

# Machine Learning Course Project: Team Reflection

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# Team Reflection

## Approach to the Project

Our team approached this project by identifying our strengths and weaknesses. Early in the process, we realized that Jake was much more comfortable working with code and model development, while Jolie had stronger skills in writing and structuring the different milestone reports. Because of that, we divided our responsibilities in a way that allowed each of us to contribute meaningfully without duplicating effort or slowing each other down. We typically started each milestone by discussing with each other what we understood the requirements to be and we talked about what approach we would take to meet those expectations. We did not have scheduled work sessions every week due to our location differences. We communicated consistently via test messages and shared documents in a Google Drive folder. This helped us update each other on progress and keep the project moving. When questions or confusions came up both of us were good about reaching out even over breaks.

## Strengths and Challenges

One thing that worked well within our team was that we respected the skills that the other brought to the table. There was an immediate realization that a project such as this requires both correct implementation and clear communication. We leaned into this mindset rather than trying to do everything individually. Because Jake felt confident with the technical side of the work, he really took the lead on the coding-heavy components such as data loading, feature generation, and model training. At the same time, due to Jolie's skill set, the organization, report writing, and the presentation benefited from having someone focused on making the final deliverables easy to

read and understand. Another strength in our collaboration was our willingness to be flexible. We were able to make changes quickly especially when we realized that our original idea for the course project was no longer going to work due to the amount of missing data. We believe that we have done good work for having to change our idea mid semester. This was the biggest challenge that we faced within this project. Another challenge we faced was making sure the code and writing stayed fully connected. Because of how we divided our work, it sometimes took extra time to ensure the written analysis accurately reflected what the models were actually doing. There were moments that coordinating schedules around each other's school and personal responsibilities made communication difficult, but we always found a way to get on track.

## Workload Balance

When reflecting on workload, we both feel that the responsibilities were balanced in a fair way. Even though our tasks were different, the effort required for each area felt comparable. If anything, Jake did more of the heavy lifting because of his technical expertise. Coding can take a lot of time especially when things are not working at first. We both put in significant effort into our individual parts to make the project come together as a whole. We also supported each other whenever one area needed extra help, so the balance did not stay rigid. There was always willingness on both Jake and Jolie's side to keep things equitable.

## Lessons for Future Collaboration

For future collaborations, we would take the same strengths we had in this project and build on them by improving our workflow. One thing we plan to do differently is set up regular progress reviews where we look at the code and writing together so that everything stays aligned as we go. This is hard when you have one partner that is very lacking in coding knowledge though. Jake did an exceptional job of taking the lead. It is also difficult when you are almost

two-hundred miles away and need to be face-to-face to work through these things. We could also create a more structured plan than what the milestones said so we had smaller sections to complete per deadline instead of so much at once. Even though our teamwork was strong throughout the entire project, these small improvements could help us feel more confident in our understanding at each stage of the project.