

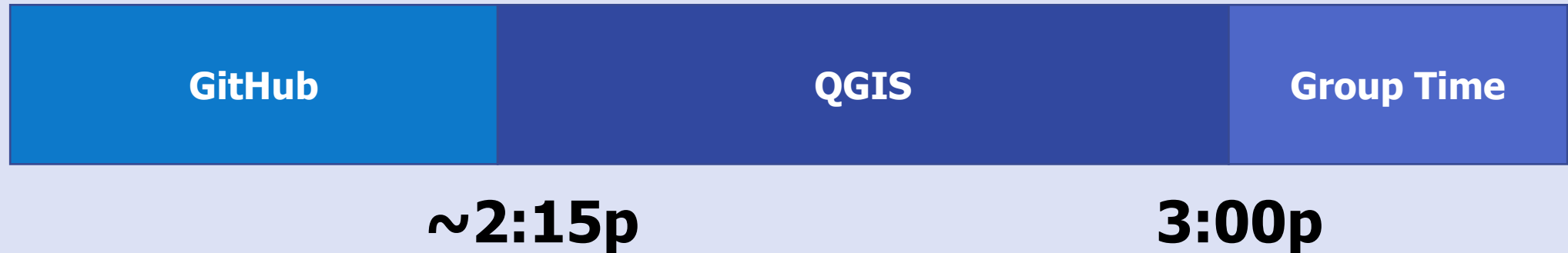
Lab #1 – G|Tting started with Spatial Data Sets

Albert Kochaphum

Week 1 | April 1st, 2021

Today's Agenda

- 1.1. Git down with GitHub**
- 1.2. "Hello World!" – QGIS Bootcamp**
- 1.3. Group Project Time**



Lab – 1.1 – Git down with GitHub

1.1. Objectives

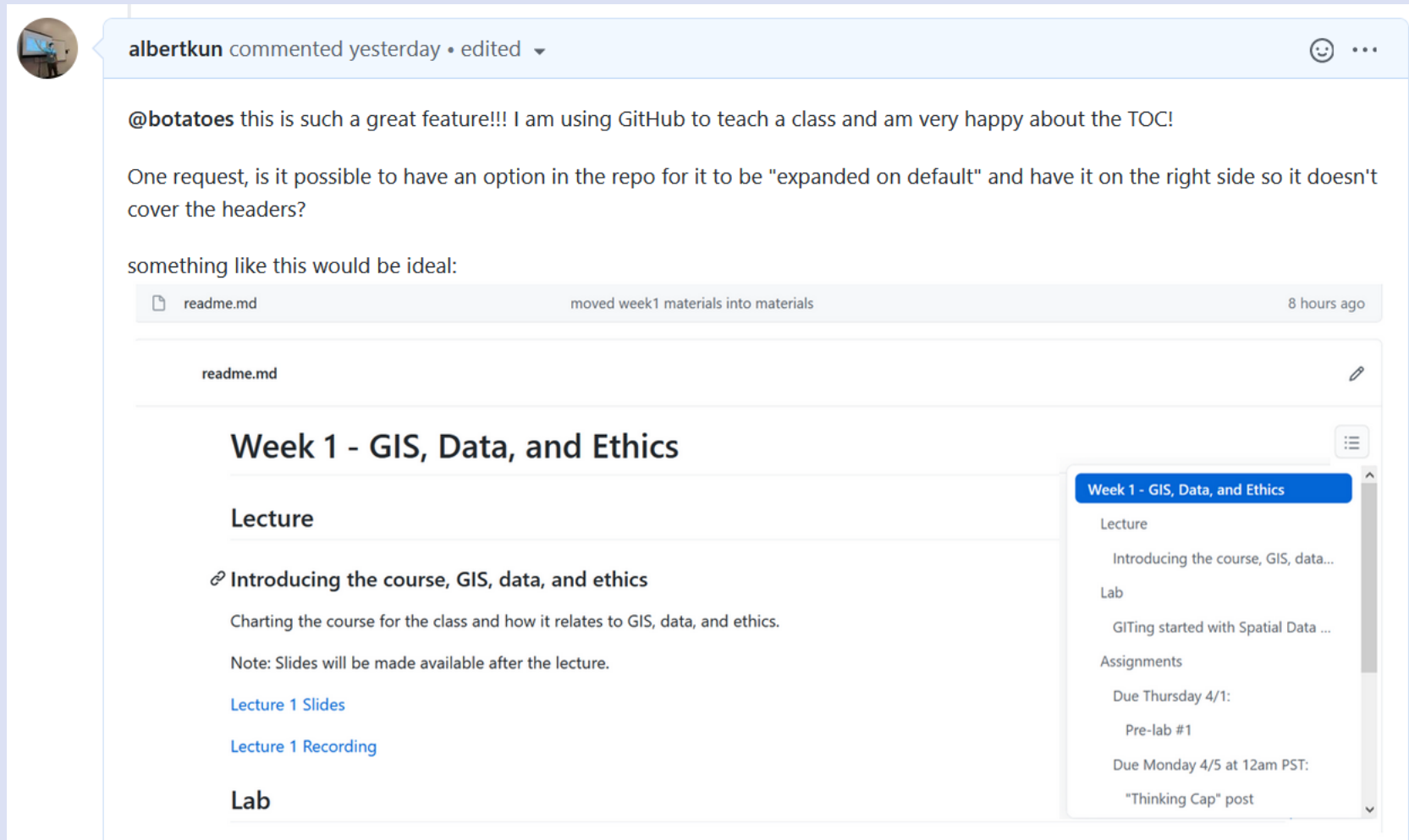
- 1. Clone Class Repo**
- 2. Fork the Lab Assignment Repo**

Both cloning and forking only needs to be done once!

