

# Week 2

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COGS 108 Fall 2024

# Due dates

- D1: Due on This Friday (Oct 11)
- A1: Release on Wed (Oct 9-Oct 16)
- Q2: Release on Friday (Oct 11-Oct 14)
- ~~Pre-course survey (Extra credit, Due on Oct 9)~~
- Group Sign-Up: Due next Monday, Oct 14
  - <https://canvas.ucsd.edu/courses/58615/pages/group-signup>

# Datahub/JupyterLab



Do not forget to submit(time-stamps)

Submitted assignments		
Practice_COGS108_FA24	COGS108_FA24_A00	<a href="#">Fetch Feedback</a>
2024-09-28 07:25:28.062723 UTC		
2024-10-02 23:16:02.164214 UTC		
2024-10-04 05:57:15.640169 UTC		
PythonReview_COGS108_FA24	COGS108_FA24_A00	<a href="#">Fetch Feedback</a>
2024-10-01 02:44:25.028562 UTC		

## Validate

- Only pass public tests
- Validate != Submit
- might need to optimize your code if runs too long

# Datahub/JupyterLab



Do not re-submit after due dates

- Please double check before submitting
- JupyterLab won't store your code

Do not delete the original cell

- autograde based on cell ID

Note: Make sure you provide your GitHub username, **not the email address** you used to create the account, follow instructions, and avoid typos. You will not get credit for this section if typos are made.

In [1]: ID: cell-784114344a572182 Autograded answer

```
### BEGIN SOLUTION
PID = 'A1234567'
github_username = 'ShanEllis'
### END SOLUTION
```

In [2]: -

```
# if you navigate to this link
# it should open your GitHub page
# if it doesn't, fix your username above
'www.github.com/' + github_username
```

Out[2]: 'www.github.com/ShanEllis'

In [3]: Points: 0 ID: cell-216ded1c5ab2c280 Autograder tests

```
assert PID
assert github_username
```

ID: part2-intr Read-only

Part 2: Python (5.5 points)

# GitHub



## 1. Fork

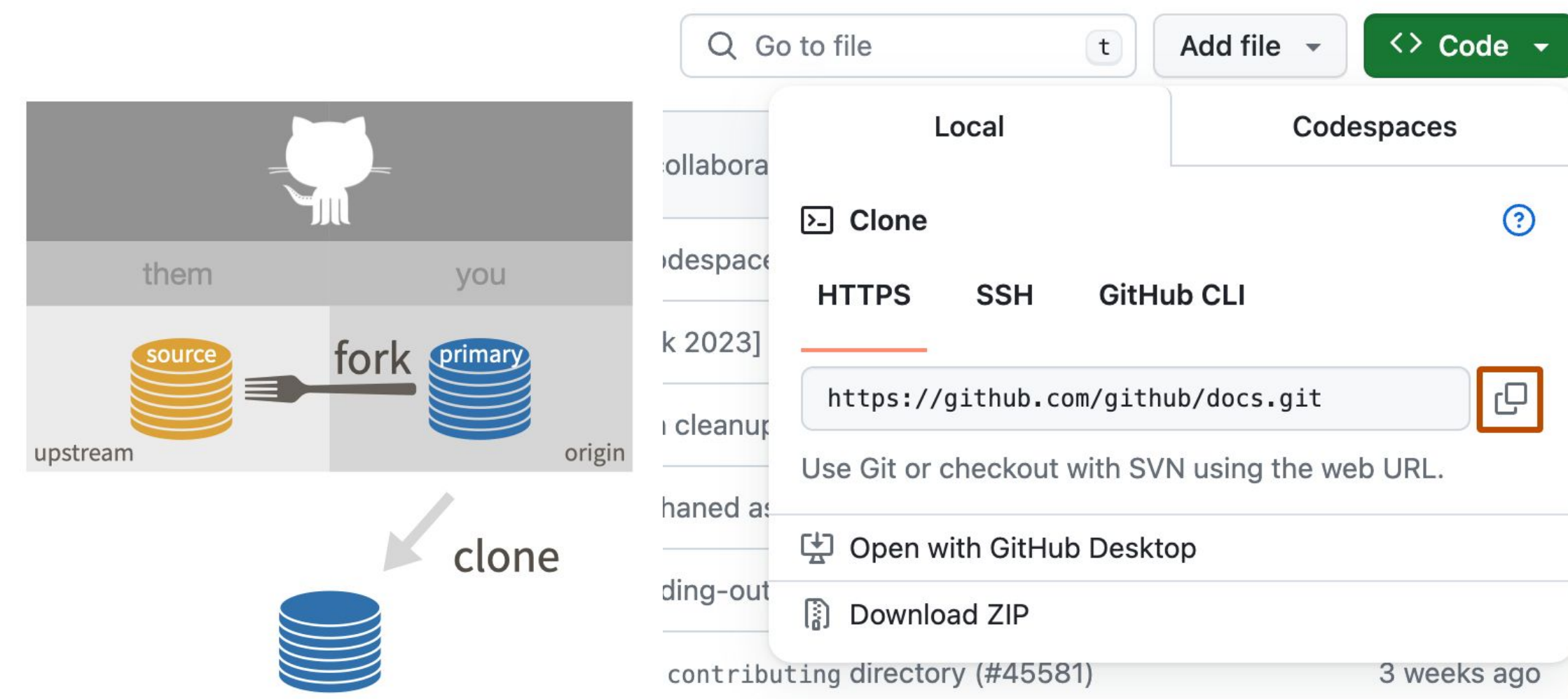
A “fork” is just an independent copy of a repository that you can develop on without affecting the original.

