

Day ??

It's Game Time: Project Week

Rutgers Coding Bootcamp | March 14, 2016

Project Week Overview

Yay!

You made it!!!

Project Week

Today's Class:

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

Next Class:

- Hardcore Development
- Presentation prep

Saturday Class:

- Group Presentations
- Pizzzzzza!
- Awards!!

The Great Push

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

Teams

Group Teams

1 – Brian, Adam, Shawn, Wojciech

2 – Dhaval, Dan, Greg, Jeremy

3 – Raghav, Anthony, Maike, Chris

4 – James Kim, Kevin, Robert,
Eugene

5 – Waverly, James D, Bryant, Al

6 – Mariah, Leslie, Aaron, Eric

Task

*To build some **awesome shiz.***

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 (Heroku or Firebase)
- Must have User Input Validation

Coding – Nice To Haves

- **Utilize Firebase for Persistent Data Storage** (Actually I want this. So its basically a requirement)
- **Mobile Responsive**
- **Use an alternative CSS framework like Material or Foundation**

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.

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**

Past Projects

Let's take a moment to see what the last class built...

Last Class

BitCurrent:

<http://bitcurrents.herokuapp.com/>

FaceCurrent:

<http://face-check.herokuapp.com/>

ToGoList:

<http://to-go-list.herokuapp.com/>

GymTriton:

<http://gymtrition.herokuapp.com/>

OurPets:

<https://showusapet.herokuapp.com/>

Uh?

<https://immense-forest-3648.herokuapp.com/>

Yeah. So I think we can crush them.

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	n/a	no
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	n/a	n/a
pinterest api	yes	n/a	n/a
google search api	yes	n/a	n/a
tumblr api	yes	n/a	n/a
marvel api	yes	api key	yes
geonames api	yes	n/a	n/a
OMDB	yes	n/a	n/a
Zillow	no	n/a	n/a
Open Street Maps	yes	n/a	n/a
GovTrack.us	yes	n/a	n/a
Sqoot	yes	api key	yes
GoogleMaps	yes	n/a	n/a
Giphy	yes	api key	yes
JSFiddle	yes	n/a	n/a
Bitcoin Charts	yes	n/a	n/a

StackOverflow	yes	api key	yes
ProPublica NonProfit API	Yes?	n/a	no
AssessmentNJ Counties	Yes	n/a	no
AssessmentNJ Towns	Yes	n/a	no
AssessmentNJ Street Addresses	Yes	n/a	no
UN Data API (https://www.undata-api.org/docs)	Yes	api key	yes
FaceFacePlus API	Yes	API Key	Yes
MusiXMatch (Lyrics)	Yes	API Key	Yes
Words API (https://www.wordsapi.com/)	Yes	Token	No

<https://news.ycombinator.com/item?id=7546040>

<http://www.programmableweb.com/apis/directory>

get access to a REST console for all different API's: <https://apigee.com/console/linkedin?u=0>

spotify example (no auth): <http://www.codernaut.co.uk/wp-content/themes/codernaut/demos/simple-spotify-song-search/>

reddit example:

<http://jsfiddle.net/danielvassallo87/6k2j5yqL/>

<http://speckyboy.com/2014/01/22/building-simple-reddit-api-webapp-using-jquery/>

soundcloud example:

<http://jsfiddle.net/tobiasbeuving/26pHX/5/>

wikipedia example:

<http://jsfiddle.net/gautamadude/hmjjg/1/>

rotten tomatoes example:

