# *AUSTRALIAN OPEN MATCH DATA*

Statistics from last Australian tournaments reveal that serve speed is more important than other factors in determining a winner. Usually the first speed is comparatively fast compared to the second, as the main intention of the player here is push the ball to the opponent’s court. In order to show these statistics, I have developed a webpage which visually show these characteristics and also increases user understandability.

On the Home page you have two options to either choose to read this article or see statistically visualization. On selecting the story button, you get to read this article.

On selecting the analysis button, you go to the analysis page where you can compare tennis serve speed of two players filtered based on each year. Data has been provided for 10 years that is from 2004 to 2014. User can select one value from the drop down. On selecting this the user is asked to choose his favorite player from player1 list and similar his opponents from player2 list.

On selecting all the required data, a graph is displayed which displays the fast serve, avgfirstserve, avgsecserve in km, winner and total. Using these data values, the winner is predicted and displayed on the screen. The chart also has an additional feature of zooming where in you can increase the size of the graph and restore it back using the reset button. You can move between pages using back and forward button in the browser.

**Design rationale:**

***Visualization type***: Grouped Bar graph

Data is represented using grouped bar graph. Delineates the fast serve, avgfirstserve and avgsecondserve, number of times won and total score for both player in the final match for every year between 2004 to 2014. On y axis fast serve in km, avgfirstserve in km and avgsecondserve in km, number of times won and total score, are represented. Legends are added at top right corner, so that users read that before looking at the graph. Winners name is displayed at the center of the page.

***Colors:*** Brown and blue with white background

Blue color in contrast with brown is used against a white background. Blue color is recognized by color blind people thus the winner is represented using this, as users are more interested in analyzing winner’s data. And brown is used to represent losers, this combination allows color blind people to recognize and analyses the data as well. Thus, this covers all audience.

***Why this design***?

Group bar graphs are suitable for comparing values, in this dataset for comparing serve speed for both the players. And horizontal grids help us represent data separately for each player. Every attribute can be compared and contrasted between two players keeping design simple and easy for users to understand and analyze data. Using the dataset, appropriate colors and graph, user experience is better.

This webpage is an interactive visualization that can be used to analyze Australian tennis open data for 10 years based on serve speed.