# **LIVE IPL DASHBOARD - 2024**

#### Introduction:

This comprehensive report delves into the creation of a dynamic Live IPL (Indian Premier League)
Dashboard using Power BI, seamlessly integrated with real-time data from the Cricbuzz API obtained through Rapid API. The dashboard serves as a centralized hub for accessing up-to-the-minute updates and key insights into IPL matches, offering a holistic view of live scores, player performance metrics, and match summaries. This report provides a detailed walkthrough of the process involved in acquiring the API key, connecting it to Power BI, and crafting an intuitive dashboard interface tailored to the needs of cricket enthusiasts and stakeholders alike.

# 1. Obtaining the Cricbuzz API Key:

- Registered for a Rapid API account.
- Browsed through the available APIs and selected Cricbuzz API.
- Obtained the API key from Rapid API's dashboard after subscribing to the Cricbuzz API.

## 2. Understanding the Cricbuzz API:

- Explored the documentation provided by Rapid API to understand the endpoints and data structures of the Cricbuzz API.
- Identified relevant endpoints for fetching live IPL match data, such as matches list, player statistics, and match details.

## 3. Connecting Cricbuzz API to Power BI:

- Accessed Power BI Desktop and navigated to the "Home" tab.
- Selected "Get Data" and chose "Blank Query" from the dropdown menu.
- Opted for "Advanced Editor" to directly input the code snippet containing the API endpoint URL and the API key obtained from Rapid API.
- Pasted the code snippet into the Advanced Editor window, ensuring proper syntax and formatting.
- Executed the query to retrieve data from the Cricbuzz API directly into Power BI.

## 4. Data Transformation and Modelling:

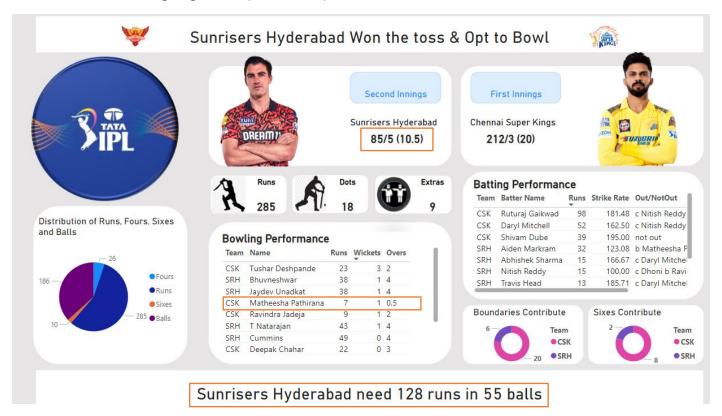
- Utilized Power Query Editor to handle the raw JSON data fetched from the API.
- Performed necessary transformations within the Advanced Editor or Power Query interface to structure the data into tables.
- Renamed columns, removed redundant columns, and adjusted data types as required to optimize data readability and analysis.
- Established relationships between different tables to enable seamless data connections and facilitate dashboard visualization creation.

## 5. Designing the Dashboard:

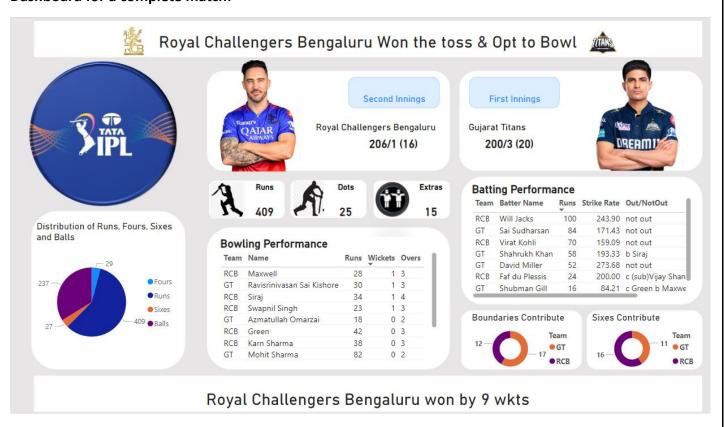
Utilized Power BI's visualization tools to design the dashboard interface.