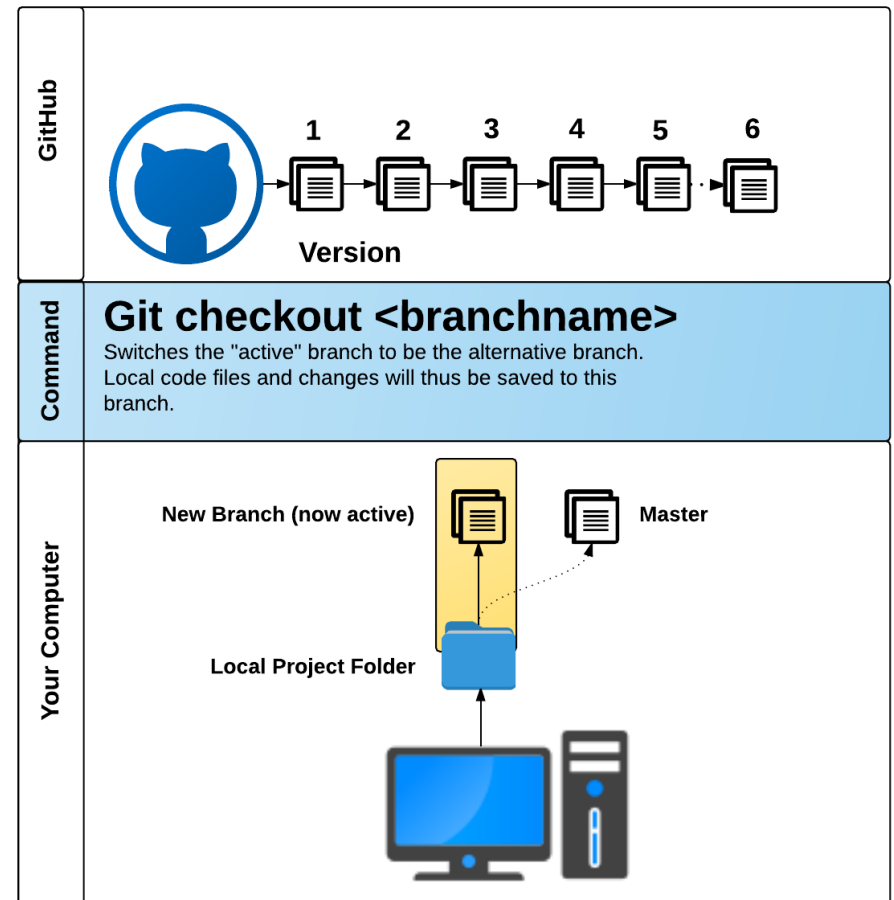
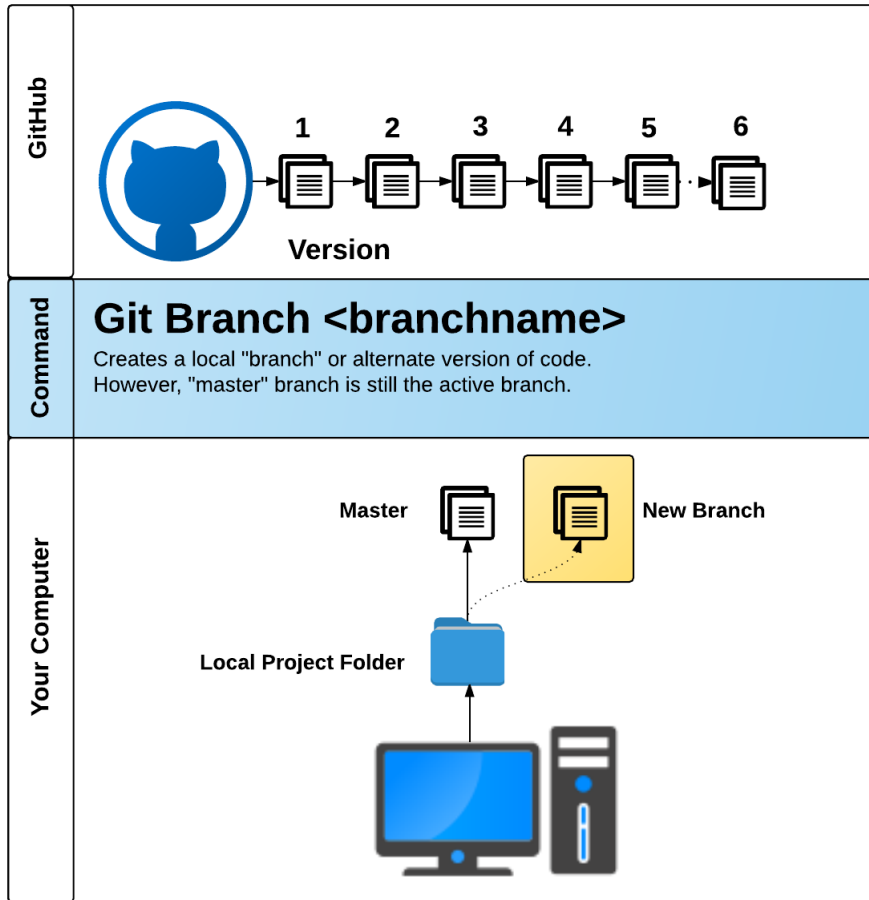
<http://developer.rottentomatoes.com/docs/read/json/v10/examples>

pinterest api example:

<http://jsfiddle.net/arunjohny/78PHM/>

Tools

Time to Get Git...



