# **Program Introduction**

Welcome to Data Science!



# Agenda

- Day-to-day expectations
- Program tools
- Assessment details
- Setting yourself up for success

# Your DS Squad



Praveen Gowtham



Joe Comeaux

Day-to-Day Expectations



# Weeks 1 & 2

"The Normal Weeks"

	2	22	23		24	25	
	Saying Hello 9 - 10am  Canvas Tim 9:30 - 10:30			Stand Up, 9am, Manhattan Canvas Time 9:30 - 10:30am	Stand Up, 9am, Manhattan Canvas Time 9:30 - 10:30am		
	10 - 11am  Program Intro, 11am		[Lecture] Introducing The 7 10:30am, Manhattan-2-Ma		[Lecture] Collaborating wit 10:30am, Manhattan-2-Ma	[Lecture] JSONs, Pickling, 10:30am, Manhattan-2-Ma	
_	NYC DS Community Orient  Lunch - Catered (Tacos)  12 - 1pm		Canvas Time, 11:30am  Lunch 12 - 1pm		Canvas Time, 11:30am  Lunch 12 - 1pm	Canvas Time, 11:30am  Lunch 12 - 1pm	
	[Lecture] Data Science & D 1pm, Manhattan-2-Manhat		[Lecture] Git 1pm, Manhattan-2-Manhat		[Lecture] File IO and CSVs 1pm, Manhattan-2-Manhat	[Lecture] Visualization in n 1pm, Manhattan-2-Manhat	
	Break, 2pm		Break, 2pm		Break, 2pm	Break, 2pm	
	Individual m 2:30 – 5:30p	Pair Programmin g/Canvas Time 2:30 – 5:30p	Individual M 2:30 – 5:30p	Pair Programmin g/Canvas Time 2:30 - 5:30p	Pair Programming/Canvas Time 2:30 – 5:30pm	Pair Programming/Canvas Time 2:30 – 4:30pm	
	Stand Down,	5:30pm	Stand Down,	5:30pm	Office Hours: Joe 4:30 - 5:30pm Stand Down, 5:30pm	Feelings Friday 4:30 - 5:30pm Stand Down, 5:30pm	

# Weeks 1 & 2

"The Normal Weeks"

MON	TUE	WED	THU	FRI
28	1	2	3	4
Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan
[Assessment] Data Serializ	[Assessment] EDA with Pa	[Assessment] Pandas Data	Canvas Time, 9:30am	Canvas Time, 9:30am
9:30 – 10:30am	9:30 - 10:30am	9:30 - 10:30am	[Lecture] SQL Joins and Aq 10am, Manhattan-2-Manha	[Assessment] Phase 1 Code Challenge
[Lecture] Pandas DataFran 10:30am, Manhattan-2-Ma	[Lecture] Pandas Data Clea 10:30am, Manhattan-2-Ma	[Lecture] Descriptive Analy 10:30am, Manhattan-2-Ma		10 - 11:30am
	10.30am, Mannattan-2-Ma		EAST-WEST & NYC-DS-022 11am, https://flatironschoo	Manhattan-2-Manhattan -
Canvas Time, 11:30am	Canvas Time, 11:30am	Canvas Time, 11:30am	, , , , , , , , , , , , , , , , , , , ,	Canvas Time, 11:30am
Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 - 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm
[Lecture] Data Visualizatio 1pm, Manhattan-2-Manhat	[Lecture] Aggregating and 1pm, Manhattan-2-Manhat	[Lecture] SQL Queries 1pm, Manhattan-2-Manhat	Phase 1 Review 1 – 2:30pm Manhattan-2-Manhattan -	[Lecture] SQL Subqueries a 1pm, Manhattan-2-Manhat
Break, 2pm	Break, 2pm	Break, 2pm	Turing (30)	Break, 2pm
Pair	Pair	Pair	Break, 2:30pm	Pair Programming/Canvas
Programming/Canvas Time	Programming/Canvas Time	Programming/Canvas Time	Pair	2:30 – 3:30pm
2:30 - 5:30pm	2:30 - 5:30pm	2:30 - 5:30pm	Programming/Canvas Time 3 – 5:30pm	Project Intro 3:30 – 4:30pm
Office Hours: Praveen 4:30 - 5:30pm			Office Hours: Joe 4:30 - 5:30pm	Feelings Friday 4:30 – 5:30pm
Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Canvas Time, 5:30pm

# **Stand Ups**



We will check in and check out every day.