## 2. Clone

Creates a local copy of a repository on your machine.

## 3. You can “push” changes back to the remote repository if you have permissions.

```
$ git clone https://github.com/user/repo.git
```



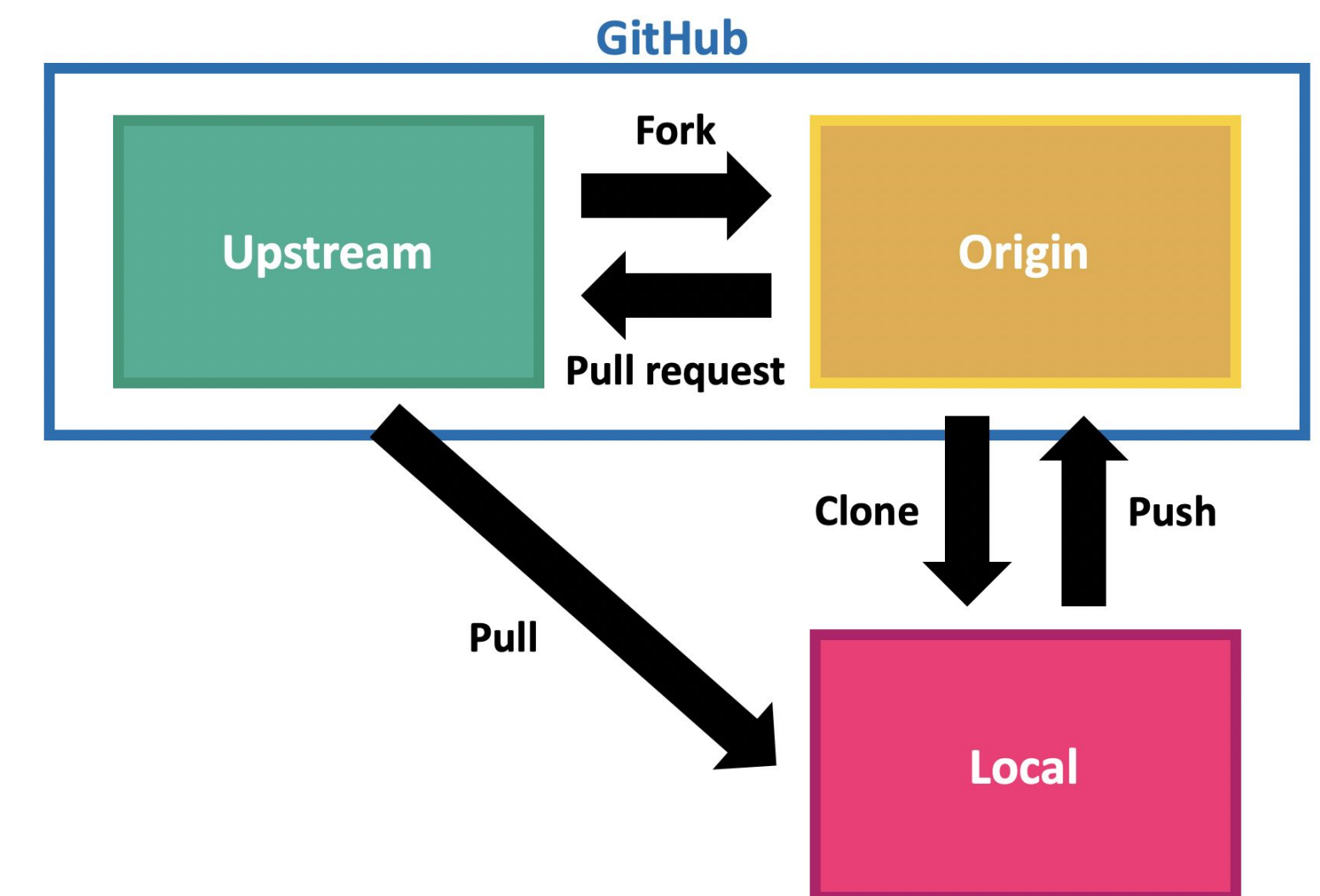
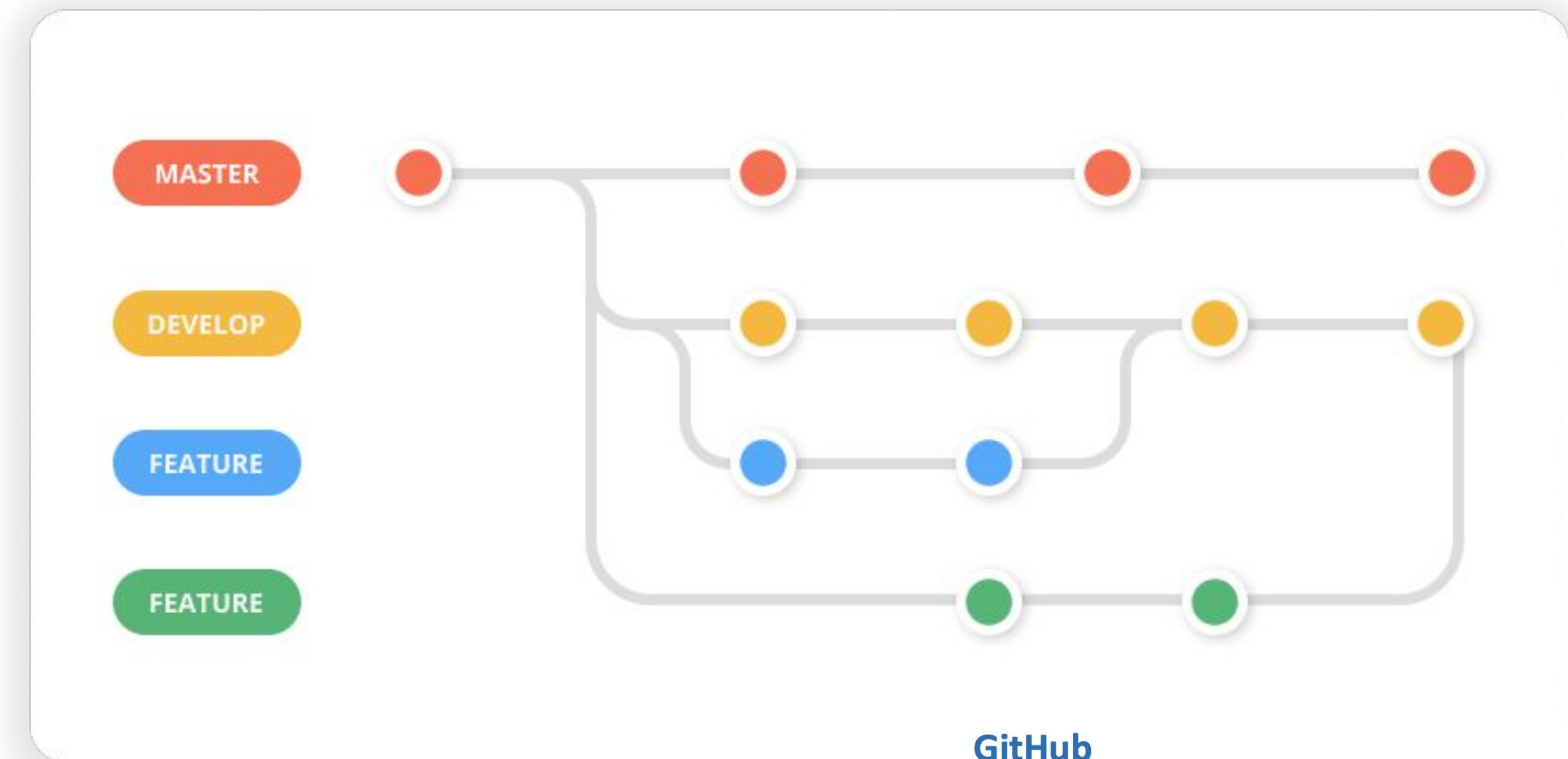


# Branching

Branch will be independent of the clean, functioning “master” code and is a safe place for you to delete, modify and add code.

