Intro to D3.js

Daniel Kunin

Outline

- What is D3.js and Setup
- SVG, Scales, and Axes
- Selections and Data
- Shapes and Transitions
- Questions and Resources

Example Visualization

What is D3.js?

Mike Bostock

- Data-Driven Documents
- JavaScript library for data visualization
- Developed at Stanford in 2011
- Used by NYT and 538

Data ↦ **Elements**

HTML/CSS/JS

HTML

- Document Structure
- Text & Content

CSS

- Layout & Position
- Style & Color

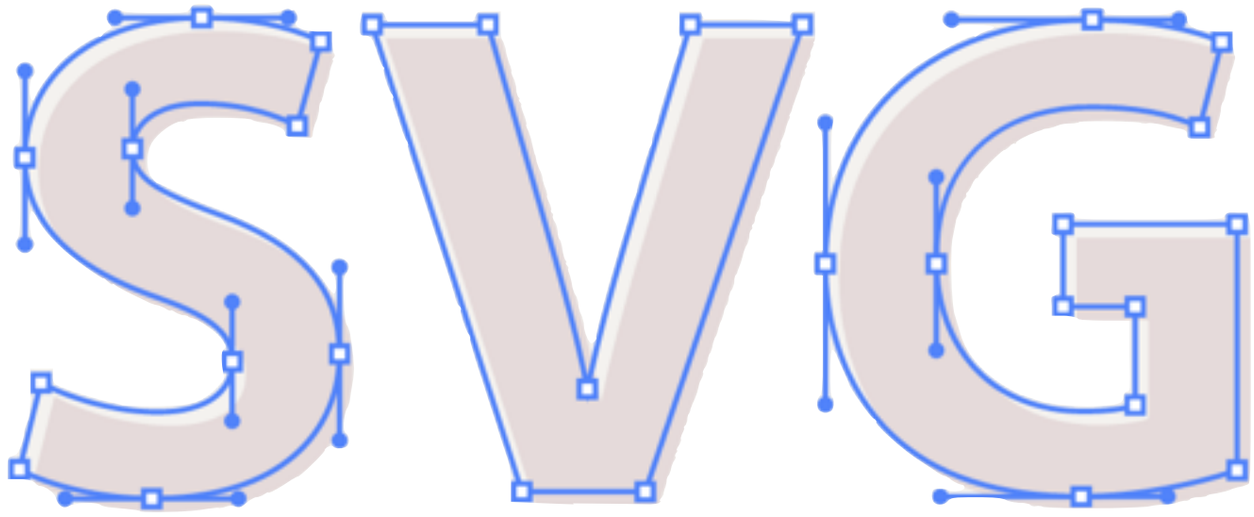
JavaScript

- Functionality

↑

D3.js

Scalable Vector Graphics



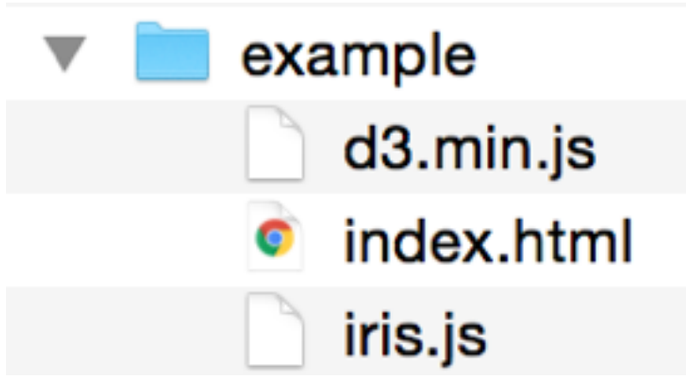
- Graphical elements are in the DOM
- Easily create basic shapes: <circle> , <ellipse> , <line> , <polygon> , <polyline> , <rect>
- “Canvas” to render D3.js visualization on

