



### Course Project #1: Storytelling at Illinois

During the past four weeks, we have explored three major data sets involving data from UIUC:

1. Gender distribution in majors
2. Historic grade distribution in courses
3. Over a century of football games

In each case, the data in the raw form is overwhelming. Even simple visualizations of the data are quite messy. The goal of the project is simple: together we will build several amazing visualizations about Illinois.

### Project Teams

The recommended team size is 2-3 people. Special exceptions are welcome, but justification is needed.

### Project Deliverables

- 1. Hand-drawn prototype visualization (Thursday, Feb. 25)**  
Create a hand-drawn prototype of your visualization. This drawing should be well thought-out and somewhat polished (eg: colors, some degree of accuracy of data, etc). You will present this at the start of class on Thursday, Feb. 25.
- 2. An initial d3.js visualization (Tuesday, Mar. 1)**  
Using your draft visualization and the feedback from class on Thursday, over the weekend you will create an initial d3.js visualization of your idea. This will likely require both some pre-processing of the data in Python as well as new visualization techniques in d3.js. You will present this at the start of class on Tuesday, March 1.
- 3. Narrating your visualization (Thursday, Mar. 3)**  
Add a short narrative to your visualization, describing the data and interesting results from your visualization. The visualization should start telling a story and the narrative should complete the story.
- 4. Final polish (Tuesday, Mar. 8)**  
Based on the feedback from class and your own ideas, polish your visualization and narrative to provide a complete story about an Illinois-based dataset. You will present this at the start of class on Thursday, March 8.

### Visualization #6 – vis6.js

What is an example of one element in our data?

What visual encodings do we want to create from this data?

Suppose we want to pull out an array of all the unique teams. How?

1. Create an array that contains only the value of the team. How?

```
var teams = d3.map(  
  data,  
  function (d) { return d["Opponent"]; }  
);
```

2. Use a set to extract the unique values:

```
teams = d3.set(teams).values();
```

What scale would we use for **teams**?

Suppose we want to pull out an array of all season years. How?

What scale would we use for **years**?

Suppose we want to explore streaks, where each consecutive Illini win results in a larger circle. How?