1.1. What is GitHub?

- **It's a web site for using Git**
- **Git is software for tracking changes**
- **We will be submitting our assignments to GitHub using Git (Vis-à-Vis Vs Code)**

1.1. Why GitHub?



The screenshot shows a GitHub interface. At the top, a comment by user **albertkun** is displayed, stating they are using GitHub for a class and requesting a feature to expand the table of contents (TOC) on the right side of the repository page. Below the comment, a preview of a repository is shown. The repository's `readme.md` file is open, displaying a TOC for 'Week 1 - GIS, Data, and Ethics'. The TOC includes sections for 'Lecture' and 'Lab'. The 'Lecture' section contains links for 'Introducing the course, GIS, data, and ethics', 'Lecture 1 Slides', and 'Lecture 1 Recording'. The 'Lab' section is also listed. A sidebar on the right of the repository preview shows a scrollable TOC with the same structure, demonstrating the feature requested in the comment.

albertkun commented yesterday • edited

@botatoes this is such a great feature!!! I am using GitHub to teach a class and am very happy about the TOC!

One request, is it possible to have an option in the repo for it to be "expanded on default" and have it on the right side so it doesn't cover the headers?

something like this would be ideal:

readme.md moved week1 materials into materials 8 hours ago

readme.md

Week 1 - GIS, Data, and Ethics

Lecture

🔗 Introducing the course, GIS, data, and ethics

Charting the course for the class and how it relates to GIS, data, and ethics.

Note: Slides will be made available after the lecture.

[Lecture 1 Slides](#)

[Lecture 1 Recording](#)

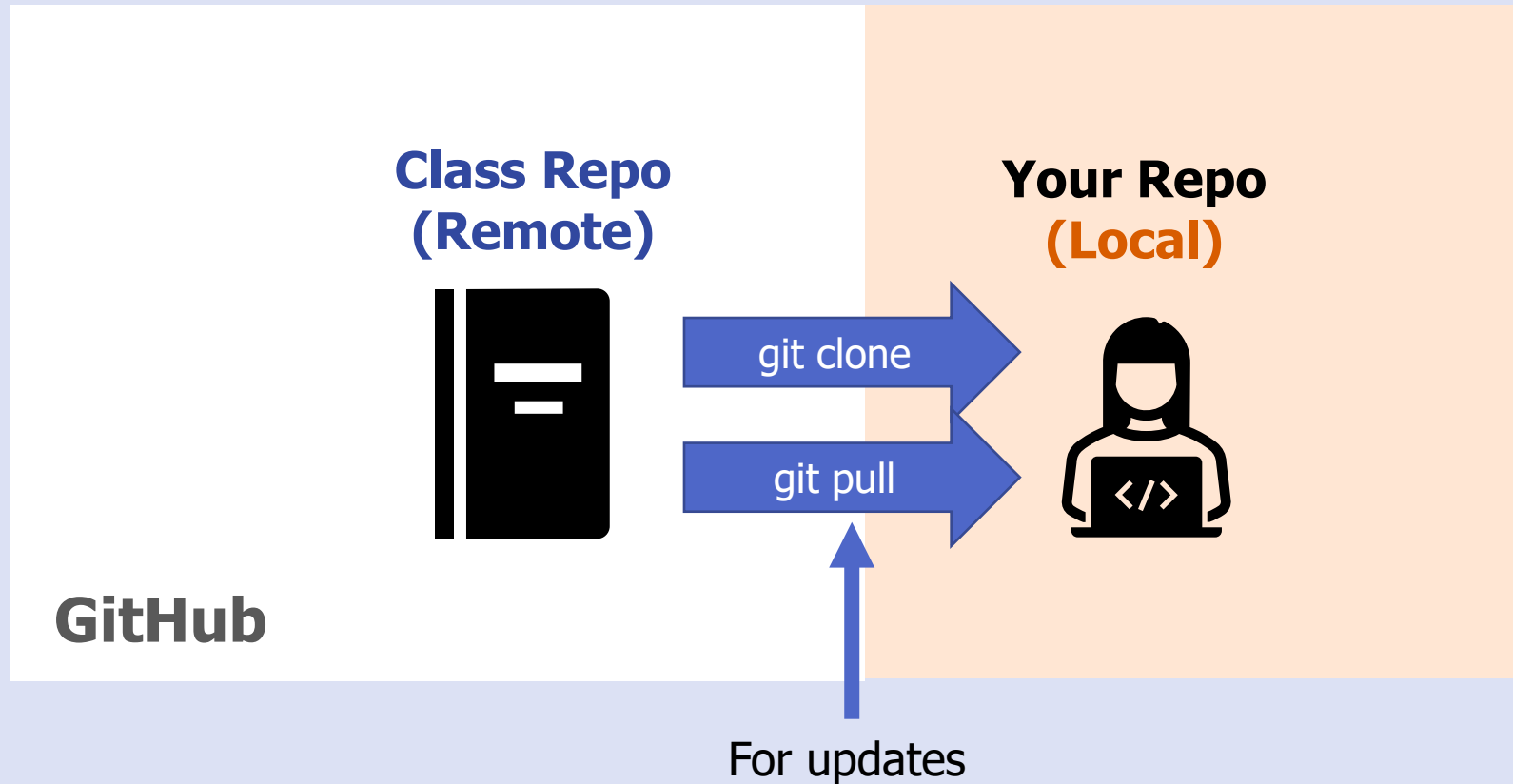
Lab

Week 1 - GIS, Data, and Ethics

- Lecture
 - Introducing the course, GIS, data...
- Lab
 - GITing started with Spatial Data ...
- Assignments
 - Due Thursday 4/1:
 - Pre-lab #1
 - Due Monday 4/5 at 12am PST:
 - "Thinking Cap" post

Building software better together!

