

Starting soon!

# React (pt. 4) & Git

JFSS CS Club 2022/23  
Aritro

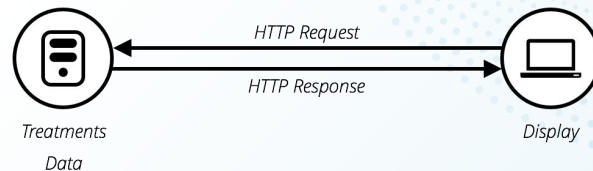


# Data Fetching

The background features a solid blue color. Overlaid on this are several wavy, horizontal lines composed of small, dark blue dots. These lines create a sense of motion and depth, with some lines appearing more prominent than others, giving the impression of a 3D effect or a stylized representation of data flow.

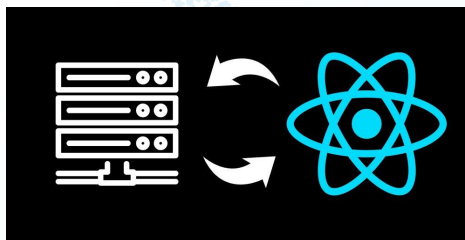
# Data Fetching

- Allows us to get info from an API
  - Ex. products from database
- What is an API?
  - Application Programming Interface
  - Lets us talk to server / database, get specific info



# Data Fetching

- Many libraries to fetch data
- Built-in method: **Fetch API**
  - Can use `fetch()` on any link, and get response



# Fetch API Example

```
async function fetchData() {  
  const res = await fetch("https://my.fake.website/interesting_data.json");  
  const data = await res.json();  
  
  return data;  
}
```

# Async/Await (quick)

- What does async/await mean?
- Async: short for asynchronous
  - Type of function
  - Allows to run time-consuming actions separately (ex. fetching data)
  - Can do other stuff while it fetches data (ex. render UI on screen)

# Async/Await (quick)

- Await: wait for async function
  - Treat async function as synchronous
  - Shares benefits of async code, while looking clean
  - Helps us avoids this

```
1 // Callback Hell
2
3
4 a(function (resultsFromA) {
5   b(resultsFromA, function (resultsFromB) {
6     c(resultsFromB, function (resultsFromC) {
7       d(resultsFromC, function (resultsFromD) {
8         e(resultsFromD, function (resultsFromE) {
9           f(resultsFromE, function (resultsFromF) {
10             console.log(resultsFromF);
11           })
12         })
13       })
14     })
15   })
16 });
17
```

# Trying fetch()

The background is a solid blue color. It features several decorative elements consisting of multiple parallel, wavy lines of white dots. These lines flow from the bottom left towards the top right, creating a sense of movement and depth.



