

M A I S I

CRA Week 8:

Subgroup Work Session

#2 - Finalizing!!! :0

Michigan Data Science Team
Fall 2025

Session 8 Agenda



Fun Icebreaker!!

Get to know your projectmates!



Final Expo Updates

What will the final expo look like?



Your Next Steps

Applying what you've learned independently of modules.



Finalize Presentations

Get as close as you can to wrapping up your final deliverable!



Quick Icebreaker!!

Share with the people around you :)

If you had to make a time capsule to commemorate the years of your childhood, what items would you put in there?





Final Expo Presentation Logistics



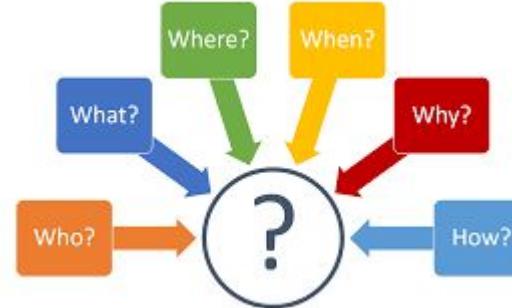
- Each semester, MDST hosts a Project Expo for all our teams and their members to show off what they have learned over the past two months!
 - This event hosted in two different sessions and is typically attended by other MDST members, DS enthusiasts on campus, professors, and sometimes even our corporate sponsors!
 - General Logistical Notes
 - When: Friday, November 21st, **6-7 PM**
 - Where: TBD
 - What: Our final presentations!
 - \$200 final prize for the best presentation in MDST!!
- 

Steps for Project Presentation

Hypothesis: Define the hypothesis or question you are aiming to answer with the COMPAS data. Feel free to use past workbooks as inspiration!

Research Questions: Clearly state some research questions that will guide your analysis. To create a strong research question include the *who, what, when, where, why, and how*

Tools and Techniques: Mention the data analysis tools your group will be using to solve the research questions. (pandas, confusion matrices, logistic regression, etc.)



Steps For Project Presentation

Findings: State what you found during your analysis of your research questions. Include model outputs, visualizations, or anything you think will be helpful!

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a						
read	.098	.025	15.199	1	.000	1.103
science	.066	.027	5.867	1	.015	1.068
ses			6.690	2	.035	
ses(1)	.058	.532	.012	1	.913	1.060
ses(2)	-1.013	.444	5.212	1	.022	.363
Constant	-9.561	1.662	33.112	1	.000	

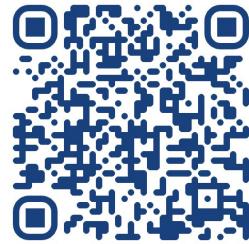
a. Variable(s) entered on step 1: read, science, ses.

Visualizations: Clearly label axes, make sure it is readable, and use colors effectively. Someone should be able to understand your plots easily and quickly.



THANK YOU!!

- Thank you all so much for all of your effort this semester! It means a lot to us that you guys have showed up and engaged actively with the contents. We really hope that this project has been informative and exciting for you all, and we hope that you decide to stick with MDST and do another project either with us or our another awesome pair of leads (or even lead a project yourself!!) Feel free to connect with us on LinkedIn :)



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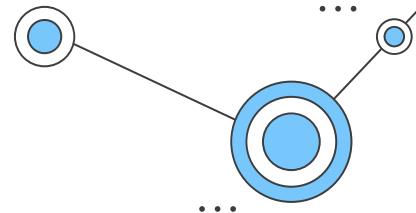


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Group Work Time!

Time to start wrapping up our presentations to
prepare for the Final Expo on Friday!!

Hands-On Data Science!! :0

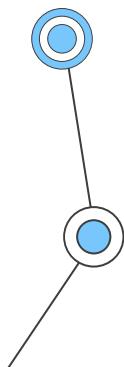


Next Steps:

1. Get in your groups and get back to doing the good work you started last week!
2. **Fill out the Google Sheet!!** [Link](#) (we need to know how many groups we have to get enough tables at expo night)
3. Ask us if you need any inspiration or help, and show us when your slides are done!