**We take attendance!** (refer to attendance policy) Stand ups will include:

- Questions about material from previous day. Concerns.
- Presenting blog posts
- Communicating events and deadlines

# **Stand Ups**



We will check in and check out every day.

We take attendance! (refer to attendance policy)

Stand downs will include:

- Light concept questions
- Bite size Python/SQL challenges
- Questions/concerns
- Joe will conduct stand downs via Zoom.

Weeks 1 & 2

WED THU FRI Stand Up, 9am, Manhattan Stand Up, 9am, Manhattan Stand Up, 9am, Manhattan Stand Up, 9am, Manhattan a Seriali: [Assessment] EDA with Pa [Assessment] Pandas Data Canvas Time, 9:30am Canvas Time, 9:30am ти:30am 9:30 - 10:30am 9:30 - 10:30am [Lecture] SQL Joins and A [Assessment] Phase 1 10am, Manhattan-2-Manha Code Challenge [Lecture] Pandas DataFran [Lecture] Pandas Data Cle [Lecture] Descriptive Analy 10:30am, Manhattan-2-Ma 10:30am, Manhattan-2-Ma 10:30am, Manhattan-2-Ma Manhattan-2-Manhattan -EAST-WEST & NYC-DS-022 11am, https://flatironscho Canvas Time, 11:30am Canvas Time, 11:30am Canvas Time, 11:30am Lunch Lunch Lunch Lunch Lunch 12 – 1nm [Lecture] Aggregating and [Lecture] Data Visualizatio [Lecture] SQL Queries Phase 1 Review [Lecture] SQL Subqueries 1pm, Manhattan-2-Manhat 1pm, Manhattan-2-Manhat 1pm, Manhattan-2-Manha 1pm, Manhattan-2-Manhat 1 - 2:30pm Manhattan-2-Manhattan Turing (30) Break, 2pm Break, 2pm Break, 2pm Pair Pair Pair Break, 2:30pm Pair Programming/Canvas Programming/Canvas Programming/Canvas Programming/Canvas 2:30 - 3:30pm Pair Time Time Time Programming/Canvas 2:30 - 5:30pm 2:30 - 5:30pm 2:30 - 5:30pm **Project Intro** Time 3:30 - 4:30pm 3 - 5:30pmOffice Hours: Praveen **Feelings Friday** Office Hours: Joe 4:30 - 5:30pm 4:30 - 5:30pm 4:30 - 5:30pm Stand Down, 5:30pm Stand Down, 5:30pm Stand Down, 5:30pm Stand Down, 5:30pm Canvas Time, 5:30pm

#### Lectures

#### Lectures

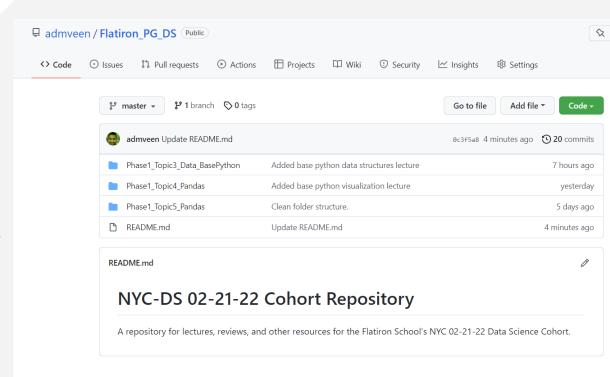
#### Plan to:

- Ask questions. Participate.
- Take notes.
- Code along when appropriate.

## **Cohort Repository**

AKA where to find all lecture content!

We will go over how to access materials from this repository in Week 1.



Weeks 1&2

MON

TUE

WED

Stand Up, 9am, Manhattan

[Assessment] Pandas Data

[Lecture] Descriptive Analy 10:30am, Manhattan-2-Ma

Canvas Time, 11:30am

THU

Stand Up, 9am, Manhattan

Canvas Time, 9:30am

FRI

Stand Up, 9am, Manhattan

Canvas Time, 9:30am

28

Stand Up, 9am, Manhattan

Stand Up, 9am, Manhattan

Lunch

Pair Programming

[Assessment] Data Serializ	[Assessment] EDA with Pa
9:30 - 10:30am	9:30 – 10:30am
[Lecture] Pandas DataFran	[Lecture] Pandas Data Clea
10:30am, Manhattan-2-Ma	10:30am, Manhattan-2-Ma
Canvas Time, 11:30am	Canvas Time, 11:30am
Lunch	Lunch
12 – 1pm	12 – 1pm
[Lecture] Data Visualizatio	[Lecture] Aggregating and
1pm, Manhattan-2-Manhat	1pm, Manhattan-2-Manhat
Break, 2pm	Break, 2pm
Pair Programming/Canvas Time 2:30 - 5:30pm	Pair Programming/Canvas Time 2:30 – 5:30pm
Pair	Pair
Programming/Canvas	Programming/Canvas
Time	Time

