Trial Assignment

Data Strategy team

Scenario

The Data Strategist plays a central role in designing and implementing Thinking Machines' proposals for potential clients. On a typical engagement, your initial activities typically involve:
- a **pitch** to the client on Thinking Machines capabilities, and
- an **exploratory data analysis (EDA)**, which allows us to become more familiar with the client's data assets and thus **propose a scope of work**.

We would like you to **conduct an exploratory data analysis** and create a presentation of your findings for a client. Your client, a Local Government Unit (LGU), aims to reduce traffic congestion in their area. They have collected traffic data, but have no concrete ideas on how to make best use of it. They have given us a sample of their data for us to explore, and are looking for proposals on how to use it in informing their decision-making.

Things to Keep in Mind:

1. Think creatively about this; we are open to multiple angles! You are free to use any tools that you are comfortable with in doing your exploratory analysis.
2. We suggest that you spend more time thinking about the quality and substance of your EDA. Be clear, concise, and make it readable but do not spend energy obsessing over aesthetics. We are mostly interested in the structure of your thinking, and how strategic and creative you are in unearthing insights within the data.
3. You have 2 main objectives in the presentation :
   a. **Describe** the data
   b. **Share your insights and conclusions** based on your analysis

   - **Bonus points** if you are able to **propose next steps** between Thinking Machines and our client, or **suggest data solutions** that we can build for them based on your EDA.
     - The goal is to show what Thinking Machines can do, and how we can bring value to our client

4. If after this assignment you are chosen to move forward, you will be asked to present this to us as if we were the client.

Instructions and deliverables

You are given 72 hours upon receiving the test to send back your deliverables :

1. **Data analysis presentation** - You will also use this deck on your onsite presentation to the team, if accepted.
2. **Code** - Compile all code files that you used in doing your analysis. If you used other tools like Excel or Google Sheets, include them in the compilation. If you hosted your code in a repository, you may simply send in the link.

Put all your deliverables inside the ***Exam* folder in the Google Drive folder** shared with you after completing the application form. If you are applying for more than one position, segregate your exam deliverables by creating one folder per position.

Upon completion, send an email to your hiring manager with a link to your deliverables to stop the timer. Good luck!