The visualization displays the relationship between attributes like ace, double fault and error rate for a tennis tournament between the winner and runner-up for ten consecutive years starting from 2008 to 2017.

The visualization I chose is a **Scatter** Plot because it's the best visualization to depict correlation among two or more attributes. In addition to it, patterns can be easily found out from Scatter Plot visualization. Here, "year" is an independent measure which is plotted on X axis, whereas the remaining attributes like Error, Double Fault, Aces are dependent variables plotted on Y axis. This visualization is designed using Tableau.

As per Tennis terminologies, following are the definitions of Aces, Double Fault and Error.

- Ace: A legal serve that is not touched by the receiver on the first serve, winning the point by server.
- Double: If the ball lands outside the service box or does not clear the net, it is known as a '**fault**'. After one **fault** the server may try again. If both tries result in **faults**, a '**double fault**' is called and the opponent wins the point.
- Error: A shot that does not land (correctly) in the opponent's court, resulting in the loss of a point.

The size of the circles represents the magnitude of winner points for both the players. The players are represented by colored circles. Red color indicates a loser whereas green color indicates a winner. The reason behind choosing this color scheme can be correlated to NASDAQ stock prices Rise and Fall Model where rise(win) is signified with green color and fall(lose) is signified with red color. Each player circle has a label representing the player name.

The legend on the right represents the color scheme and the mapping between winning points and diameter of circle for each player.

All the three graphs are somewhat similar for winner loser pattern where losers generally have a higher win score than winners. In most of the years, losers played a high number of aces than winners, thereby resulting in high error rates and this could be attributed to their loss. In some years, winners had more aces than losers again maintaining a linear direct relationship with the error rate. The graphs for double faults and aces also seem somewhat similar. Most of the times, the losers had higher ace rates which would be attributed to their high risk-taking ability, thereby resulting in higher double fault rates. In short, from this visualization, we can deduce that most of the times, losers had a higher risk-taking ability resulting in more aces and in an attempt to score an ace, resulted in double fault.