Lab - Week 7

Custom Visualizations & JavaScript Frameworks

Hubway - Bike Sharing in Boston | 297 Stations
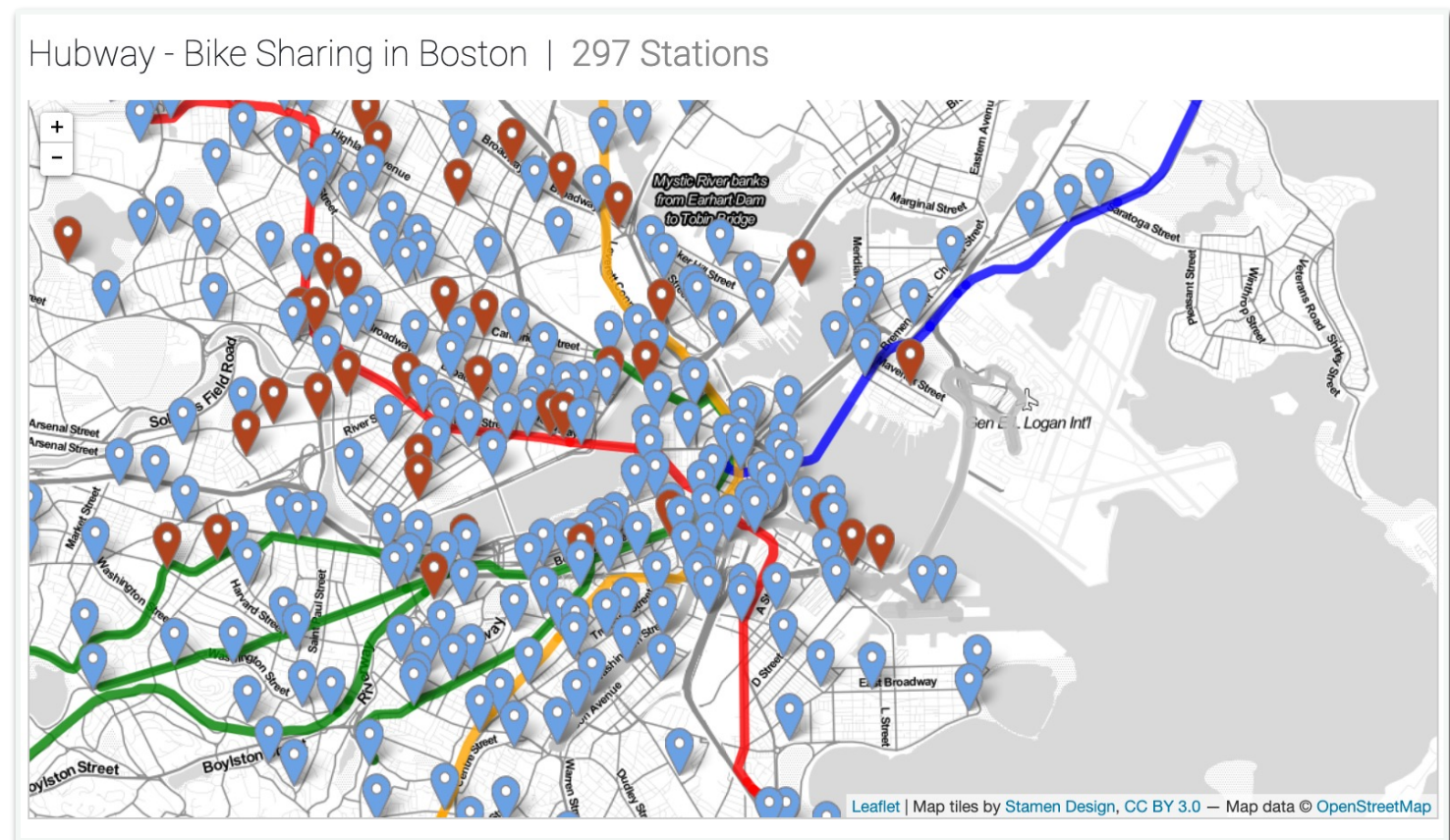
Homework

