

Final Project -

Self Assessment

- **Presents a cohesive written analysis that describes the role(s) they played over the course of the project and their contribution to the project in that role**

I had the Square role in the Group Project and in that role I got to set-up and manage the Group Repository for the Green Wave Team (#15).

I drove engagement and made everyone do timely commits through their branch, reviewed their progress, created pull requests and merged the most updated presentable version in the main branch.. I also owned and modified the ReadMe.md file across the 4 deliverables to provide a storyline around our project as well as share analytics, recommendations and findings.

I also reviewed the deliverables against the rubrik and ensured we tick-off all the requirements.

I along with Kobe also took the lead on project presentation, wording and brevity

- **Presents a cohesive written summary of how they contributed to each of the roles they did not take on via team discussions, peer reviews, or other means.**

For the data analysis part I assisted Tarini in finding relevant data sources, reviewed the data at length to come-up with the storyline we could present and shared my recommendation on the various analysis we can conduct using the PG Admin database and the Tableau dashboard.

Worked like a project manager to ensure that everybody's opinion is given due consideration and they are heard to get proper commitment from them till the end. For instance I found a way to have Michael present a case study on Norway which he was close to since the beginning and connected that with our project storyline.

- **Additionally, the analysis should describe their greatest personal challenge over the course of the project, and how they overcame that challenge.**

The greatest personal challenge was to bring everyone together at the same time. Some of the team-members were usually non-responsive over the weekends so I tried to connect with them between 7-9 pm on most days to get the project going.

Team Assessment

- Communication protocol, including any challenges, how they were resolved, and what they would do differently next time

The team-members were in constant touch via various communication channels:

- ☐ Slack came in handy for instant connection. It also helped to communicate with our TA. Most of our communication around setting the meeting time, pending requirements, etc. were handled via slack
- ☐ For sharing our progress and taking team's inputs we leverages Zoom calls and connected multiple times during the course of our project

The challenge we faced sometimes was when people were travelling or away from laptops and not able to check their slack messages. For that we decided to exchange numbers with the team to get connected immediate action or input was needed.

Next time we will try to take contact numbers earlier on to be able to connect as and when required to avoid waiting for getting a response.

- Their strengths as a team, including tips and tricks they would want to share with a new cohort kicking off the project

Our team was a team of 5 and it worked out well. Early on we gave opportunity to everyone to pick roles and everyone was flexible on taking any role.

Tarini did a great job in crunching data and preparing the ML model. She also took the lead in reviewing the presentation with TA.

Kobe was great in maintaining the Google doc with slides up to date. He would quickly imbibe feedback simultaneously during our zoom calls. He also helped with dashboard.

Avneesh helped in setting up long duration Zoom calls with his premium account which helped in connecting over 30 minutes without interruptions.

Michael was a quiet one but gave his inputs and shared views from time to time. He took the lead in creating the database.

And I felt like running a real work related project with a team comprising individuals possessing various strengths. It helped me hone my own managerial skills so to say. I like presenting written analysis at work so it kind of helped to take a lead on the Read Me and Github repo.

All in all my input to the newcomers would be to have the team-mates explore and find areas where they can make most meaningful contributions but at the same time also involve them in different tasks to seek inputs and fresh perspective.

Have clear cut milestones and progress update meetings to stay on track.

Also get timely inputs from the assigned TA who knows best where to spend most time.

Project Summary

✓ Topic addressed - Impact to global climate due to rapid increase in GHG emissions

✓ Machine module used - We used linear regression model to test our hypothesis whether higher use of EVs contribute to lesser carbon emissions. Created a Postgres database in PG Admin and linked it via python programming to the Machine learning model.

To bring interactivity we deployed Tableau dashboard which displayed EV sales over time across different countries via a bubble chart.

✓ Results of the analysis - We conducted Univariate, Multivariate analysis and also created a correlation matrix that depicted strong correlation between several features: like energy and industry, transport and heat/electricity.

We also analysed the case study of Norway where EV use is high to read how the emergence of EV on a time scale has impacted their air quality over the same timeline. It further backed our recommendation to continue higher EV adoption globally.

Our recommendation was to explore more renewable energy alternatives for charging the EVs so that the impact is even higher and the world becomes a much greener cleaner place to live in!