Goal:

1. To create a model which predicts if a given team will win their next game based on various inputs
2. Create a website to host the model
3. Use docker as web server
4. Input features to the model in form of api

Data source:

The simplest way to get live score feeds is through an API. There are many sports data provider in the market nowadays. Following is my suggestion according to my own experience.

Sportradar Sports Data API, the coverage includes more than 60 sports and 390,000 annual games. Sportradar is an official partner to NFL, NBA, MLB, NHL and many others leagues and federations. The API provides data for the American sports already mentioned, plus NCAA, Cricket, Handball, Australian Rules Football, Rugby, Soccer, Golf, Olympics, and E-Sports, among others. The API can return probabilities and odds comparisons. The API features a simulation system that replays select completed games and allows users to view API feeds as if they were happening live.

iSports API- Free Trail & Reliable API are provided by iSports, coverage football, basketball and esports data of multiple events around the world. Their affordable data services are perfect for startups with a limited budget. In addition, the universal data format is all well structured and easy to implement. As a company devoted sports industry fou more than 12 years, they've to serve news media, sports enthusiast platform as well as football club and betting operators with professional services and reasonable price.

ou can try to obtain data from professional sports data provider, I will suggest iSports API, ESPN API and Rapid API to you.

Trustful & Reliable Sports API are provided by iSports, coveraged about football, basketball and esports data of multiple events around the world. Their affordable data services are perfect for startups with limited budget. In addition, universal data format is all well strutured and easy to implement. As a company devoted sports industry fou more than 12 years, they've serve news media, sports enthusiast platforom as well as football club and betting operators with professional services.

Secondly, ESPN API and Rapid API covered most major and minor leagues with livescore, standings, events, line-ups, pre-match odds, statistics. They have built a simple and logical architecture to facilitate your developments.

In conclusion, all of them would allow you find, test, and connect to thousands of different kinds of historical football match data..

<https://www.optasports.com/>

<https://www.whoscored.com/Statistics>

<https://www.optasports.com/>

<http://www.footballsquads.co.uk/> - squad info

Web scraping ??

Restful API??

Ideal Input datasets:

* Player lineup ( Home and away )
* Player stats ( Home and away ) Separate
  + Goals scored
  + Assists
  + Key passes
  + Shots on target
  + Shots per game
  + Shots per goal
  + Minutes per goal
  + Interceptions
  + Successful Dribbles
  + Successful tackles
  + Saves ( gk )
  + Penalty Saves ( gk )
  + Headers won
  + Forward passes
  + Crosses?
  + Minutes played
  + Games played
  + Minutes spent Injured
  + Minutes spent on bench
  + Distance covered
  + Yellow cards
  + Red cards
  + Goals conceded ( def )
  + Possession lost?
  + Position
  + Offside?
  + Last 3 games
  + Last 7 games
  + Age?
  + Season
  + Competition
  + Days since last game
* Team stats ( Home and Away )
  + Wins
  + Losses
  + Draws
  + Shots conceded
  + Total Shots
  + Shots on target
  + Offside
  + Yellow Cards
  + Red Cards
  + Opponents
  + Matchday
  + First half goals
  + Second half goals
  + Leading at half time win
  + Leading at half time loss
  + Lagging at half time win
  + Lagging at half time loss
  + Competition
  + Season
  + Possession
  + Formation

Database / table ideas:

Team table

Forwards table

Midfielder table

Defender table

GK table

Separate table for real time prediction, fetch player data from

User enters names of players in both teams, subs optional.

Prediction: Home team Win probability, Draw probability, away team probability

Real time prediction:???

Read real time subs, score line, time left, Possession, other stats possible ????