Name: Nikodem Drabik

Group: 23

Personal Reflection Statement (1000 words)

Lessons Learned/ Personal Growth

Through this project, I gained extensive knowledge about the tech industry, particularly in IoT device tracking. As this was my first experience working with a client to deliver a project, I faced many challenges when I was starting off the project, especially in creating a project idea in an unfamiliar specialisation. Despite these difficulties, I have learnt many lessons.

Firstly, I learned about the IoT lifecycle, including its functionality, benefits, and applications across industries. For example, I explored how IoT solutions like Amazon IoT and Microsoft Azure IoT trackers are used to optimize costs and enhance security. This deep dive into how they operate, and the non-user-friendly GUI highlighted potential improvements to make these solutions more user-friendly and adaptable for broader audiences that will be utilising our solution.

Additionally, I gained an understanding of LoRaWAN and LoRa RF technologies, which the client suggested integrating as a feature later in the project. These technologies added a new dimension to my technical knowledge and different technologies available.

Working with the client taught me valuable lessons about project scope and functional analysis. Initially, I was eager to jump into the design and development phases. However, the client emphasized the importance of understanding the application’s purpose and user perspective in depth before performing any design tasks. This involved creating character profiles and analysing their interactions with the application, which significantly improved the development process by providing a well-rounded view of user requirements.

Throughout the project, I also acquired experience in performance analysis, such as identifying key performance indicators (KPIs) during the documentation phase. I learned the importance of quality assurance and the steps required to ensure the application's effectiveness.

Risk management was another critical area of growth. I gained deeper understanding of how to identify potential risks and implement mitigation strategies, which will be beneficial in my professional career after university.

Collaboration with my team further enhanced my understanding of decision-making processes in selecting the appropriate software solutions. We evaluated various programming languages, including Python, C++, Java, and JavaScript, and frameworks such as Flutter and React Native, to determine the best tools for the project that will best suit the clients and our needs.

Lastly, working with our client helped me develop essential skills in managing group meetings, recording meeting minutes, and creating effective agendas. Throughout this project, I have continuously refined my approach to meetings by asking more targeted questions and gathering relevant information from the client that will enhance our ability in providing a good final product.

One key lesson I learned in December was the importance of maintaining regular communication with the client. Initially, I made the mistake of only reaching out after achieving significant milestones in the project. This approach caused unnecessary stress for the client, as they perceived a lack of progress despite substantial advancements on the team’s end. Moving forward, I will be prioritising providing consistent updates regularly, even for minor developments, which will hopefully provide better collaboration and reduced misunderstandings.

By adapting my communication style and embracing these lessons learnt, I believe going into the second semester it will have significantly improved my ability to manage client relationships effectively, ensuring alignment and transparency throughout the project's duration.

This experience not only expanded my technical knowledge but also improved my ability to approach projects strategically, ensuring their success from conceptualization to deployment.

Contribution to the Project

In this project, my primary contribution has been in documentation department. I have written much of the final version of the main document, which outlines the project’s objectives, scope, and implementation strategies I have converted notes form our team meeting to be usable in the main document that is submitted to our client. My team members have significantly contributed to the more technical sections, leveraging their expertise to address areas specific to their roles.

Additionally, I have been responsible for managing client communication. This involved setting up communication channels, scheduling meetings, and recording meeting minutes. During team meetings on Microsoft Teams, I led most of the discussions, providing updates on our progress and aligning our team’s goals with the client’s expectations.

At the project’s beginning, I collaborated with Tom on planning the user interface (UI) design. Together, we held a meeting to discuss colour schemes and the graphical user interface (GUI) layout that would best suit the client and provides an pleasing visual. This collaboration established a cohesive design foundation that aligns with our project’s goals and enhances the user experience. Using this Tom has been able to provide a amazing prototype.

By contributing to documentation, client communication, and UI design, I have played a pivotal role in ensuring the project’s organizational and developmental success while creating collaboration within the team.

Improvement into Semester 2

Going into the second semester, I plan to enhance my communication skills within the team and contribute more actively to the technical implementation of the prototype. While I have primarily focused on planning and documentation thus far, I recognize that I could have provided greater support to Tom during the implementation phase. His expertise allows him to complete tasks in this field much more efficiently, but I aim to assist him beyond the planning stage by taking on hands-on tasks and learning from his experience.

To achieve this, I will be taking proactive action to seek opportunities to collaborate on the technical aspect of this project by dedicating time to learning technologies in areas I lack expertise in. I hope that working alongside Tom as an assistant I will learn from his great experience and develop my own in GUI development.

Significant events:

Appendix - Evidence

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| **Significant Event Mentioned** | **Git Commit Hash/ Trello Card (deck and card)/ Meeting Minutes (date and point)** |
| *Event 1* | *Completed Deck – Card (Emergency Changes)* |
| *Event 2* | *Minutes on 2 December 2024 – Section Client Discussion, Point 2* |
| *Event 3* | *Date: 2 December 2024, Git Commit Hash: 4bd1c0f* |