

Unveiling Insights through Data-driven Exploration of Cricket World Cup 2023

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Problem Statement

With the Cricket World cup 2023 in full swing, there is a wealth of untapped data which holds the key to unlocking strategic insights. The aim of this project is to comprehensively evaluate the performance of teams across the tournament by analyzing various aspects such as individual batting or bowling performances, venue trends, toss outcomes etc. Through this analysis, our objective is to understand how these factors have contributed to the success or underperformance of different teams in the tournament.

Data Sources

Cricbuzz - <https://www.cricbuzz.com/cricket-series/6732/icc-cricket-world-cup-2023>

ICC - <https://www.cricketworldcup.com/tournament-stats>

Espn - <https://www.espnricinfo.com/series/icc-cricket-world-cup-2023-24-1367856/stats>

Analysis and Visualizations

- **Web Scraping** - utilize BeautifulSoup and requests module to scrape data on match results, player statistics, team compositions, venue details etc. from official websites.
- **Data cleaning and preprocessing** - visualizing missing values using MissingNo library and handling missing values if any.
- **Data Transformation and outlier analysis** - convert data types and perform outlier analysis using boxplots.
- **Statistical analysis** - perform statistical analysis of the dataset to summarize different features.
- **Visualizations** - use Seaborn, Matplotlib and Plotly to create bar charts, pie charts, histograms and scatter plots to visualize trends like venue specific patterns, player statistics, team strategies etc.