## Pull Request

Asks the maintainers of the original repository to take a look at and hopefully integrate your code changes into their repository.



GitHub Issues are used to track tasks, enhancements, and bugs for a project, allowing team members to discuss and manage work collaboratively.

GitHub Projects is a tool to organize and track the progress of issues and pull requests in a board view, helping teams visualize workflows and prioritize tasks.

🔒 OctoArcade Invaders

📅 Planning

📊 Sprint Board

📋 Alpha

📅 Roadmap

📅 My work

📅 Features

📅 Priority

👤 By person

📊 Status Board

📊 By status

📅 By Sprint

📅 Done

Filter by keyword or by field

🕒 Not Started19Estimate: 37

🕒 planning-tracking-demo #810

Beta go-no-go meeting

🕒 planning-tracking-demo #800

Save score across levels

🕒 planning-tracking-demo #784

Interviews with media outlets

epic

🕒 Draft

Enable for teams

🕒 planning-tracking-demo #1161

tweak difficulty

🕒 planning-tracking-demo #1167

Update README.md

🕒 Draft

Prevent the Konami code from bringing down all of GitHub

+ Add item

📅 Planning19Estimate: 109

📅 planning-tracking-demo #823

Updates and bug fixes to engine from Beta

bugdemo

📅 planning-tracking-demo #824

Beta signup page

need help

📅 planning-tracking-demo #806

[Tracking] Upsell / Growth experience

backlogfeature

📅 planning-tracking-demo #818

Account subscription design

📅 planning-tracking-demo #828

Acquire domain for launch

📅 planning-tracking-demo #832

Final creative shots from game

📅 planning-tracking-demo #829

+ Add item

🔨 Building8Estimate: 40

🔨 planning-tracking-demo #1160

Update documentation

🔨 planning-tracking-demo #814

Updates to collision logic

enhancement

🔨 planning-tracking-demo #816

Free and paid levels

need help

🔨 planning-tracking-demo #831

Documentation and Support

need help

🔨 planning-tracking-demo #821

Updates to alien, beam, bomb and cannon sprites

#370

🔨 planning-tracking-demo #802

Updates to velocity of the ship and alien movements

+ Add item

🔍 Review5Estimate: 17

🔍 planning-tracking-demo #822

Hero site - Development

#12#1160in-reviewtaskurgent

🔍 planning-tracking-demo #808

General bug fixes from Alpha feedback

#992

🔍 planning-tracking-demo #1151

Design new launch screen

#374web

🔍 planning-tracking-demo #793

Polished alien, beam, and cannon sprite files

🔍 planning-tracking-demo #1101

[Tracking] Integrate payments system

backlogfeature

+ Add item

🔒 OctoArcade Invaders

📅 Planning

📊 Sprint Board

📋 Alpha

📅 Roadmap

📅 My work

📅 Features

📅 Priority

👤 By person

📊 Status Board

📊 By status

📅 By Sprint

	Title	Status	Assignees	Priority	Labels
▼	Squad 16				
1	🕒 [Tracking] Allow users to perform a manual resetting #1100	Done✔️	shiftkey	⭐⭐⭐ High	duplicate enhancement epic f
2	🕒 Integrate with Commerce Service #3	Done✔️	rileybroughten	⭐⭐⭐ High	
3	🕒 Hero site - Development #822	Review▶️	azenMatt	! Urgent	in-review task urgent
4	🕒 Integrate with backend systems #809	Done✔️	keisaacson	! Urgent	demo prototype urgent
5	🕒 Prevent the Konami code from bringing down all of GitHub	Not Started🕒			
6	🕒 investigate latency	Not Started🕒			
+ Add item					
▼	Squad 29				
7	🕒 Integrate with Leaderboard Service #811	Done✔️	dusave and jclem	⭐⭐⭐ High	enhancement
8	🕒 [Tracking] Upsell / Growth experience #806	Planning📅	mariorod	⭐⭐ Medium	backlog feature
9	🕒 Account subscription design #818	Planning📅	azenMatt	⭐ Low	
10	🕒 Free and paid levels #816	Building🔨	JannesPeters	⭐ Low	need help



