

Presentations and Project Workshop

1 hour lab last minute project fixes

1 hour presentations

1 hour review, lab support, Examples of Data Science Questions

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Workshop

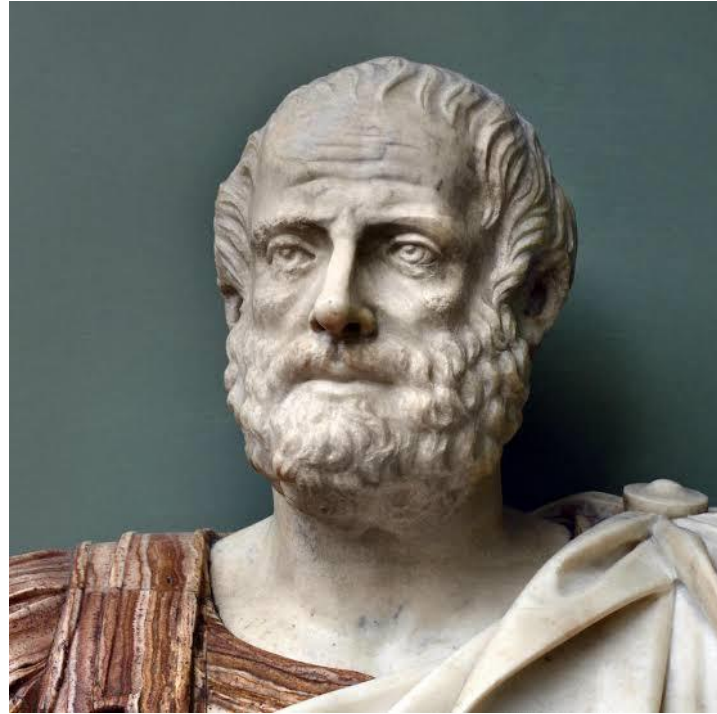


Data Science Questions

"Asking the right question is half the answer"

Aristotle

- Data Science Examples
- SMART method



Data Science Questions

Classification

Two-Class is this A or B?

Will this customer subscribe?

- Is this a cat or dog?
- Does this new effort increase sales?

Multi-Class

is this X,Y, or Z?

- What species of fish is in this image
- What is the sentiment of this article?
- Who is the speaker of this recording?
- What kind of vehicle is in front of me?

Data Science Questions

Clustering

- What are our customer segments(customer demographics and outcomes of those demographic combinations.)
- What items are often bought together?
- gaming or sports metrics to create balanced games or form best teams.
- metrics on interactivity with a product(emails, streaming, click through) and outcomes.

Data Science Questions

Regression

Linear

Temperature, weight, Sales

Causal analysis, forecasting, forecasting effect, trend forecasting

- Do body weight, calorie intake, and age influence blood cholesterol level?
- With employee base pay increase and work demand retention rate will increase or decrease by X a quarter.
- How much will 30 minutes of studying increase a grade?

Logical

Binary

Should you approve a loan for a customer?

Will a team win?

Multinomial

Classify text based languages

Predicting whether student will graduate high school, drop out, or go onto college.

Ordinal

Ranking store locations as low medium high

Predicting top 10 movies.

Data Science Questions

Anomaly Detection

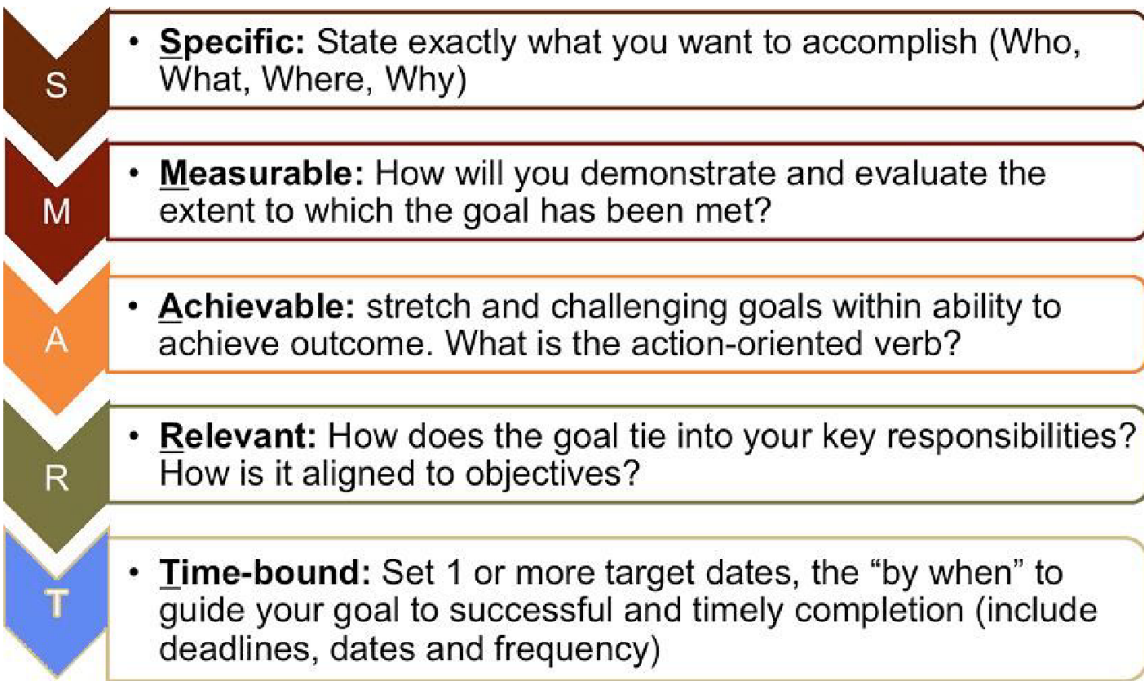
Are these sales unusual?

Is this email typical?

Are these combinations what we are used to seeing in risk?

Is the snow- pack normal for this time of year?

Data Science Questions



Tasks

Use Slack email or zoom to chat with at least one other classmate and discuss:

What do you feel you are struggling with in class and what do feel you are getting

What dataset do you have or are thinking of using for your final project

Based on the basics of Data Science Models in the first unit what kind of predictions will you try to make and how?

Bonus Discussion Topics

What is the difference between logistic and linear regression?

What is an example of a Classification Model?

What is the Smart Method?

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