

Tutorial:

Basic Visualization

Concepts Using Tableau

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Goals of this Tutorial

- give a short overview and first experience with Tableau
- you can create to your own visualizations using your own data
- you have an idea about some basic principles of creating visualizations

Why Tableau?

- great for exploratory data analysis
- drag-and-drop visualizations
- best practice already built into system
- free to use for students

Requirements



- Tableau Installed - Student License:
<https://www.tableau.com/academic/students>
- Download Dataset:
<https://github.com/christoph/happiness-teaching-dataset>

Structure

1. Short theoretical introduction to the topic
2. Hands-on exercise in Tableau

How does it work?

- You should have Tableau and the video open at the same time
- Hands-on exercise in the video will be done at regular speed
- Pause at any time and follow the instructions from the video, rewatch if necessary

Chapter Overview

1. **Data and Datasets**

import dataset, first bar chart visualization, save workbook

2. **Dimensions and Measures**

aggregation functions, continuous and discrete values, line chart

3. **Marks and Channels**

perception of position/size/color, scatterplot

4. **Geospatial Data**

map visualization

5. **Derived Attributes**

extend dataset, calculated fields

6. **Faceting/Multiple Views**

side-by-side views, interaction, dashboard