# Dataset

1. kaggle

<https://www.kaggle.com/datasets>

2. UCI Machine Learning Repository

<https://archive.ics.uci.edu/datasets>

3. Google Dataset Search

<https://datasetsearch.research.google.com/>

4. Github or other resources

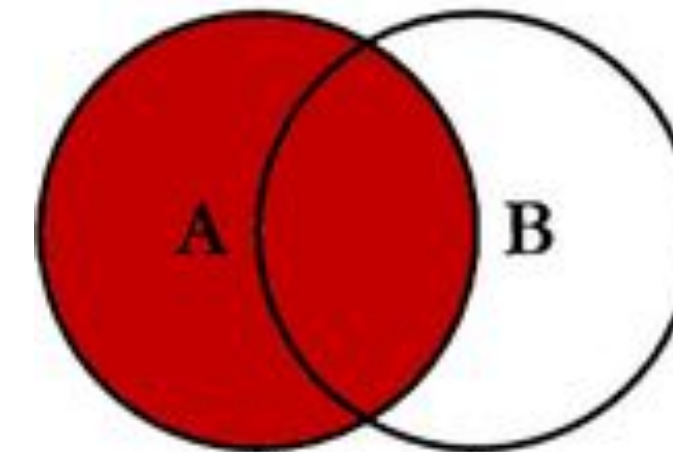


# Best practices when working with large data sets

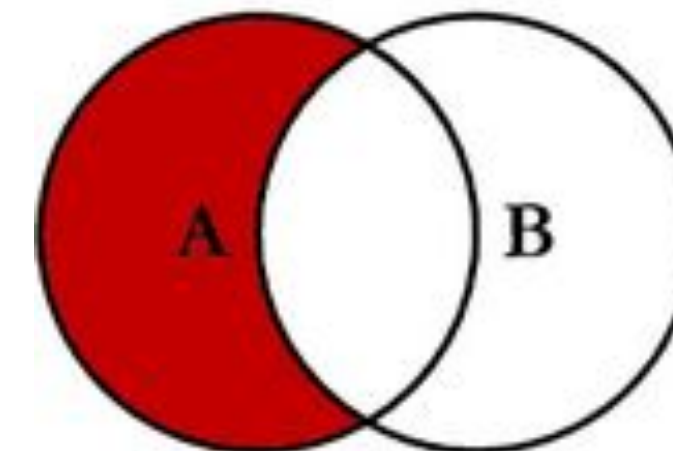
Be careful when joining, aggregating, sorting, or filtering your dataset.

Make sure to limit the dataset to only columns and rows needed.

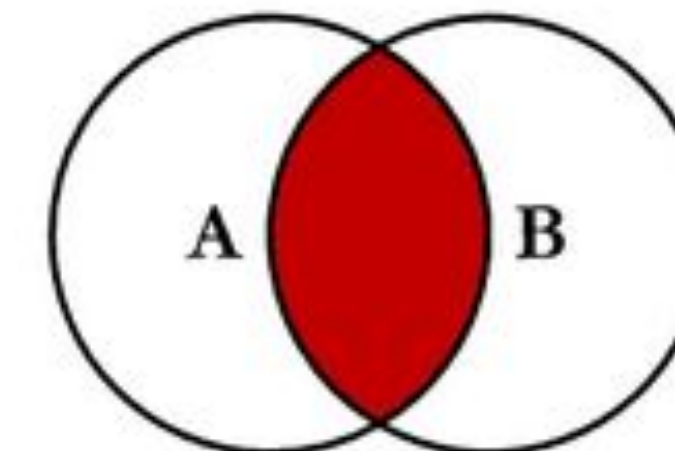
## SQL JOINS



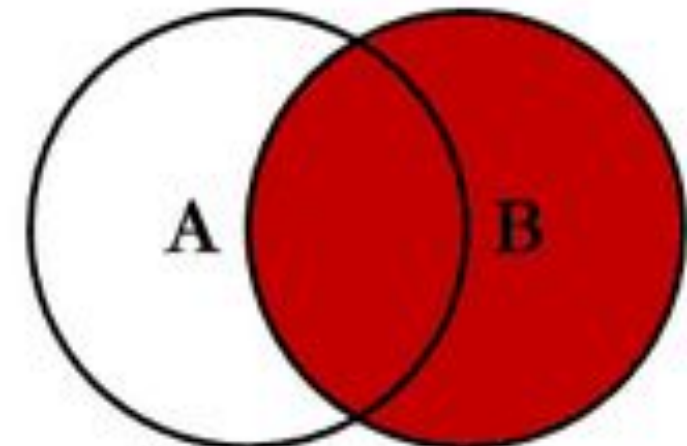
```
SELECT <select_list>  
FROM TableA A  
LEFT JOIN TableB B  
ON A.Key = B.Key
```



