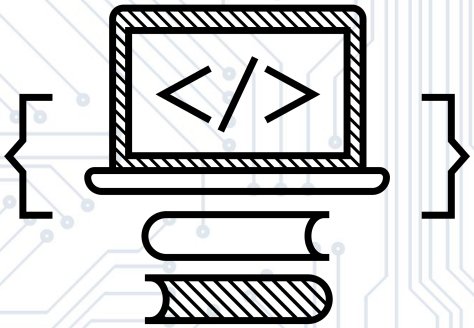
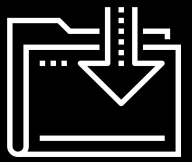


GitHub Collaboration and Project Week

Web Development Boot Camp

Lesson 4.3



Project Week Overview

You Made It to Project Week!

Project Week at a Glance

Friday, 7/12:

- Divide into groups.
- Begin researching APIs.
- Outline project ideas.
- Submit project proposal for approval.
- Begin initial design work.

Monday, 7/15:

- Dive in to project development.
- Work closely with instructors and TAs.

Tuesday, 7/16:

- Continue project development.

Project Week at a Glance

Wednesday, 7/17:

Continue project development.

Thursday, 7/18:

Continue project development.

Prepare for presentations.

Friday, 7/19:

Give presentations!

The Great Push

- Take Project Week seriously.
- Use Project Week as an opportunity to push yourself and prove what you know.
- Because you DO know!

Project Teams

Group 1	Group 2	Group 3
Matthew Dague Jennifer Kwon Joshua Ellsworth	Justin Shannon Danit Lentz Jessica Finlayson Manuel Gonzalez	Saakshi Gundecha Cameron Brown Ryan Lacon Daniel Beccaria

Group 4	Group 5	Group 6
Robert Mcdonough Ying Huang Alexander Shumonov	Greg Zahora Pamir Jantaev Lucas Foulkes Aida Yrysbekova	Nicholas Marcionese Sarfulah Stewart James Latta

Project Requirements

- Use at least two APIs.
- Use AJAX to pull data.
- Use at least one new library or technology that we haven't discussed.
- Create a polished front end/UI .
- Meet good quality coding standards (indentation, scoping, naming, etc.).
- Do NOT use alerts, confirms, or prompts (look into *modals*).
- Incorporate some sort of repeating element (table, columns, etc.).
- Use Bootstrap or an alternative CSS framework.
- Deploy your site to GitHub Pages.
- Include user input validation.

Bonus

Utilize Firebase for persistent data storage.

Make your site mobile responsive.

Use an alternative CSS framework such as Materialize.

Presentation Requirements

You will be responsible for preparing a formal, 10-minute presentation that covers the following:

- The overall concept of your application
- Your motivation for developing the application
- Your design process
- Technologies used (and a brief description of how they work)
- A demonstration of the application's functionality
- Directions for future development
- Treat the presentation seriously!
- Sometimes, talking intelligently about tech > doing tech.

Metrics

Project Metrics

Your project will be evaluated on the following:

- Concept
- Design
- Functionality
- Collaboration
- Presentation

Awards

Projects will receive awards in the following areas:

- Most Awe-Inspiring
- Most Useful
- Most Creative
- Best Use of Tech
- Best UI/UX
- Most Hilarious
- Most Disruptive
- Most Socially Conscious

API Suggestions

API Suggestions

Stick to APIs that do all of the following:

- Allow cross-origin resource sharing (CORS)
- Require simple or no authentication
- Return a JSON response
- Are well documented

API Suggestions

Find a collective list (updated daily!) of free APIs for use in software and web development here: public-apis

Spotify	Pinterest
Reddit	Google
YouTube	Tumblr
LinkedIn	OpenStreetMap
SoundCloud	Giphy
Wikipedia	BitCoinCharts
Flickr	Stack Exchange