1.1.1 Cloning



1.1.1 Git Cloning (the VS Code-sy way)

1. Start VS Code
2. Click "Clone repository"
3. Search for the class repo or add it:
`https://github.com/albertkun/21S-ASIAAM-191A.git`
4. Select a folder
5. Open the cloned repo.
6. To update new files: Run `git pull` in the VS Code terminal

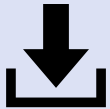
1.1.2 We can't FORKet about forking!

1.1.2 Clones vs. Forks



1.1.2 Clones vs. Forks

Clones



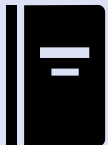
“Download” to my machine



When you need to contribute to the original repository



Keeps your local changes to synced to the web (remote)



Used for Class repo

Forks



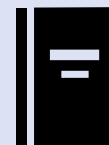
“Copy to my cloud drive”



When contributing to the original repository is optional



Can still connect local changes to the original upstream (remote) without adding your changes

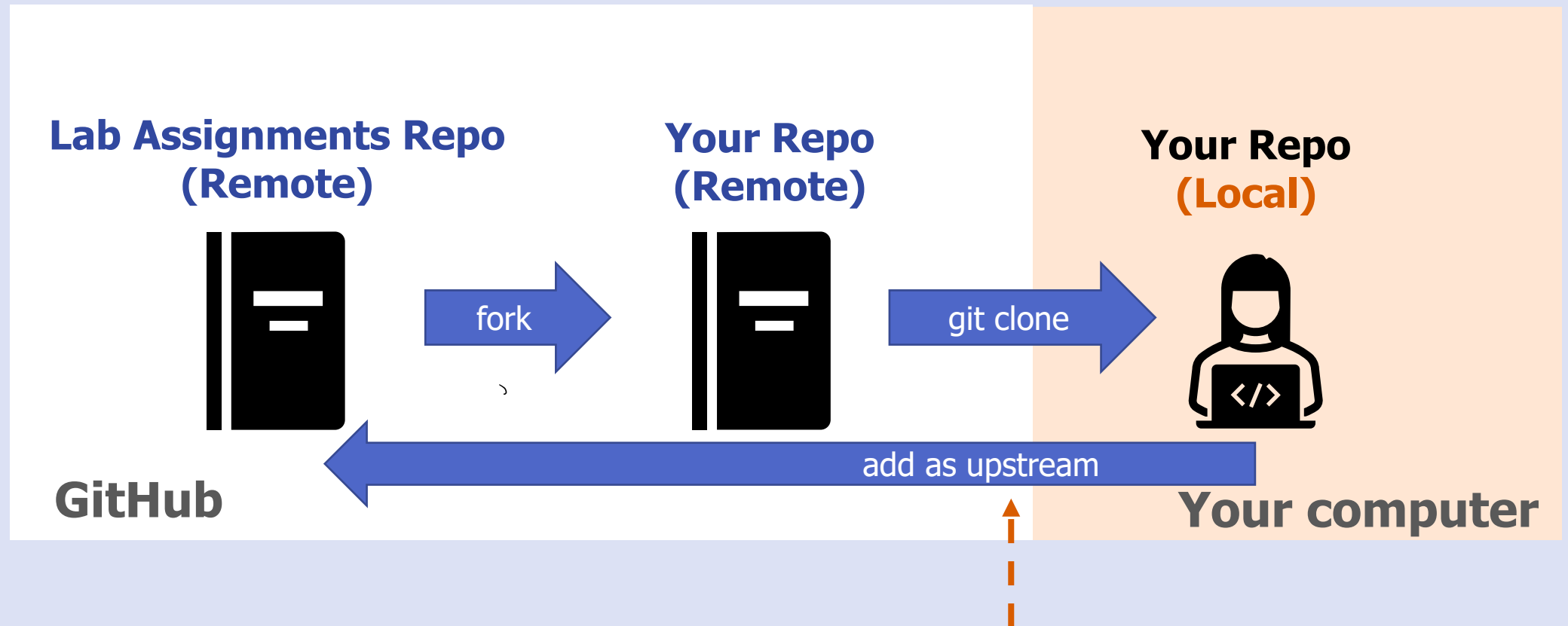


Used for Lab Assignments Repo

1.1.2 Forks and Clones work together



1.1.2 Forking the Lab Assignments Repo

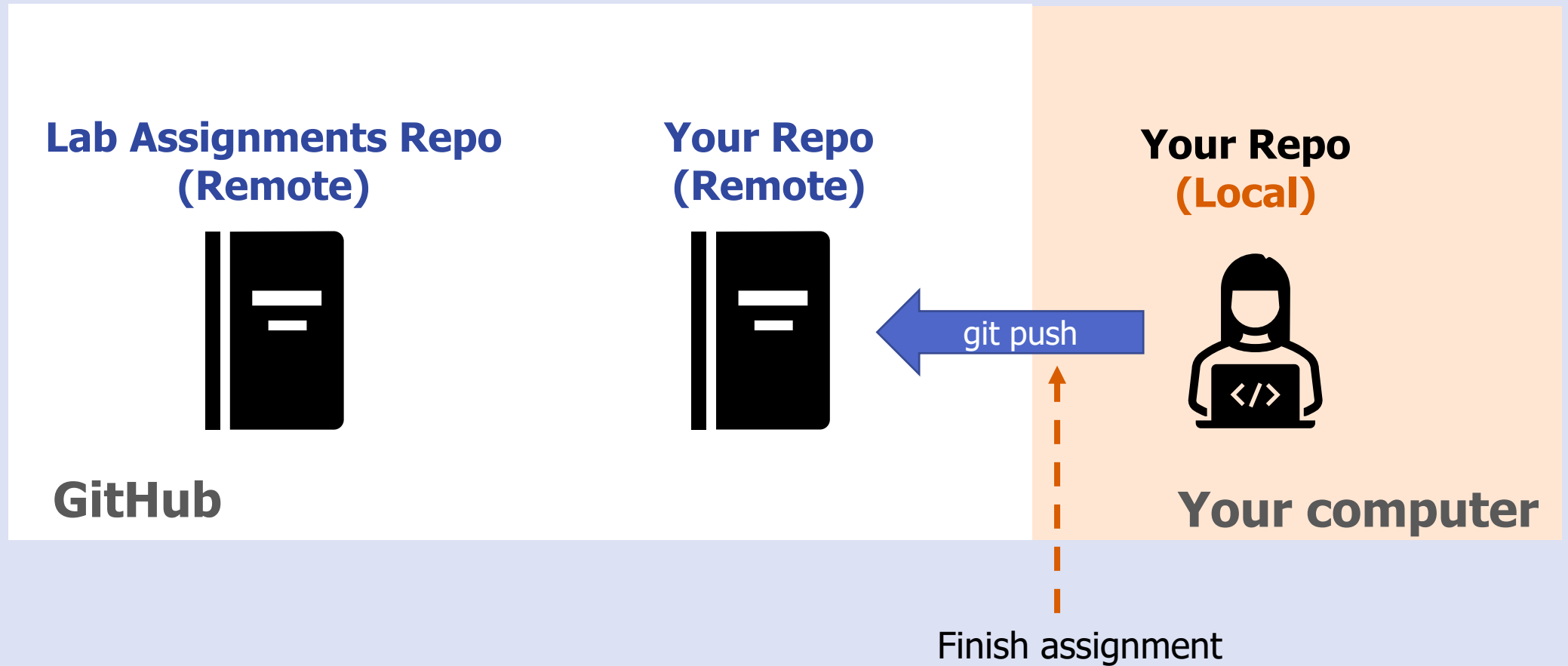


Advanced method:

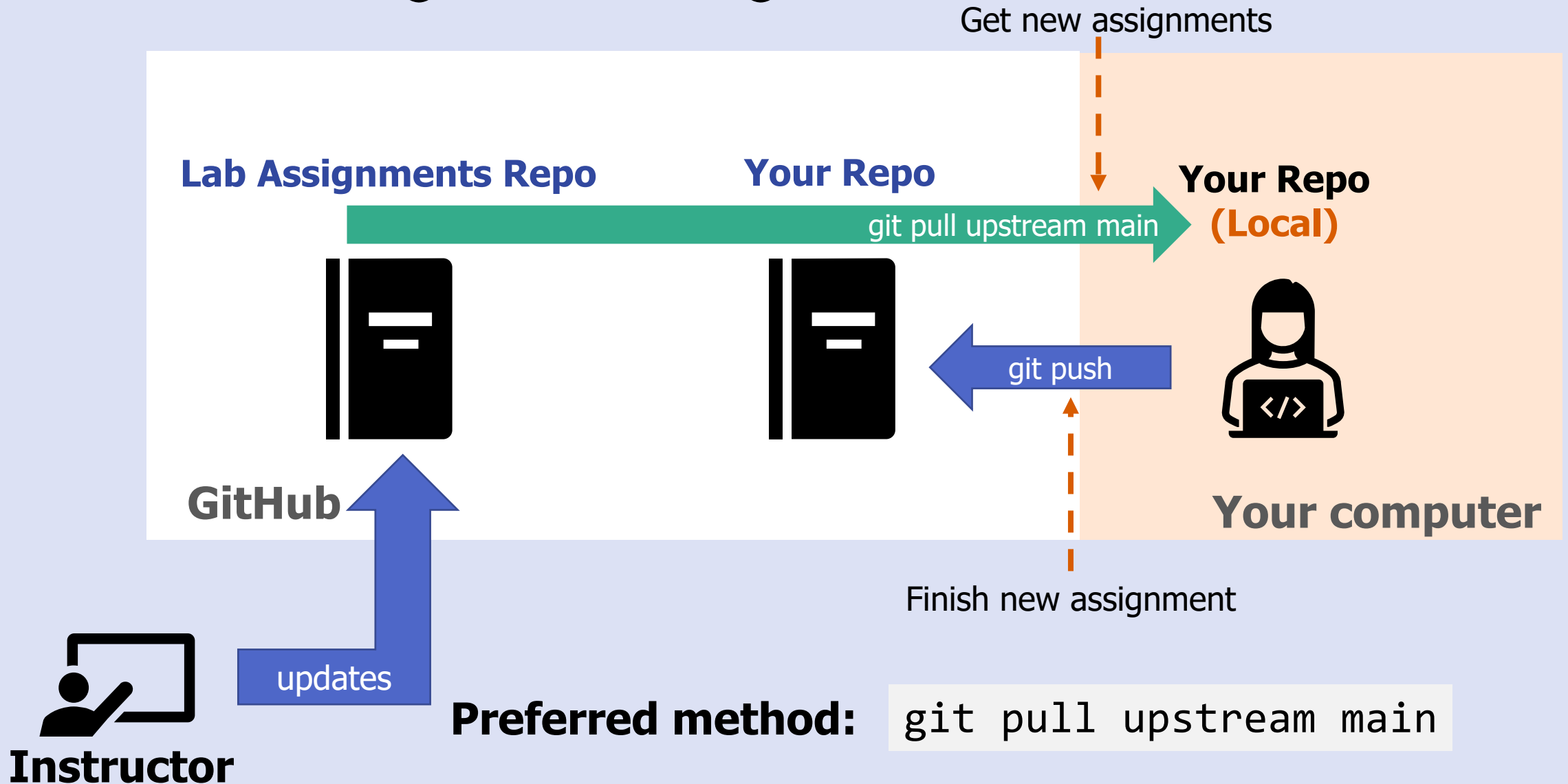
Allows you to get new assignments

```
git remote add upstream https://github.com/albertkun/21S-ASIAAM-191A-Assignments.git
```

