

Game Time: Project Week

The Coding Bootcamp

Project Week Overview

You made it!!!



Project Week! (This Week)

Today's Class:

- Divide into groups
- Begin researching APIs
- Outline project ideas
- Submit Project Proposal for Approval
- Initial Design work

Next Class:

- Hardcore Development
- Instructor + TA Workshops

Rest of the Week:

- Hardcore Development



Project Week

Today (W)

- Planning and API Research

This Week (Th/F)

- Hardcore Development

Next Week (M/T):

- Hardcore Development

Next Week (W):

- Presentations!
- Intro to Node

Next Week (Th/F):

- Node & NPM

The Great Push

- ***Be serious about project week!***
- Use this as an opportunity to push yourself and prove what you know.
- Because ***YOU KNOW YOUR STUFF!***.

Teams

Groups

Team #1

Carmen Collins, Brittani Slimp,
Jennifer Bazalak, Suzanne Rashka,
Stephen Ridings

Team #2

John Kim, Selma Delgado
Eric Galassi, Michael Guillen
Amanda Kramer

Team #3

Thomas Behrenbeck, Adnan Yousef
Chase Rabon, Miles Benovic
Jared Walker

Team #4

Carla Thurston, Alejandro Gonzalez
Evelyn Gonzalez, Austin Walker
Trang Do

Team #5

Travis Copeland, Dylan Marini,
Kenneth Fickling, Jyoti Kumari
Mason Vickery

Team #6

Tin Dang, Lucas Hannan,
Thomas Milnes, Abraham Ibarra
Sean Angle

Team #7

Adams Lowe, Melissa Womack
Michael Soto, Terry Williams
Jason Kirker

Team #8

Sanjan Tripathi, Spencer Vigil
Momin Amad, Nanette Labrada

Task

Coding Requirements

- Must use at least two APIs
- Must use AJAX to pull data
- Must utilize at least one new library or technology that we haven't discussed
- Must have a polished frontend / UI
- Must meet good quality coding standards (indentation, scoping, naming)
- Must NOT use alerts, confirms, or prompts (look into *modals!*)
- Must have some sort of repeating element (table, columns, etc)
- Must use Bootstrap or Alternative CSS Framework
- Must be Deployed (Github Pages, Heroku or Firebase)
- Must have User Input Validation

Coding – Nice To Haves

- Utilize Firebase for Persistent Data Storage (Consider this basically a requirement).
- Mobile Responsive
- Use an alternative CSS framework like Materialize

Presentation Requirement

- You will also be responsible for preparing a 10 minute presentation.
- This will be a formal presentation.
- One in which you explain in detail:
 - Your overall application's concept
 - The motivation for its development
 - Your design process
 - The technologies you used (and briefly how they work)
 - A demonstration of its functionality
 - Directions for future development
- Treat the presentation seriously!
- Talking intelligently about tech > doing tech sometimes.

Be Glam for the Camera

- All presentations will be recorded...
- So treat it seriously!
- These can be great portfolio pieces if you invest the time.

Metrics

Metrics

- **Concept**
- **Design**
- **Functionality**
- **Collaboration**
- **Presentation**

Awards Yay!

- **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:

- Allows CORS
- Simple or no authentication
- JSON response returned
- Well documented

API Suggestions

API List

Name	Allows CORS	Authentication Method	Authentication Required
Spotify Web API	yes	oauth	yes/no
reddit API	yes	auth	yes
Youtube API	yes	API key	yes/no
LinkedIn	yes	API key	yes
Soundcloud	yes	API key	yes
Wikipedia	yes	n/a	n/a
Rotten Tomatoes	yes	API key	yes
Flickr	yes	oauth	yes
Pinterest API	yes	oauth	yes
Google Custom Search API	yes	API key	yes
Tumblr API	yes	outh	yes
Marvel API	yes	API key	yes
GeoNames API	yes	username	yes
OMDB	yes	n/a	n/a
Flickr	no	ID	yes