[Lecture] SQL Queries 1pm, Manhattan-2-Manhat Break, 2pm Pair Programming/Canvas Time 2:30 - 5:30pm

Stand Down, 5:30pm

[Lecture] SQL Joins and A [Assessment] Phase 1 10am, Manhattan-2-Manha Code Challenge Manhattan-2-Manhattan -EAST-WEST & NYC-DS-022 11am, https://flatironscho Canvas Time, 11:30am Lunch Lunch Phase 1 Review [Lecture] SQL Subqueries 1pm, Manhattan-2-Manhat 1 - 2:30pm Manhattan-2-Manhattan Turing (30) Break, 2pm Break, 2:30pm Pair Programming/Canvas 2:30 - 3:30pm Pair Programming/Canvas **Project Intro** Time 3:30 - 4:30pm 3 - 5:30pm**Feelings Friday** Office Hours: Joe 4:30 - 5:30pm 4:30 - 5:30pm Stand Down, 5:30pm Canvas Time, 5:30pm

# Pair Programming



Pair programming helps you practice verbalizing what you want to accomplish prior to writing code.

It also allows you to view a peer's coding style and approach to problems.

#### **Driver:**

- Loads up the lab and shares screen
- Responds to instructions provided by Navigator and enters code into cells

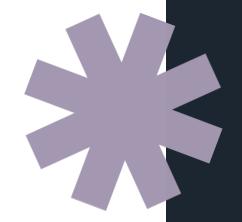
#### **Navigator:**

- Instructs the Driver on the approach to take to solve the problem / complete the lab
- Suggests code implementation

#### **Canvas Time**

Also known as **Personal Working Time.** 

- Priority Lessons: **do not** try to do every single lesson.
- Quizzes on Canvas: checks for understanding. **NOT** official assessments, but reference for yourself.



# Individual Check Ins



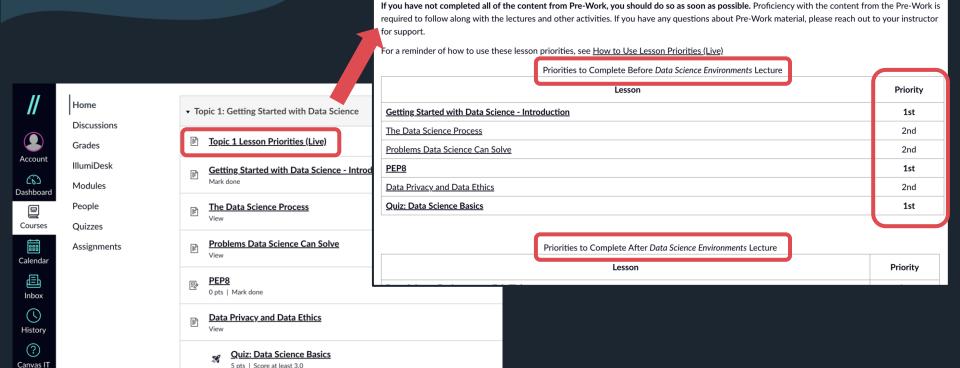
Check in with your instructor(s) or your coach!

Discuss your understanding, review labs or checkpoints, and otherwise check in on your progress through the program.

Sign up for 1:1s using **appointment slots.** 

One check in (15 min.) per week with Praveen.

