Reflection Entry 2

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FIT3164 Data Science Project Part 2

Semester Reflection for FIT3164 Data Science Project Part 2

Throughout the semester, my team made significant progress on our final year project, overcoming challenges while achieving important milestones. This reflection will summarize the key activities, problems encountered, solutions adopted, and my personal growth and learnings from the project.

Key Activities and Milestones

Early in the semester, task allocations were made to ensure smooth project management. My role primarily focused on handling both the frontend and backend of the web-based system. I was responsible for several key components and their functionality, including Medicine, Appointment, Prescription, Physician, Homepage, and the HTML for Login and Register. Additionally, I managed the core functions for these components, such as add, delete, view, update, and list, while also overseeing the navigation menu and bar of the web application.

A major milestone was completing the medication component early, which established a strong foundation for more complex features like the prescription and appointment module. I completed the prescription feature during Week 7, driven by a strong sense of responsibility after facing a personal challenge: learning that my teammates had achieved slightly higher grades than me in FIT3163, initially caused frustration and disappointment as this difference in grade resulted in my teammates having the reward of obtaining the highest grade within the cohort even though report wise I have contributed the most in terms of quality and quantity. I briefly considered not contributing as much as I once did in FIT3163 to avoid being exploited but I quickly realized that withdrawing my contributions would harm both the project and my relationship with the team. This emotional hurdle pushed me to finalize the prescription and physician feature within one week and thus fuelled my continued dedication to the project. I now plan to focus on the appointment feature in the coming weeks.

Alongside this, I contributed to all the task allocation for all our reports, ensuring that we remained organized from the start until the end of the project from FIT3163 to FIT3164. Regular scrum team meetings and sprint reviews kept us aligned, and we actively communicated on WhatsApp and Discord to address any issues promptly.

One of the highlights of the semester was our interim and final presentation, which both went smoothly. We received valuable feedback from Mr. Soo during the interim presentation where he has helped identifying key areas for improvement, particularly in the model and web integration. This feedback drove the next stage of development, where I worked closely with my partner to refine the web application system while ensuring the frontend was well-structured and intuitive for users.

Challenges and Problem Solving

One significant challenge was balancing my project commitments with my role in the Monash Clubs and Societies Publicity Subcommittee, especially during the busy Monash Cup season. This led to a temporary delay in my contributions for the project. Reflecting on this, I realized the importance of setting smaller, more manageable goals to maintain steady progress throughout the semester. In the

future, I plan to balance multiple responsibilities more effectively by breaking down tasks and managing my time better to avoid overwhelming myself and my team.

Another challenge arose late in the development process when I have discovered that the navigation bar and menu could be accessed without proper login credentials. Although this issue surfaced toward the end, I was able to resolve it promptly, reinforcing the importance of early and consistent testing. This experience taught me that it's critical to remain adaptable and vigilant throughout development to catch potential security flaws before deployment.

Additionally, as I handled both frontend and backend duties for the website, I consistently oversaw task assignments for all team members without any delays or mishaps. This included organizing the Team Management Report, Final Project Report, and other necessary reports submissions to the desired structures and formats whilst making sure the work was distributed effectively and met all deadlines.

Struggles and Stress Experienced

Weeks 11 and 12 of the current semesters were particularly stressful, as they brought a heavy influx of assessments. Alongside the ongoing project work and reports for this unit, I had to complete a 40% assessment for ETW3482, an OLAP quiz for FIT3003, FIT3164 final presentation, software demonstration and many more. The volume of work felt overwhelming, and managing deadlines across multiple units was challenging. The pressure was immense, especially since many of these assessments carried significant weight for my overall grade.

Despite this stress, I pushed through by prioritizing tasks and breaking them down into smaller, manageable steps. Nonetheless, even with this huge influx of assessments, I also never failed to support my team and urged them to start on the reports for FIT3164 early. One thing I felt I have done right for the team is to consistently require the team to finish their meeting minutes promptly as this decision helped the team to streamline the completion of the Team Management Report. This difficult period reinforced the importance of pacing myself and leveraging teamwork to manage heavy workloads.

During Week 13 and 14, our primary focus was completing the Final Project Report. Although no major assessments from other units were due other than the exams for FIT3003 looming, the workload still required intense focus and collaboration. The process of wrapping up the report marked the final stretch of my academic journey, and I felt a bittersweet sense of closure. Completing the final tasks brought a mixture of satisfaction and nostalgia—satisfaction from knowing that we had put in consistent effort throughout the semester, and nostalgia from realizing that my university life was coming to an end.

Reflecting on the last two weeks, I found myself looking back at how much I've grown academically and personally. The challenges, late nights, teamwork, and occasional frustrations were all part of the journey, and while there were moments of stress, there were also many moments of accomplishment. This final project felt like the culmination of everything I've learned over the years, and it has given me a deeper appreciation for how far I've come.

The end of university life is undoubtedly a bittersweet moment—while I'm excited for the next chapter, it's hard to say goodbye to the structure and experiences that have shaped me. However, I leave with a sense of fulfilment, knowing that I've given my best effort and built strong relationships along the way.

Technical Learnings and Project Management

Throughout the semester, I developed a deeper understanding of how frontend and backend systems integrate within a web application. Working on multiple components of the project gave me valuable insights into structuring CRUD (Create, Read, Update, Delete) operations efficiently and ensuring that both user interface and backend logic worked seamlessly together. Managing the navigation bar and menu was another technical accomplishment, as it enhanced the system's usability while securing access for users.

When it came to project management, I assumed the role of Project Manager and team leader, by mainly ensuring accountability was held by each member in the team whilst arranging all tasks allocation for all reports, which helped the team stay on track throughout the semesters. I learned the importance of clear communication and planning, especially when balancing multiple project requirements and external commitments. Using tools like GitLab and GitHub for version control ensured that the team could manage changes efficiently and collaborate without conflict.

Reflection on Team Dynamics and Individual Contributions

In addition to handling the technical aspects of the project, I was responsible for allocating tasks to my team members throughout the semester. This allowed us to maintain clarity on each person's role, ensuring that we all contributed fairly and equally.

Reflecting on our team dynamics, I feel that the collaboration was generally smooth, but there were moments when workloads could have been distributed more evenly. Open communication and regular updates helped mitigate these challenges, and our collective effort ensured that we remained on track to complete the project successfully.

Conclusion

This semester has been a valuable learning experience in both technical development and project management. While balancing multiple responsibilities was challenging, especially during Weeks 11 and 12, I am proud of the contributions I made to the project and the role I played in ensuring its success. Completing the Final Project Report in Weeks 13 and 14 brought a bittersweet sense of closure, as I reflected on my growth and the end of my university journey. The skills I gained in handling frontend and backend tasks, managing project components, and allocating team responsibilities will be invaluable in my future career. Moving forward, I will carry these lessons with me, particularly the importance of continuous improvement, thorough testing, and effective team collaboration.