FALL 2021 / ONLINE

INTERACTIVE DEVELOPMENT

Friday, September 17

WARM-UP QUESTION:
FAVORITE CHILDHOOD CARTOON?

AO3 RECAP
DEMOS + DISCUSSION
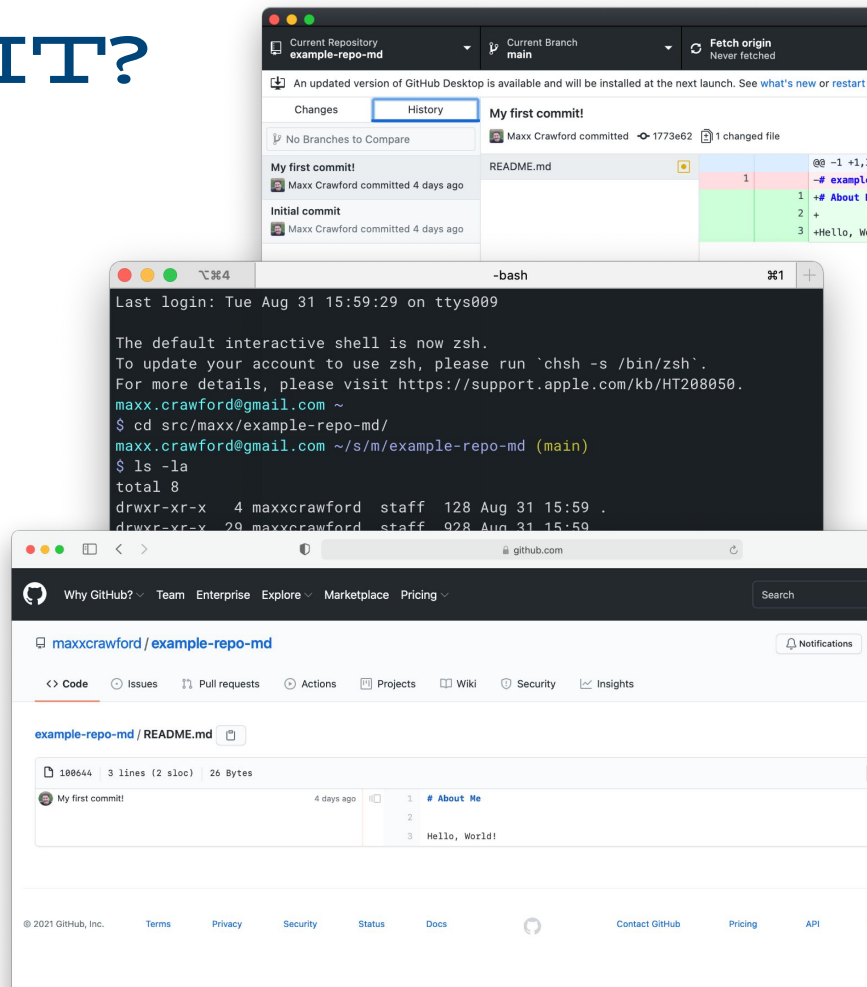
GITHUB REFRESHER

WHAT IS GITHUB?

HOW DO I USE GIT?

There are a few different methods:

- GitHub.com (Web interface)
- GitHub for Desktop (OS App)
- Command line (via Terminal)

Note: Because of current IT limitations, we will be using GitHub.com as the primary method to make sure anyone who uses one of the UAFS computer lab machines, but I am happy to help you set up your personal machines and walk through these other methods!

THE GITHUB FLOW

guides.github.com/introduction/flow

GIT TERMS

Repository - The entire project: History, code and all.

