



PV251 Visualization

Seminar 2

What today?

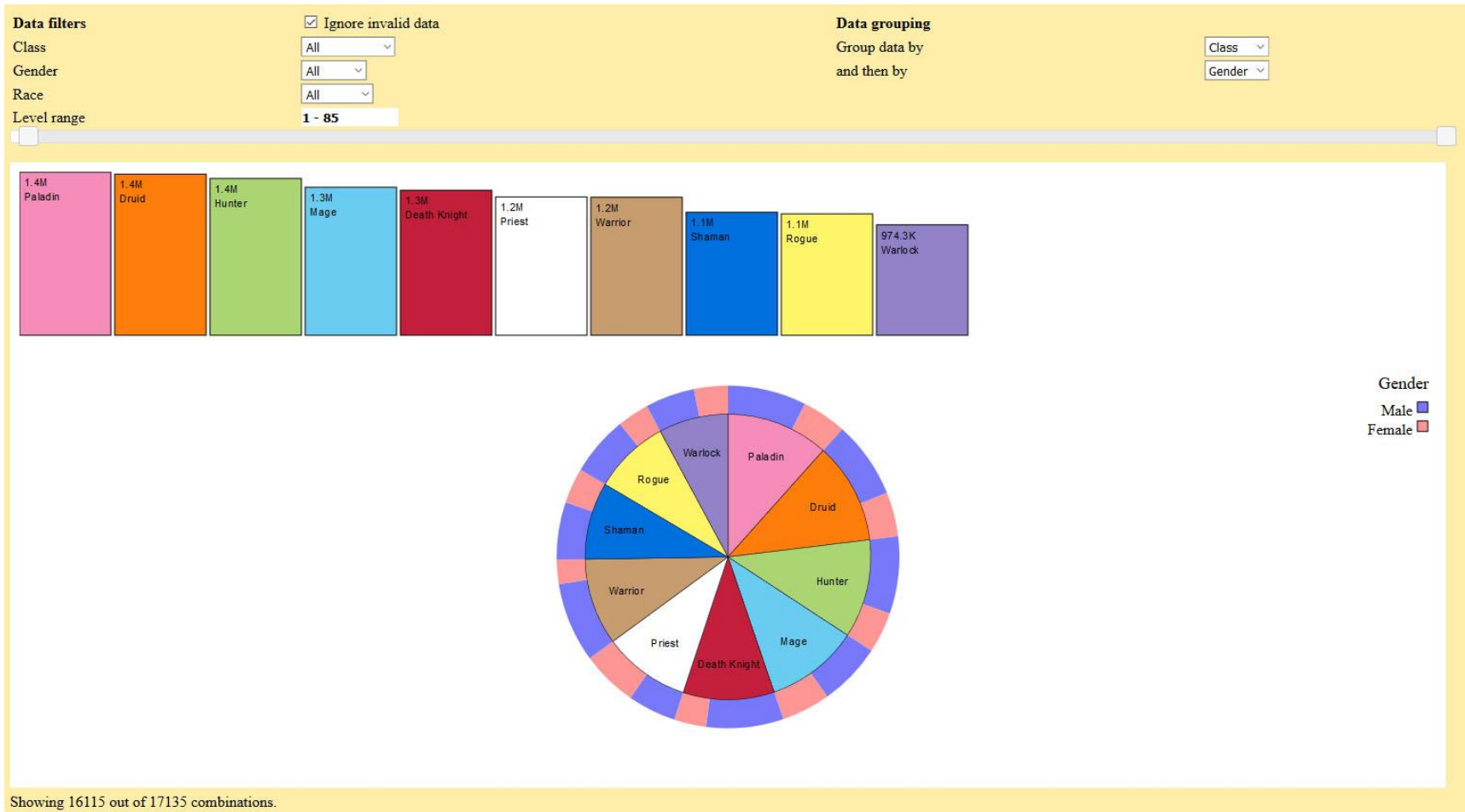
1. Postcards
2. Project definition
3. Examples of projects from the last years
4. Visualization tools
5. Processing
6. Physical visualization

