



GitHub Collaboration and Project Week

Web Development Boot Camp
Lesson 8.1



Project Week Overview

You Made It to Project Week!



Project Week at a Glance: This Week

Day 1:



Divide into groups.



Begin researching APIs.



Outline project ideas.



Submit project proposal for approval.



Begin initial design work.

Day 2:



Dive in to project development.



Work closely with instructors and TAs.

Day 3:



Continue project development.

Project Week at a Glance: Next Week

Day 4:



Continue project development.

Day 5:



Continue project development.



Prepare for presentations.

Day 6:



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 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.

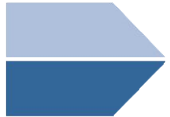
Metrics

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

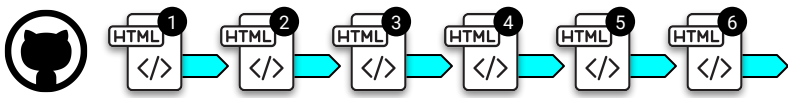
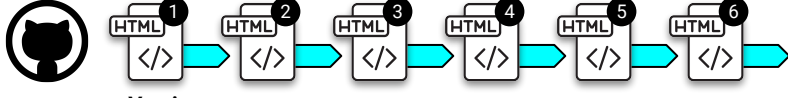
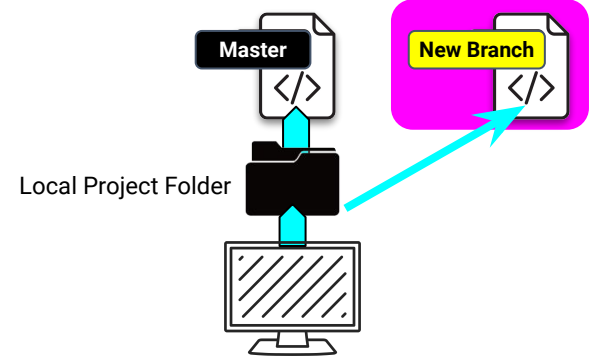
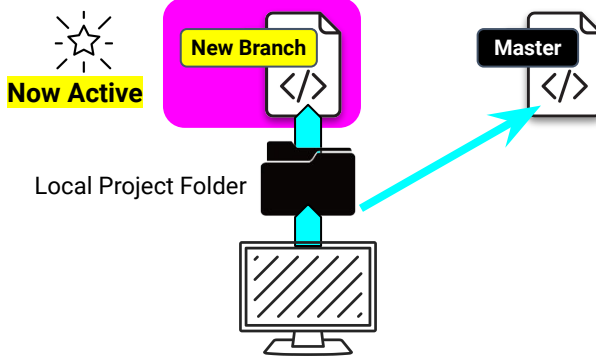
Collaboration Is Critical!

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 |  <p>Versions</p> |  <p>Versions</p> |
| COMMAND | Git Branch <code><branchname></code> Creates a local branch, or alternative version of code. However, the "master" branch is still the active branch. | Git Checkout <code><branchname></code> Switches the active branch to the alternative branch. Local code files and changes will be saved to this branch. |
| YOUR COMPUTER |  <p>Local Project Folder</p> |  <p>Now Active</p> <p>Local Project Folder</p> |

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.



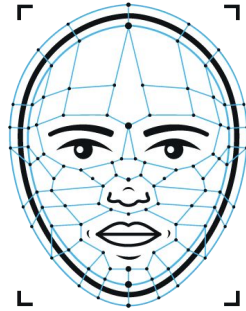
Use a secondary data source (Google Maps, Flickr, YouTube, etc.) to provide additional context or data.



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



Sketch of the design



Team members



APIs to be used



Project description



Rough breakdown of tasks



Questions?