Phase 4 Project Introduction

Agenda

- Overview Across Projects
- Project Deliverables
- Schedule

Overview



Key Points



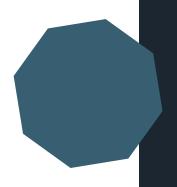
 Tailor your notebook to a technical data science audience, since this could be the most advanced project you complete from a technical perspective and is an excellent opportunity to demonstrate your understanding of an advanced modeling technique

Validation Strategy

 You should demonstrate how you've ensured your model will perform well on unseen data, using validation strategies which make sense for your specific project type this may or may not be just a train_test_split!

Don't Get Bogged Down

 This is a great chance to demonstrate advanced skills - but remember that your much larger capstone project is just around the corner

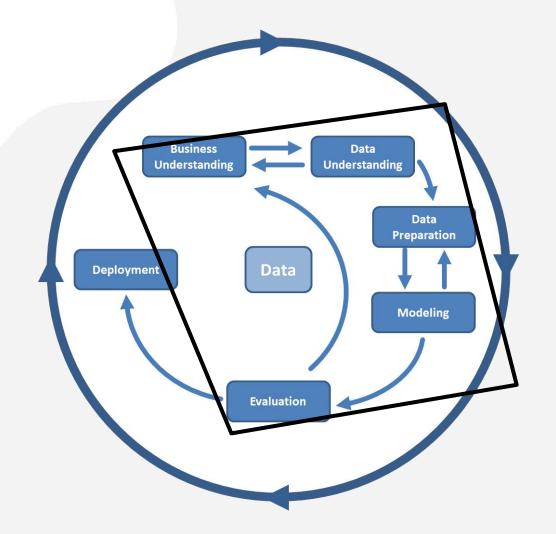


Project Deliverables

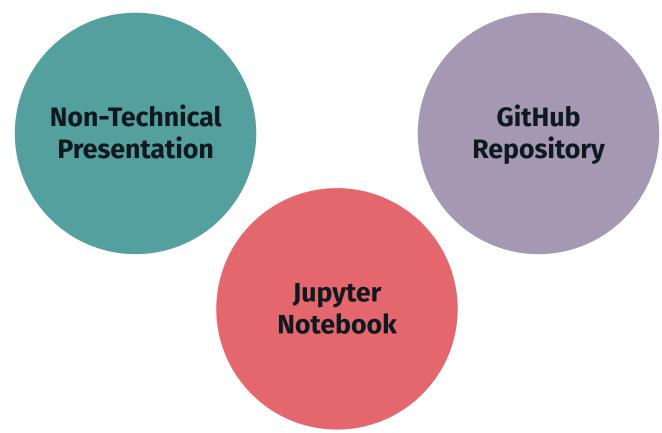


DS Process: CRISP-DM

Consider the **CRISP-DM** process and headers while creating each deliverable.



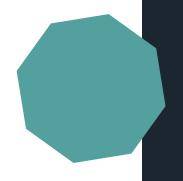
Project Deliverables



Non-Technical Presentation

- Slide deck for a five minute presentation
- Non-technical audience
- Professional style
 - Light on text
 - Effective template
 - Legible and labeled visualizations

Example slide deck



Non-Technical Presentation

Tell a Story:

Beginning

- Overview
- Business Understanding
- Stakeholder
- Key Business Questions

Middle

- Data Understanding
- Final Model Results (nontechnically!)
- Discuss considerations for metric choice (nontechnically!)

End

- Recommendations
- Next Steps
- Thank You Slide

GitHub Repository

- Where your project lives and grows want to see a consistent commit history throughout
- This will be part of your portfolio at the end of this course!
- Recommend starting your repository from scratch rather than forking the template repository

Example repository and templates

GitHub Repository

Must-Haves



More detail on the next slide

2. Commit History

- Commit history with clear messages
- Contributions throughout the project period

3. Organization

- Clear folder structure
- Clear naming conventions for files and folders
- Technical notebooks and presentation file are easily located

4. Notebook

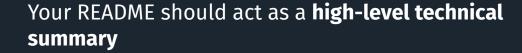
- Final technical notebook on main level of repo
- Working notebooks (if applicable) in subfolders

5. .gitignore

- Ignores large files as well as junk files (like .ipynb_checkpoints or .DS_Store)
- GitHub's python .gitignore template

GitHub Repository

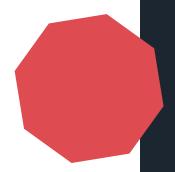
README Sections



- General Overview
- Business Understanding
 - Include stakeholder and business questions
- Data Understanding
 - Source of data (either describe or link)
 - Description of data (high level, go into more detail in your technical notebook)
- Modeling
 - Describe techniques or methods
 - Written interpretation of results (final model)
- Conclusion
 - Summary of conclusions / recommendations
- Repository File Structure
 - (nice-to-have not need-to-have)

Jupyter Notebook

- Blends code, markdown, and visualizations to tell the **full story** of your project
- Includes justifications and rationale for every decision made throughout the project
- Notebook should be free of errors and run from top to bottom
- Use CRISP-DM steps as markdown headers to divide your final notebook into sections



Important Links

• Project Description

- Explains the project goal, dataset, and deliverables
- Contains rubric explanations

Rubric & Checklist Overview

Use to check off requirements

Picking a Dataset

- 4 options of project
- Can use your own or provided data

Working Groups and Schedule



Group Project Best Practices

- 1. Get to Know Your Group Members
- 2. Define Individual Project Contributions
- 3. Meet Regularly
- Communicate Actively, Clearly, and Transparently



Working Groups

• TBD: See slack survey

Schedule

Project Kickoff: Right now!

Group Check Ins: Wednesday AM

Office Hours: Mon, Tues, Wed, Thurs

Thursday PM: Practice Presentations

Friday PM: Final Presentations

Friday 7 pm ET: Submit deliverables on Canvas!

Questions?