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

Wednesday/Thursday Class:
- Hardcore Development

Project Week (Next Week)

Saturday Class:
•Hardcore Development

Next Week (M/W):
•Hardcore Development
•Presentation Prep

Wednesday/Thursday Class:
•Presentations!

- ***Be serious about project week!***

- Use this as an opportunity to push yourself and prove what you know.

- Because you ***DO KNOW*** shiz.

Teams

Task

Coding Requirements

•Must use at least <u>two APIs</u>

•Must use <u>AJAX to pull data</u>

•Must utilize at least one <u>new library or technology</u> that we haven't discussed

•Must have a <u>polished frontend / UI</u>

•Must meet <u>good quality coding standards</u> (indentation, scoping, naming)

•Must <u>NOT use alerts, confirms, or prompts</u> (look into *modals!)*

•Must have some sort of <u>repeating element</u> (table, columns, etc)

•Must use <u>Bootstrap or Alternative CSS Framework</u>

•Must be <u>Deployed</u> (Github Pages)

•Must have <u>User Input Validation</u>

Coding – Nice To Haves

•**Utilize Firebase for <u>Persistent Data Storage</u>** (Consider this **<u>basically a requirement</u>**).

•**Mobile Responsive**

•**Use an alternative CSS framework like Materialize**

Presentation Requirement

•You will also be responsible for preparing a <u>10 minute presentation.</u>

•<u>This will be a formal presentation.</u>

•One in which you explain in detail:

oYour overall application's concept

oThe motivation for its development

oYour design process

oThe technologies you used (and briefly how they work)

oA demonstration of its functionality

oDirections for future development

•Treat the presentation seriously!

•Talking intelligently about tech > doing tech sometimes.