Git Collaboration + Issues

Issues

Pull requests

Labels

Milestones

Filters is:open is:issue

New issue

104 Open 9,660 Closed

Author Labels Milestones Assignee Sort

.form-group-sm .form-group-lg shrink textarea **confirmed** **css** 4

#13989 opened 11 hours ago by limitstudios v3.2.1

Tooltip unnecessarily breaks into multiple lines when positioned to the right **confirmed** **js** 0

#13987 opened 15 hours ago by hnrch02 v3.2.1

Tooltip Arrows in Modal example facing wrong way **css** 6

#13981 opened a day ago by SDCore

Table improvement **css** 0

#13978 opened a day ago by Tjoosten

docs/dist files **docs** 7

#13977 opened 2 days ago by XhmikosR v3.2.1

Potential solution to #4647 **js** 4

#13976 opened 2 days ago by julioarmandof

Bootstrap site: right-hand navigation text becomes rasterized after scrolling **css** **docs** 4

#13974 opened 2 days ago by mg1075 v3.2.1

Dropdown toggle requires two clicks **js** 1

#13970 opened 3 days ago by Kieran

Trello

The image shows a Trello board with the following columns and cards:

- Inbox**: 2 cards. The first card has a checklist with 3 items. The second card has a checklist with 2 items. Both cards have an "Add a card..." button at the bottom.
- Dec 2012 Release**: 8 cards. The first card has a checklist with 3 items. The second card has a checklist with 2 items. The third card has a checklist with 1 item. The fourth card has a checklist with 1 item. The fifth card has a checklist with 1 item. The sixth card has a checklist with 1 item. The seventh card has a checklist with 1 item. The eighth card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.
- On Deck**: 3 cards. The first card has a checklist with 1 item. The second card has a checklist with 1 item. The third card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.
- Doing**: 3 cards. The first card has a checklist with 1 item. The second card has a checklist with 1 item. The third card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.
- Done**: 1 card. The card has a checklist with 1 item. It has an "Add a card..." button at the bottom.
- Jan 2013 Release**: 8 cards. The first card has a checklist with 1 item. The second card has a checklist with 1 item. The third card has a checklist with 1 item. The fourth card has a checklist with 1 item. The fifth card has a checklist with 1 item. The sixth card has a checklist with 1 item. The seventh card has a checklist with 1 item. The eighth card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.
- General Backlog**: 8 cards. The first card has a checklist with 1 item. The second card has a checklist with 1 item. The third card has a checklist with 1 item. The fourth card has a checklist with 1 item. The fifth card has a checklist with 1 item. The sixth card has a checklist with 1 item. The seventh card has a checklist with 1 item. The eighth card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.
- Future**: 8 cards. The first card has a checklist with 1 item. The second card has a checklist with 1 item. The third card has a checklist with 1 item. The fourth card has a checklist with 1 item. The fifth card has a checklist with 1 item. The sixth card has a checklist with 1 item. The seventh card has a checklist with 1 item. The eighth card has a checklist with 1 item. Each card has an "Add a card..." button at the bottom.

Project Ideas

- Utilizes the Github API to create a new frontend for Github
- Hover over commit message words to get definitions (utilizing WordsAPI)
- Search Giphy using commit messages to return animated GIF's

Student / Employer Site

- Utilize Firebase to show a list of students and employers (think social network)
- Employers can view student pages and pull in information from Github API
- Rutgers Coding Bootcamp would use this!

Deal Searcher

- Users type in a street address
- Address is Geocoded via Google Maps API
- Deals are searched (via Sqoot API) in that vicinity
- Flickr Images pertaining to that deal are shown

- Use the Marvel API to let the user search for a story / character / concept
- Cross correlate that with Flickr images of that concept
- Search the OMDB to see if any movies / shows exist for that character / story

Homework Submission

- Create a new way for your fellow students to submit homework
- Look up their Github Repo automatically when they enter their Github username
- Mark as “done” / “late” via Firebase

UN Data API

- . Use the Unofficial UN Data API to search a user specified country
- . Return relevant data for the users' desire
- . 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

- Use a Finance API in conjunction with the New York Times Article API to observe changes in stock prices against new articles about a company
- Allow users to scan for % changes in companies over 1, 5, 10 day periods

Today's Focus

Today's Focus

- **Brainstorm possible ideas**
- **Begin API Research**
- **Create an initial draft / sketch of the final design**
- **Make sure you know how to use Git Collaboratively. (PRACTICE THIS!!!!)**
- **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