Commit - A set of changes (add/delete/revisions) to the project

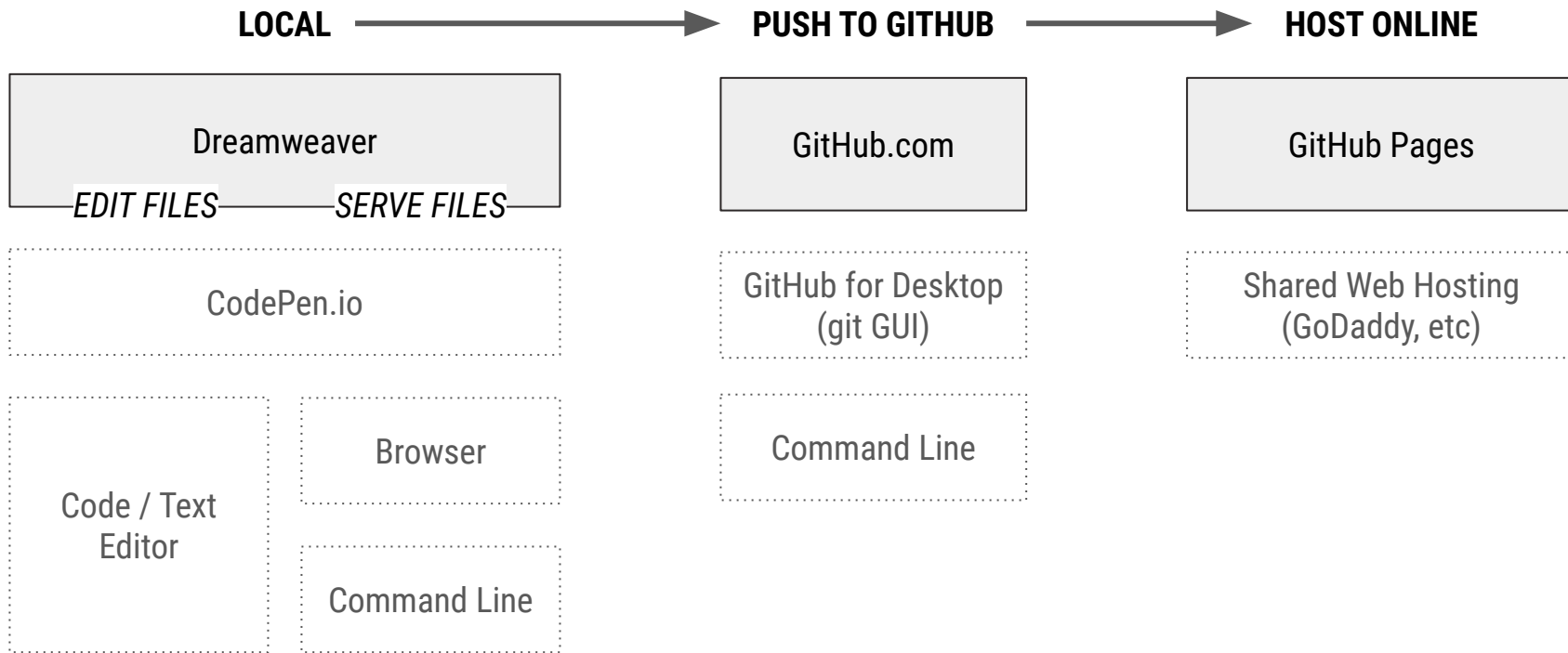Local - On your machine

Remote - In the cloud / internet

Branch - A copy of the code base inside the git repository

main/master branch - The root branch of a git project

Fork - A copy of the git repository

See more terms at [GitHub Glossary](#)

OUR OFFICIAL HTML WORKFLOW

LOCAL ➝ **PUSH TO GITHUB** ➝ **HOST ONLINE**

Dreamweaver

EDIT FILES   *SERVE FILES*

CodePen.io

Code / Text Editor	Browser
	Command Line

GitHub.com

GitHub for Desktop (git GUI)

Command Line

GitHub Pages

Shared Web Hosting (GoDaddy, etc)

WORKFLOW DEMO (A02+A03)

WHAT IS RESPONSIVE DESIGN (RWD)?

RESPONSIVE WEB DESIGN

Responsive web design (RWD) is an approach to web design that makes web pages render well on a variety of devices and window or screen sizes from minimum to maximum display size.

More than half of all website traffic is from a mobile device.

CSS
MEDIA
QUERIES

MEDIA QUERIES

The `@media` rule, first introduced in CSS2, made it possible to define different style rules for different media types.

Media queries in CSS3 extended the CSS2 media types idea: Instead of looking for a type of device, they look at the capability of the device.

Media queries can be used to check many things, such as:

- width and height of the viewport
- width and height of the device
- orientation (is the tablet/phone in landscape or portrait mode?)
- resolution

MEDIA SYNTAX

A media query is composed of an optional **media type** and any number of **media feature** expressions. Multiple queries can be combined in various ways by using **logical operators**. Media queries are case-insensitive.

Media types describe the general category of a device.

Media features describe specific characteristics of the user agent, output device, or environment.

The **logical operators** `not`, `and`, and `only` can be used to compose a complex media query. You can also combine multiple media queries into a single rule by separating them with commas.

EXAMPLE

Media Type Logical Operator Media Feature

```
@media screen and (min-width: 600px) {
    body {
        background: red;
    }
}
```

MOBILE-FIRST APPROACH AND BREAKPOINTS

Mobile First means designing for mobile before designing for desktop or any other device (This will make the page display faster on smaller devices).

