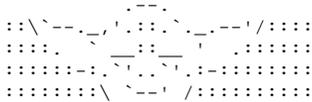


Open Source Web Development Work Group



"Difficult to see. Always in motion is the future.."

"You will find only what you bring in."

"Size matters not. Look at me. Judge me by my size, do you? Hmm? Hmm. And well you should not. For my ally is Open Source, and a powerful ally it is."

Yoda

NOT ACTIVE - 02/05/18

Who:

Web development and communications specialists interested in building community and learning how industry leading open source packages can benefit the USGS in providing scientific information on the web.

Current Activity:

This group is currently being run in a casual "coffee talk" format to facilitate knowledge and culture building among participants. Our goal is to pose new questions, try new technologies, and create an interactive and fun learning experience. A topic is proposed by a different member each month and the group investigates and discusses in the 1hr duration of the meeting.

- Visit the [Monthly Idea Farm](#) to suggest topics
- Explore previous challenges and discussions in the [Community Knowledge Archive](#).

Meetings:

The last Wednesday of every Month at 5pm ET

JOIN BY PHONE 703-648-4848 conf code: 47919#

JOIN Google Hangouts:

https://hangouts.google.com/hangouts/_/doi.gov/ccladino

Submit Discussion Ideas:

Got something you want to discuss, explore, or get feedback on from the group? Use our crowd sourcing app to submit discussion topics to our [monthly idea farm](#)! Membership not required, anyone can participate any time.

Links to Group Resource:

- [GitLab](#)
- [Trello](#)
- Group Lead - Cassandra Ladino (ccladino@usgs.gov)
- Email List: ccladino@usgs.gov, lprivette@usgs.gov, gpetrochenkov@usgs.gov, hvraga@usgs.gov, ssoileau@usgs.gov, dpizzarelli@usgs.gov, joshua_bradley@fws.gov, lhsu@usgs.gov, rfmiller@usgs.gov, gcocks@usgs.gov, llastowka@usgs.gov, emartinez@usgs.gov, jmfee@usgs.gov, mcannister@usgs.gov, bdraper@usgs.gov

Related Activities:

[USGS DevOps Technical Syncs](#)

[Software Dev Cluster](#)

[Open Source GIS](#)

Future ideas for a formal work group...

Since I (Cassandra Ladino - your volunteered organizer) can't do it all, I want to appoint a code cha potentially a CHS cloud champion to help participants with technical details.

Phase 1 - Creating a Common Philosophy (bi weekly - kick off)

- UX Design
 - leading experts in UX philosophies
 - philosophies for different environments
 - What works best for communicating science

- User requirements
 - why this is important
 - how to keep an open mind during this phase
 - how can we bridge communication gaps with scientists
- Open Source Code/ Software Release Policies
 - Important Resources (code.gov, IM, Fed Source Code)
 - Fed Source Code 3 steps
 - Code Strategies - Function vs Object Oriented
 - Unit Testing
 - Bitbucket/ Github
- Development styles - agile, scrum
 - Leading experts, good discussions blogs
 - What are the challenges to implementing these models in USGS? funding model, etc.
- Social media
 - The social world, communicating science on social media
 - How can this influence what and how we design apps
- Deployment strategies and app life spans
 - Not every app needs to live in perpetuity, how can we make USGS app development more responsive events and contemporary social topics?
- USGS IT Policies
 - Provide information resources
- Costs strategies in the cloud
 - Point to some industry studies and examples

Phase 2 - "Hands On" Core Learning (switch to monthly)

- **Set Up**
 - Cloud environment (maybe work with CHS to set up sandbox for the group?)
 - Cool dev tools. What are some of your most handy code writing, deploying, and debugging tools
 - Version Control
- **Visualizations**
 - HTML5 Images as data
 - SVG - USGS VIZLAB examples
- **Databases**
 - Postgresql with spatial extension, MongoDB
 - Hadoop? - not sure how deep to dive on distributed environments
- **JavaScript Frameworks**
 - Modern Model View Control paradigms
 - Angular, ReactJS
- **Others Frameworks**
 - Ruby on Rails
- **JS Map libraries**
 - leaflet, opengeo suite, geoserver on natweb
- **Non or not truly open source - compare/ contrast**
 - ArcGIS server and js api, oracle, SQLserver, ArcGIS online
- **Unit Testing**
 - Examples per Function vs Object style programming and per library
- **Ontologies? XML, JSON**

*The follow
toward building an open source knowledge base to create something similar to the concept of an '*

Phase 3 - Use Cases (Deep Dive)

- Apply core learning technologies to selected use cases to demonstrate data driven applications and s

Phase 4 - Develop Enterprise Suite

- Use lessons learned to create recommendations and support groups for selected open source techn

Phase 5 - Continued Community Fostering

- Continue collaboration and leading technology discussions. Revise enterprise suite as needed.