1.1.2 Submitting Lab assignments



1.1.2 Getting new assignments



1.1.2 Git Forking (the easy-ish way)

1. Go to the Lab Assignment Repository:

<https://github.com/albertkun/21S-ASIAAM-191A-Assignments>

2. Click **"Fork"**

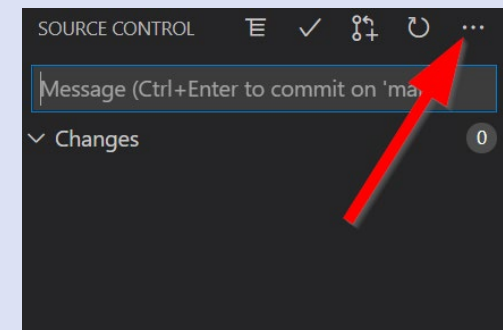
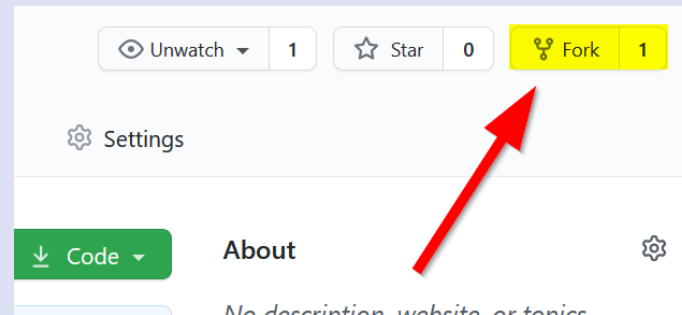
3. Start VS Code