Metrics

- Concept

- Design

- Functionality

- Collaboration

- Presentation

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
Zillow	no	ID	yes

Name	Allows CORS	Authentication Method	Authentication Required
Open Street Maps	yes	n/a	no
GovTrack.us	yes	n/a	no
Sqoot	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
StackExchange API	yes	oauth	yes
ProPublica NonProfit API	Yes?	n/a	no
U.S. City & County Web Data API	Yes	n/a	no
UN Data API	Yes	API key	yes
Face++ API	Yes	API Key	Yes
MusiXMatch	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
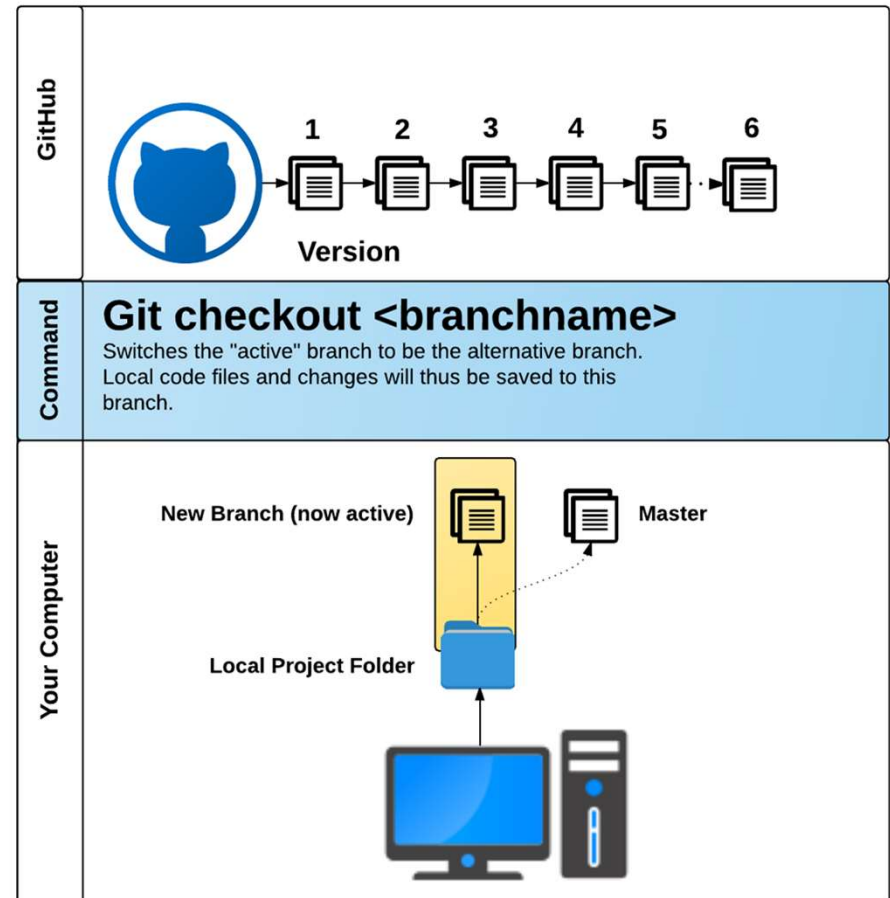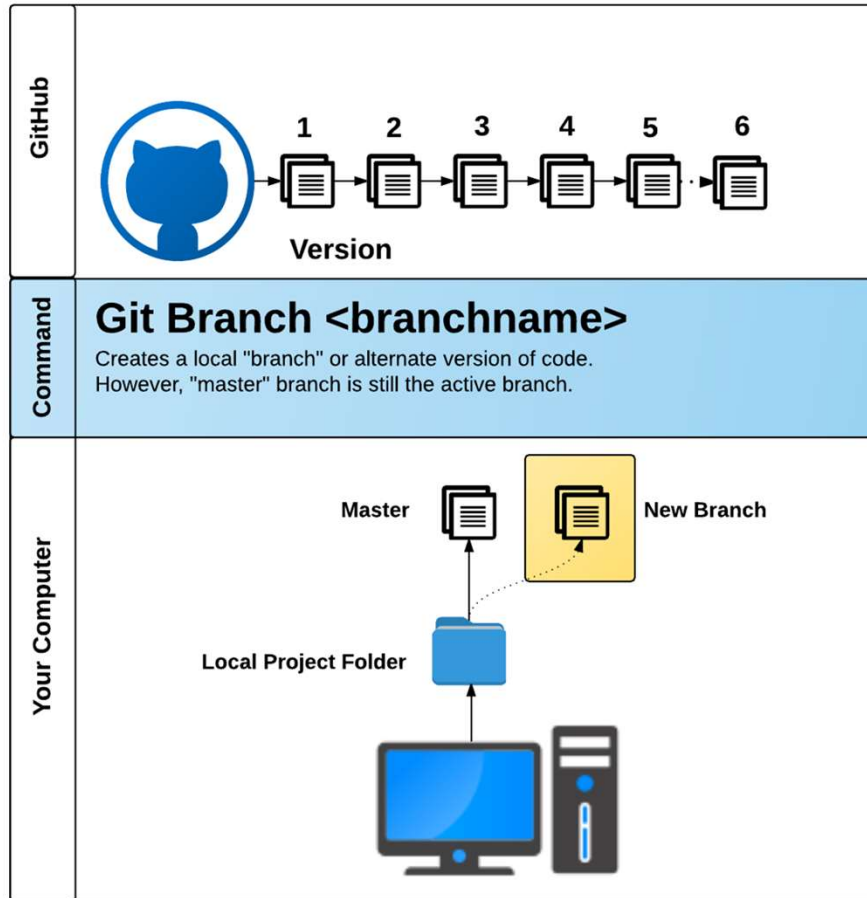
- GitHub Pull Requests are a great way to "combine" code when multiple users are working on the same files.