- NO HOMEWORK THIS WEEK

- Longer Lab with two topics (custom VIS + Maps)

Final Project

- Will start on Monday with a team-building phase

- Upload in the morning; If sooner, we will let you know via MS Teams

- We will monitor MS Teams on Monday for general questions. Next Friday is Office Hour
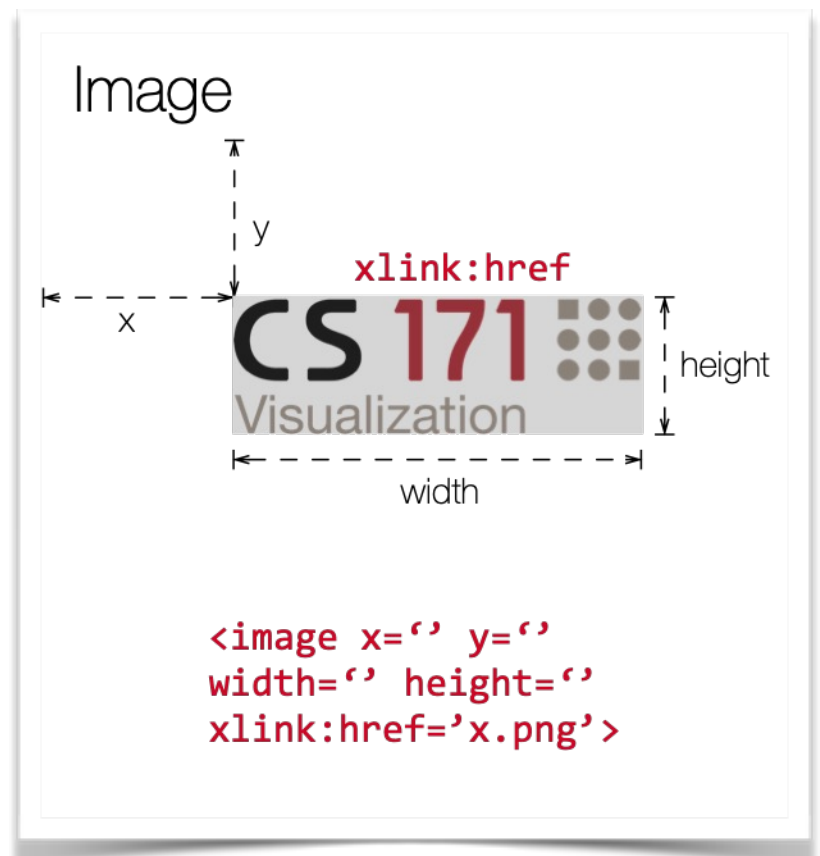
Custom Vis in D3