4. **Clone** your Forked repository

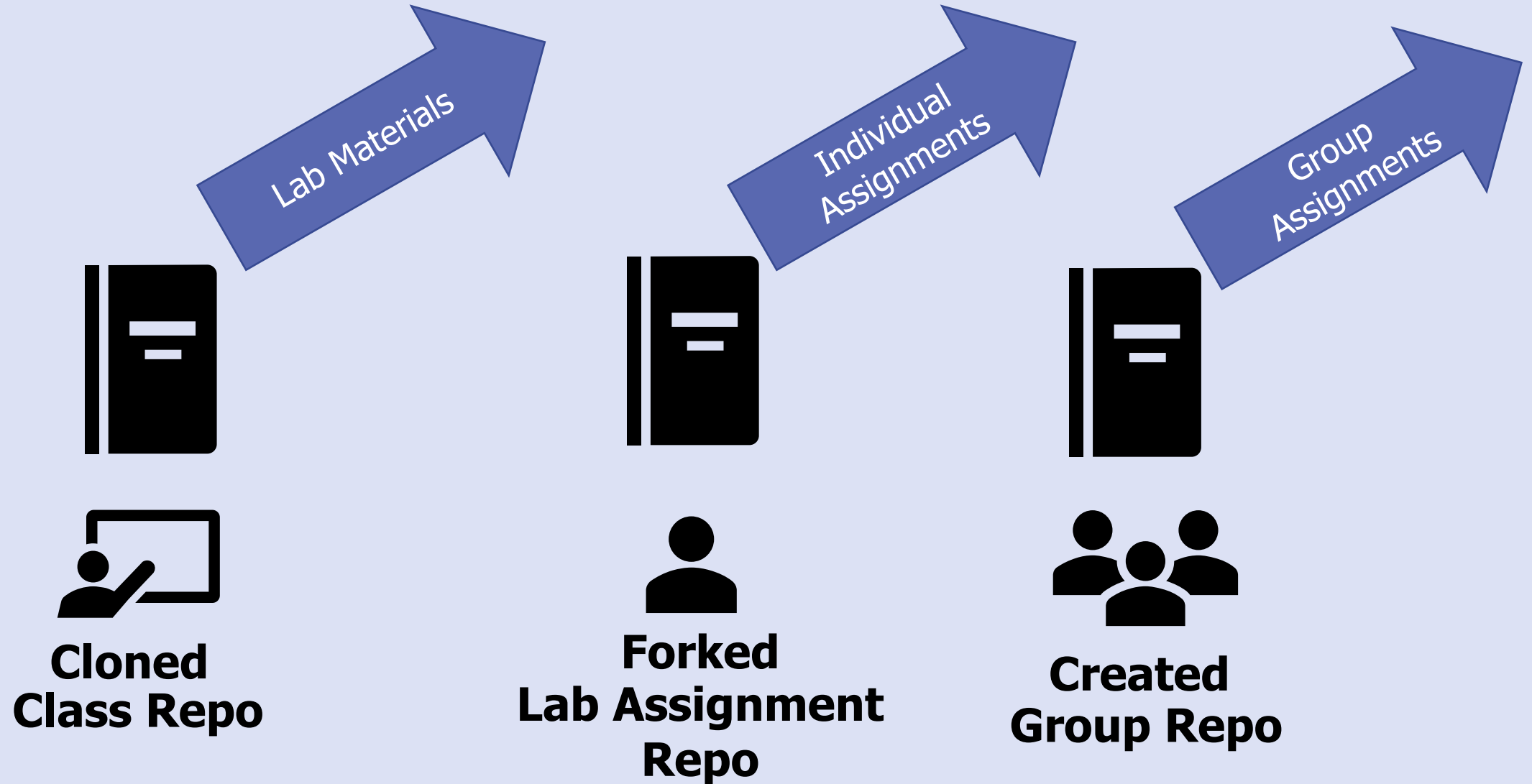
5. Add Remote Repository

6. `git push` when you are finished with labs

7. `git pull remote upstream` for new labs



Summary of repositories

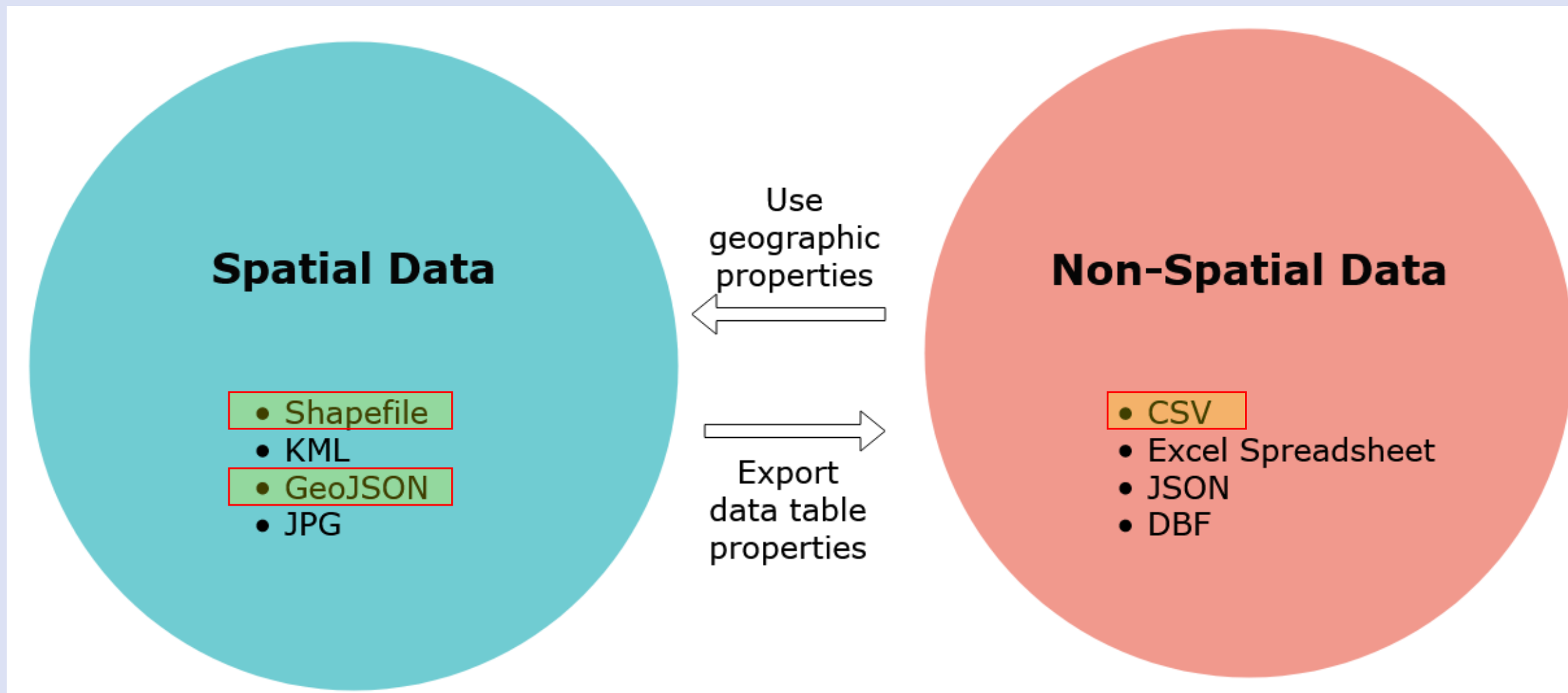


Lab – Part 2 – Spatial Data Management (QGIS)

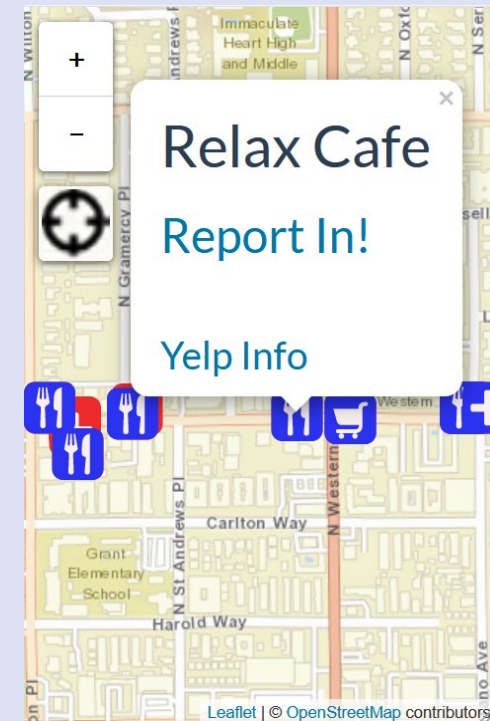
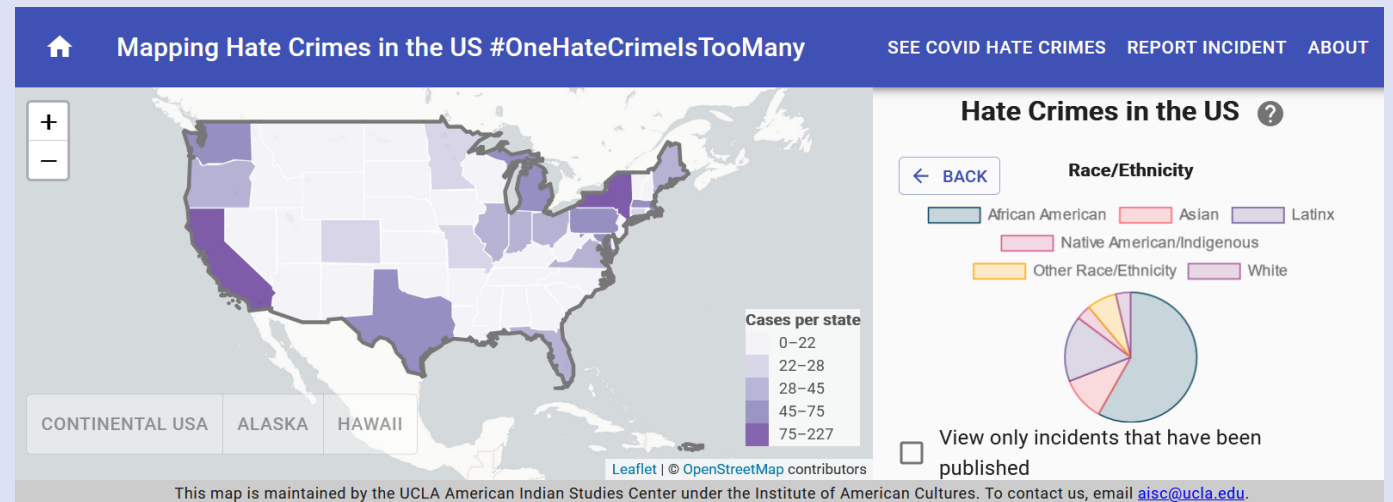
Objectives