Getting Started

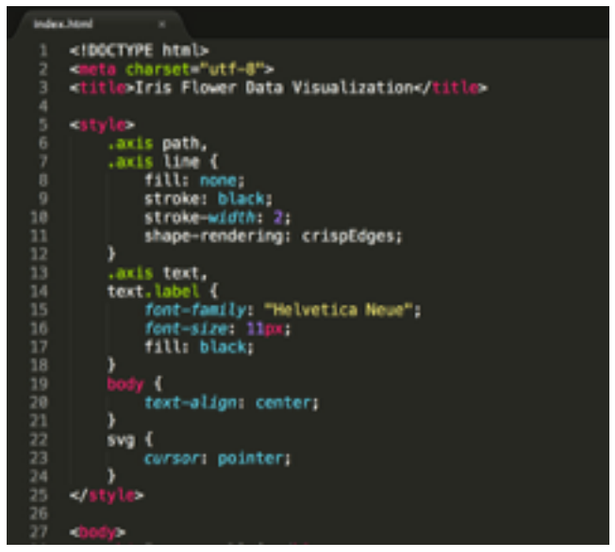
github.com/danielkunin/Brown-Datathon-2017

(1) Download

(2) Find

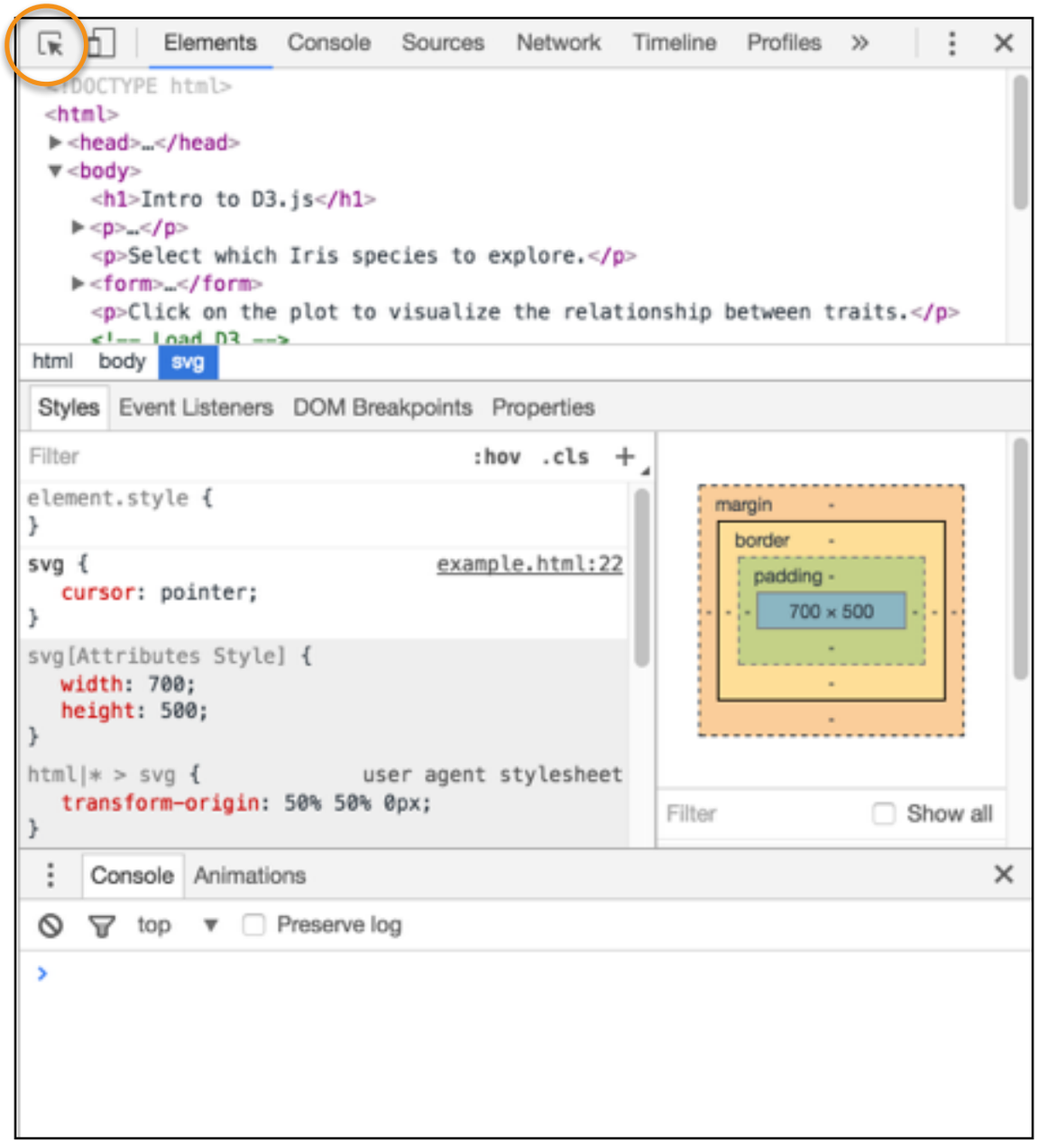


(3) Open



Inspector

Selector →

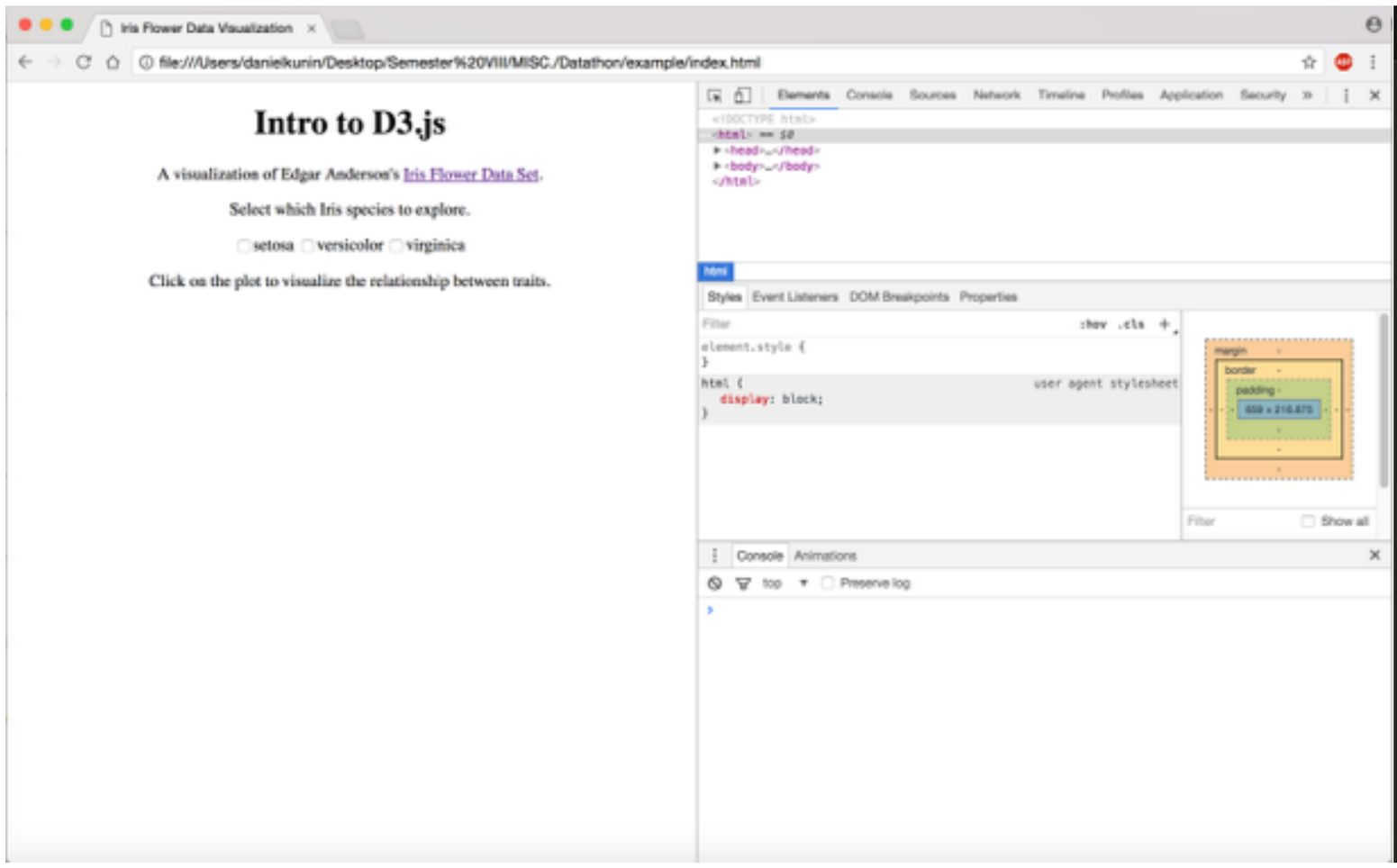


← HTML

← CSS

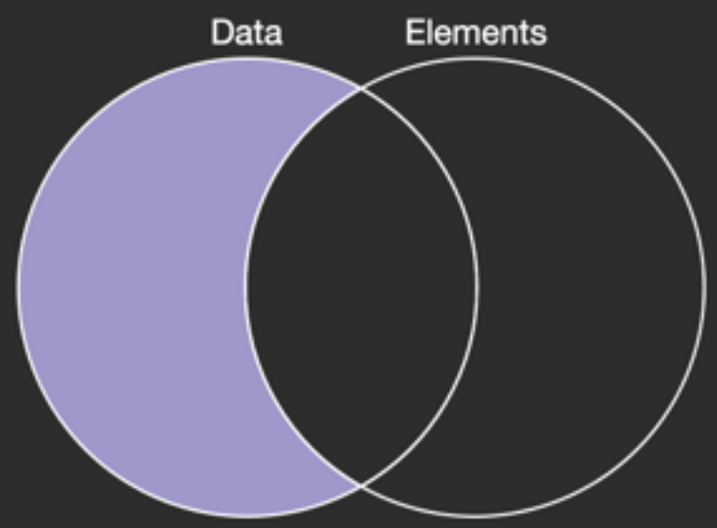