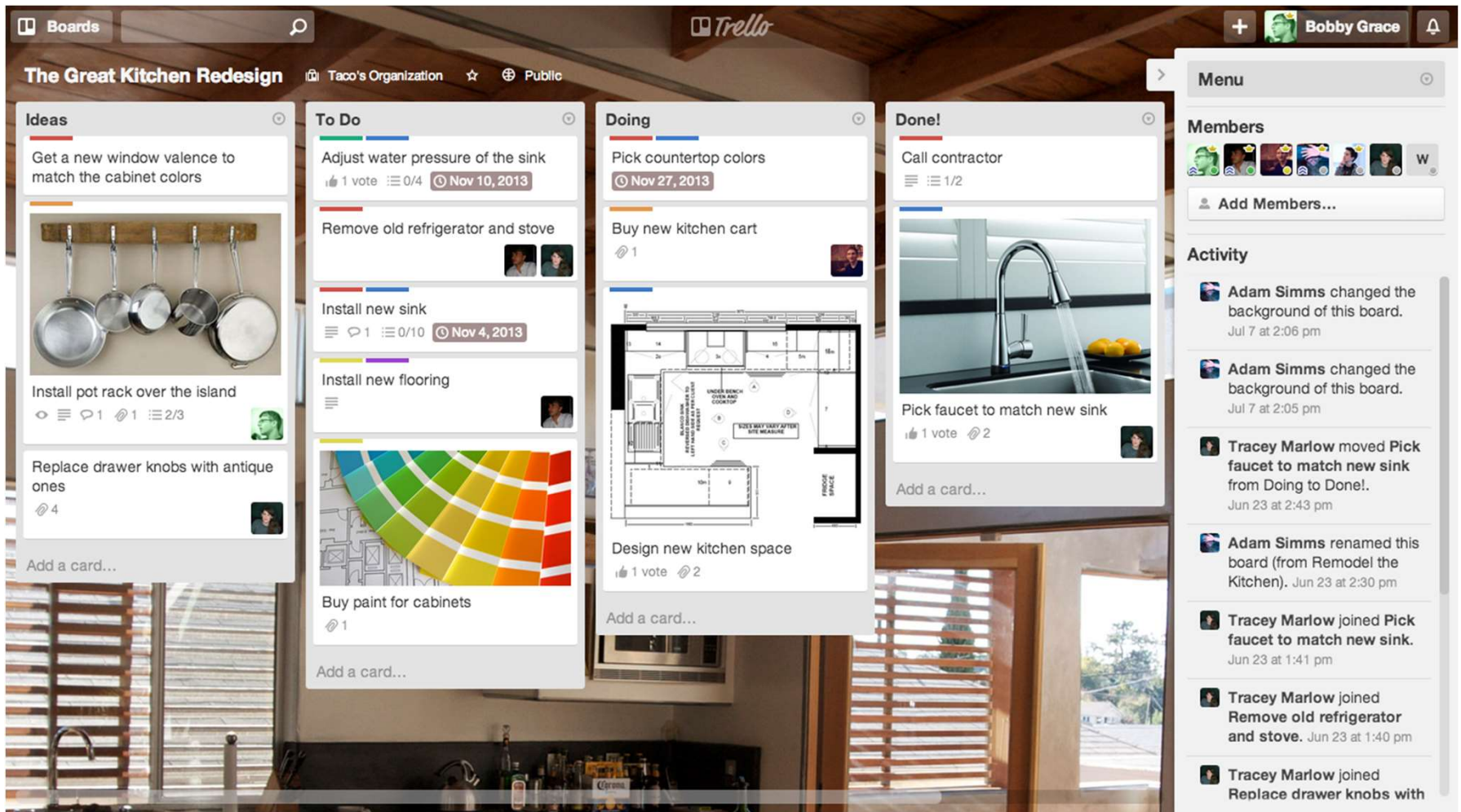We'll show you how to use this feature in class.

GitHub Issues

• 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.

SeatGeek

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

UN Data API

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:**

  o **Project Title**

  o **Team Members**

  o **Project Description**

  o **Sketch of Final Product**

  o **APIs to be Used**

  o **Rough Breakdown of Tasks**

Questions