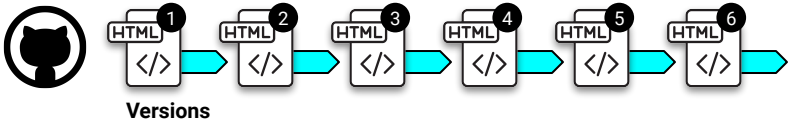
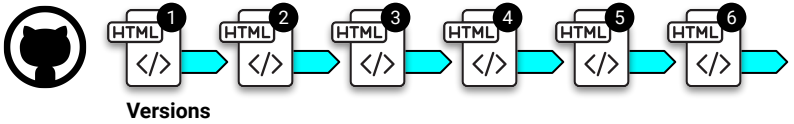
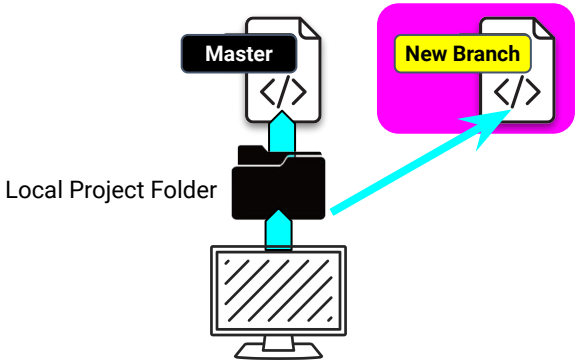
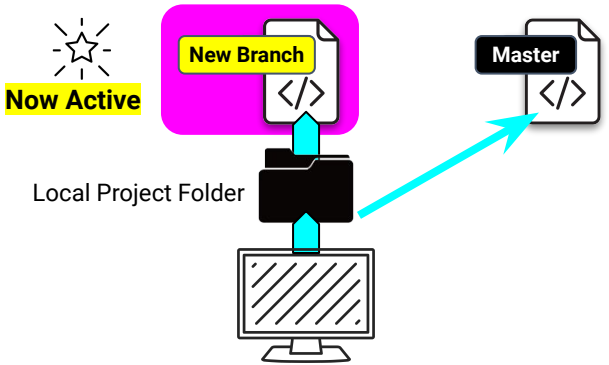
Tools

Collaboration Is Critical!

Steering a project with remote developers can be challenging.
Consider using the following tools.

GitHub Pull Requests

GitHub pull requests are a great way to “combine” code when multiple users are working on the same files. We’ll show you how to use this feature in the next class.

GitHub		
COMMAND	**Git Branch** `<branchname>` Creates a local branch, or alternative version of code. However, the "master" branch is still the active branch.	**Git Checkout** `<branchname>` Switches the active branch to the alternative branch. Local code files and changes will be saved to this branch.
YOUR COMPUTER		

GitHub Issues are a great way to keep track of bugs, feature requests, and more.

GitHub Projects is a great project management tool for creating to-do lists and communicating updates.

Example Project Ideas

Example Project Ideas

Event Searcher:

- Users type in the name of their favorite sports team.
- Using the SeatGeek API, your web application points users to the time and location of the team's next game.
- The web application also provides users with an eBay link to purchase memorabilia associated with the team.

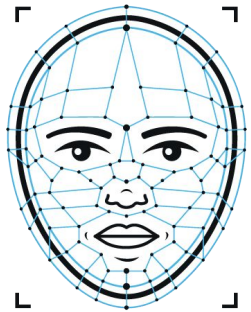
Example Project Ideas

UN Data API:

- Use the unofficial UN Data API to search a user-specified country's health records.
- Use a secondary data source (Google Maps, Flickr, YouTube, etc.) to provide additional context or data.
- Examples: per capita government expenditures on health; number of physicians; deaths due to HIV, malaria, etc.; low-birth-weight newborns.

Example Project Ideas

Facial Recognition:



Use the Face++ API.

Allow users to provide a link to a facial image, and then provide viewers with information about the image's gender, race, age, and whether they are wearing glasses.

Or just do your own thing.

Be creative! Be ambitious!

Today’s Focus

Today’s Project Checklist

- Brainstorm possible project ideas.
- Begin API research.
- Create an initial draft and sketch of the design.
- Create a short (1 page) proposal that contains the following:
  - Project title
  - Team members
  - Project description
  - Sketch of the design
  - APIs to be used
  - Rough breakdown of tasks

Questions?