreover I am aware of technologies, which before I havent even heard of.