SQUAD DATATHON CHALLENGE

3rd April 2024

We acknowledge and pay our respects to the Kaurna people, the traditional custodians whose ancestral lands we gather on.
We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs.

Introduction

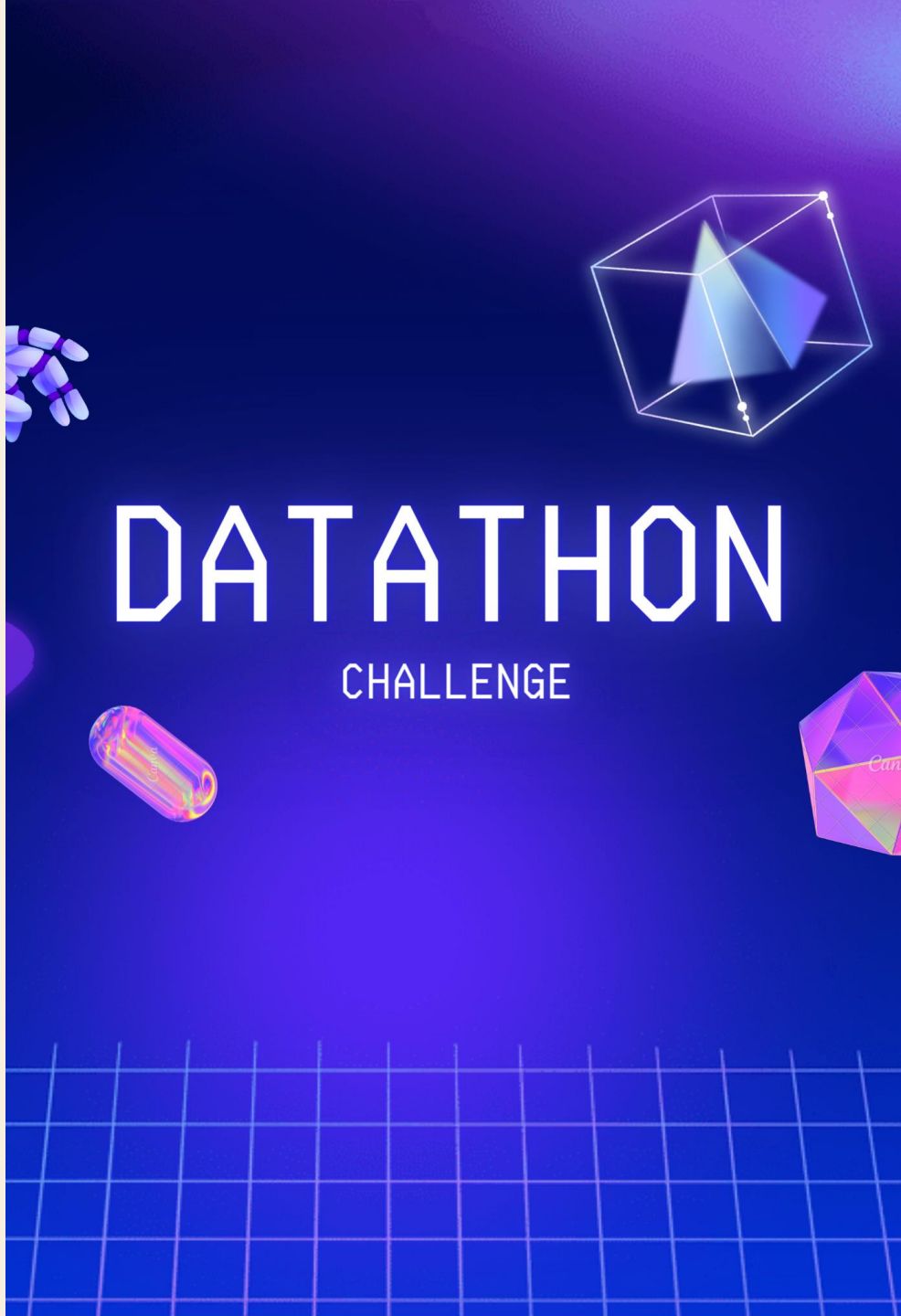
Welcome to the **first SQUAD Datathon Challenge**!

We are very excited to host this event to encourage data-driven innovation and problem-solving.

The Datathon Challenge provides an opportunity for you to apply your skills and creativity to address real-world problems using data analytics.

We appreciate the support of our sponsors IMC, PwC and AEDA

Let's dive into the details of the challenge!