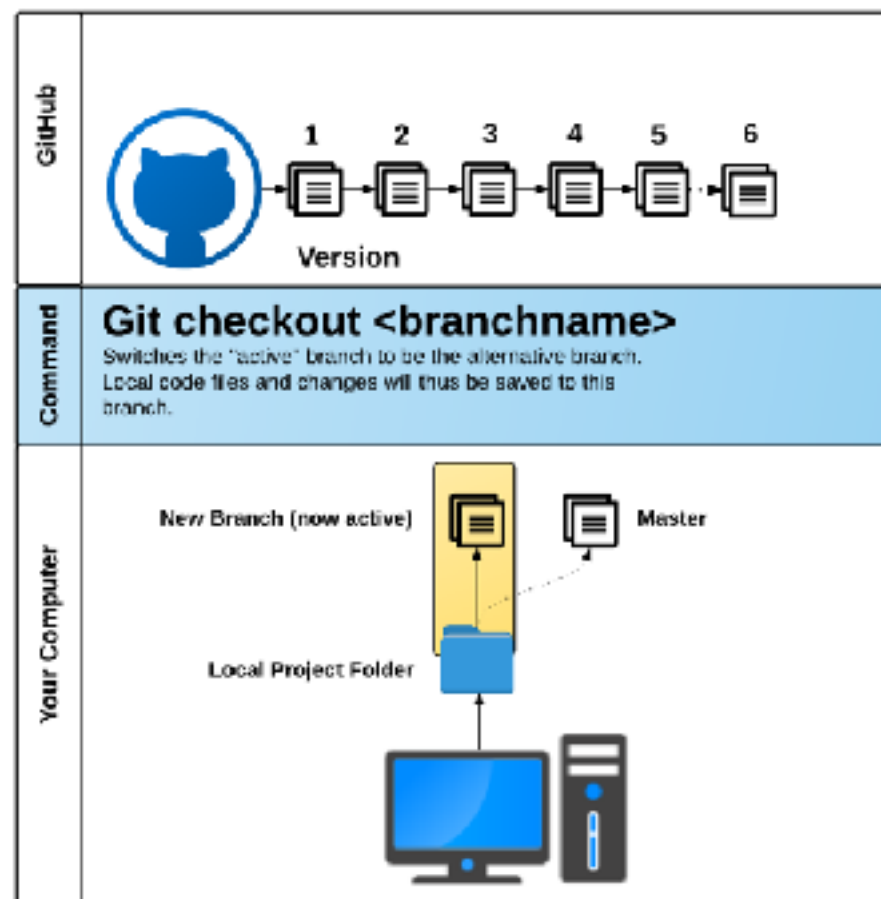
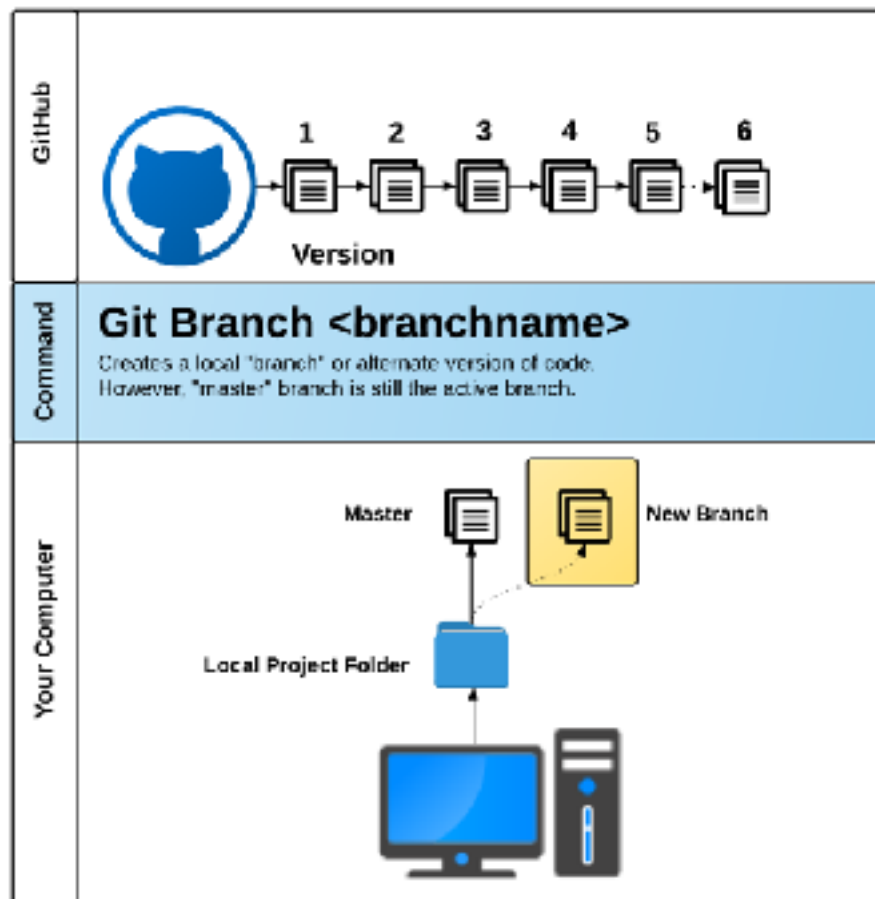
Open Street Maps	yes	n/a	no
GeoTrack.us	yes	n/a	no
Signal	yes	API key	yes
Google Maps	yes	API key	yes
Giphy	yes	API key	yes
JSFiddle	yes	n/a	n/a
Bitcoin Charts	yes	n/a	n/a
StockExchange API	yes	oauth	yes
Pro Publica NonProfit API	Yes?	n/a	no
U.S. City & County Web Data API	Yes	n/a	no
UN Data API	Yes	API key	yes
Facebook API	Yes	API Key	Yes
MusicXMatch	Yes	API Key	Yes
Words API	Yes	Token	No

