UT FullStack Bootcamp

Week 1

Full-Stack Development

Client Browser
(Frontend)

User

HTML / CSS / Image Assets

Javascript (Client Side)

JSON / XML

User Interactions

Transfer Protocols
(HTTP / HTTPS)

HTML

CSS

JSON

JS

JPG

Server
(Backend)

Node.js

Express
Webserver

Server-side
Scripts and
Services

MongoDB
Database

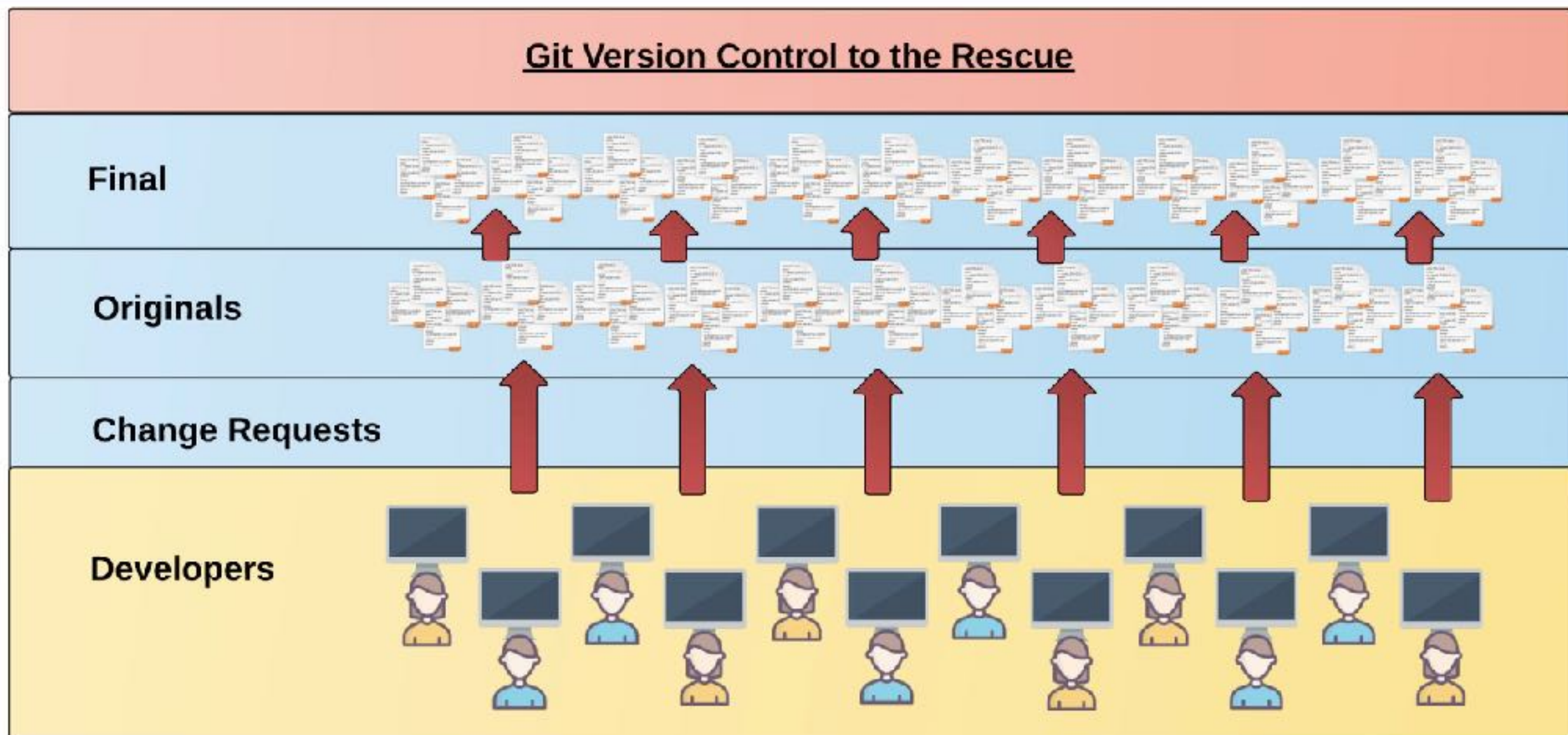Raw Files
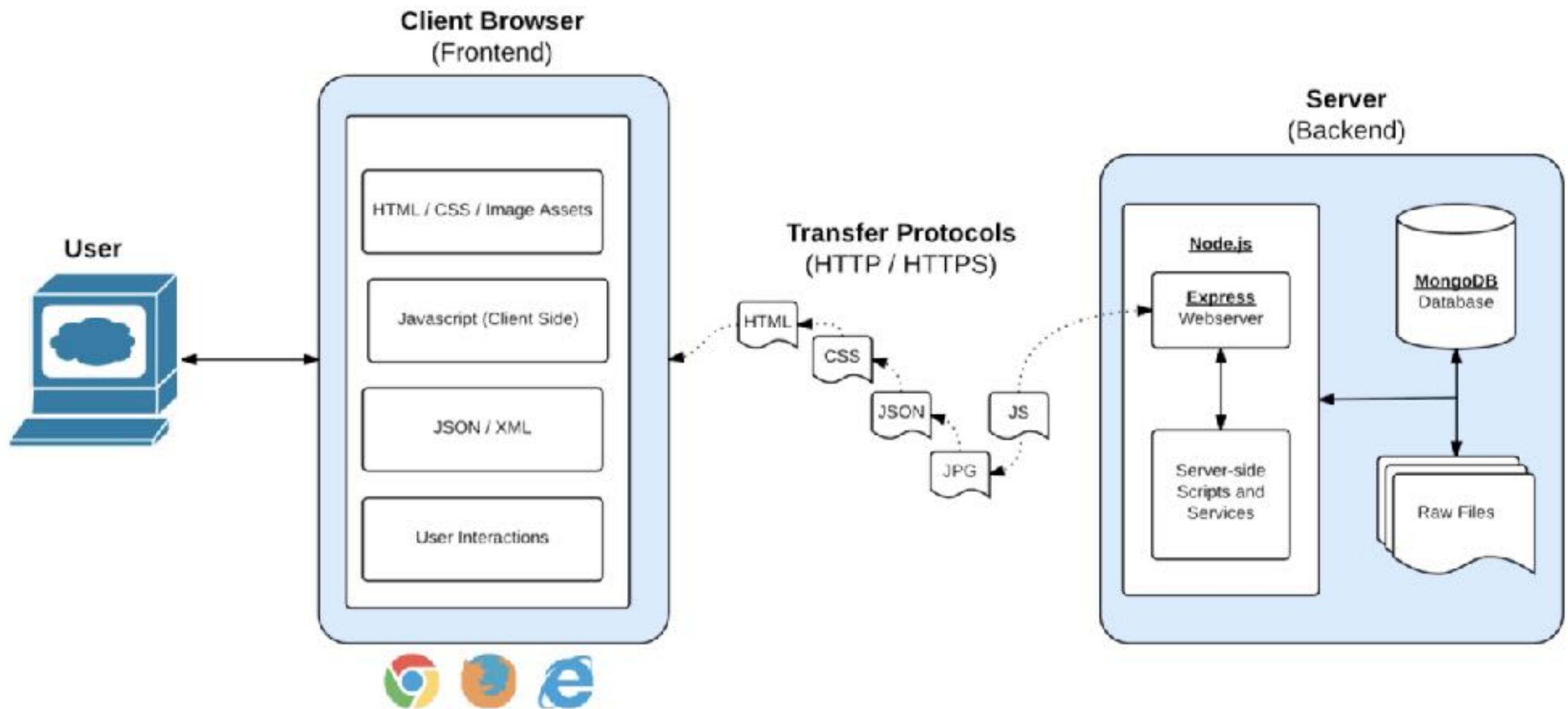
In modern **web apps**, there's a constant back-and-forth communication between two key components: the visuals displayed on the user's browser (**frontend**) and the data and logic stored on the server (**backend**).

