

Project Milestone

CS – 5630 / CS – 6630

University of Utah

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As the process book is not a journal, but a writeup, this will be a writeup of the current status of our project at the time of the milestone.

Data

The data we use is from the college scorecard dataset, which is available online:

<https://collegescorecard.ed.gov/data/>

The entire dataset is quite large (246 MB zipped). The data for the visualization is only a much smaller, processed subset of this data. The data used by the visualization are:

- School_Data.csv : A file containing relevant data about each school under consideration.
- similarity_rankings.csv : A file containing, for each school under consideration, the 15 schools most similar to it according to the similarity metric.
- us-states.json – A .json data file providing the information necessary for the US map layout.

The similarity metric, and how it was derived, will be explained on the final project website, but the details behind it are not important for the visualization. The important thing is just that there is a metric.

Visualization

The visualization begins with a screen waiting for data, and a search bar:

Finding The Right College

Top School:

Top School

Name

Tuition

Average SAT

Admission Rate

Location

Other School

Name

Tuition

Average SAT

Admission Rate

Location



Similar Schools

Plot: Tuition

Sliders

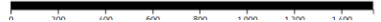
What tuition range are you interested in?



What school size range are you interested in?



What SAT range are you interested in?



If the user types a top school into the (autocomplete) search bar, the location of the top school is populated in the map layout with a red circle, while the top 15 similar schools are shown with blue dots on the map, and are also listed in order of similarity:

Apps ★ Bookmarks My Applications OLife Bug Report Partner Connect Wiki Playbooks Tasks Tools Learning Aster Online Marketing Asana Data Science

Top School: University of Utah

Top School

Name

University of Utah

Tuition

19048

Average SAT

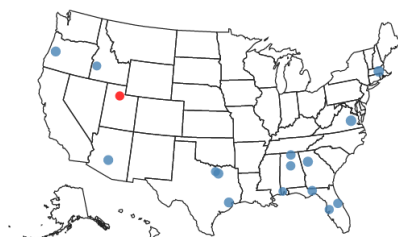
1109

Admission Rate

0.8174

Location

Salt Lake City, UT



Similar Schools

1. University of Alabama at Birmingham
2. Arizona State University-Tempe
3. University of Oregon
4. University of Central Florida
5. University of North Texas
6. Virginia Commonwealth University
7. University of South Florida-Main Campus
8. University of Alabama in Huntsville
9. Florida State University
10. The University of Texas at Dallas
11. University of Houston
12. Boise State University
13. University of Massachusetts Medical School Worcester
14. Georgia State University
15. University of South Alabama

Other School

Name

Tuition

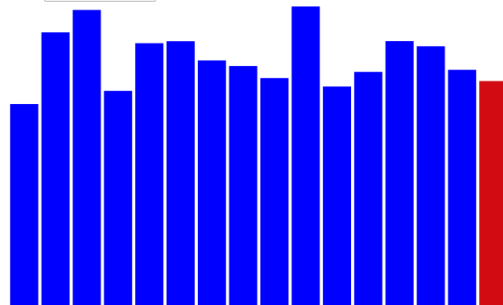
Average SAT

Admission Rate

Location

Bar Chart

Plot: Tuition



Sliders

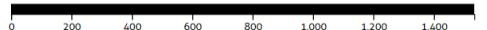
What tuition range are you interested in?



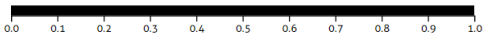
What school size range are you interested in?



What SAT range are you interested in?



What admission rate range are you interested in?



If the user hovers over a similar school, either on the map or on the list, that school highlights in light green on both:

Top School:

Top School

Name
University of Utah

Tuition
19048

Average SAT
1109

Admission Rate
0.8174

Location
Salt Lake City, UT



Similar Schools

1. University of Alabama at Birmingham
2. Arizona State University-Tempe
3. University of Oregon
4. University of Central Florida
5. University of North Texas
6. Virginia Commonwealth University
7. University of South Florida-Main Campus
8. University of Alabama in Huntsville
9. Florida State University
10. The University of Texas at Dallas
11. University of Houston
12. Boise State University
13. University of Massachusetts Medical School Worcester
14. Georgia State University
15. University of South Alabama

If the user then selects the school with a mouse click, the school highlights in darker green, and additional information about the similar school is provided:

Top School:

Top School

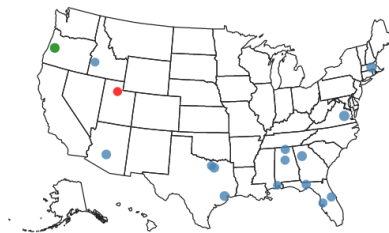
Name
University of Utah

Tuition
19048

Average SAT
1109

Admission Rate
0.8174

Location
Salt Lake City, UT



Similar Schools

1. University of Alabama at Birmingham
2. Arizona State University-Tempe
3. University of Oregon
4. University of Central Florida
5. University of North Texas
6. Virginia Commonwealth University
7. University of South Florida-Main Campus
8. University of Alabama in Huntsville
9. Florida State University
10. The University of Texas at Dallas
11. University of Houston
12. Boise State University
13. University of Massachusetts Medical School Worcester
14. Georgia State University
15. University of South Alabama

Other School

Name
University of Oregon

Tuition
22390

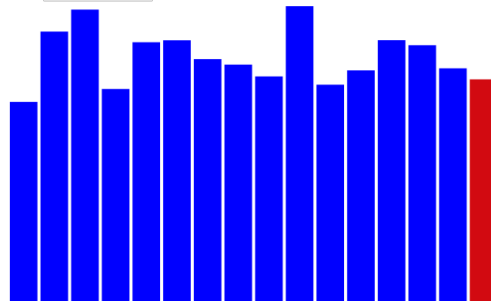
Average SAT
1108

Admission Rate
0.7417

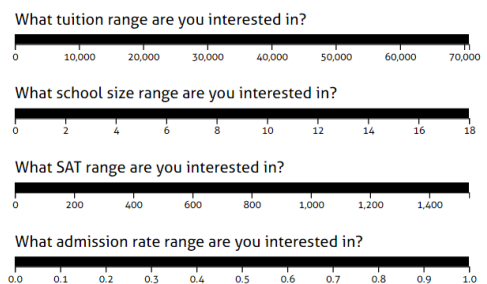
Location
Eugene, OR

Bar Chart

Plot:



Sliders



A bar chart visualization provides data about the similar schools, where the data is selected from a pulldown menu. Sliders can also be used to filter the similar schools under consideration.

Where This Is Going

- **Additional Data on Map Layout** – The user will be able to visualize data about the similar schools on the map layout as well, where the size of the school's circle will represent the given metric, be it tuition, average SAT, etc...
- **General Data Exploration** – The user will be able to explore the data without the context of a favorite school.
- **Visualization Cleanup** – The visualization, in its current state, is obviously a work in progress. It will look much, much nicer as a final product.