#### **Lesson Priorities**



**Topic 1 Lesson Priorities (Live)** 

# Program Tools



#### **Canvas**



#### **Programmatic Content:**

- Cohort Calendar
- Program resources and information
- Surveys



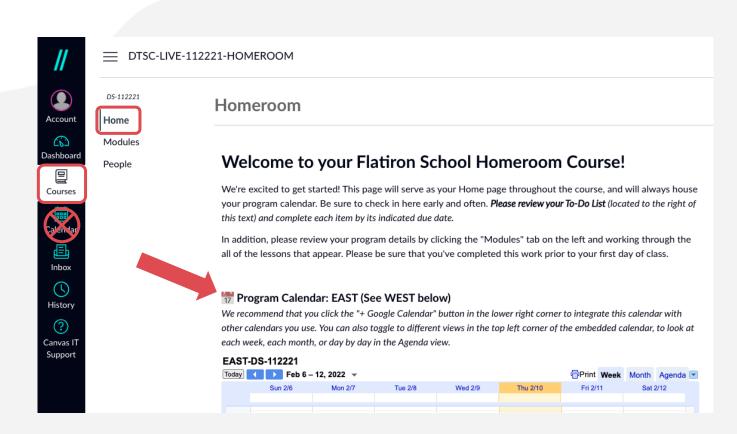
#### Textbook and Workbook:

- Lessons
- Labs
- Quizzes (not graded!)

Plus: Access Illumidesk & Pair with a TC

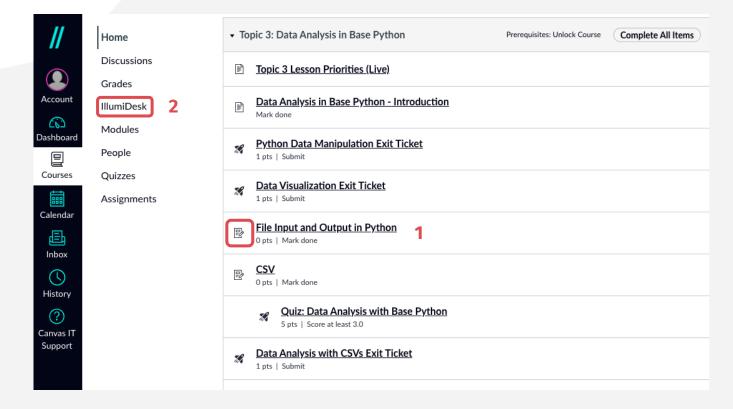
#### Homeroom

# Accessing the Calendar

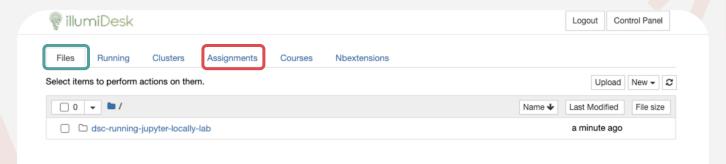


#### Phase Course

Accessing IllumiDesk



#### **Navigating IllumiDesk**



#### **Files**

Every Jupyter Notebook opened through an assignment link from Canvas lives in your **Files tab**, and will save your work

#### **Assignments**

All of our Checkpoints and Code Challenges will be conducted in IllumiDesk, and you'll be able to access both the assessment and feedback through the **Assignments tab**.

### **Accessing Labs**

Every lesson and lab is stored on GitHub - it's also where you can find lab solutions!

We'll teach you how to easily download GitHub repositories soon so, should you do labs locally or in IllumiDesk?

Short answer: **both!** Each method has their pros and cons.

#### Advantages of Working Locally



- Practice using Git / GitHub → in-demand skills!
- Forking labs on GitHub contributes to a robust, 'green' commit history
- Content is more accessible after the program
- More 'real world'