- 1. Add datasets**
- 2. Calculate a new field**
- 3. Visualize data**
- 4. Export data as GeoJSON**

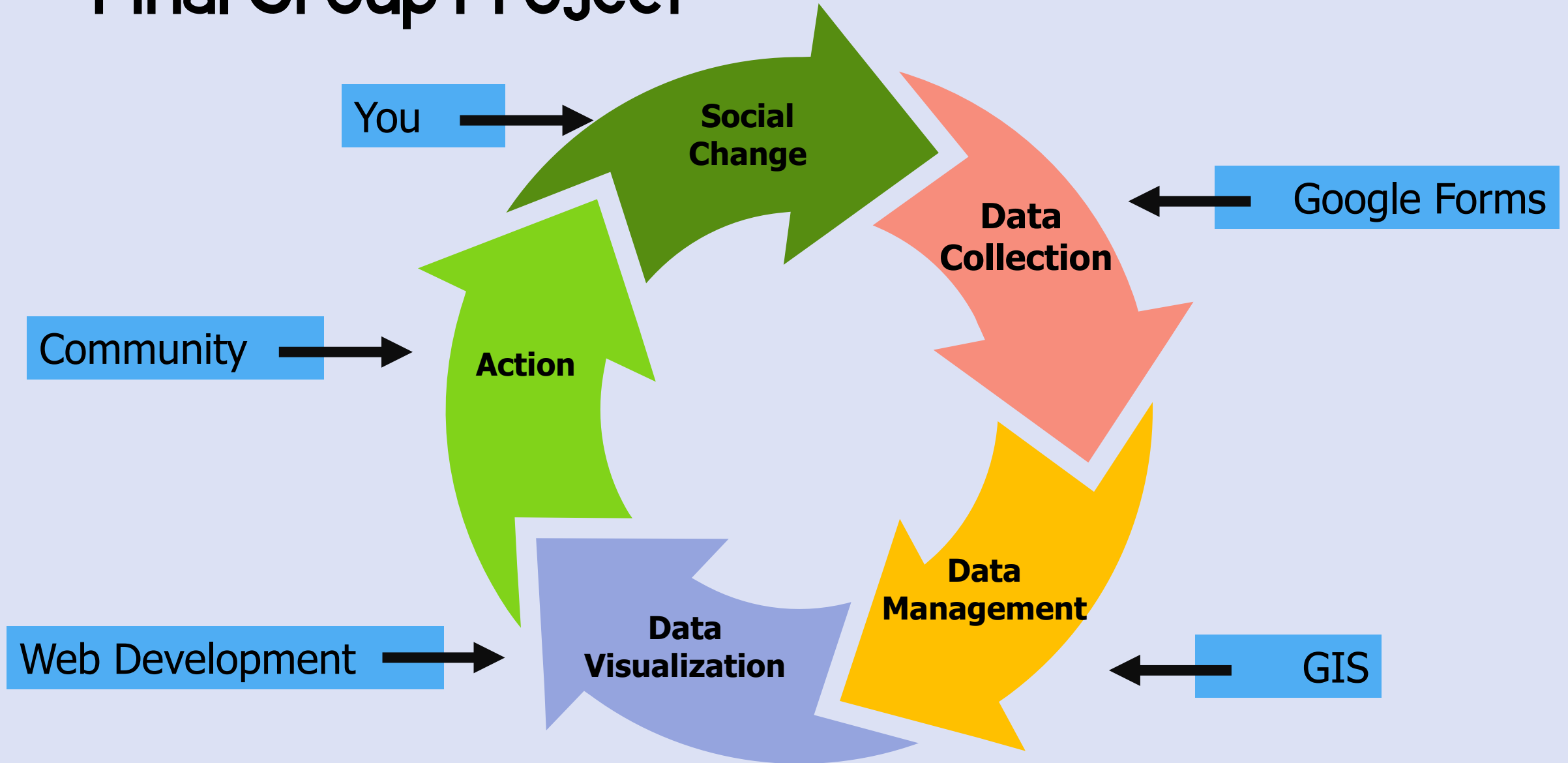
Spatial Data



Lab – Part 3 – Final Group Projects



Final Group Project



Final Group Project

Identify
issue

Create
Survey

Test
survey

Code
application

Present
application

Assigned	Week 1	Week 2	Week 3	Week 4	Week 10
Due	Week 2	Week 3	Week 4	Finals Week	Finals Week

