**Project Description: Cricket World Cup Best XI Selection and Dashboard**

This project involves the analysis of cricket World Cup scorecards to determine the best eleven players (Best XI) of the tournament. The project includes data scraping, processing, analysis, and visualization using Python and Power BI.

**Walkthrough of the Project**

1. **Data Collection**:
   * **Objective**: Scrape data from cricket World Cup scorecards of individual games.
   * **Tools**: Python (libraries like BeautifulSoup, Requests).
   * **Process**:
     + Extract relevant data such as player statistics from various web pages.
     + Ensure data integrity and completeness.
2. **Data Processing and Cleaning**:
   * **Objective**: Clean and preprocess the scraped data to make it suitable for analysis.
   * **Tools**: Python (Pandas, NumPy).
   * **Process**:
     + Handle missing values, correct data types, and normalize data.
     + Create a clean dataset with essential statistics for each player.
3. **Player Selection Criteria**:
   * **Objective**: Define criteria to select the best eleven players of the tournament.
   * **Reference**: Criteria outlined in the document "Player Selection Criteria"​(Player Selection Criter…)​.
   * **Process**:
     + **Openers**: Average runs > 30, Strike Rate > 140, Boundary percentage > 50%, etc.
     + **Middle Order**: Average runs > 40, Strike Rate > 125, Avg. balls faced > 20, etc.
     + **Finishers**: Average runs > 25, Strike Rate > 130, etc.
     + **All-Rounders**: Batting average > 15, Bowling economy < 7, etc.
     + **Specialist Bowlers**: Bowling economy < 7, Strike rate < 16, etc.
4. **Data Analysis**:
   * **Objective**: Analyze the cleaned data to identify the best performers based on the selection criteria.
   * **Tools**: Python (Pandas, NumPy).
   * **Process**:
     + Calculate key performance metrics for each player.
     + Compare players against the defined criteria to shortlist the top performers for each role (Openers, Middle Order, Finishers, All-Rounders, Bowlers).
5. **Dashboard Creation**:
   * **Objective**: Visualize the analysis results in an interactive and intuitive dashboard.
   * **Tools**: Power BI.
   * **Process**:
     + Import the cleaned and analyzed data into Power BI.
     + Create interactive visualizations such as bar charts, line graphs, and tables to display player statistics and comparisons.
     + Develop filters and slicers to allow users to view specific subsets of data (e.g., by role, team).
     + Highlight the final selection of the Best XI players based on the analysis.

**Power BI Dashboard Overview**

1. **Player Statistics Overview**:
   * **Visualizations**:
     + Table displaying player names, teams, batting style, total runs, strike rate, batting average, and boundary percentage.
     + Charts showing trends in strike rate, batting average, and boundary percentage over time.
2. **Role-Based Analysis**:
   * **Sections**:
     + **Openers/Quick Hitters**: Visualizations comparing key metrics like strike rate and average.
     + **Middle Order/Anchors**: Analysis of batting averages and strike rates.
     + **Finishers/Power Hitters**: Performance metrics such as strike rate and batting position.
     + **All-Rounders**: Combined batting and bowling performance.
     + **Specialist Bowlers**: Bowling economy, strike rate, and dot ball percentage.
3. **Final Team Selection**:
   * **Interactive Feature**: Users can click on individual players to view their detailed statistics and understand why they were chosen for the Best XI.
   * **Summary**: Display the final Best XI team with a focus on their performance metrics that met the selection criteria.
4. **Team Performance Analysis**:
   * **Visualization**: Summary of the overall performance of the selected Best XI team, including batting and bowling statistics.