

# Flexible Class Session #2

## Machine Learning Modeling

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# Learning Objectives

After this lesson, you should be able to:

- Review Steps ⑤ Refine the Data and ⑥ Build a Model and more specifically
  - Linear Modeling (OLS)
  - Classification Modeling (KNN and Logistic Regressions)
- Have fun doing Data Science!



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# Announcements and Exit Tickets

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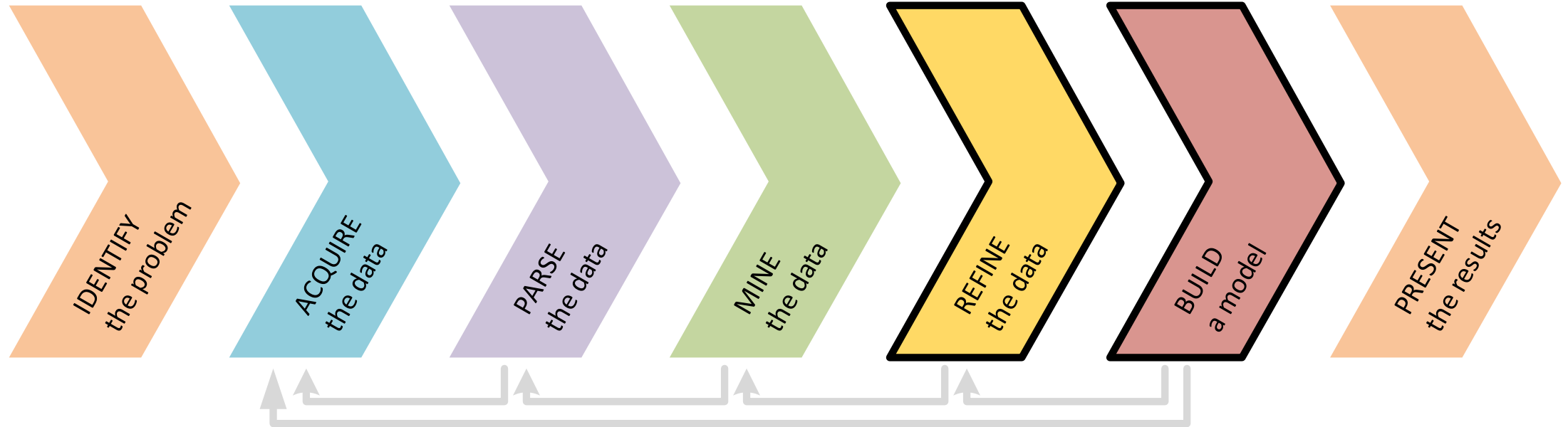
Q & A



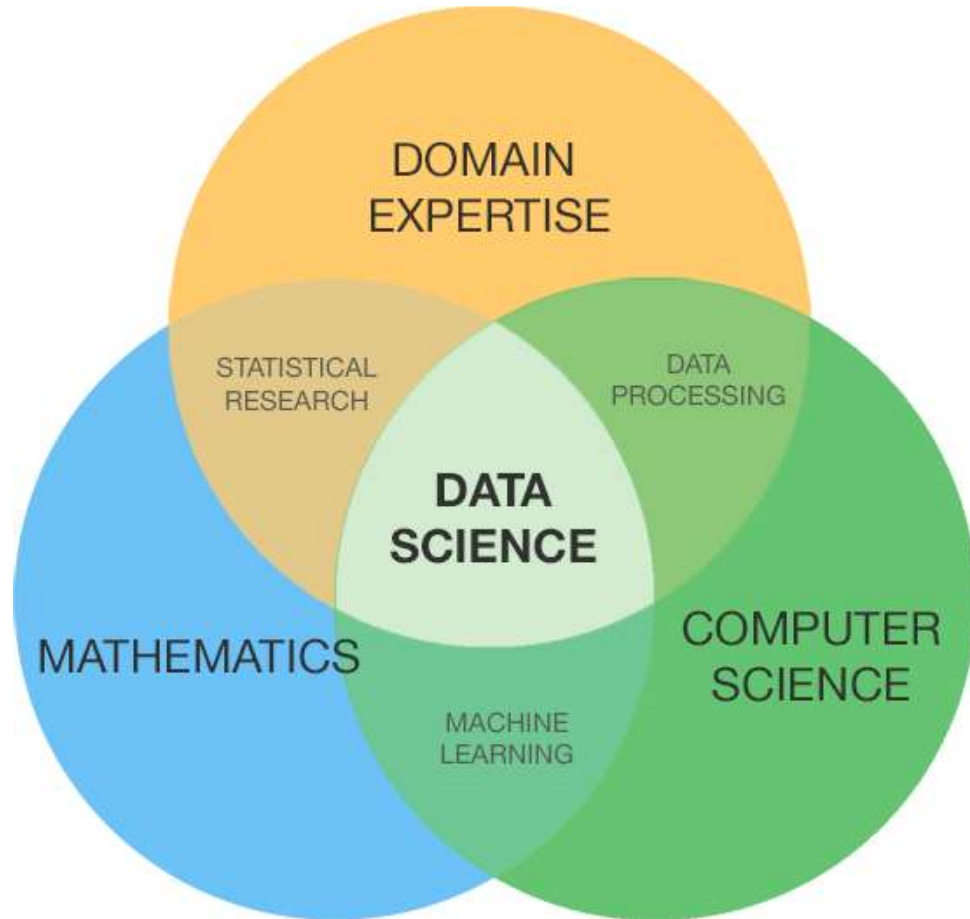
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# Today

Today we will apply what we learned in Unit 2 and the **REFINE** **the data** and **BUILD** **a model** steps of the data science workflow on a new dataset



# This session is about practice, practice, and practice...



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H O U R S

# Here's what's happening today:

- Announcements and Exit Tickets
- Review
- **⑤ Refine the Data and ⑥ Build a Model**
  - Linear Modeling (OLS)
  - Classification Modeling (KNN and Logistic Regressions)
- Exit Tickets



DS

# Auto-MPG

*Machine Learning Modeling*

And don't forget that...



- “Essentially, all models are wrong, but some are useful” – George Box

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Q & A



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# Before Next Class

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Before the next lesson, you should already be able to:

- Explain the concepts of cross-validation, logistic regression, and overfitting
- Know how to build and evaluate some classification models in *sklearn* using cross-validation

# Next Class

*Advanced Metrics and Communicating Results*

# Learning Objectives

After the next lesson, you should be able to:

- Evaluate a model using advanced metrics such as confusion matrix and ROC/AUC curves
- Explain the trade-offs between the precision and recall of a model while articulating the cost of false positives vs. false negatives
- Describe the difference between visualization for presentations vs. exploratory data analysis
- Identify the components of a concise and convincing report and how they relate to specific audiences/stakeholders



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# Exit Ticket

*Don't forget to fill out your exit ticket [here](#)*



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