# API Link

**<https://frasercodes.vercel.app/fakeapi/products.json>**

# Git & GitHub

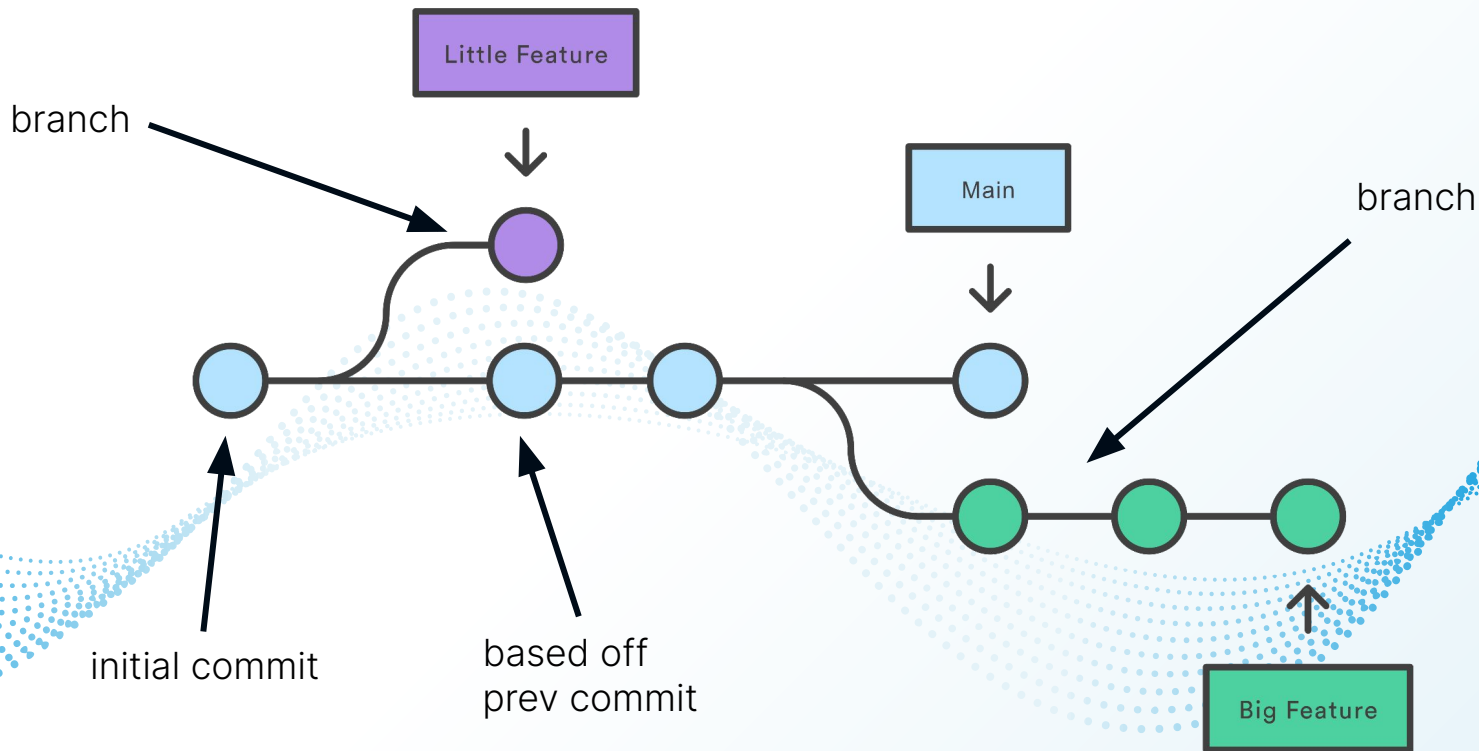
The background of the slide is a solid blue color. Overlaid on this background are several wavy, horizontal lines composed of small, dark blue dots. These lines create a sense of motion and depth, flowing from the left side towards the right. The dots are arranged in a way that forms a series of overlapping, undulating curves, giving the impression of a stylized wave or a digital signal.

# What is Git?

- Version control system (VCS)
- Allows us to track & manage changes in code
- Essential for collaboration
  - Track 5Ws for each change
  - Can work on different versions of code at once



# Git Structure



# What is GitHub?

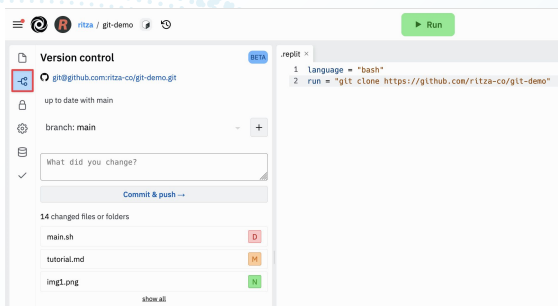
- Place to upload Git repositories
- Allows for easy collaboration
- Has many other features
  - Web hosting, continuous integration, etc.
- Different from Git
  - Git is the system, GitHub stores the data

# Signing up for GitHub

The background is a solid blue color. Overlaid on this are several decorative, wavy lines composed of small white dots. These lines flow from the bottom left towards the top right, creating a sense of motion and depth. The text 'Signing up for GitHub' is centered horizontally and partially overlaid by these dotted waves.

# Using Git - Repl.it

- Controllable through this icon in sidebar
  - Can run git commands w/o memorizing them
- Can also use shell (what we'll be doing)



# Using Git - Local

- Install it! (if you don't have it)
  - Windows: <https://git-scm.com/>
  - Mac:
    - `xcode-install --install`
    - `brew install git` (if you have brew)
  - Linux:
    - depends on your distro
    - try using default package manager



# Using Git - Shell

- Important commands:
  - `git init` → initializes a repository
  - `git add` → prepare to add file(s)
  - `git commit` → create snapshot of added files
  - `git push` → upload to GitHub

# Publishing our Projects to GitHub





**Free templates for all your presentation needs**



For PowerPoint and  
Google Slides



100% free for personal  
or commercial use



Ready to use,  
professional and  
customizable



Blow your audience  
away with attractive  
visuals