

Datasets

This assignment makes use of the following two datasets.

Titanic

Datasets: [Titanic.csv](#)

Description: Data on passengers of the RMS Titanic. Entries include the name, age, class, fare, gender, and whether or not the passenger survived.

Notes:

- A blank entry for age means that the age is unknown.
- Fare can have more than two digits because money was not base-10 at that time

World Cup

Datasets: [Players.csv](#), [Teams.csv](#), [PlayersExt.csv](#)

Description: 2010 World Cup data including last name, team, position, minutes played, and game statistics for each player (Players.csv) as well as world ranking, games played in tournaments, and game statistics for each team (Teams.csv). The joined tables can be found in PlayersExt.csv. Note: keep in mind that since the tables are joined, country data will show up for each player.

Notes:

- Statistics, including yellowCards and redCards, are for the entire tournament (excluding the final game).
- Team ranking is the world ranking going into the tournament, so it may not be 1-32 even though there are only 32 teams.

● Tableau Visualization

Using either the World Cup (PlayersExt.csv) or Titanic (Titanic.csv) data, create an interactive data visualization dashboard using Tableau (please only choose one and explore multiple aspects of the data). This is a very open-ended problem; you should experiment with different features in Tableau. Full points will be awarded to visualizations that meet all the requirements below. While we encourage you to create "detailed" visualizations, you will not be penalized for creating "basic" ones.

Requirements

Create one dashboard with the following:

- At least three different visualization types in the dashboard. (e.g. bar chart, scatterplot, map, etc.)
- Each visualization should illustrate different relationships (e.g., don't just make a pie chart and a bar chart from the same data).
- One pane should interactively drive all of the others (see hints below).
- Every visualization should "make sense".
 - Examples of visualizations that don't make sense: red cards per position in the World Cup data (the data only has red and yellow cards per team), sum of classes in the Titanic data (classes are more like a category than a number; see hint below).

Hints:

- Sometimes, categories are represented as numbers (e.g., Class in the Titanic data; Games, Red Cards, or Yellow Cards in the World Cup data). Tableau will automatically process these attributes as numeric, which is not something we want! To change a numeric attribute to a category, drag it from Measures to Dimensions.
- If you use PlayersExt.csv, remember that all team info (Ranking, Wins, Losses, etc.) is repeated for each player on the team.
- To use a map (if your Tableau version has the background map) for teams, in the Team drop-down menu change Geographic role to Country/Region.
- Make good use of Tableau's documentation. Tableau has a wealth of [tutorials](#), like this one on [Building a Dashboard](#), that can help you learn how to fulfill the requirements above.