- Included visualizations such as scorecards, pie charts, donut chart, playing team's captain's images, their logos and tables to display live match scores, player statistics, and match summaries.
- Implemented slicers and filters to allow users to customize the dashboard based on their preferences, such as selecting specific teams or matches.
- Ensured the dashboard layout is user-friendly and intuitive for easy navigation and data interpretation.

## A Dashboard for an ongoing match (Live Match):



#### Dashboard for a complete match:



## In Addition, Scraped IPL 2024 Player Information:

#### **Data Obtained:**

- Player Names: Extracted the complete list of player names participating in IPL 2024 from the official Website.
- Team Associations: Gathered information on the teams to which each player is affiliated for IPL 2024.
- Player Images: Collected images representing each player to enhance their profiles within the dashboard.

# **Integration Process:**

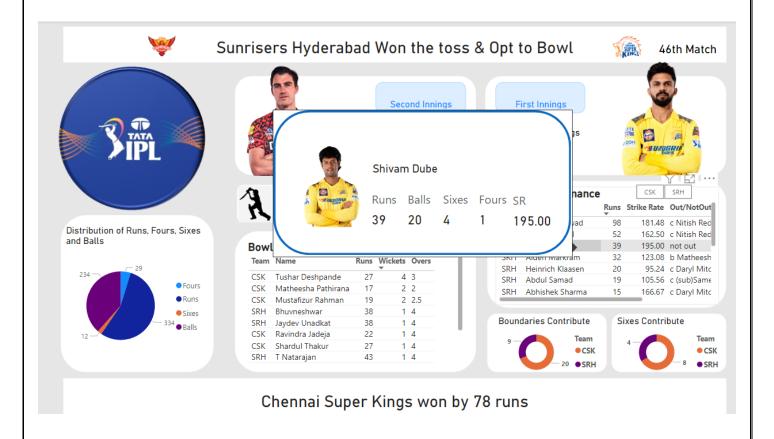
- The primary purpose of using web scraping technique was to extract player image.
- Scraped data was processed and formatted for compatibility with Power BI.

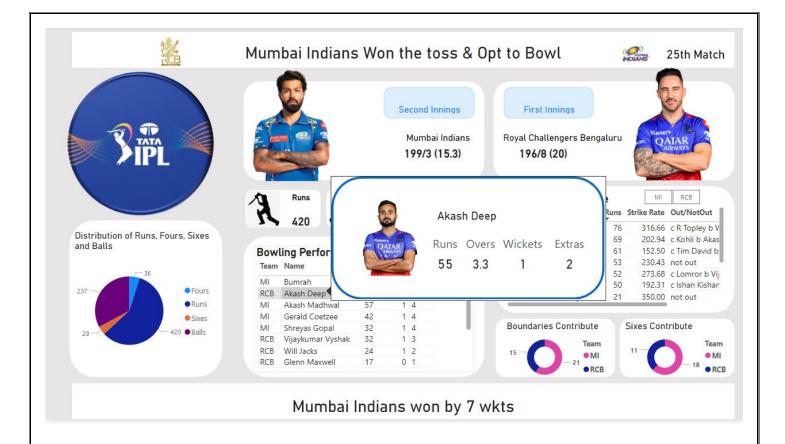
## **Integration with Power BI:**

- Scraped player data was imported into Power BI Desktop and aligned with existing data structures.
- Player profiles, team compositions, and player images were seamlessly integrated into the dashboard layout.
- Implemented interactive features to enable users to explore player statistics and team dynamics, enhancing their engagement with the dashboard.

## Use of Images from the scraped data:

- Used the Image to generate a basic tooltip that is visible on hover over the player's name.
- Created a different page in power bi and integrated that page as a tooltip on the dashboard page
- Here's how it looks:





#### **Outcome:**

The resultant Live IPL Dashboard in Power BI represents a comprehensive solution for real-time IPL match analysis. By delivering timely updates and actionable insights, the dashboard enhances decision-making processes and fosters deeper engagement with IPL matches among stakeholders and cricket enthusiasts.

## **Future Enhancements:**

- Explore additional features such as historical data analysis and predictive modelling.
- Integrate with other data sources to provide comprehensive coverage of IPL-related metrics and trends.
- Continuously update and enhance the dashboard based on user feedback and emerging requirements.
- Your inputs or suggestions are encouraged and valued to improve the quality and usability of this document.