

Teamwork Reflection

IDS 706 - Data Engineering Systems

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Peter de Guzman

General Reflection:

Our team was driven by a unified commitment, high level of trust, and shared standards of excellence. We met twice early on in the project timeline to review the rubric, decide on a data source and approach, and to clarify our team expectations. Once we decided on our ideal data source and the minimum viable product for our microservice design, we began to divide roles and implement specific parts of the overall project. This worked well because we have competent team members who could step up into leadership roles and independently manage their specific tasks. Once a team member completed a task, another team member reviewed it and offered suggestions for revision. Since we had high standards of quality, our team members did not avoid or react negatively to this feedback, but were humble and driven to work collaboratively to improve the end result. Since our team members each had different final project and personal obligations, we had to balance collective in-person work with independent task completion. However, I never thought this put us at a disadvantage or led to any issues that impacted our collaboration. The unified commitment to produce an interesting project that satisfied all the requirements kept us disciplined, creative, and results-oriented as we navigated challenges during this iterative process.

Eric Ortega Rodriguez

| Areas to Sustain | Areas of Improvement |
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| Eric was driven to contribute and took it | Eric was a great collaborator, and in the |

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| upon himself to learn a new Python package “locust” to load test the microservice. This learning mindset was very beneficial to our team. | future I would encourage Eric to identify parts of the project that he wanted to take more leadership in, as it can be hard to “own” parts of the project with so many team members. |
| Eric promoted clear communication for our team, keeping our Google Drive organized and setting meeting times so that we would not fall behind while we all juggled other deadlines and obligations. | Eric could be more assertive with his opinions on project design, and this will come with experience. For this project, I felt that Eric was able to clearly explain any concerns he had and gain team member buy-in to refine the project deliverables. This was key to our success. |
| Eric was humble and willing to ask questions during team meetings and asynchronous work times, ensuring that we met all of the project requirements and had a shared understanding of our technical approach. | In the future it will benefit Eric to be more involved in the project design, and potentially spend more time pre-meeting thinking through suggestions to shape the project approach. |

Ilseop Lee

| Areas to Sustain | Areas of Improvement |
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| Ilseop was both persistent and patient as he collaborated with the team to produce an optimized Docker image that was compatible with the AWS ecosystem. | A small area of improvement for Ilseop would be to become more familiar with using the git branch system and avoiding merge conflicts when collaborating with team members on projects with many branches. |
| Despite encountering occasional issues while navigating new code structures, Ilseop never became frustrated with the team and worked to communicate his thought process and approach. | Ilseop was an adept communicator, and the only area of improvement would be to more explicitly confirm when he is done with certain tasks so other team members can get started with the next step, without delays or confusion. |
| Ilseop stepped up in a leadership role to lead both the Gemini API integration for the microservice and the quantitative assessment to measure the microservice’s performance. | As with other members of the group, Ilseop could improve by clearly explaining the best practices for securely sharing API keys and platform secrets for public-facing microservices. |

Zachary Fennie

| Areas to Sustain | Areas of Improvement |
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| Zachary kept our team focused on the end result and encouraged us to align on the minimum viable product for our microservice, which we built before expanding the scope to add additional features. | Zachary worked very well independently, and a way to improve upon this would be for him to briefly share the functionality of his code so that other team members fully understand and could step in if he was otherwise unavailable. |
| Zachary was efficient and flexible, completing parts of the Flask app design independently before handing off tasks to other team members with clear next steps and direction. | Zachary was able to work well on a demanding timeline. In the future on different projects, I think Zachary could let his creativity play a bigger role in project design, as this was apparent in our collaboration but at times limited due to the demands of other project deadlines. |
| Zachary diligently used the GitHub branch system for version control, documentation, and collaboration, which promoted collaboration and communication among our team. | This feedback applies to all members of the group, but at times Zachary and others focused on completing tasks consecutively without taking the time to share the thought process and result with all team members, and this could lead to communication issues in other projects with more complex concepts. |

Reflection from Feedback Session:

Our team met together on Wednesday, December 11th in person to discuss our prepared feedback tables. It was great to have a chance to share and receive feedback from my team members. There were some recurring themes in the feedback I received, including needing to better delegate tasks, explain concepts to my teammates, and make space for others to step up in their own leadership and ownership of tasks. For this project, I did a lot of my own background research on AWS products, and did not do a great job of communicating this before implementation. This led to a situation where I was often making decisions and explaining the outcome to my team members rather than authentically

involving them in the decision-making process. In the future, I will make sure to bring along others with me in the decision-making and building process, and create specific checkpoints for us to make sure we are all on the same page. Overall, the process of giving and sharing feedback was very helpful and I'm looking forward to bringing these lessons into future collaboration.

