

Lab 2

Bootstrap

HTML, CSS & JS Frameworks

Rather than coding from scratch, frameworks enable you to utilize ready made blocks of code to help you get started. They give you a solid foundation for what a typical web project requires and usually they are also flexible enough for customization.

We have chosen **Bootstrap** as an example open source HTML, JS and CSS framework. It is one of the most widely used frameworks, it is easy to understand and it provides a great documentation with many examples.

The question whether a framework can be useful depends on the individual project and on the developer. Therefore, it is up to you to decide if you want to use it in your homeworks or projects.

Here is a summary of the main aspects of **Bootstrap**:

- **Open source** HTML, CSS, and JS framework
- Provides a **base styling** for common used HTML elements
- The **grid system** helps you to create multi-column and nested layouts, especially if your website should work on different devices
- Extensive list of **pre-styled components** (navigation, dropdown-menu, forms, tables, icons ...)

Bootstrap (currently v3.3.6) has a few easy ways to quickly get started, each one appealing to a different skill level and use case. Read through to see what suits your particular needs.

Bootstrap

Compiled and minified CSS, JavaScript, and fonts. No docs or original source files are included.

Download Bootstrap

Source code

Source Less, JavaScript, and font files, along with our docs. **Requires a Less compiler and some setup.**

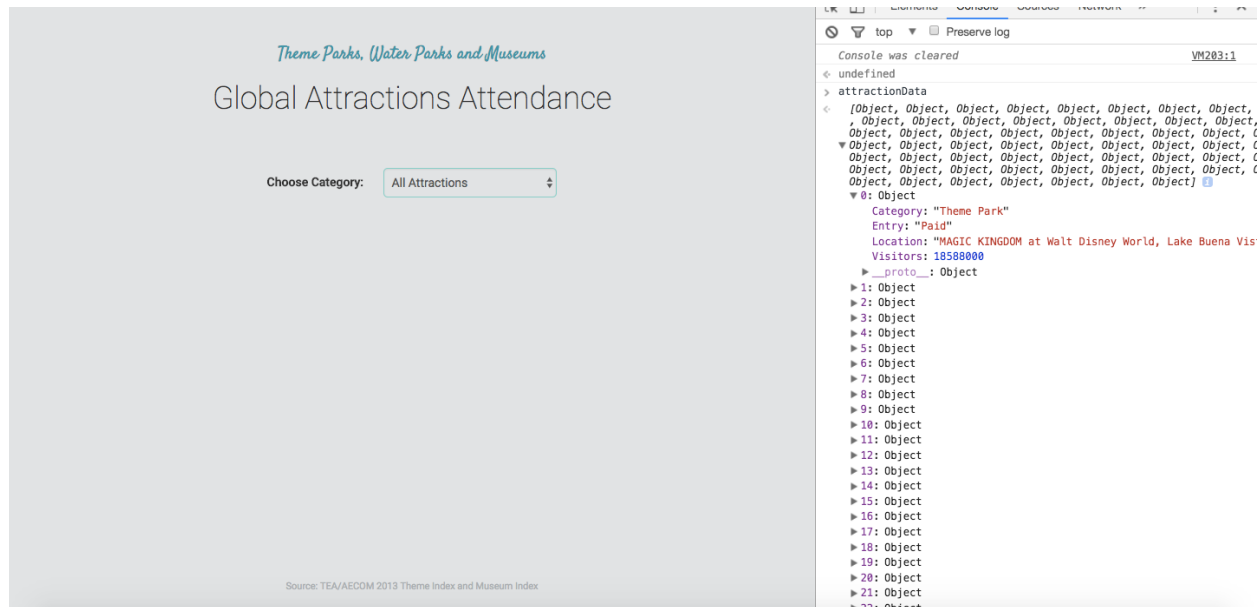
Download source

Sass

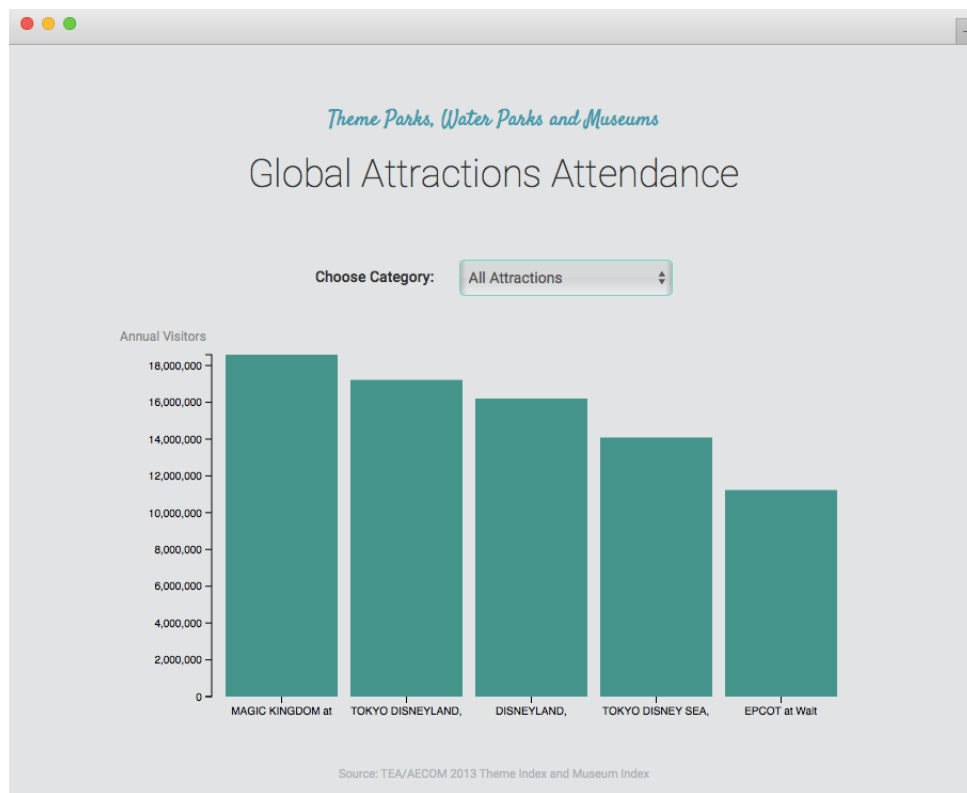
[Bootstrap ported from Less to Sass](#) for easy inclusion in Rails, Compass, or Sass-only projects.

Download Sass

attractionData (ALT+CMD+ I for console)



Result



Exercise: Barchart

Open “barchart.js”

```
// ---- START ---  
// DRAW BARS
```

```
var bars = svg.selectAll(".bar").data(data);
```

```
// ADD  
bars.enter().append("rect").attr("class", "bar");
```

```
// UPDATE  
bars  
  .attr("x", function(d) { return x(d.Location); })  
  .attr("width", x.rangeBand())  
  .attr("y", function(d) { return y(d.Visitors); })  
  .attr("height", function(d) { return height - y(d.Visitors); });
```

```
// REMOVE  
bars.exit().remove();
```

```
// UPDATE (again)  
bars  
  .on('mouseover', tip.show)  
  .on('mouseout', tip.hide);
```