

MAP673-Summer 2016-Final Project Proposal
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Week 07 Status

Mapping Scenario

Map Title: "Post-Secondary Education in Kentucky". What and where are the schools that provide a post-secondary opportunity in the Commonwealth? Via a list available at the Kentucky CPE website (<http://cpe.ky.gov/institutions/>), I would like to produce a data source (csv) which will inform spatial representation of post-secondary schools in Kentucky with proportional symbology representing enrollment and cost as separate svg elements in order to understand the size of the school (enrollment) and the cost of the school (via tuition as a baseline cost-boarding and fees will not be included).

What do I want to get out of it?

A better understanding of what education is available where and for how much in the Commonwealth of Kentucky. Growing up, living in, and going to school in central Kentucky, I realized I am unaware of the number, location, and kinds of schools available in the rest of the state. I want to use this project to investigate the creation of a data set, and its representation in the form of an interactive web map.

What do I want users to get out of it?

A graphic, interactive resource that, at a glance, can inform a novice map user what post-secondary schools exist in the state, where they are located, and some basic information regarding those schools represented in the form of scalable vector graphics. Affordances should be available to users to click on/off layers based on public/private, two-year/four-year, and profit/non-profit. Additional affordances will include highlighting of schools as users mouse over them and basic school data (address, enrollment, tuition, logo, etc) if the user clicks on the school's svg circle. Additionally, I would like to represent in a separate window to the left of the map a news or information item about that school that would be a unique information item (for example 'Recent News') separate from the basics. Examples could include...

EKU considers cutting number of majors:

<http://www.kentucky.com/news/state/kentucky/article97546582.html>

Midway votes to admit men into undergraduate programs:

<http://www.midway.edu/2016/05/16/midway-university-trustees-vote-accept-men-daytime-undergraduate-programs/>

Georgetown College put on probation by its accreditor:

<https://www.insidehighered.com/news/2016/06/20/southern-accreditor-puts-five-colleges-probation>

St Catherine College closes:

<http://www.wdrb.com/story/32112881/st-catharine-college-closing-due-to-low-enrollment-and-debt-obligations2>

Spalding University's 43rd Running of the Rodents:

<http://www.courier-journal.com/picture-gallery/news/2015/04/09/gallery--spalding-universitys-43rd-running-of-the-rodents/25524677/>

User Interaction

A general user is interested in post-high school education. Not knowing what schools may be available in their region, googles “Kentucky colleges”. This map would be available to show what schools are in Kentucky, with some basic information and the ability to click the school and to click links associated with that school, for more information. It assumes the user knows their location relative to the Kentucky map. The user should be able to:

Pan and zoom on the map.

Toggle layers on and off.

Click links for more information regarding the school or a news story about the school.

Click the svg circles for more information about the school (within the page and not leaving the page)

Content Requirements

Map data of Kentucky at the county level (geojson).

School information as per the Post-Secondary Education list encoded to a csv with such details as: location, enrollment, tuition costs, public/private, profit/non-profit, two-year/four year, etc

One pane with the title of the map-”Post-Secondary Education in Kentucky”

One pane with the map, user controls, zoom controls, etc

One pane with 'recent news' and links to go to the source website

One pane with school logo, and link to school website

Average annual income data at the county level to illustrate cost of school versus income in that area

Functional Specifications

A zoom-able, pan-able map of Kentucky illustrated to the county level

An affordance that highlights a school when moused over. This affordance will include an info pane with the school's name. Clicking on the school will actuate the 'school pane' at left with a logo, basic info, and link to school's website

User layer controls that can remove/add schools based on their status as public/private, profit/non-profit, and two-year/four year.

SVG circle graphics to illustrate the size of the school relative to others via enrollment counts.

SVG circle graphics to illustrate the cost of the school relative to others via tuition costs.

The use of papa-parse or omnivore to load and access data from the csv.

User affordance showing info pane in map pane of average annual income, to contrast with school cost.

Data Source

Part of this exercise would be data creation, taking the list of institutions at the following website (<http://cpe.ky.gov/institutions/>) and adding to it enrollment, cost, info and layer information (public/private, two-year/four year, profit/non-profit, land-grant status, etc). I've attached a draft csv to this submittal as I continue to add schools and information.

Technology Needed

Leaflet for the map, svg circles, affordances, and info panes/flyouts. Papa-parse and/or omnivore to access data in the csv file. HTML to lay out the page and CSS to style it. As understanding of d3 allows, perhaps the use of d3 to load images, maps, and data more efficiently.