[Pandas Cheat Sheet](#)

[Seaborn Cheat Sheet](#)



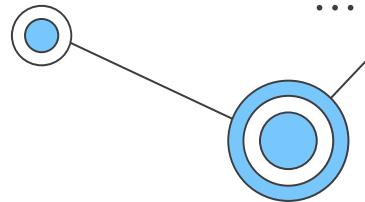
Reminders

- Don't share colab notebooks with teammates if you are working at the same time
- Where to put csv and data files
 - Google Drive
 - Need to include:

```
from google.colab import drive
drive.mount('/content/drive')

pd.read_csv('/content/drive/MyDrive/[FILE NAME]')
```
 - Colab Files
 - See next slides

Reminders



Click on the folder in the sidebar



Files

sample_data

Week 1 - Pandas Practice

Here is where you import the libraries necessary to perform the following tasks!

```
[1]: import pandas as pd  
import seaborn as sns  
  
# Allows you to provide a path to a Google Drive address rather than a local file path  
from google.colab import drive  
drive.mount('/content/drive')
```

Mounted at /content/drive

Load the Google Forms .csv into a Pandas dataframe.

```
[1]: df = pd.read_csv('/content/MDST Week 1 - Pandas Practice.csv')
```

Print out the .head() and the datatypes.

```
[1]: df.head()
```

Timestamp	What is your name?	What is your major?	What year will you graduate? (Answer in state code)	If you're American, what state are you from? If not, leave blank.	If you're not American, what country are you from? If American,	(Approximately) How many years of coding experience do you have?	How many pets do you have?	How many credits are you taking this semester?	How many roommates do you have?	How many football games have you been to?	(Approximate) How many are ok?
2023-10-01 14:30:00	John Doe	Computer Science	2025	California	United States	3 years	1 pet	15 credits	2 roommates	1 game	10

Disk 68.47 GB available

Variables Terminal Python 3

Reminders

Click the upload button and select the file you want to upload

The screenshot shows the Google Colab interface. On the left, there's a sidebar with a red arrow pointing to the 'Upload' button in the 'Files' section. The main area displays a notebook titled 'Week 1 - Pandas Practice'. The first cell contains code for importing pandas and seaborn, mounting Google Drive, and reading a CSV file. The second cell contains code for printing the head of the DataFrame. The third cell shows the resulting DataFrame with various questions and their answers. The bottom navigation bar includes 'Variables', 'Terminal', 'Disk' (showing 68.47 GB available), and 'Python 3'.

```
import pandas as pd
import seaborn as sns

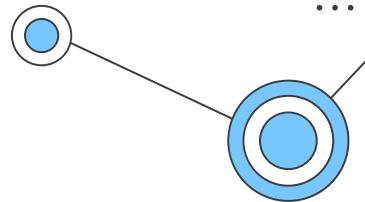
# Allows you to provide a path to a Google Drive address rather than a local file path
from google.colab import drive
drive.mount('/content/drive')

df = pd.read_csv('/content/MDST Week 1 - Pandas Practice.csv')

df.head()
```

Timestamp	What is your name?	What is your major?	What year will you graduate?	If you're American, what state are you from? If not, what country are you from? If blank, (Answer in state code)	(Approximately) How many years of coding experience do you have?	How many pets do you have?	How many credits are you taking this semester?	How many roommates do you have?	How many Michigan Football games have you been to? (Approximately)
2023-09-18 14:45:23.456Z	John Doe	Computer Science	2025	US	1 year	1	1	1	1

Reminders



Click the three dots and copy the path. Put this in your read function

The screenshot shows a Jupyter Notebook environment. On the left, there's a file browser with a 'Mount' button highlighted. A red arrow points from the text instructions to this button. The main area contains code for reading a CSV file:

```
[1]: import pandas as pd  
import seaborn as sns  
  
# Allows you to provide a path to a Google Drive address rather than a local file path  
from google.colab import drive  
drive.mount('/content/drive')  
  
Mounted at /content/drive
```

Below the code, instructions say to load the Google Forms .csv into a Pandas dataframe:

```
[1]: df = pd.read_csv('/content/MDST Week 1 - Pandas Practice.csv')
```

Then, it asks to print out the .head() and the datatypes:

```
[1]: df.head()
```

The output shows the first few rows of a survey dataset:

Timestamp	What is your name?	What is your major?	What year will you graduate? (Answer in state code)	If you're American, what state are you from? If not, leave blank.	If you're not American, what country are you from? If American,	(Approximately) How many years of coding experience do you have?	How many pets do you have?	How many credits are you taking this semester?	How many roommates do you have?	How many Football games have you been to?	(Approximate) How many are ok?
2023-10-01 14:30:00	John Doe	Computer Science	2025	California	United States	2 years	1 pet	15 credits	2 roommates	1 game	10
2023-10-01 14:30:15	Jane Smith	Mathematics	2026	Illinois	United States	1 year	0 pets	12 credits	1 roommate	0 games	5
2023-10-01 14:30:30	Mike Johnson	Physics	2027	Michigan	United States	3 years	2 pets	18 credits	3 roommates	2 games	15
2023-10-01 14:30:45	Sarah Lee	Chemistry	2028	Texas	United States	4 years	3 pets	20 credits	4 roommates	3 games	20

At the bottom, it says 'Python 3'.