PROJECT DEFINITION

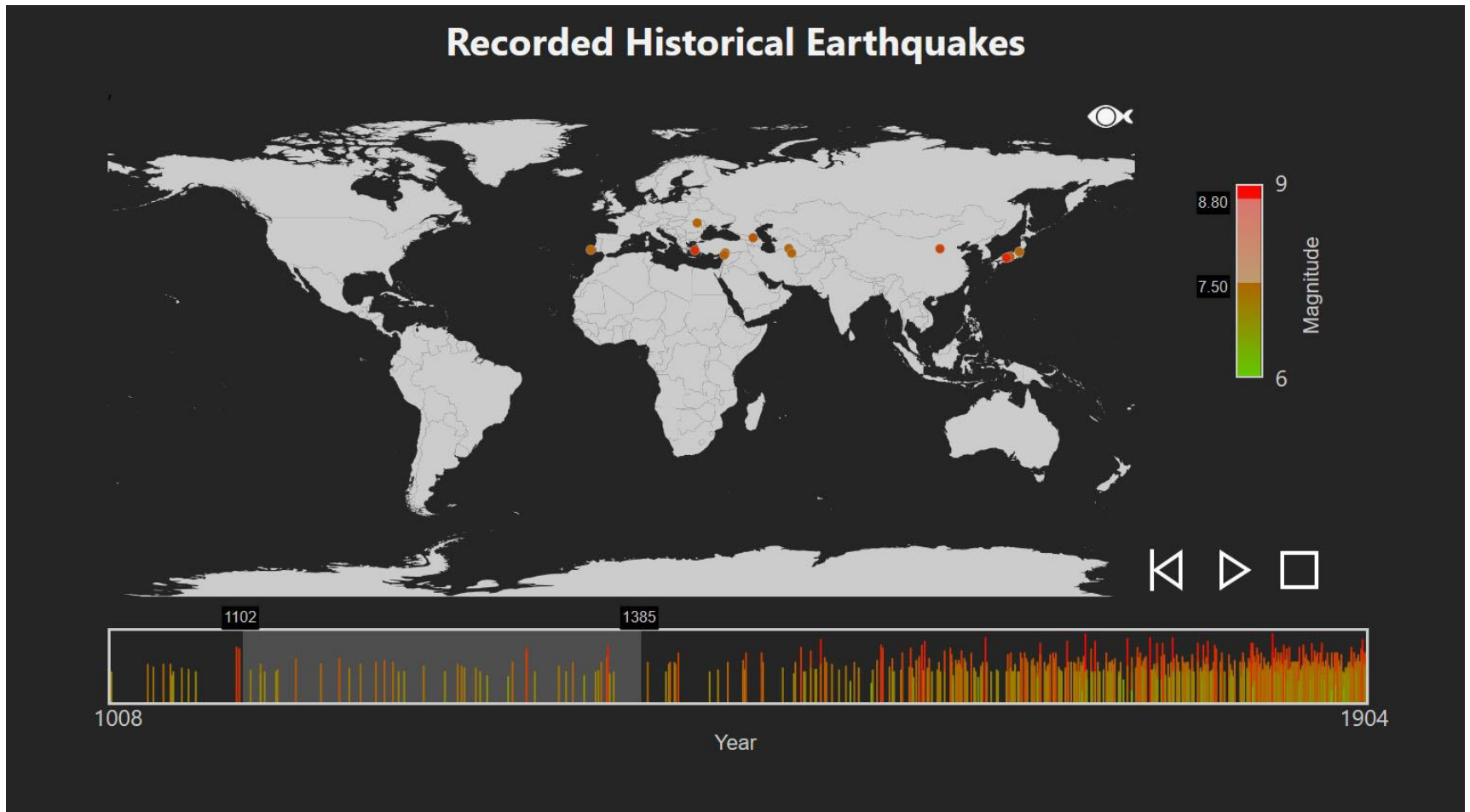
Do not forget about ...

- Multiple interactively linked views
- Readme with data description, reference to data source, description of preprocessing used, description of interaction ... and whatever else what is relevant (recommended browser, etc.)
- All source codes necessary for launching the application
- All used libraries
- What was your inspiration 😊
- Critical assessment and future work is welcomed

