

Assignment #1: Data Exploration & Static Visualization Design

Task:

Explore the data and find an interesting story. Design a static visualization to convey a story from the provided data set. Provide one page of write up to describe the story, including design rationale and justification for your design decisions. Describe your choices of visualization type, size, color, and other visual elements. Why and how do you think your design effectively deliver the story?

Note: You are free to transform the data and/or import external data. You are free to use any graphics or charting tools. You are **not** required to include all the variables from the provided dataset.

Data set: You can download the data as a csv file on Canvas.

10 years Professional Tennis Australian Open Championship matches statistics, winner(player1) vs runner-up(player2) (10 rows, with 16 variables)

Rules: Each player take turns in serving, each service has two chances to put the ball into service box. Typically, first serve will be faster (make it harder for opponent to return); second serve will be slower (try to put the ball in the box without making a fault).

Year, Gender (men or women), *Player Name*, *Player Country*

Ace: service won the point without opponent touched the ball.

Double Fault: When breaching the 2-chances service rule, it's called "double fault".

Break: convert the opponent's service.

Winner: win a point by hitting a ball that the opponent did not reach it.

Error: ball hit the net & didn't pass, miss the return, or miss the serve.

Total: total points won in the match.

Return: return point won.

Hint: Would you be able to analyze patterns or trends or ? You may not need all the variables.

Evaluation: Data analysis (30%), Rationales of your visualization design and story (30%),
Visualization: clarity (10%), consistency (10%), aesthetic (5%), originality (10%),
satisfy the submission criteria (5%).

Submission:

1. This is an individual assignment.
2. Your submission should include a page of your write up and a copy of your visualization in standard image file format (PNG, JPG, SVG). You may zip these **two** files together.
3. File must be named as **Assign1-YourFirstnameLastname**
(i.e. *Assign1-SharonHsiao*)
4. Submit it through Canvas.
5. Deadline: Monday Jan.28 2019, by 12:00am (midnight).

Your assignment will be discussed in class or on blog.