#### Advantages of Working on IllumiDesk



- Ease of use
- No environment issues
- Fully integrated into Canvas

# Assessment Details



Weeks 1 & 2 MON

TUE

# Blog Posts

•	28	1	2	3	4
	Blog post due!				
	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan
	[Assessment] Data Serializ	[Assessment] EDA with Pa	[Assessment] Pandas Data	Canvas Time, 9:30am	Canvas Time, 9:30am
	9:30 - 10:30am	9:30 - 10:30am	9:30 - 10:30am	[Lecture] SQL Joins and A	[Assessment] Phase 1
	[Lecture] Pandas DataFran	[Lecture] Pandas Data Clea	[Lecture] Descriptive Analy 10:30am, Manhattan-2-Ma	10am, Manhattan-2-Manha	Code Challenge 10 – 11:30am Manhattan-2-Manhattan -
S	10:30am, Manhattan-2-Ma	10:30am, Manhattan-2-Ma		EAST-WEST & NYC-DS-022 11am, https://flatironschoo	
	Canvas Time, 11:30am	Canvas Time, 11:30am	Canvas Time, 11:30am		Canvas Time, 11:30am
	Lunch 12 - 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm
	[Lecture] Data Visualizatio 1pm, Manhattan-2-Manhat	[Lecture] Aggregating and 1pm, Manhattan-2-Manhat	[Lecture] SQL Queries 1pm, Manhattan-2-Manhat	Phase 1 Review 1 – 2:30pm Manhattan-2-Manhattan -	[Lecture] SQL Subqueries a 1pm, Manhattan-2-Manhat
	Break, 2pm	Break, 2pm	Break, 2pm	Turing (30)	Break, 2pm
	Pair	Pair	Pair	Break, 2:30pm	Pair Programming/Canvas
	Programming/Canvas Time	Programming/Canvas Time	Programming/Canvas Time	Pair	2:30 – 3:30pm
	2:30 - 5:30pm	2:30 - 5:30pm	2:30 – 5:30pm	Programming/Canvas Time 3 – 5:30pm	Project Intro 3:30 – 4:30pm
	Office Hours: Praveen 4:30 - 5:30pm			Office Hours: Joe 4:30 - 5:30pm	Feelings Friday 4:30 – 5:30pm
	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Canvas Time, 5:30pm

WED

THU

FRI

# **Blog Posts**



Building a web presence demonstrating your data science chops is **essential** in the job search.

To help you do so, you will be required to write **4 blog posts**: 1 for each phase (except Capstone).

Blog posts will be due on **second Monday** of the phase.

We will **present** our blogs to each other during stand downs after the blog post due dates.

# That's right first blog post is due next week!

# First blog post topic: Why did you decide to learn data science?

Potential elements to include:

- Your past educational or career experience
- How you learned about data science
- Any particular data science-related projects that you find especially exciting
- How you chose Flatiron School
- What you're hoping to do with data science in the future

# Weeks 1 & 2

# Checkpoints

MON

TUE

5	28	1	2	3	4
	Blog post due!				
	Stand Up. 9am. Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan
	[Assessment] Data Serializ	[Assessment] EDA with Pa	[Assessment] Pandas Data	Canvas Time, 9:30am	Canvas Time, 9:30am
	9:30 - 10:30am	9:30 – 10:30am	9:30 - 10:30am	[Lecture] SQL Joins and A	[Assessment] Phase 1
	[Lecture] Pandas DataFran	[Lecture] Pandas Data Clea 10:30am, Manhattan-2-Ma	[Lecture] Descriptive Analy 10:30am, Manhattan-2-Ma	10am, Manhattan-2-Manha	Code Challenge 10 – 11:30am
its	10:30am, Manhattan-2-Ma			EAST-WEST & NYC-DS-022	Manhattan-2-Manhattan -
	Canvas Time, 11:30am	Canvas Time, 11:30am	Canvas Time, 11:30am	11am, https://flatironschool	Canvas Time, 11:30am
	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 - 1pm	Lunch 12 – 1pm
	[Lecture] Data Visualizatio 1pm, Manhattan-2-Manhat	[Lecture] Aggregating and 1pm, Manhattan-2-Manhat	[Lecture] SQL Queries 1pm, Manhattan-2-Manhat	Phase 1 Review 1 – 2:30pm Manhattan-2-Manhattan -	[Lecture] SQL Subqueries 1pm, Manhattan-2-Manhat
	Break, 2pm	Break, 2pm	Break, 2pm	Turing (30)	Break, 2pm
	Pair	Pair	Pair	Break, 2:30pm	Pair Programming/Canvas
	Programming/Canvas Time	Programming/Canvas Time	Programming/Canvas Time	Pair	2:30 – 3:30pm
	2:30 - 5:30pm 2:30 - 5:30pm		2:30 – 5:30pm	Programming/Canvas Time 3 - 5:30pm	Project Intro 3:30 - 4:30pm
	Office Hours: Praveen 4:30 - 5:30pm			Office Hours: Joe 4:30 - 5:30pm	Feelings Friday 4:30 – 5:30pm
	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Canvas Time, 5:30pm

WED

THU

FRI

## Checkpoints



Mini-assessments that occur about twice per week to check your understanding and key proficiencies.

You will have **30-45 minutes** to complete the checkpoint.

Checkpoints give you a chance to practice coding in a time-boxed session without the pressure - these assessments are not used to judge whether you progress through the program!

