

## Steps to Run the Code

### Step 1: Install Jupyter Notebook and Necessary Libraries

- a. Install Required Libraries:
  - Install the necessary libraries used in data analysis and sports analytics by running the following command: `pip install pandas numpy matplotlib seaborn scikit-learn scipy tensorflow keras beautifulsoup4 requests selenium`.
  - This command installs:
    - ❖ Pandas, NumPy for data manipulation.
    - ❖ Matplotlib, Seaborn for data visualization.
    - ❖ Scikit-Learn, TensorFlow, Keras for machine learning.
    - ❖ BeautifulSoup, Requests for web scraping.
    - ❖ Selenium for browser automation.
- b. Run Jupyter Notebook:
  - Open Jupyter Notebook by running the command `jupyter notebook`. This will open Jupyter Notebook in your default web browser.

### Step 2: Install ChromeDriver

- a. ChromeDriver is required for browser automation tasks, such as web scraping with Selenium.
- Install ChromeDriver:
  - ❖ Visit the ChromeDriver download page and download the version that matches your Chrome browser. After downloading, place it in a directory included in your system's PATH, or specify its path directly in your code.
  - ❖ Alternatively, you can install ChromeDriver using a Python package by running `pip install chromedriver-autoinstaller`. Then, in your script, use the following code to automatically install the correct version:

```
import chromedriver_autoinstaller
chromedriver_autoinstaller.install()
```

### Step 3: Clone the Repository

- a. Clone the Repository:
  - Open a terminal or command prompt and run the command

```
git clone
https://github.com/GudiDheeraj/Dissertati
on-sports-analysis
```

- b. Navigate to the Cloned Directory:
  - Change to the cloned directory by running `cd Dissertation-sports-analysis`.

### Step 4: Run the Python Code

- a. Open the Jupyter Notebook:
  - In the cloned repository directory, look for complete python code.ipynb file (Jupyter Notebook file). Open it using Jupyter Notebook.
- b. Run the Code:
  - Execute each cell in the notebook sequentially by pressing Shift + Enter.
  - If any libraries are missing, install them by running `pip install <library_name>` directly in a new notebook cell or in the terminal.

### Reference: Using Executed Code

- As you run the notebook, the code will execute, and the output will be displayed below each cell.
- For any doubts in code execution, please refer to the executed code in the repository with the filenames part 1 executed code.ipynb and part 2 executed code.ipynb.

### Troubleshooting

- Missing Libraries: If you encounter an error indicating a missing library, install it using `pip install <library_name>`.
- ChromeDriver Issues: Ensure that the ChromeDriver version matches your Chrome browser. If issues persist, re-download the appropriate version or reinstall using `chromedriver-autoinstaller`.