Example – WoW characters



Example – Earthquakes



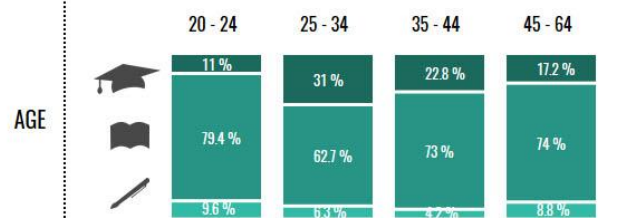
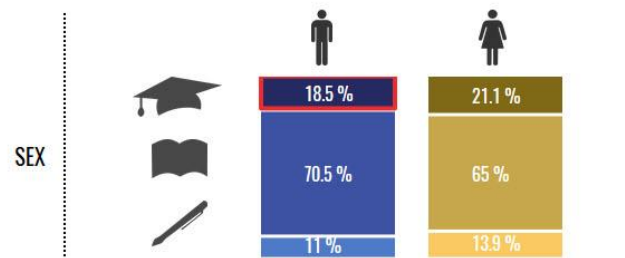
Example – Education level in Europe

Notes and program explanations are below.

Selected sex: males

Selected education level: 

Selected state: CZ

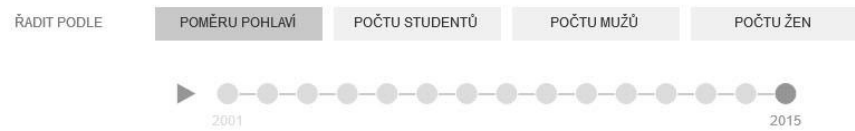
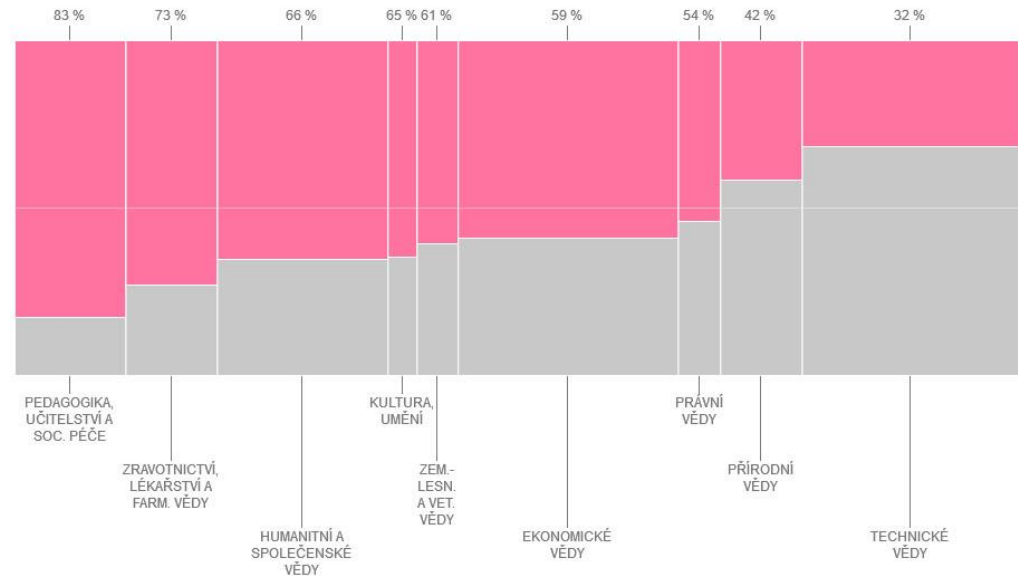
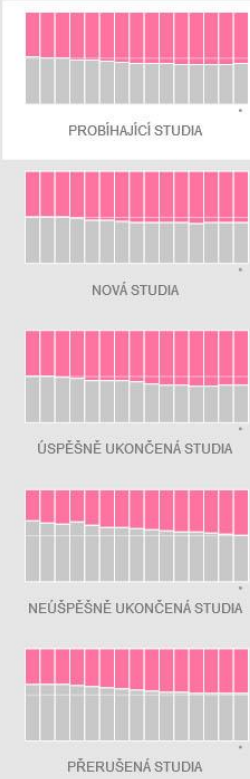


Selected year:

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Example – Sex ratio between university students

POMĚR POHLAVÍ STUDENTŮ VYSOKÝCH ŠKOL



ZDROJ: MŠMT

VISUALIZATION TOOLS

Visualization tools

- Lexipedia

<http://www.lexipedia.com>

Visualization tools

- Word Clouds

<https://www.wordclouds.com/>

- Other interesting visualizations

<http://chartporn.org/>

- Big data

<http://www.visualcomplexity.com/vc/>

Visualization tools

- Google chart tools – animated graphs

<https://developers.google.com/chart/interactive/docs/gallery/motionchart#Example>

