Football Match Prediction User Manual

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Group GitHub Link:

https://github.com/RecepSamiOzdemir/software-engineering-project/tree/main/Football%20Match%20Result%20Prediction

Football Match Prediction GitHub Link

https://github.com/gulssumm/football_prediction

Note: This user manual reported by Zeynep Sude Altın, Gülsüm Çetinözlü
(Software developers, data engineers)

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1 Introduction

- Brief overview of the project

  - This project collects football data from specific sites and filters it based on user preferences. It supports fetching real-time data for a specific year or accessing data from the database, with filters for data ranges and team names.

- Objectives and goals

  - Provide a tool to fetch real-time football data, apply filters.

- Scope of the project

  - Focuses on data collection, cleaning, visualization, and saving football matches results.

2 System Requirements

- Software Requirements

  - Python 3.7+
  - IDE
  - Following libraries

```
selenium==4.11.2
pandas==1.3.5
python-dateutil==2.9.0
webdriver-manager==4.0.2
```

3 Installation Guide

- Prerequisites: Ensure Python and required libraries are installed
- Download: Visit the GitHub Repository and download the project.

4 User Interface Overview

- **Login Screen:**

  - Enter the following information to login.

    Username: admin ; Password: 123

- **Main Screen:**

  - Filters: Search by league, team name, initial year, and end year.

o   Data Table: Displays fetched and filtered data. The general appearance of the interface and data table is as in the figure below.

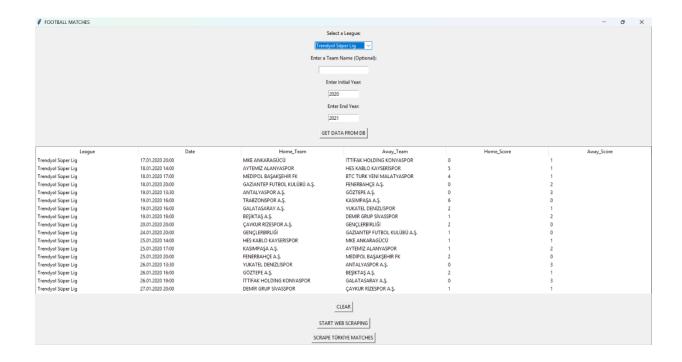o   Let's get the League One data for years between 2000-2001 from database:

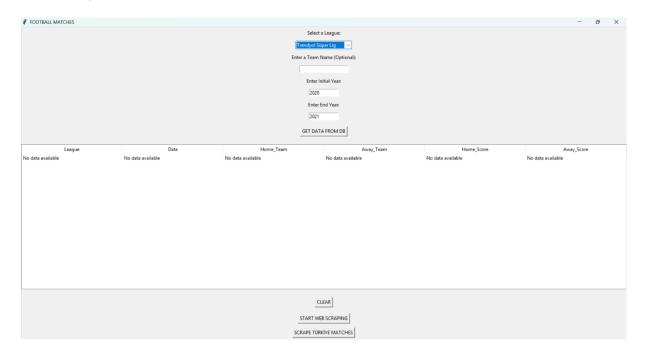o   Now, Let's fetch data for League One for years between 2021-2022.

o Now, Let's filter according to team name.

o Let's fetch Türkiye's one of the leagues this time.

o   If you click the "Clear" button it will clean all data in interface.

5 Features and Functionalities

- **Data Collection:** Scrapes details like League name, team name, date.
- **Data Cleaning:** Removes previous data from interface.
- **Data Saving:** Save fetched data in csv form.

6 Usage Instructions

- Run "login_screen.py" file in the project folder.
- Use "Scrape Türkiye Matches" button to fetch Türkiye matches data, and use "Start Web Scraping" for the rest of the leagues.
- Use "Get Data From DB" button to have data from database.

7   Troubleshooting and Maintenance

- Common Issues:
    - Missing libraries: Ensure dependencies are installed. Check "requirements.txt" in the project folder.

    - Fetching or getting data from Trendyol 1. League 2000-2001: Trendyol 1. League started in 2001 so there is no data.

    - No such table: User error : Run "merged_db_creation.py" to create merge.db again and run "login_screen.py".

    - If you get URL error for path: Change it to your local path.

8   References

- https://stackoverflow.com/questions/75060132/error-from-selenium-attributeerror-service-object-has-no-attribute-process

- https://www.geeksforgeeks.org/python-web-scraping-tutorial/

- https://www.scrapingbee.com/webscraping-questions/selenium/how-to-find-elements-by-xpath-selenium/