Weeks					
1&	2				

Code

# Challenges

:	
•	

MON

TUE

.0	28	1	2	3	4
	Blog post due!				
	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattan	Stand Up, 9am, Manhattar
	[Assessment] Data Serializ	[Assessment] EDA with Pa	[Assessment] Pandas Data	Canvas Time, 9:30am	Canvas Time, 9:30am
	9:30 - 10:30am	9:30 - 10:30am	9:30 - 10:30am	[Lecture] SQL Joins and A	[Assessment] Phase 1
	[Lecture] Pandas DataFran	[Lecture] Pandas Data Clea	[Lecture] Descriptive Analy	10am, Manhattan-2-Manha	Code Challenge 10 – 11:30am
	10:30am, Manhattan-2-Ma	10:30am, Manhattan-2-Ma	10:30am, Manhattan-2-Ma	EAST-WEST & NYC-DS-022	Manhattan-2-Manhattan -
es	Canvas Time, 11:30am	Canvas Time, 11:30am	Canvas Time, 11:30am	11am, https://flatironschool	ounted time, 11.00um
	Lunch	Lunch	Lunch	Lunch	Lunch
	12 – 1pm	12 – 1pm	12 – 1pm	12 – 1pm	12 – 1pm
	[Lecture] Data Visualizatio 1pm, Manhattan-2-Manhat	[Lecture] Aggregating and 1pm, Manhattan-2-Manhat	[Lecture] SQL Queries 1pm, Manhattan-2-Manhat	Phase 1 Review 1 - 2:30pm	[Lecture] SQL Subqueries 1pm, Manhattan-2-Manhat
				Manhattan-2-Manhattan -	
	Break, 2pm	Break, 2pm	Break, 2pm	Turing (30)	Break, 2pm
	Pair Programming/Canvas	Pair Programming/Canvas	Pair Programming/Canvas	Break, 2:30pm	Pair Programming/Canvas 2:30 – 3:30pm
	Time	Time	Time 2:30 – 5:30pm	Pair Programming/Canvas Time 3 – 5:30pm	2.00 0.00pm
	2:30 – 5:30pm	2:30 – 5:30pm			Project Intro 3:30 – 4:30pm
	Office Hours: Praveen			Office Hours: Joe	Feelings Friday
	4:30 – 5:30pm			4:30 – 5:30pm	4:30 – 5:30pm
	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Stand Down, 5:30pm	Canvas Time, 5:30pm

WED

THU

FRI

# Code Challenges



End-of-phase challenges that simulate real-world workflows or technical interviews.

This will feel just like the checkpoints, but you will have **1 hour 30 minutes** to complete the code challenge.

This is one place where no collaboration is allowed. We encourage you to ask instructors questions, but these are **your own work**.

### **Graded Assignment Protocol**

- Assessments are open book
   (ok to reference labs, lectures, and Google)
- No copy and pasting code
- No screen sharing or messaging with peers during assignments
- Exit break out room after submission

# Evaluating Student Progress

In order to advance through the program, we need to know that you have **mastered the essentials.** 

If you do not pass the code challenge, you will have the opportunity to demonstrate your readiness to move on through the completion of a graded, solo project.

The final pass/not pass assessment happens at the end of each phase.

#### Week 3

#### Project Week



# **Projects**



Either solo or in groups, you will **tackle real problems** to develop portfolio-ready projects you can showcase to potential employers.

Your project will consist of both **technical** and **non-technical deliverables**.

**Project presentations** are a chance to gain experience presenting your findings to a non-technical audience.

The requirements for each project will be outlined in the rubric, which we will go over during the project launch.

Setting Yourself Up for Success



#### Personal Empowerment Protocol

This is an important framework in general for debugging / working through problems.

Reading errors, looking up problems, and collaborating with peers are **essential** skills.

Get practice with them before asking us!

# PERSONAL EMPOWERMENT PROTOCOL

 $/\!\!/$ 

- 1. READ THE ERROR
- 2. GOOGLE THE PROBLEM
- 3 ASK A NEIGHBOR
- 4. ASK A TEACHER

# Giving Feedback: C - A - S - K



#### Consensual

If someone isn't in a good space to receive feedback, it won't stick and it won't help.

#### **Actionable**

Outline ways to change or act on the feedback, instead of saying something vague like "this is bad".

#### Specific

Give examples when you can, to anchor your feedback in a real way to the experience you had which prompted the feedback.

#### Kind

The goal is to help someone improve, not to belittle others.

# Any Questions?