**Teamwork Reflection – Eleanor (Data Engineering & Performance Analysis)**

As the Data Engineering and Performance Analyst, my primary responsibility was ensuring that our system could effectively handle the specified load and analyzing its performance under varying conditions. This involved both designing load tests and translating raw data into actionable insights about system behavior, stability, and reliability. Overall, I’m pleased with how the team collaborated to achieve these goals. Alina’s development of the core microservice laid a strong foundation, providing the performance and scalability we needed for the system. Jessie’s work in managing the infrastructure and CI/CD pipeline ensured that everything was properly deployed and able to scale seamlessly, which was essential for performance testing. Jay’s clear and thorough documentation allowed us to communicate our findings effectively, ensuring that all stakeholders could understand the performance results and the work behind them.

Looking back on the project, there are a few areas where I feel we could have further optimized our approach. First, while we conducted load testing under different request-per-second (RPS) scenarios, I believe we could have expanded our test cases to cover more edge cases and stress points. For example, simulating high-concurrency situations, testing under rapid bursts of traffic, and analyzing the system’s response during various failure modes would have provided deeper insights into how the system behaves under stress. These edge cases are important for understanding the true limits of the system and ensuring its reliability in real-world conditions.

Additionally, while task delegation was generally efficient, there were moments during the project when our task distribution became somewhat unclear, especially when there were overlapping responsibilities. We could have benefitted from a more structured approach to delegating tasks at the outset, ensuring everyone had a clear understanding of their specific responsibilities and deadlines. This would have reduced some confusion and streamlined our efforts as the project progressed.

On the technical side, while our documentation was thorough, I feel that our performance visualizations could have been more detailed and intuitive. We focused on summarizing the data, but I believe more interactive or dynamic visualizations—such as time-series graphs or heatmaps of system performance across different conditions—would have provided a clearer understanding of system behavior. These types of visualizations could have helped the team, as well as external stakeholders, grasp performance patterns more easily and make data-driven decisions for future optimizations.

Despite these areas for improvement, I’m proud of the work we accomplished as a team. The system met its performance targets, and we were able to identify key areas where further optimization would yield the most value. I see this as a stepping stone in refining our testing methodologies and documentation practices for future projects. My contribution to performance analysis and data interpretation played a key role in shaping the system’s stability, and I’m satisfied with the impact it had on our overall success.

In terms of my self-assessment, I would grade myself **A-**. While I was able to contribute significantly to performance analysis and system reliability, I recognize there’s room for improvement in the rigor of our testing and in the presentation of our performance findings. Expanding the scope of our testing scenarios and improving the clarity of our data visualizations will be a focus for me in future projects.