← JS Console

Demo

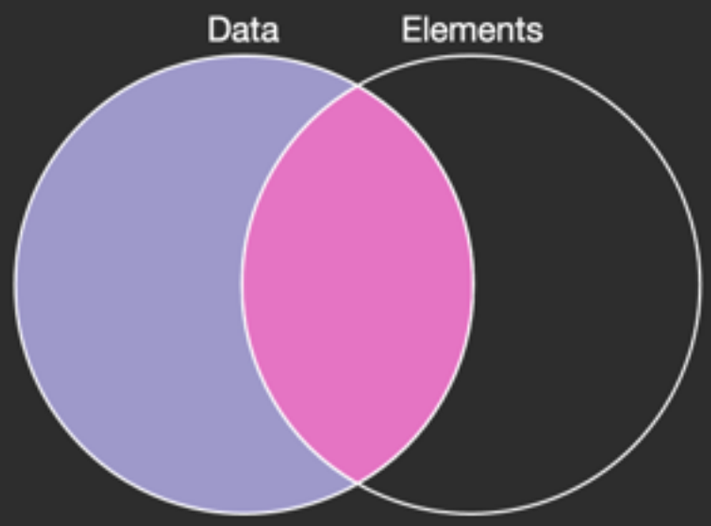


```
index.html
<!DOCTYPE html>
<meta charset="utf-8">
<title>Iris Flower Data Visualization</title>

<style>
    .axis path,
    .axis line {
        fill: none;
        stroke: black;
        stroke-width: 2;
        shape-rendering: crispEdges;
    }
    .axis text,
    text.label {
        font-family: "Helvetica Neue";
        font-size: 11px;
        fill: black;
    }
    body {
        text-align: center;
    }
    svg {
        cursor: pointer;
    }
</style>

<body>
```

Enter



Update



Exit