**Project Proposal**

**United States Oil Drilling Activity Visualization**

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* **Background and Motivation.**

The crash in oil prices kicked off intense debate over when, and how, American producers would react. So far they’re still cranking out oil, but there are signs that a slowdown is looming, how strong the signs are?

* **Project Objectives.**

Questions:

* 1. What is a good way to explore Chandra oil drilling data in a visually friendly format?
  2. Which data values will be useful to display to the user, based on the target audience?

Goals:

* 1. I would like to create an interactive map showing the drilling activities to present American oil producers real time react to oil price fluctuation.
* **Data.**

Baker Hughes publishes weekly North American rig count report since 2000, and the rig count is by state, and the data link is :

<http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reportsother>

* **Data Processing.**

Data Cleanup should be moderate after it is scraped from the tables. Desired

quantities are rig count in each state, rig count in each county, rig size, total rig counts from year 2000 to 2015.

I would like to display the data in a U.S map, with buble size represent rig size, bubble quantities represent the rig counts located presisely to county, state, bubble color represent different rig type( rotary or hirozontal).

* **Must-Have Features.**

a.2D interactive map

b.Projected bubble based on rig data information

c.Total rig count relationship with oil price in a graph

* **Optional Features.**

a.Animation showing the change of rig activities throughout the year

b.Curved(3D) interactive map

* **Project Schedule.**

a. Week 1

Analysis of dataset

ii. Processing and cleanup of our dataset

iii. Sanity check on feasibility of our project based on results of analysis

b. Week 2

Basic visual structure/layout of projected data 1

static frame, pending

spinning globe progress

data (not yet populated/animated)

c. Week 3

Continued work on map, hopefully leading to dynamic projected

data views

ii. Population of data for cyclebycycle

layout

d. Week 4

Polish on styling of the modules, based on what data we’re able to

represent at this point in time.

ii. Begin work on correlation module (time pending)

e. Week 5

Continued polish on styling and user interactions (addressing potentially

slow rendering/transitions, long loading times due to dataset size)

ii. Setting up domain and hosting for website

iii. Finalize screencast storyboard and script

iv. Begin recording voiceover for screencast

f. Week 6

Finalize recording screencast visuals

ii. Finalize and sync audio to video