Final Group Project



Relies on community-based and/or crowd-sourced data



Designed for a social good and/or political campaign



Realigns power back to communities being harmed



Only uses government or private data sources



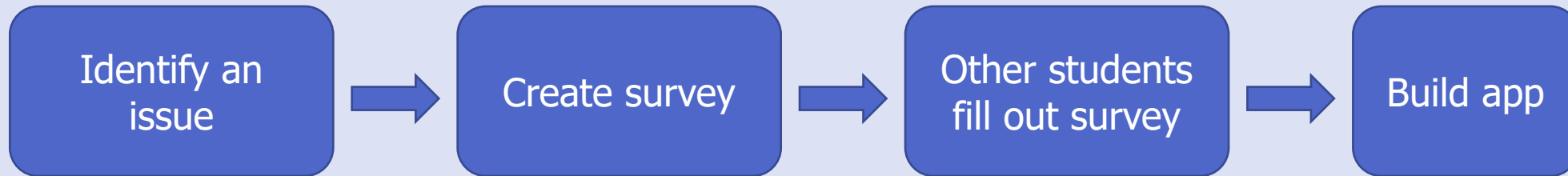
Designed for-profit or for self interest



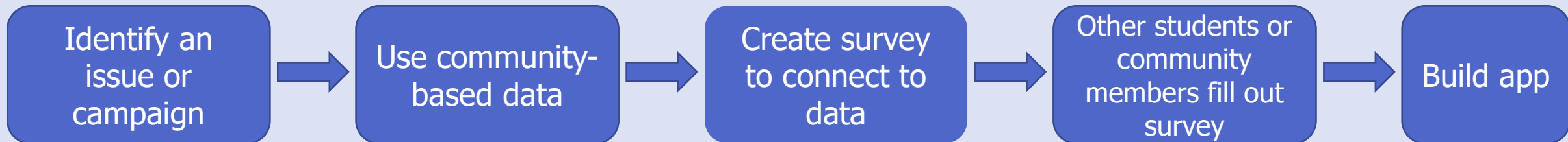
Reinforces corporate, academic, or governmental institutions

Final Group Project

Option A:

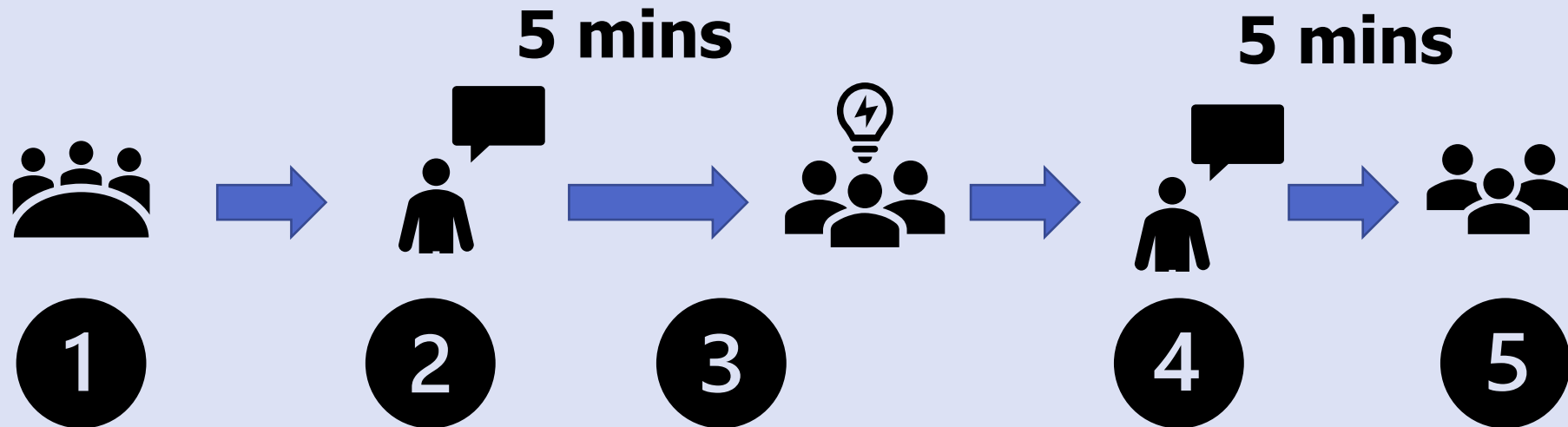


Option B:



Final Project Grouping

1. Pre-assigned breakout rooms
2. Message me to check out a different topic in another room
3. After 5 minutes I will move people who requested to change topics
4. After another 5 minutes I will move people again on request
5. Exchange contact information



Final Project Grouping

Breakout	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7	Room 8	Room 9
Topic	anti-imperialism	asian-american	climate change	education equity	health equity	mental health	racial equity	sustainability	transportation
Person 1	Nina Monet Reynoso	Adhvaith Vijay	Jason Nathanael Muljadi	Brian Zamora	Ericko Halim	Vanessa Ta	Nathakin Leepreecha	Ray Hsiao	Emily Pham
Person 2	Alize Magana	Ana Gu	Jess Xu	Christine Tran	Anny Rodriguez Vilorio	Michelle Nguyen	Kathryn Greenler	Sam Karakas	Nina Long
Person 3		Rachel Chan		Lauren Valles	Wilny Duong				

<https://docs.google.com/spreadsheets/d/1B5QTtB3iDFuOXT3z6kv1Dwr1eNku9AeVAHF55YEZXFs/edit?usp=sharing>

Assignments

*Part one is due **Monday** at **12am!**



Due Tuesday 4/6:

1. Post a "Thinking Cap" and two responses*
2. Read "Introduction to Critical Cartography"

Due Thursday 4/8:

3. Lab assignment #1
4. Group assignment #1
5. Pre-lab #2

Note: Unless specified otherwise, all assignments are due at the beginning of classes. Late assignments will be given half credit up to a week.