# 02.3 Patterns - 11x17 Presentation handout - Final

Thursday, September 15, 2016 | DAI523 Info Design: Data Visualization | Trogu | SFSU

## Texbook: Chapter 4

For this assignment we will be using Chapter 4 of the textbook: **Visualizing Patterns over Time** as a guide to practice visualizations that display change over time. The exercises in the book use R and Illustrator and we'll be practice using those tools, however for your final design you are free to use any appropriate software program or programming language. You should have already read Chapter 4, here is also a **PDF of the chapter with my notes** and comment.

## Data viz handbook

For your reference, you must study the list of **Information Design Principles (Small Handbook)**. You received your copy of the handbook at the beginning of the semester.

## Format

The final product for this assignment is a 11x17 single sheet (tabloid) folded once: 8.5x11 when folded, 4 pages total, inside spread when open. The format was inspired by one of **Edward Tufte**'s tips for good slide presentations: put a lot of details and information on a handout to give to your audience, then you are free to keep the presentation visual, with little or no text. While you make your presentation, the audience can refer to handout and dig for details if desired. You are not required to make a presentation on a specific topic, but only to produce a handout that would complement such presentation. The front can have lots of text, the back can have lots of supporting information, and the inside spread could be a "super-graphic", a concentration of graphics with the main visualization and supporting annotations. See Tufte's own handout (mostly typographic) for his talks, and another example from a conference on typographic experimentation (Jack Stauffacher). I will bring these examples to class.

## Exploratory Data Analysis

**1.** Use and expand the provided movie data set (entertainment) of US Box Office daily receipts for the year 2012 from Jan.1 to Sept. 10. Get the **comma separated value file** here. The set was created by simply cutting and pasting data from tables found in the **Box Office Mojo website**, specifically in the **monthly section for 2012**, where you can find much more data related to movies and Box Office. As an alternative of your choice, find a data set from the following domains that interests you: education, sports (Olympics, World Cup, US Open-Tennis), politics (US elections), economy, health.

You can view sample final designs from the 2012 class in the **archive folder**, or look at a few that I have selected that are particularly good. I have assembled those in this **reference folder**.

**2.** Once you have a suitable data set, ask a number of possible questions about your data and see if they can be answered with a visualization. Some questions may be simple, for example: the reason Box Office receipts go up on Friday is fairly obvious. Other questions may be harder, for example, why most big budget movies these days tend to make a profit, but some fail to do so. It may be that some questions are impossible to answer by using a particular visualization, or that the answer turns out to be unexpected.

**3.** Before you start your visualization, you want to look at the data (table) to see if you can spot important characteristics or clues that the data will work for you. You definitely want to make sure that it's clean and properly formatted for the software that will be using it. Use Excel, Numbers, TextWrangler, NotePad++, or any other tool to prepare the data, such as removing thousands separators and dollar signs from your numbers (if it's currency). Watch out for special characters that might conflict with computer code.

## Process

Experiment with quick visualizations to determine the best type of graph and what categories (columns) will likely produce meaningful graphs. As we have learned, R let's you quickly plot a matrix of graphs based on all possible combinations using the table column categories for the X and Y axes. Keep trying your visualization until it looks like you are getting some answers to your questions. Maybe the results are a surprise. Don't try to force or "fight" the data if it looks like you had made the wrong assumptions, as the new answer may be more interesting than the original idea.

## Deliverables

Two copies. 11x17 printed on both sides on off-white paper, between 24 and 28 lb text. No bleeds, use the same grid as project 1 as a guide. All the visualizations created for this assignment must be your own, they must be obtained automatically, that is, either through the use of a software tool or through a programming language (coding). You are not to "hand-draw" the graph from scratch, for example in Illustrator. Use Illustrator mainly to finish and fine-tune the visual styles of the graph, or use the graph tool in Illustrator if you find it adequate.

You can use texts from other sources provided that they are properly credited, however the title of the handout as well as a short introduction (1000 characters minimum) have to be your own writing. Include all data sources as well as your name, class info, etc.

Deliverables also include a mid-review printed intermediate layout, and a one-page written proposal describing your topic and the story you want to tell with your data.

## Deadline

Final printed copies are due at start of class on Tuesday, September 27, 2016. There will be an **intermediate deadline** worth 25 points: a **printed draft due on Thursday, September 22, 2016**. Also, please upload your 1-page written proposal on Saturday, September 17.

In addition to:
1. the physical printed pieces
you are to submit the following through the upload function in iLearn:

2. PDF file of final piece, max. file size: 20MB.

NOTE: If your file is too big, make it smaller in Acrobat > File > Save As > Reduced Size PDF. Note that if you have graphics or images and you used masks to crop them, these WILL NOT be reduced and therefore your file may not get smaller at all. Solution: DO NOT USE MASKS in your layout program! Also, get rid of mask boxes generated by R, after you import the PDF that was exported by R, if applicable.

Due Wednesday, September 24, 2014 at start of class. Use standard formatting for the name of the file, such as **`52301_08_lastname_1_sketch.pdf`**, which is explained in the **file naming instructions page**. The assignment in iLearn allows you to delete previously uploaded files if necessary.

3. Dataset files and visualization files used for the project, such as text files, illustrator, etc. Do not upload layout or photo files such as inDesign or Photoshop files. A maximum of five files can be uploaded. If you have more files, compress them into a single .zip archive. Do not compress the PDF of the final layout (#2).

NOTE: If necessary, you can delete previously uploaded files by clicking on **EDIT** in the upload section.

## Grading rubric

All assignments will be graded according to the following rubric.

Project total is 130 pts:

1.   Written outline: 5 pts
2.   Mid-review: 25 pts
3.   Final review: 100 points, divided as shown below.

## Written proposal

Based on deadline.
Separate upload (2.1)

## Mid-review

General feedback and grade based on rubric categories, but single grade will be given based on individual submission. Separate upload (2.2)

Please note that although the upload button deadline is set at 2:10PM for both sections, the upload deadline for the morning class is still 9:10AM. Morning students deadline will be considered final when instructor downloads all projects shortly after the start of class.

## Summary of rubric for final submits

1.  Concept and novelty of idea: 25 pts
2.  Research and iteration process: 25 pts
3.  Appropriateness of tools and encodings: 25 pts
4.  Craftsmanship and attention to detail in graphic visualizations as well as typography, layout, and editorial content, including orthography and completeness of sources: 25 pts