Self Reflection Report

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1). About Me

- Determined
- Hardworking
- Collaborative
- Versatile
- Ambitious

2). What I have learned through the third year group project

1. Flutter Development

I had to learn flutter from the scratch inorder to create the mobile application for this project. First I did some learning projects in flutter and started the development of the application for the Group Project. During the time period I have learned creating dynamic and visually appealing UIs, state management using Provider, GetX, and integrating robust backend services like Spring Boot. This included handling real-world scenarios like user authentication, data validation, and secure storage, preparing myself for complex app development tasks. I learned mostly from Youtube and also with help from my friends, group members.

2. React Development

At the start of the project I was hoping to develop both the web application and the mobile application, to do that I had to learn ReactJS. For that I did a learning project to get the knowledge of basics, hooks, state management etc. But I did not do anything in the web application, I only did the mobile application.

3. Software Engineering Best Practices and Concepts

I gained practical experience applying principles like clean architecture, modularity, SOLID design principles, and test-driven development, which are crucial for building scalable and maintainable software. I learned about working within an iterative framework, possibly involving sprints or task prioritization, taught me the importance of incremental progress, regular feedback, and adapting to changing project requirements.

4. Collaboration and Teamwork

Collaborating in a team improved my ability to use version control effectively, Communicate ideas clearly with team members, dividing the tasks and complete the them strategically in order to meet the deadlines.

Benefits of the learning outcomes of the Group Project

The third-year group project equipped me with practical skills in Flutter development, API integration with Spring Boot, and software engineering principles, preparing me for real-world challenges. Collaborating in a team improved my communication, task management, and problem-solving abilities. Exposure to Flutter and React enhanced my adaptability to different frameworks, and applying clean architecture and modular design strengthened my ability to build scalable applications. These experiences also helped me secure an internship working with React and Spring Boot, advancing my expertise in modern development.

3). Group work experience, my role and contribution

Working in a group of six, with two backend developers, three web front-end developers, and myself as the sole mobile app front-end developer, was a valuable and collaborative experience. My role primarily focused on developing the mobile application's front-end, where I took full ownership of the UI/UX design, state management, and ensuring smooth interactions between the app and the backend services. I collaborated closely with the backend team to integrate APIs and ensure the mobile app functioned as intended. While the team worked in parallel on their respective tasks, I maintained clear communication to align on project milestones and resolve any issues. My contribution involved translating the project's design into a fully functional, user-friendly mobile interface, ensuring a seamless experience for users.

4). What Went Wrong, What Went Well, and How I Can Improve

Initially, I intended to collaborate across multiple areas of the project, including web front-end, mobile front-end, and back-end development. However, due to the team structure, I ended up focusing solely on the mobile front-end development. While this was not the original plan, it allowed me to fully immerse myself in Flutter development, which went well. I gained significant knowledge and hands-on experience in building the mobile app, from UI/UX design to integrating the front-end with the backend.

Looking ahead, I recognize areas for improvement. While working independently on the mobile app was a valuable learning experience, I aim to improve my ability to collaborate more effectively across both front-end and back-end tasks. I have already started my internship, where I work with React and Spring Boot, expanding my full-stack development skills. Balancing both front-end and back-end development will help me grow as a full-stack developer and improve my collaborative approach in future projects.