- You have learned everything you need to know to build custom visualizations

- Some modifications can be done very easily

- Look at examples & code on the web

- Make use of the hints ONLY when necessary

Example
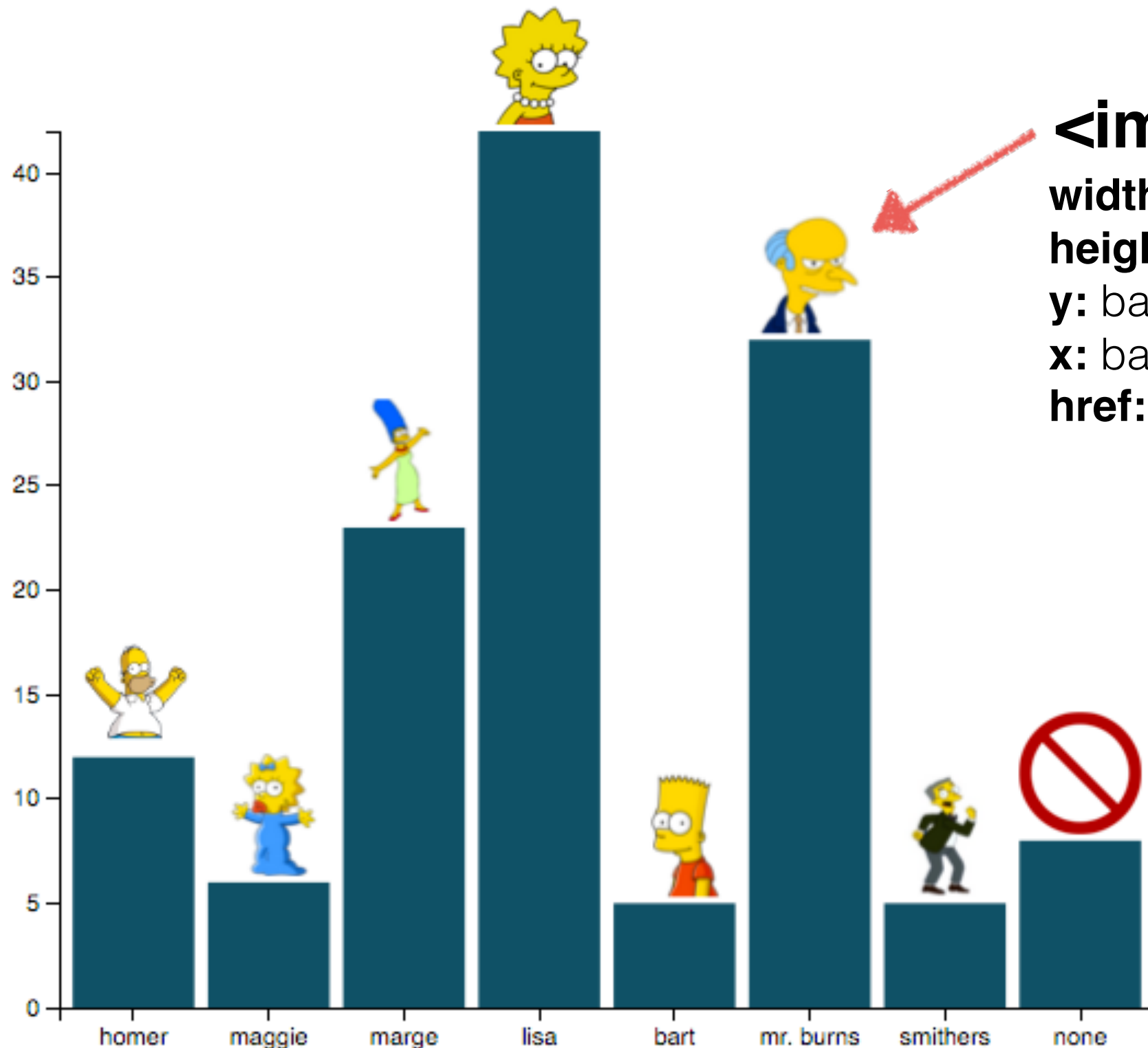
<image>
width: like one bar
height: keep aspect ratio
y: bar.top - height
x: bar.x
href: d.file

Image

y

x

xlink:href

CS 171
Visualization

height

width

```
<image x='' y=''
width='' height=''
xlink:href='x.png'>
```

Part 1:

Tips

- Read through **all** of the instructions first

- Come up with a **step-by-step plan** of what you want to implement first, what second, etc. These steps should be relatively small and self-contained (e.g., (1) draw only the matrix rows, as rectangles, all the same color, (2) create a compound data structure, (3)…)

- General D3 tips:

  - Think about how to represent your data (csv, json, 2d array,…)

  - Use g elements to structure your visualization!

  - Easy to create glyphs with svg paths (can get arbitrarily complex)

Part 2:

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