Zachary Fennie

General Reflection:

Our data engineering project highlighted the value of diverse technical expertise within a team. The regular in-person meetings were invaluable, providing the collaborative environment we needed for both initial design planning and resolving complex integration challenges in the final stages. During periods of tight deadlines, our team excelled by leveraging each member's unique strengths effectively. We developed a practical approach to tackling complex challenges by breaking them into manageable pieces and adopting agile project management methods. This flexibility became particularly crucial when integrating various components of our pipeline. Our collaborative mindset helped us navigate technical hurdles while maintaining project momentum. The final deliverable surpassed our expectations, demonstrating not just technical proficiency but also effective teamwork in a real-world context. Beyond the technical achievements, the project offered valuable lessons in collaborative development and reinforced the crucial role of clear communication in technical work. The end result is a compelling portfolio piece that showcases both our technical capabilities and our ability to work effectively as a team.

Ilseop Lee

| Areas to Sustain | Areas of Improvement |
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| Shawn took the lead on researching and understanding complex aspects of the project, particularly the integration of the GenAI (Gemini) API. His ability to dive into difficult areas and figure out the technical details was a key contribution to the project's success. | One minor area for improvement for Shawn was in providing clearer communication outside of meetings regarding his progress on tasks. While he contributed effectively during meetings, more frequent updates on what had been accomplished or what still needed attention would have helped the team |

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| | stay better informed and aligned throughout the project. |
| Shawn was a pleasure to work with when it came to collaborative problem-solving. He was always effective in addressing group challenges, particularly when it came to connecting the different aspects of the project. His ability to approach problems with a positive attitude and a collaborative mindset greatly contributed to our team's success. | One area for improvement for Shawn was taking more initiative during certain phases of the project. While he was excellent at following through with tasks and collaborating effectively, he could have been more proactive in proposing solutions or leading certain technical decisions, which would have helped drive the project forward even more efficiently. |
| Shawn's agreeableness made him a great team member to work with, especially given English not being his first language. His positive attitude and willingness to collaborate created a comfortable and productive environment, making it easy for the team to communicate and work together effectively. | Another area for improvement for Shawn was in asking for help sooner when facing challenges. At times, he struggled with certain sections of the project but waited longer than necessary before reaching out for assistance. Asking for help earlier could have streamlined the process and potentially avoided delays in completing tasks. |

Eric Ortega Rodriguez

| Areas to Sustain | Areas of Improvement |
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| Eric demonstrated great flexibility throughout the project, consistently being willing to adjust his schedule and accommodate changes to our group meetings. His openness to shifting timelines and meeting times helped ensure that we stayed on track, even when unexpected challenges arose. | Eric has a great personality and is always positive, but at times, he tended to take a backseat in discussions. Being more vocal in group conversations could have helped leverage his ideas more effectively and ensured his contributions were fully integrated into the project. |
| Eric was an active participant in all group communications, consistently sharing updates, asking questions, and providing feedback. His engagement ensured that everyone was on the same page and | While Eric contributed valuable insights, there were times when it would have been beneficial if he took more initiative in driving design choices. Given his strong ideas and technical knowledge, taking a |

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| helped foster clear, ongoing dialogue within the team. | more active role in shaping the design could have further enhanced the project's development. |
| Eric displayed a strong work ethic by independently taking on tasks such as load testing. He managed these responsibilities with minimal supervision, ensuring they were completed thoroughly and on time, which significantly contributed to the project's success. | One area for improvement for Eric was time management, as outside commitments occasionally interfered with his ability to focus on the group project. While he was always willing to make adjustments, there were times when this impacted the team's overall timeline. |

Peter de Guzman

| Areas to Sustain | Areas of Improvement |
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| Peter demonstrated excellent organizational skills throughout the project, doing a great job of creating and maintaining the group's resources. His ability to keep everything well-organized and easily accessible ensured that the team stayed on track and had all the necessary materials to work efficiently. | One area for improvement for Peter was that sometimes he got ahead of the rest of the team, which, while a good problem to have, meant that certain tasks or decisions were made before everyone was fully aligned. Slowing down occasionally to ensure the team was on the same page could have helped maintain better overall coordination. |
| Peter showed strong initiative from the start of the project, taking the lead in getting things moving and ensuring that we were ahead of the curve. He proactively set the pace for the team, making sure we stayed on track and consistently moved forward at a good pace. | One area for improvement for Peter was in asking for help sooner when facing challenges. At times, he worked through difficult sections on his own, which led to delays. Reaching out for assistance earlier could have helped resolve issues more efficiently and kept the project moving forward smoothly. |
| Peter excelled at task delegation, fairly and effectively dividing up the work among the team. He was always mindful of each member's strengths and ensured that tasks were distributed evenly. Additionally, when certain tasks fell | While Peter was an effective leader, one area for improvement would be encouraging others to voice their opinions more during discussions. At times, his strong initiative and decision-making could have overshadowed quieter team |