Collaborative Coding

Modern web development is _highly_ collaborative.

Teams are often extremely large and separated across the country — or planet.

Apps sometimes comprise hundreds or even thousands of files.

Version Control

Git Version Control:

- Provides an organized system for managing code for when multiple developers work on a project at the same time.

Benefits of Git:

- Provides an organized system for managing code for when multiple developers work on a project at the same time.

Git Commands

Create a new public GitHub repository. Check the box to initialize with ReadMe.

- **git clone:** copies an entire repo (to begin).

- **git add:** adds a file for inclusion in Git.

- **git commit:** notes a change to the local repo.

- **git push:** sends changes to hosting service.

- **git pull:** downloads freshest version of repo.

https://www.codeschool.com/courses/try-git

Git Commands syntax..

- **git status:** on branch master

- **git add:** git add index.html

- **git commit:** git commit -m "made some change"

- **git push:** git push origin master

https://www.codeschool.com/courses/try-git

Intro to Console

- ls: list

- pwd: Print working directory

- ls -A :

- mkdir: make directory (example mkdir example)

- cd: change directory

Terminal Commands

These are the basic commands for navigating directories in a Terminal or Git Bash window

Moving in directories

Change Directory

`cd`

Change to Root Directory

`cd ~`

Move to One Directory Up

`cd ..`

View Folders and Files in the Directory

`ls`

Show the current Directory

`pwd`

Autocomplete a File Name in the Current Directory

Press `tab` key once to autocomplete once you have typed a unique portion of a file name.

Open file or folder (Mac only)

`open [name of file]`

Open all files and folder in current directory (Mac only)

`open .`

File Manipulations

Make New File

`touch [name of file to create]`

Make New Folder

`mkdir [name of directory to create]`

Delete file

`rm [name of file to remove]`

Delete folder

`rm -r [name of directory to remove]`

Copying File

`cp [filename1] [filename2]`

Move/Rename File

`mv [filename1] [filename2]`

Mac Only

Open file or folder (Mac only)

`open [name of file]`

Open all files and folder in current directory (Mac only)

`open .`

https://github.com/the-Coding-Boot-Camp-at-UT/UTAUS201807FSF2-FT/blob/master/class-content/01-html-git-css/01-Activities/01-ConsoleCommands/bash-terminal-commands-cheatshet.md