The points at which a media query is introduced are known as **breakpoints**.

Common breakpoints:

- 320px – 480px: Mobile devices
- 481px – 767px: Large phones, small tablets
- 768px – 1024px: iPads, Large Tablets, Small screens, laptops
- 1025px – 1200px: Desktops, large screens
- 1201px and more – Extra large screens, TV

VIEWPORT META TAG

The viewport meta tag exists as a way control how mobile browsers render content.

This is needed because by default, most mobile browsers lie about their viewport width.

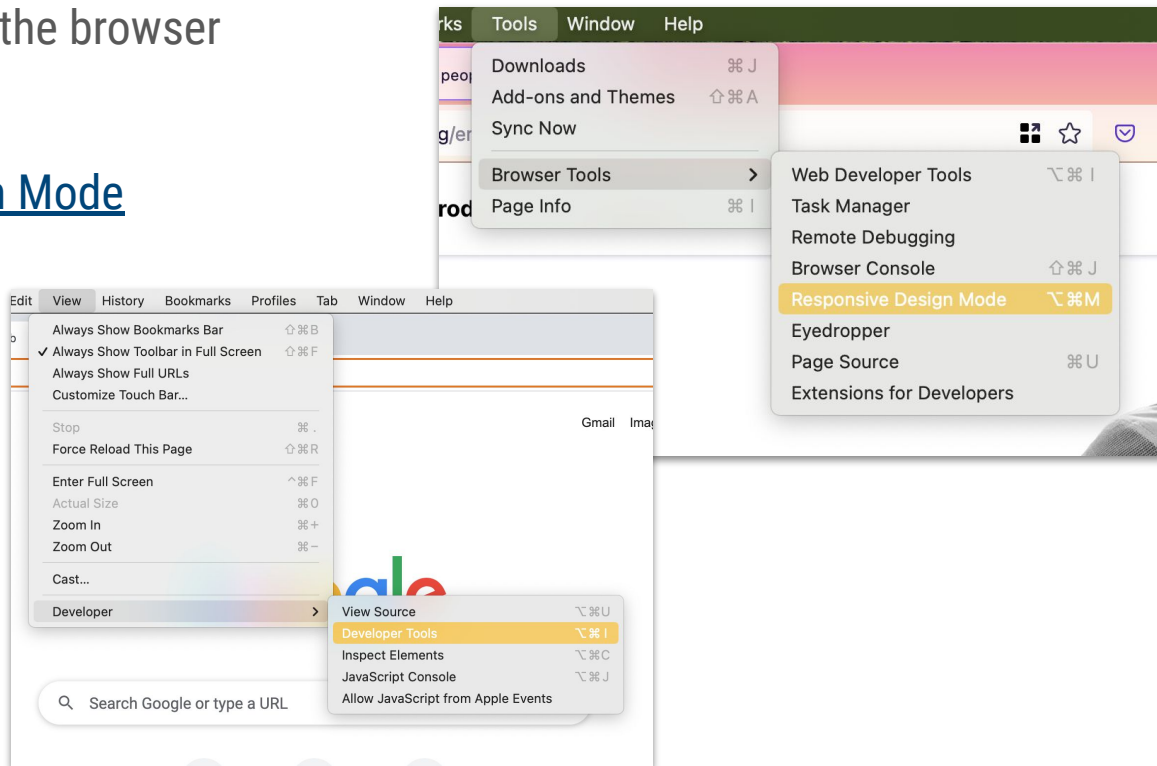The **width** property controls the size of the viewport.

The **initial-scale** property controls the zoom level when the page is first loaded.

```
<meta name="viewport" content="width=device-width,initial-scale=1">
```

RESPONSIVE TESTING

You can use developer tools in the browser to simulate different devices.

- [Firefox Responsive Design Mode](#)
- [Chrome Device Mode](#)

MEDIA QUERY
LIVE DEMO

GITHUB HOMEWORK

- Complete the following GitHub guides:
    - Read https://guides.github.com/introduction/flow/
    - Complete the Hello World activity and submit the repo to me.
      https://guides.github.com/activities/hello-world/
- Due Tuesday, Sept 21, 5:00 PM

ASSIGNMENT 03.1: BAREBONES HTML SITE, STYLED FOR MOBILE

- Continue with your A03 Poem Styled repo.
- Revise the CSS to be mobile-first and use media queries to style the desktop layout.
  - Be sure to have distinct design differences between the two breakpoints and add a *viewport meta tag*.
- Use GitHub Pages to host your project
- First Draft: Wednesday, Sept 22, 5:00 PM
- Final: Due Friday, Sept 24, Beginning of class