

# Week 2

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COGS 108 Sp 2025

# Due dates

- Q1: Due on Monday (04/07)
- Practice Assignment: Due on Wednesday (04/09)
- D1: Due on Friday (04/11)

# 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

- autograder 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-init Read-only

Part 2: Python (5.5 points)

# GitHub



## 1. Fork

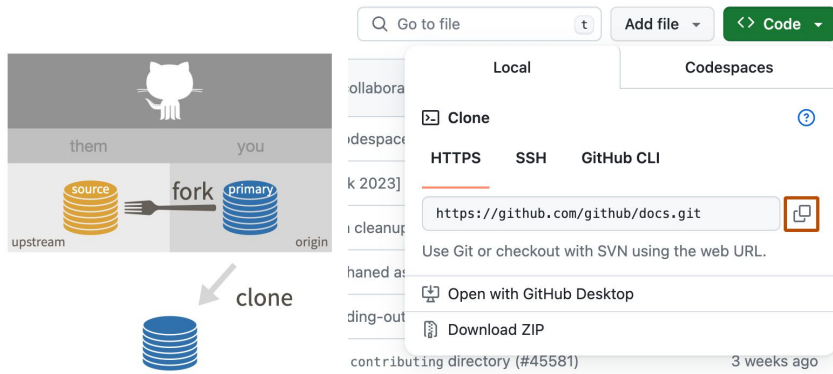
A “fork” is just an independent copy of a repository that you can develop on without affecting the original.

## 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
```

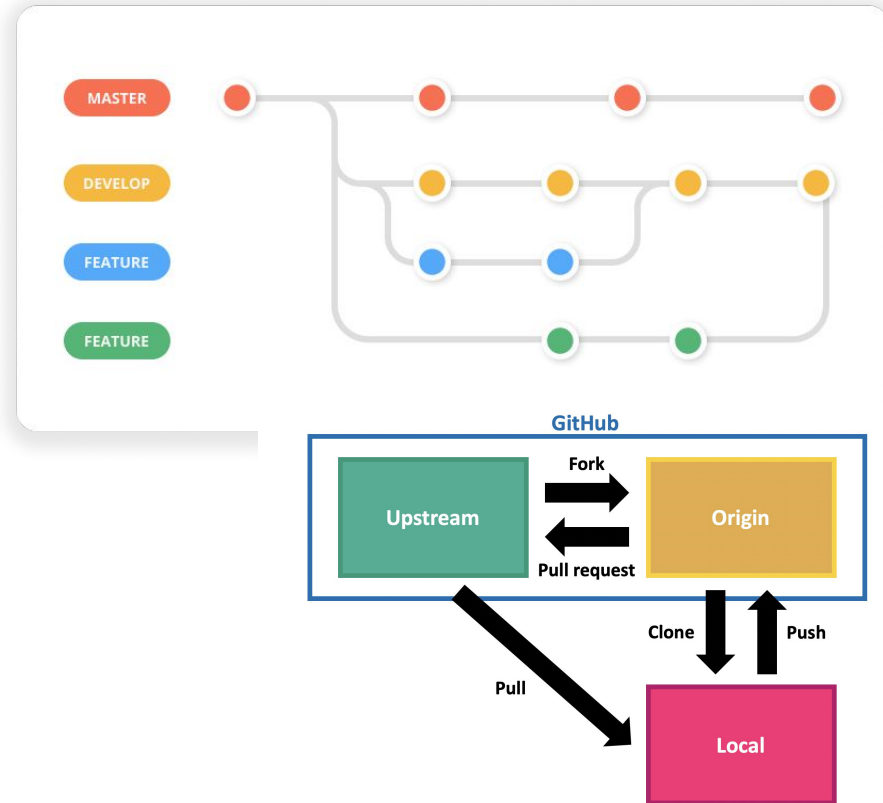


## Branching

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

Filter by keyword or by field

Planning 19 Estimate: 109

Building 8 Estimate: 40

Review 5 Estimate: 17

Not Started 19 Estimate: 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

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

planning-tracking-demo #823  
Updates and bug fixes to engine from Beta

planning-tracking-demo #824  
Beta signup page

planning-tracking-demo #806  
[Tracking] Upsell / Growth experience

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

planning-tracking-demo #1160  
Update documentation

planning-tracking-demo #814  
Updates to collision logic

planning-tracking-demo #816  
Free and paid levels

planning-tracking-demo #831  
Documentation and Support

planning-tracking-demo #821  
Updates to alien, beam, bomb and cannon sprites

planning-tracking-demo #802  
Updates to velocity of the ship and alien movements

planning-tracking-demo #822  
Hero site - Development

planning-tracking-demo #808  
General bug fixes from Alpha feedback

planning-tracking-demo #1151  
Design new launch screen

planning-tracking-demo #793  
Polished alien, beam, and cannon sprite files

planning-tracking-demo #1101  
[Tracking] Integrate payments system

planning-tracking-demo #802  
Creative shots from game

planning-tracking-demo #811  
Integrate with Leaderboard Service

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# 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

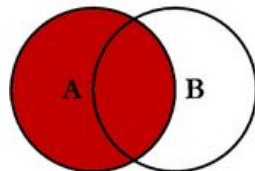


# Best practices when working with large data sets

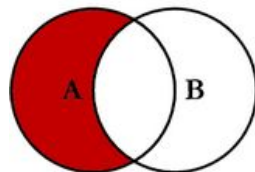
Be careful when joining, aggregating, sorting, or filtering your dataset.

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

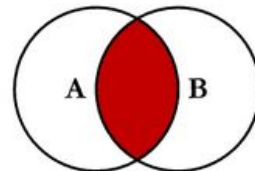
## SQL JOINS



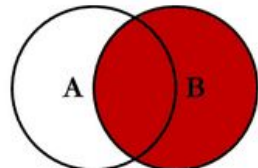
```
SELECT <select_list>  
FROM TableA A  
LEFT JOIN TableB B  
ON A.Key = B.Key
```



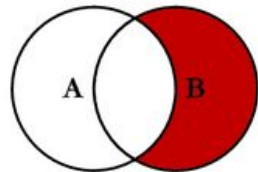
```
SELECT <select_list>  
FROM TableA A  
LEFT JOIN TableB B  
ON A.Key = B.Key  
WHERE B.Key IS NULL
```



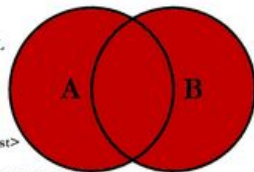
```
SELECT <select_list>  
FROM TableA A  
INNER JOIN TableB B  
ON A.Key = B.Key
```



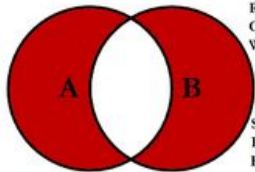
```
SELECT <select_list>  
FROM TableA A  
RIGHT JOIN TableB B  
ON A.Key = B.Key
```



```
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