

IPL Data Analysis with Grafana

Grafana Overview

Grafana is a dynamic and versatile open-source analytics and monitoring platform widely used for its ability to visualize and analyze metrics from various data sources. It provides a flexible and interactive environment for creating dashboards and panels, making it a top choice for displaying insights in real-time.

Dataset

The Indian Premier League (IPL) dataset which has 2 csv files has been used. The first file has the info about each ball which was bowled by ballers and also info about batting, second csv file has info about matches and this data is up to the year 2020.

Visualizations and Their Descriptions

1. Horizontal Bar Chart: Runs by Batting Team

Description:

This visualization offers a straightforward comparison of the total runs scored by each batting team. It provides valuable insights into the offensive performance of each team in terms of runs scored.

2. Stacked Bar Chart: Top 5 Batsman Dismissals and Average

Description:

The stacked bar chart provides a comprehensive view of both batsman dismissals and batting averages. It helps in assessing the performance and consistency of batsmen in scoring runs and avoiding dismissals.

3. Single Stat or Gauge Chart: Matches Played by City

Description:

In either the single stat or gauge format, this chart effectively showcases the count of matches played in various cities. It gives a quick overview of the number of matches conducted in each city.

$$\text{Average} = \text{SUM}(\text{d.batsman_runs}) * 1.0 / \text{SUM}(\text{d.is_wicket})$$

4. Pie chart: Top 3 Batsmen by Strike Rate

Description:

The horizontal bar chart highlights the top batsmen based on their strike rates. This comparison allows cricket enthusiasts to evaluate batting efficiency across players.

$$\text{Strike rate} = \text{SUM}(\text{batsman_runs}) / (\text{COUNT}(\text{ball}) * 1.0) * 100$$

5. Pie Chart: Top 3 Bowlers by Economy Rate

Description:

The pie chart presents the distribution of bowlers based on their economy rates. It is a crucial metric for understanding the efficiency and effectiveness of bowlers during matches.

$$\text{Economy} = \text{SUM}(\text{d.total_runs}) * 1.0 / \text{COUNT}(*)$$

6. Bar Gauge Chart: Boundaries Scored by Batting Team

Description:

Utilizing the Bar gauge chart, this visualization vividly represents the number of boundaries (fours and sixes) scored by each batting team. It conveys the aggressiveness of each team's batting approach.