**Individual Reflection Report**

This report reflects on my experience throughout the three assessments in our project, focusing on the roles I played, the challenges faced, and the lessons I’ve learned.

**Assessment 1**

I was responsible for developing the trading application prototype in the first assessment. This task involved using RabbitMQ as middleware to facilitate real-time communication between different components of the system. The project required setting up message routing, managing asynchronous communication, and developing a user-friendly interface using C# and Windows Forms. This was a highly education experience for me, as it strengthened my understanding of middleware technologies and how they support the functionality of distributed systems. Successfully implementing the trading app prototype provided a solid technical foundation for the rest of the project, allowing me to apply this knowledge in later stages.

**Assessment 2**

For the second assessment, I contributed to the group report, which focused on evaluating our prototypes and preparing a post-mortem analysis. My work on the second assessment involved documenting some of the technical aspects of our project, which covered part of the middleware setup and the challenges we faced during development. This assessment emphasised the importance of reflection and continuous improvement in software development projects. By analysing our successes, and setbacks, I gained an understanding of the strengths and weaknesses of our approach, which helped with the strategy for the final phase of the project.

**Assessment 3**

The final phase in the project. I was responsible for reporting on the project’s costs and scheduling. Building on the foundation from the previous assessments, I applied what I had learned about planning and managing resources to ensure that our project stayed on track and would have an adequate budget. This involved creating a project timeline and estimating theoretical costs for personnel and tools.

**Challenges and Learning Outcome**

Throughout the project, one of the main challenges was adapting to different roles and responsibilities with each assessment. Moving from a technical role in assessment one to a more general reporting role in assessment two and three. By experiencing both the technical and resource management sides of software development, I developed a more comprehensive understanding of how to manage complex projects.

Teamwork and communication were also key areas of learning. Coordinating with team members, especially when managing different schedules and workloads, highlighted the importance of clear communication and collaboration. Regular meetings and updates were essential in keeping the project on track and ensuring that everyone was aligned with the project’s goals.

**Conclusion**

Overall, this project was a great learning experience that helped me grow my understanding of the software development industry. From building the trading app prototype in assessment one to writing reports working towards the final project phase in assessment two and three, I gained practical skills in software development and project management. These experiences have helped prepared me for future projects, where I will be able to apply what I’ve learned to take on various new challenges and continue improving my ability.