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| behind, Peter stepped in to complete them, ensuring that the project stayed on track and deadlines were met. | members, and creating more space for everyone to contribute could have led to even more diverse ideas and solutions. |
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Reflection from Feedback Session:

Our feedback session proved both productive and insightful. Taking turns, we each shared our observations about sustainments and potential improvements. My teammates recognized my strong technical foundation, particularly highlighting my proficiency in Git, Flask, and SQL. They also commended my work ethic and initiative throughout the project. While I contributed effectively to the team, I often felt intense pressure to deliver results. The primary improvement area my teammates identified was the need for greater transparency in communicating both my progress and challenges. These points resonated with concerns I had already recognized before our discussion.

The combination of heavy coursework and looming deadlines led me to adopt a somewhat isolated approach: grinding through tasks quickly and trying to solve problems independently to avoid being a burden to the team. However, the feedback session revealed that much of this pressure was self-imposed. I realized I should have collaborated more openly with my teammates, who were eager to help and support each other. Despite these personal growth areas, I feel incredibly positive about our team dynamic. I'm grateful to have been invited to join this group, proud of our collective achievements, and appreciative of the bonds we formed. The experience not only resulted in a successful project but also helped me understand the value of open communication in team settings.

Ilseop (Shawn) Lee

General Reflection:

Our project highlighted the importance of teamwork, adaptability, and effort. By leveraging each member's strengths, we took the time to learn new tools and approaches to tackle challenges as they came up. I personally faced some

difficulties with Git branching, but the team's support helped me resolve them quickly. Open communication and mutual respect ensured a smooth process, and it was reassuring that there were no major teamwork-related issues. This experience reinforced how collaboration and shared commitment can drive successful outcomes, even within a short timeframe. Personally, I learned a lot throughout the process and am grateful to my teammates for their support and encouragement, especially for their understanding and patience when language barriers made collaboration more challenging.

Eric Ortega Rodriguez

| Areas to Sustain | Areas of Improvement |
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| Problem Solving : Tackled issues during a load test even though it was unfamiliar to him, and proactively troubleshoot them | I think he is humble, but it would be great if he showed more confidence in what he does and expressed his opinions more assertively in meetings |
| Collaboration : Played an active role in team meetings, encouraging a cooperative atmosphere that boosted team spirit | It would be great if he could actively participate from the early stages of the project and dedicate time beforehand to consider suggestions |
| Responsibility : Always made sure to complete his tasks within the given timeframe (While managing other tasks simultaneously) | He tries to handle most of the issues on his own, but it would be better if he shared any difficulties with the team |

Peter de Guzman

| Areas to Sustain | Areas of Improvement |
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| Project Management : Excels at | He's patient and has an inclusive |

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| breaking down tasks into detailed components and coordinating schedules effectively. | leadership, but I'm wonder if he can also demonstrate strong leadership to handle uncooperative team members |
| Extensive Knowledge : Possesses a strong understanding of overall processes and excellent at visualizing components. | He has shared progress well from the start. If time allows, more detailed debriefs on each element would be helpful (he's not a TA though) |
| Punctuality : Completes tasks on time and shares expected completion times with teammates to streamline workflows. Always attends meetings on time | He is reliable and consistent. Sometimes, I wonder if he needs a break. I hope he can take care of himself occasionally |

Zachary Fennie

| Areas to Sustain | Areas of Improvement |
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| Grit : Worked overtime to meet deadlines. Persisted through challenging tasks especially in UI development. | When facing overwhelming problems, it would be nice to brainstorm together and find ways to reduce the workload. |
| Initiative : Voluntarily tackled difficult tasks, creating the foundational code, which boosted project progress. | It would be helpful to provide a high-level overview of the deliverables(such as codes) to catch up quickly |
| Application ability : Leveraged extensive knowledge of DE to finish tasks on time such as API integration and obtaining CI/CD badges. | Taking responsibility is great, but sharing thoughts on grey areas such as overlapping roles would be better. |

Reflection from Feedback Session:

Team reflection helped me contemplate the meaning of teamwork. Working as a

team means being closely interconnected to accomplish a common goal within a given time frame. Especially when tasks are sequentially linked, completing work on time becomes crucial. In this regard, the importance of sharing the timeline and seeking help from colleagues to address bottlenecks is significant. I particularly experienced how insufficient communication decreases work efficiency in this project. So, I realized I need to communicate more proactively even if there are problems. Additionally, collaboration tools like GitHub can be tremendously helpful. Once again, I'm grateful to my teammates, and this team project experience has become an opportunity for personal growth.

