**Analysing T20 World Cup Cricket Data and Selecting the Best World XI**

**Introduction**

This project involves a comprehensive T20 World Cup cricket data analysis, utilising web scraping techniques, Python programming, the pandas library for data manipulation, and Power BI for data visualisation. The ultimate goal of this project is to identify and select the best World XI cricket team from a list of players based on their performance in T20 World Cup tournaments.

**Project Objectives**

The primary objectives of this project are as follows:

**Data Extraction**:

Implement web scraping techniques to extract cricket data from the ESPN Cricinfo website. The extracted data will encompass match statistics, player profiles, team rankings, and other relevant details.

**Data Preparation:**

Clean and pre-process the scraped data using Python and the pandas library. This step involves handling missing values, data transformation, and aggregating data to create player profiles and performance metrics.

**Exploratory Data Analysis (EDA):**

Conduct extensive EDA to gain insights into player performance across different T20 World Cup tournaments. Analyse batting, bowling, and fielding statistics to assess player strengths and weaknesses.

**Best World XI Selection**:

Develop a methodology for selecting the best World XI cricket team. Consider factors such as batting and bowling averages, strike rates, economy rates, and historical performance in T20 World Cups.

**Visualisation:**

Create informative and visually appealing charts and graphs using Power BI to illustrate key findings. Visualisation aids in presenting insights and player comparisons effectively.

**Methodology**

**Web Scraping:**

Utilise web scraping techniques to collect data from the ESPN Cricinfo website. Python libraries such as Beautiful Soup and Requests will scrape data from web pages. Extracted data will include match statistics, player information, and team performance details.

**Data Cleaning and Pre-processing:**

Clean and pre-process the scraped data to prepare it for analysis. This includes handling missing values, standardising data types, and aggregating player statistics across tournaments.

**Exploratory Data Analysis:**

Perform in-depth EDA to uncover player performance trends and statistics. Analyse batting averages, bowling strike rates, player rankings, and other relevant metrics to assess player capabilities.

Best World XI Selection: Develop a methodology for selecting the best World XI cricket team based on player performance metrics. Consider factors such as batting and bowling averages, player roles, and historical tournament performance.

**Visualisation:**

Create interactive visualisations and dashboards using Power BI to present the best World XI selection and player performance insights. Visualisations may include player comparison charts, radar plots, and team composition visuals.

**Report and Presentation:**

Generate a comprehensive report summarising the project's findings, including the best World XI team selected. The information will be a reference for cricket enthusiasts and analysts interested in the best XI selection.

**Conclusion**

Analysing T20 World Cup cricket data and selecting the best World XI team is an engaging project that combines web scraping, data analysis, and decision-making in sports. By leveraging web scraping techniques, Python, pandas, and Power BI, valuable insights into player performance can be obtained. These insights are instrumental in forming the best XI team, aligning with data-driven decision-making in cricket.

This project showcases the application of data analytics in sports and offers cricket enthusiasts a data-driven approach to selecting the best team from a pool of talented players. Whether you're a cricket fan, a data analyst, or a sports strategist, this project offers an exciting journey into the world of cricket statistics and the art of team selection.