

COMP47480 Contemporary Software Development

Lab Journal

Shourya Khujneri (22204653)

MSc. in Computer Science (Negotiated Learning)



UCD School of Computer Science

University College Dublin

Table of Contents

Table of Contents.....2

1 Agile Methods.....3

 1.1 Work Done 3

 1.2 Reflections..... 3

1 Agile Methods

This practical involved a group activity wherein students were supposed to get into groups of two or three and reflect on the topics covered during the lecture sessions. The theme of this particular practical was to come up with answers to the question “What criteria help a software project succeed?”.

1.1 Work Done

The activity was divided into 3 phases. First phase was the Brainstorming phase where I along with 2 other group members discussed various criteria that help a software project succeed. We came up with 13 criteria that we thought were imperative for a software project to succeed. The second Phase involved choosing the top eight criteria from the initial list that we thought were the most important. The third Phase involved a detailed discussion with other team members on whether the criteria chosen by us were Agile compliant or not and if they were then we needed to justify it by writing a short note for all the criteria.

1.2 Reflections

I found the activity quite interesting as it involved a discussion with other students and even though I was aware of various software development methodologies such as Agile and Waterfall, I still got to learn something new about them. For example, I didn't know much about the code review process but during the discussion, I understood that it is a process in software development where one or more developers review the code written by another developer before it is integrated into the main codebase with the goal of making the software high quality, reliable, maintainable and free of bugs. Code reviews are a great way to improve the quality of the codebase while also learning and improving your skills from fellow developers.

While we were discussing different criteria based on different software development approaches, we also discussed a bit about DevOps. DevOps is a software development process that emphasizes collaboration and communication between development and operations teams. The goal of DevOps is to improve the speed and reliability of software delivery by automating key processes and breaking down the traditional silos between development and operations. Even though DevOps wasn't covered yet during the lectures but the concept was quite fascinating to me so I did read about it before the practical. Being aware of another software development methodology turned out in my favor as I was able to suggest a few different criteria during our discussion.

During our discussion, I also realized that choosing different criteria for the software development project to succeed depends a lot on a number of factors such as the size and complexity of the project, the team's experience and skill level, the desired speed of delivery, and the organizational culture. A lot of thought is given to deciding the best criteria using the right methodology. We came to the conclusion that while there are a lot of software development methodologies out there, we cannot apply the same criteria or software methodology to all projects. We must adapt to different approaches to developing software and even modify the existing approaches if needed to our own advantage because, at the core, we all share the same goal which is to develop state-of-art quality software.

I believe that this practical session was an eye-opener for me as I learnt a lot about the thought processes that are required while working on projects to deliver high-quality software. The session also helped in providing a simulation of how different development teams go about developing software for

their clients. The key, in my opinion, is effective communication and collaboration among the team members developing the software and the stakeholders who will be using the software.