## Individual Reflective Essay

## Abdelaziz Abushark 20332134

I am a second-year computer science and computer science student and I loved working on this group project as it was my 1<sup>st</sup> time experiencing working with group of lads from 2<sup>nd</sup> and 3<sup>rd</sup> years as well as meeting with software engineer from the company we are working on the project for as he was checking on us every week and giving advice about the project. I really appreciate this opportunity as it gives me an idea of how working in companies within group like. I developed so many skills such as communication, time management and leadership as I got to experience how 3<sup>rd</sup> years are leading us so I can lead people in the future. Living this experience was very helpful as I was put under pressure sometimes but managed to submit my tasks as this happens often in real life. We were 4 second years and 3 third years, our team was divided into 3 groups: Project Under Test, Test Runner and Docker/Kubernetes. I was on the 3<sup>rd</sup> group which is Docker/Kubernetes. Our task was to create a generic service that will be able to take any executable, package it up to a docker container, run tests and collect the results in a test file.

This module taught me a lot about teamwork. This module, more than any other, has showed me the most about what working on a project after college will entail. I had previously completed some teamwork assignments in college, but not on this scale. I believe that the client component of this module was beneficial since it taught me how to connect with, request things from, and answer to people for whom I will be working, simulating the real-world context of developing software for a team. For collaboration, we used GitHub, and for communication, we used Zoom meetings. I was unfamiliar with GitHub so we had to learn how to use it effectively before we could contribute any work. This is a useful skill I learnt because GitHub is widely used in the real world for code collaboration on projects, and it is considered an industry standard.

Working in a collaborative project team was vital point of our success and delivering work at time, as our team leader always organized 2 team meetings weekly in which the first one was with the software engineer and the other one was to ask questions and deliver the task we were assigned to. We were very organized and did not have any disagreements as we assigned the tasks fairly. The third years were managing the group well and helping us if we are stuck or have any problems regarding the software developing part. My team's collaboration on the project was effective, in my opinion. First and foremost, the project's planning was extremely efficient. We designed a clear plan and created a calendar for every team member to follow during the initial meeting, which helped everyone to stay on track and deliver pieces of work on time. We also determined that breaking down each person's task into smaller chunks would be preferable to completing the job at the last minute. This gave us enough time to double-check the work and make any necessary revisions. As well as it was helpful to be able to consult my teammates if I had any queries or worries about my task. Finally, I believe that the task allowed each team member to demonstrate his or her strengths while also broadening our understanding of workplace communication techniques utilized by Rapid7.

Working in a group provided me with an interesting opportunity to gain new skills and increase my ability to collaborate. For me, one of the most significant changes between working alone and working in a group was the requirement for group decision-making. Working in a group necessitates

the participation of all members in decision-making. I learned the importance of effective leadership in teamwork while working on this project. Aaron, our group leader, worked extremely hard to ensure that everyone turned in their work on time, while also staying extremely nice and supportive of all team members. Another thing I've learned about teamwork is that everyone has their own skills and shortcomings. Some people are simply more gifted in certain areas than others. For maximum efficiency, our team leader assigned us to work in areas where we are strong and confident.

During doing this module we encountered two main issues. The first one was finding a time where all the group members were free for example, I am a computer science and business students and sometimes I have lectures same time computers science students are free and same go for them so It was so hard to find a free time that suits us but we managed to find times in which we were all free in which were rare but we still managed to go to meetings and deliver the tasks. Sometimes when we had client meetings but had lectures at the same time, we let the free lads of the group to attend and to inform us of what was discussed in that meeting. The second issue which was blocking our progress sometimes was learning new technologies while having college work and assignments to do. I was assigned to set up dockers and Kubernetes environments which was a lot of reading and learning hours and having assignments and college work at the same time was so much stress but at the end of the day we managed to cross that obstacle and deliver our tasks on time by using time management.

I am proud of myself and my contributions to this project because I was able to function under extreme stress and pressure and deliver my tasks on time. It was a challenge and I love challenges and this one was one of the hardest challenges to overcome and experience so I am proud of myself. I was able to contribute on many things such as the division of tasks, the plan of delivering our tasks as well as presentations and the coding part of this project by setting up dockers and Kubernetes with my teammate Aaron. I am happy that I had the opportunity to work and share this experience with other lads from different courses and years in which helped me gain knowledge and skills from them.

I realised that I was able to work better with group than working individually as I was asking questions and getting the answers that I needed which helped me delivering my tasks on time. I also realised that when you put the hours into working on something or learning new technology you will get the knowledge you need either you going to use it now or in the future. Finally, I learned that I love learning and trying new technologies which helped me big time in working and delivering the tasks on time.

In conclusion, I really enjoyed this module as it gave us the opportunity to work within a team combined of 2<sup>nd</sup> and 3<sup>rd</sup> years. I learned a lot of interesting technologies such as GitHub, Dockers, Kubernetes, and Python. These technologies are valuable and widely used, and they may open new job prospects for me in the future. I learned real life skills such as leadership and time managements in which will help me in my career and next year's software engineering project module. The concept of teamwork was particularly enjoyable for me because I enjoy interacting with others and exchanging ideas and experiences. I've learned a lot about how real-world software project development works, which will come in handy in the future. I'm looking forward to working on next year's software engineering project from a management perspective, where I aim to learn even more skills in software development than I did this year.