

## Information Visualization – Exercises

### **Due date:**

Please hand in the solution for this exercise no later than May 3rd, 23:59.

Solutions by e-mail to [huberma@in.tum.de](mailto:huberma@in.tum.de), [nestler@in.tum.de](mailto:nestler@in.tum.de) and [schlegem@in.tum.de](mailto:schlegem@in.tum.de) are acceptable.

### **Exercise 1 (H) Google Documents**

In combination with *GMail* (Google Mail) Google offers numerous additional services for free. One of these services is called *Google Docs*, which enables you to create and modify documents and share them with others. In this lesson we use *Google Docs* for information visualization purposes. Therefore a Google Account is required, if you haven't one yet, get one from your tutors.

- a) Get a *Google Account*
- b) Get familiar with *Google Docs* ([docs.google.com](http://docs.google.com))
- c) Create a *Google Docs* spreadsheet

### **Exercise 2 (H) Visualisations with Google Documents**

*Google Docs* spreadsheets include possibilities to visualize different types of information. On the one hand charts can be used for visualization on the other hand gadgets are available in *Google Docs*. Get familiar with the various gadgets which are available in *Google Docs* and search after data sets which can be visualized with the following gadgets:

- a) Interactive Time Series Chart
- b) Motion Chart
- c) Organization Chart
- d) Timeline Gadget

Publish these four visualizations and send the link per email to your tutors.

### **Exercise 3 (H) Visualization of geographical information**

On the website you find the *Eurovision2007.csv* file which contains the results of the Eurovision 2007 song contest. The table contains the votes which each country (rows) received from all other countries (columns). Visualize this information in one or two (non-geographical) visualizations and interpret them.

*Google Docs* includes geographical gadgets as well, e.g. so-called *heat maps*. Modify the data set in that way that it can be visualized in a heat map, publish the gadget and send it per email to your tutors.