Eric Ortega Rodriguez

General Reflection:

Our team's success was rooted in the unique strengths brought by each member's diverse background and our collective determination to overcome challenges. While none of us came from strictly technical fields, we embraced the opportunity to learn and grow throughout the project. Early in the process, we recognized the value of our varied perspectives and leveraged them to approach the project with creativity and innovation. Despite the technical nature of the task, we took the initiative to learn new tools and methodologies, dedicating time to developing skills in data analysis, microservice design, and infrastructure management. Whenever we encountered obstacles, whether in understanding complex frameworks or navigating technical setbacks, we worked collaboratively to find solutions. Each team member demonstrated adaptability and a willingness to step outside their comfort zone, ensuring the project moved forward. By combining our strengths and maintaining open communication, we not only achieved the project's objectives but also grew significantly as individuals and as a team. This experience highlighted the power of determination and teamwork, proving that a strong commitment to learning can bridge the gap between limited technical experience and meaningful project outcomes.

Peter de Guzman

| Areas to Sustain | Areas of Improvement |
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| Peter consistently communicates effectively, ensuring all team members are on the same page during discussions and updates. | Peter could improve by delegating tasks more equitably and providing team members with opportunities to engage with and gain exposure to different aspects of the project. |
| Peter is highly organized, and we were able to set milestones to keep track of progress effectively. | Peter was a great leader, room for improvement would be to share the resources he used to understand certain concepts so some team members can be caught up with the material as well. |
| Peter openly shares his knowledge, contributing to the team's collective learning. Especially when it came to his understanding of Amazon Web Services. | Peter was really resourceful. Some room for improvement lies in incorporating more creativity into the project. |

Ilseop Lee

| Areas to Sustain | Areas of Improvement |
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| Ilseop consistently demonstrates a willingness to address issues within the code or logical errors, ensuring the project progresses smoothly and efficiently. | Ilseop could improve by providing more frequent updates on task progress and completion, ensuring better alignment and collaboration with the team. |
| Ilseop effectively communicates the rationale behind his actions and decisions within the project. | Ilseop could improve by ensuring clear communication and coordination regarding GitHub workflows, including branch creation and completion, to keep the team aligned and streamline collaboration. |
| Ilseop asks insightful and relevant questions that help the team identify | Ilseop consistently maintained a positive attitude throughout the project. An area |

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| potential pitfalls and uncover opportunities for improvement, fostering better progress and collaboration. | for improvement could be proactively voicing any uncertainties or identifying potential flaws within the project to facilitate collaborative problem-solving. |
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Zachary Fennie

| Areas to Sustain | Areas of Improvement |
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| Zachary consistently works well with team members, ensuring that everyone feels heard and included. | Zachary demonstrated exceptional technical knowledge, but an area for improvement could be delegating technical tasks more frequently, enabling other team members to develop their skills and contribute more effectively to the project. |
| Zachary approaches problems logically and provides thoughtful, well-considered solutions. | An area of improvement for Zachary could be to provide more in-depth explanations of his logical approach to specific actions within the project. This would help ensure all team members fully grasp the rationale behind decisions, fostering better alignment and collaboration. |
| Zachary's technical contributions are high-quality and align well with the project goals. His detailed explanations of using server and serverless databases were particularly insightful, helping the team understand the trade-offs and applications of both approaches. | An area for improvement for Zachary was communicating with others about ways they could assist him, ensuring that work was evenly distributed and completed more efficiently. |

Reflection from Feedback Session:

Our group met on Wednesday, December 11, 2024, for a feedback session that turned out to be incredibly insightful and constructive. The session provided a supportive environment where we openly discussed each other's strengths and areas for improvement. I found it to be a good experience because it shed light on specific aspects where I excel and those areas where I need refinement. Receiving constructive feedback helped me reflect deeply on my work and approach and get actionable steps to improve and move forward. Additionally, I gained practical experience in giving feedback in a thoughtful and meaningful manner. This skill will be useful when working in future teams. The session showed the importance of communication and active listening, as well as the value of creating a space where feedback is seen as an opportunity for growth rather than criticism. As a whole, I learned more about how to collaborate efficiently and be a good team member.