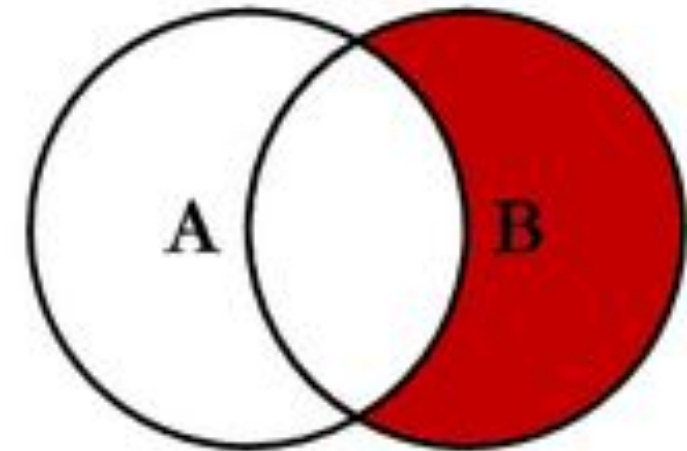
```
SELECT <select_list>  
FROM TableA A  
LEFT JOIN TableB B  
ON A.Key = B.Key  
WHERE B.Key IS NULL
```



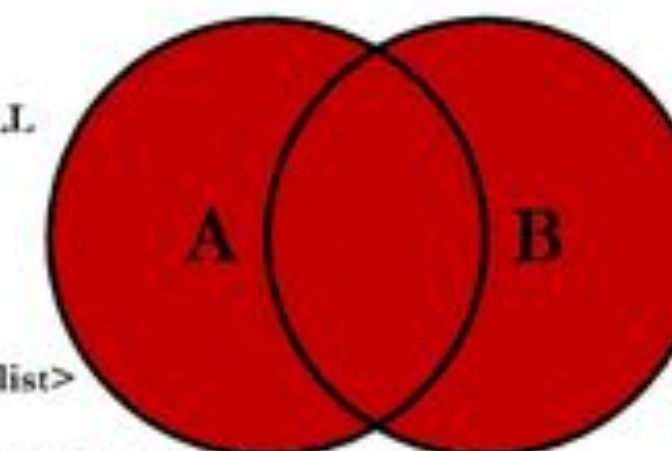
```
SELECT <select_list>  
FROM TableA A  
INNER JOIN TableB B  
ON A.Key = B.Key
```



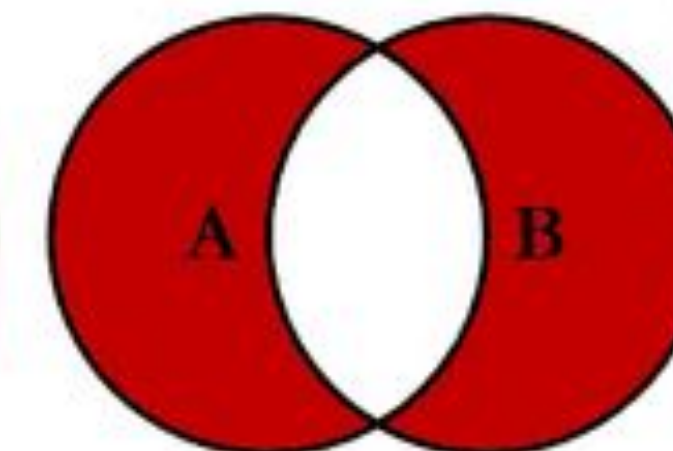
```
SELECT <select_list>  
FROM TableA A  
RIGHT JOIN TableB B  
ON A.Key = B.Key
```



```
SELECT <select_list>  
FROM TableA A  
RIGHT JOIN TableB B  
ON A.Key = B.Key  
WHERE A.Key IS NULL
```



```
SELECT <select_list>  
FROM TableA A  
FULL OUTER JOIN TableB B  
ON A.Key = B.Key
```



```
SELECT <select_list>  
FROM TableA A  
FULL OUTER JOIN TableB B  
ON A.Key = B.Key  
WHERE A.Key IS NULL  
OR B.Key IS NULL
```

# Your time to ...

- Talk to your classmates to find potential teammates!
- Work on D1