- GapMinder World

[http://www.gapminder.org/tools/# state marker color scaleType=ordinal;&size slash label which=_slash default&use=constant;;;&chart-type=bubbles](http://www.gapminder.org/tools/#state_marker_color_scaleType=ordinal;&size_slash_label_which=_slash_default&use=constant;;;&chart-type=bubbles)

Visualization tools

- Graphs

<http://old.onlinecharttool.com/>

<http://www.chartgo.com/>

<http://www.flotcharts.org/>

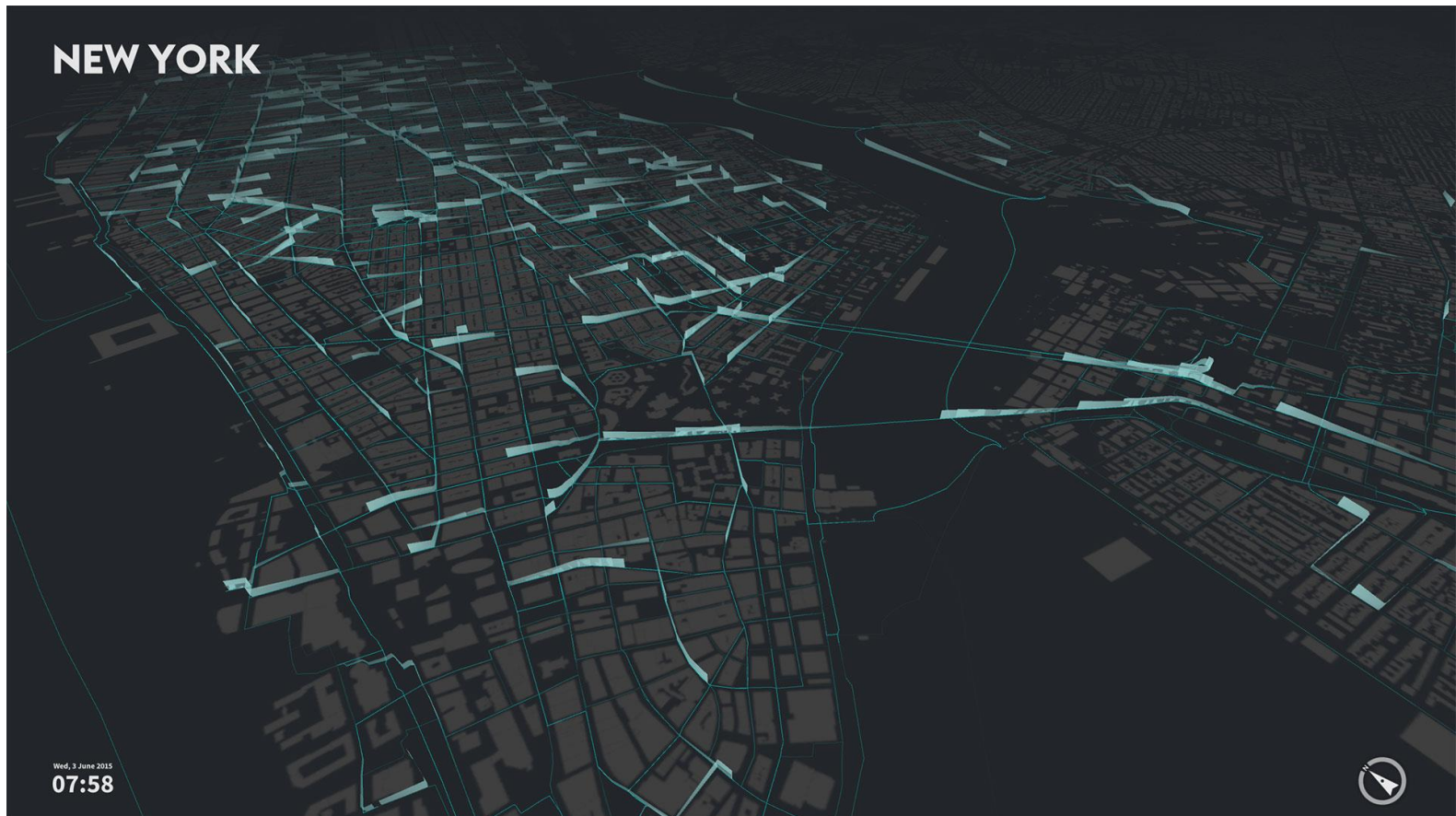
<http://fooplots.com/#W3sidHlwZSI6MCwiZXEiOiJ4XjliLCJjb2xvciI6IiMwMDAwMDAifSx7InR5cGUiOiJEWMDUxQy9XQy00>