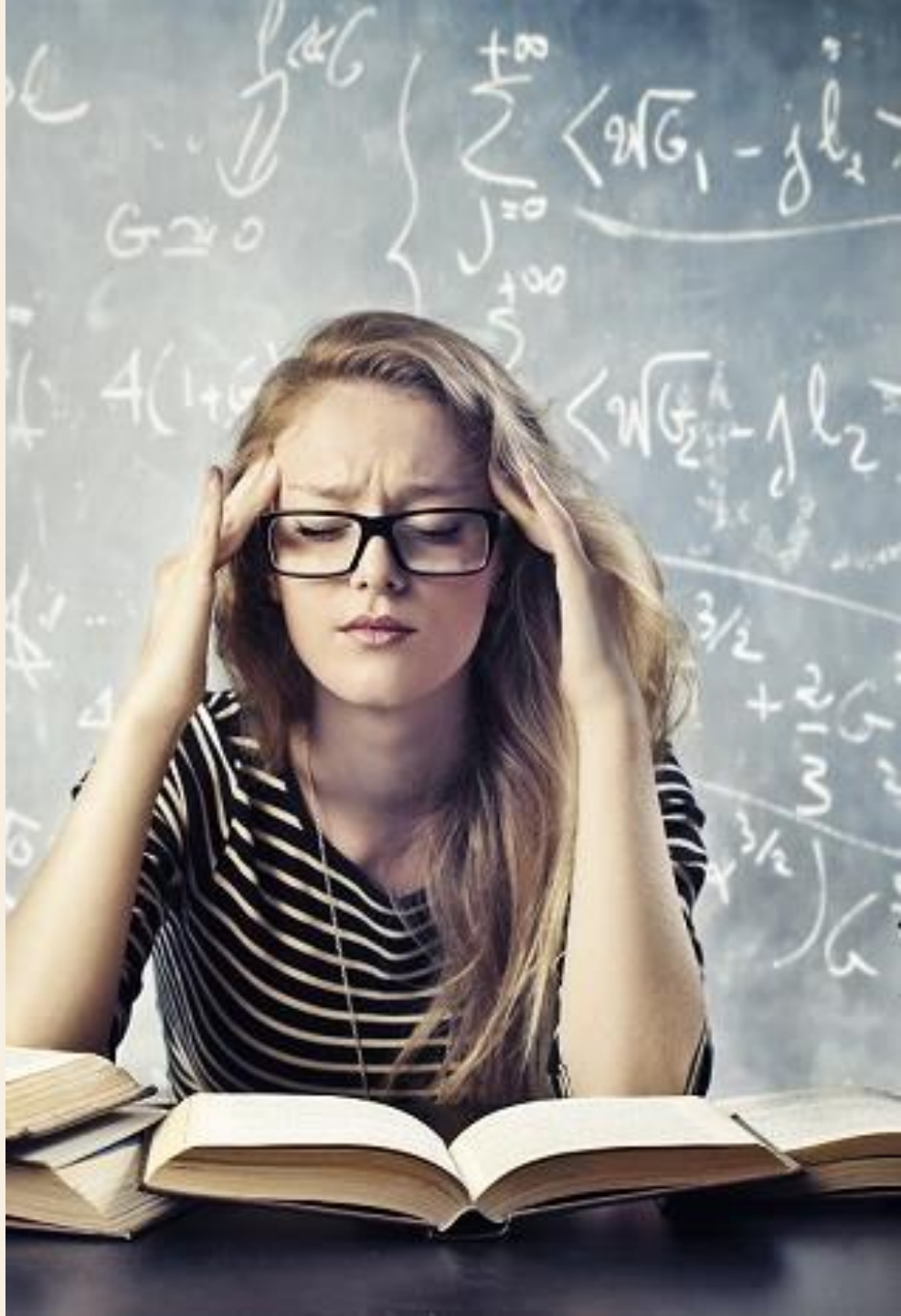


Problem Statement

The primary objective is to conduct an exploratory data analysis aimed at understanding the multitude of factors influencing students' academic performance and progression.

The dataset contains a diverse range of social, gender, and academic data from high school students. It offers valuable insights into students' demographics, family backgrounds, study habits, and extracurricular activities.

This analysis carries significant implications beyond statistical exploration. By understanding the complex relationship between socio-economic variables, lifestyle choices, and academic outcomes, your aim should be to identify practical insights. These insights can help tailor interventions and support systems to improve student success rates.



Submission Criteria

1. **Executive Summary**
    - Provide a concise executive summary summarising key findings and insights derived from your analysis. This summary should offer a high-level overview of the main discoveries and implications of their work.
2. **Insights**
    - Present detailed insights (at least 3) gained from your analysis of the datasets. This includes significant trends, patterns, correlations, and any actionable insights discovered through exploratory data analysis.
3. **Prediction Model**
    - Develop a prediction model using appropriate modelling techniques. This model should aim to predict the response variable (hint: students' grades) based on the available features in the dataset. The model's performance should be evaluated based on relevant metrics, and you should provide a clear explanation of their model's methodology and results.

Rubric

First Year (Bachelor)

Executive Summary	**40%**
Insights (EDA)	**40%**
Prediction Model	**20%**

Rest

Executive Summary	**20%**
Insights (EDA)	**30%**
Prediction Model	**50%**

*Please note that to be considered as a first-year team, all members should be freshmen.

**** Don't forget to include your code in your submission!!!**

Important stuff!

Deadline: **11:59pm, 3rd of April**

Please send your code and presentation (pptx format) to us at squad@clubs.youx.org.au. Don't forget to mention your teams' name.

What's next?

- Top 3 teams will be announced at mid-day on the 4th of April (tomorrow).
- The team that placed 1st will have the opportunity to present your solution with our recruiters from IMC, PwC, and AEDA. Don't worry, prize money to be given to the top 3 teams after the presentation!
- **Everyone is invited to join us on Night 2 for networking!**

GRAND PRIZE:

$200

Second Prize:

$100

Third Prize:

$50

imc pwc Adelaide Economic Development Agency

SCAN THE QR CODE BELOW TO ACCESS THE DATASET

Link: https://github.com/Theskrtnerd/squad-datathon

Please go through the **additional information document** provided with the dataset for detailed information about the features and submission process!

GOOD LUCK EVERYONE!!!