Tools

Collaboration is Critical!

- Steering a project with remote developers like this one 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.

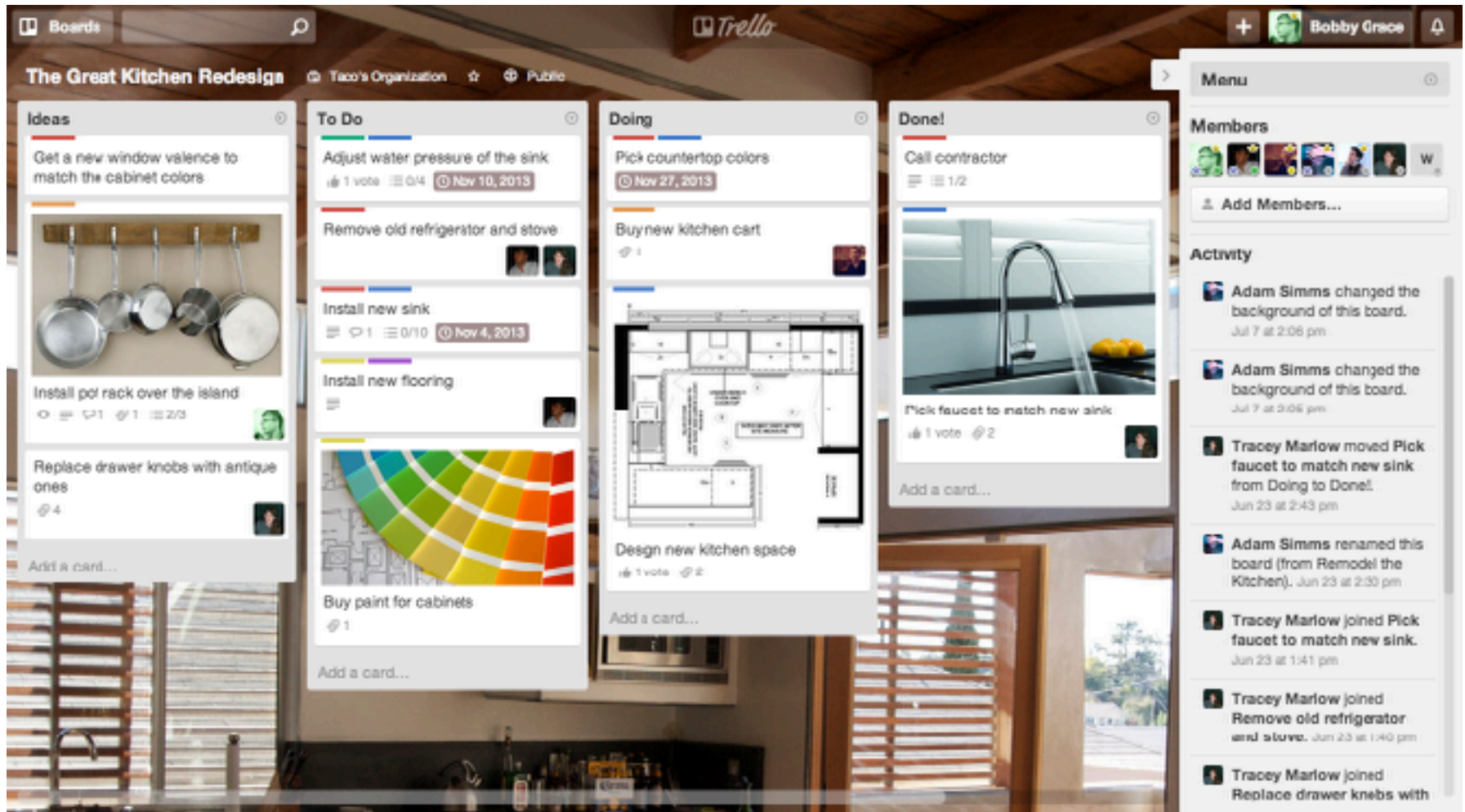
GitHub Issues

The screenshot displays the GitHub Issues interface for the Bootstrap 4 repository. At the top, there are navigation tabs for 'Issues', 'Pull requests', 'Labels', and 'Milestones'. A search bar with the text 'is:open is:issue' and a 'New Issue' button are also present. Below the navigation bar, a summary shows '104 Open' and '9,660 Closed' issues. The main content area lists several open issues, each with a title, status (confirmed), labels (css, js, docs), and a comment count. The issues listed are:

- .form-group-sm .form-group-lg shrink textarea** (confirmed, css) - 4 comments
- Tooltip unnecessarily breaks into multiple lines when positioned to the right** (confirmed, js) - 0 comments
- Tooltip Arrows in Modal example facing wrong way** (css) - 6 comments
- Table improvement** (css) - 0 comments
- docs/dist files** (docs) - 7 comments
- Potential solution to #4647** (js) - 4 comments
- Bootstrap site: right-hand navigation text becomes rasterized after scrolling** (css, docs) - 4 comments
- Dropdown toggle requires two clicks** (js) - 1 comment

- GitHub Issues are a great way to keep track of bugs, feature requests, etc.

Trello



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

Example Project Ideas

Event Searcher

- Users type in the name of their favorite sporting team.
- Then using the SeatGeek API, your web application points them to the next game and location where the team is playing.
- The web application also provides them a link to Ebay where they can purchase memorabilia associated with the team.



UN Data API

- Use the Unofficial UN Data API to search a user specified country's health records.
- Then use a secondary data source (Google Maps, Flickr, YouTube, etc.) to provide additional context or data.
- Examples: Per Capita Govt Expenditures on Health, # of Physicians, Deaths due to HIV, Malaria Cases etc, low birth weight newborns



Facial Recognition

- Use the Face++ API
- Allow users to provide a URL link to a facial image then provide viewers with information on the image's gender, race, whether they are wearing glasses, and their age
- Use Firebase to update ALL users of the site about the current search



Or...

***Just do your own thing.
Be creative! Be ambitious!***

Today's Focus

By End of Day - Today

- Brainstorm possible ideas
- Begin API Research
- Create an initial draft / sketch of the final design
- Create a short 1 page proposal listing out each of the following:
 - Project Title
 - Team Members
 - Project Description
 - Sketch of Final Product
 - APIs to be Used
 - Rough Breakdown of Tasks

Questions