<http://www.slideshare.net/kgude/free-visualization-tools-snd-2012-cleveland-presentation>

PROCESSING

A Comparative Visualization Environment of Urban Bike Mobility

<https://uclab.fh-potsdam.de/cf/>



Processing

- Web

<https://processing.org/>

- Documentation

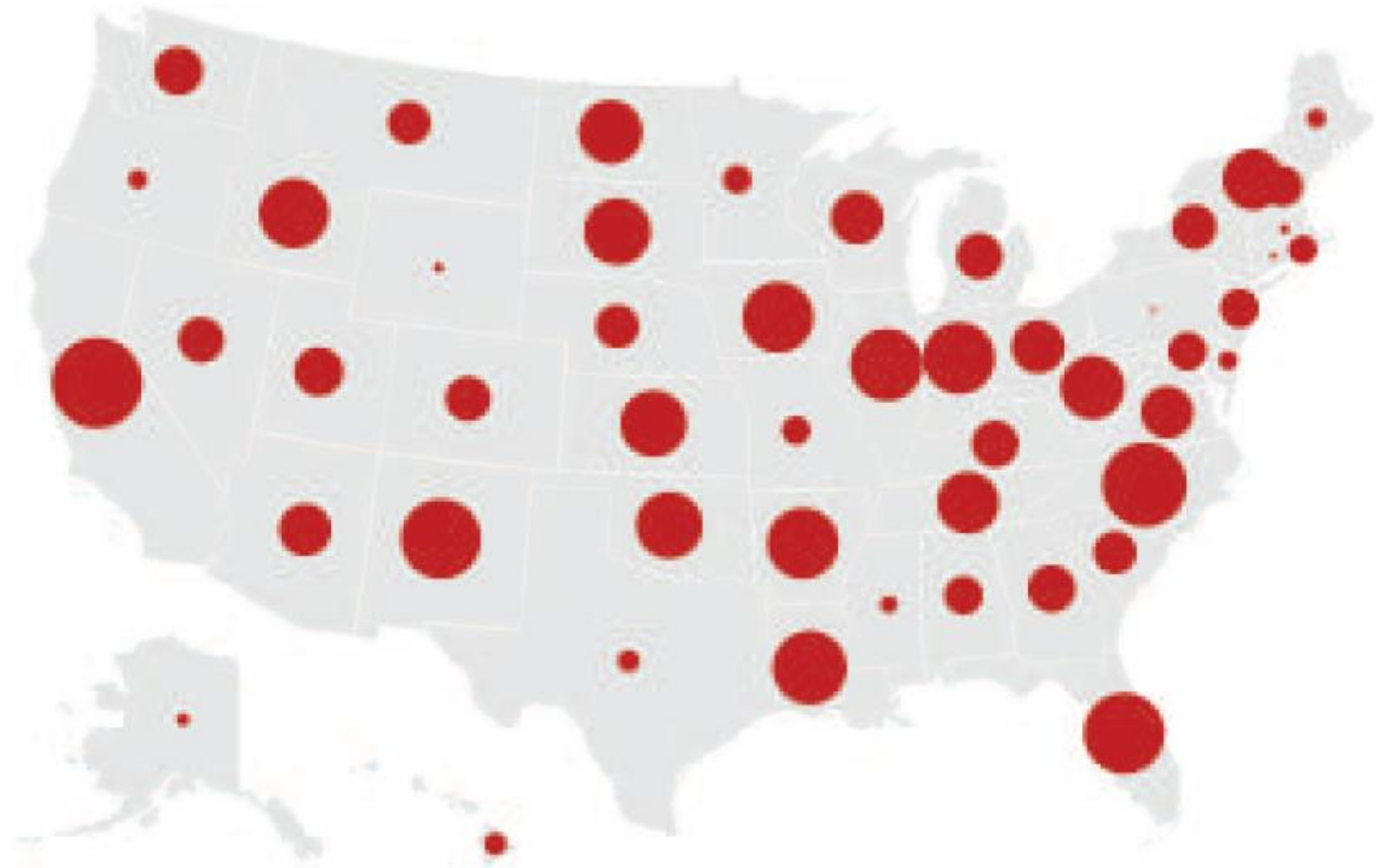
<https://processing.org/reference/>

- Tutorials

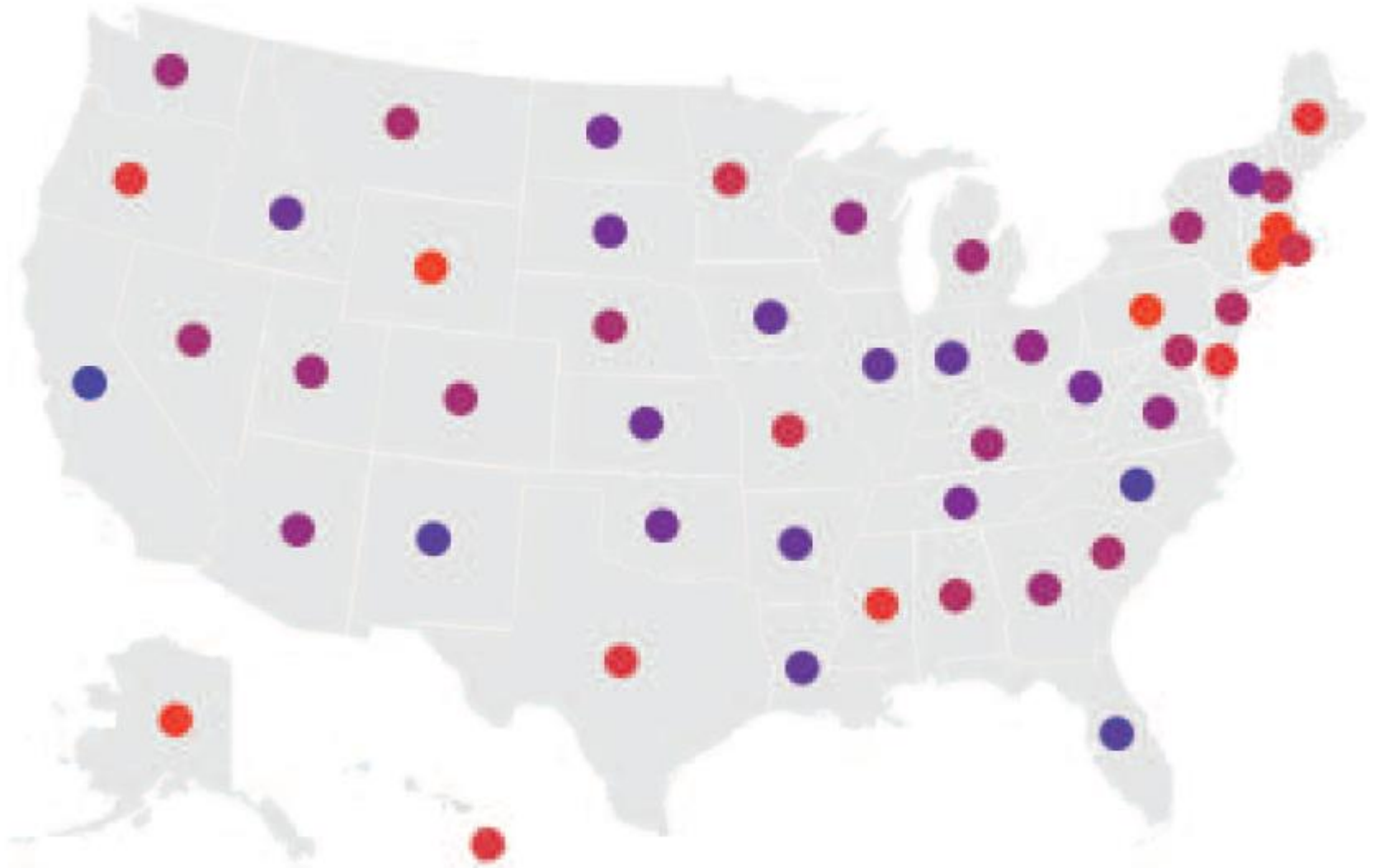
<https://processing.org/tutorials/>

DATA VISUALIZATION USING MAPS

Size variation



Color variation



What next?

*Exploring and Explaining Data with
the Processing Environment*

Visualizing Data



O'REILLY®

Ben Fry

Task no. 2

- Create a “physical” visualization of selected dataset
- Prepare the model and very short presentation for next seminar

Examples

