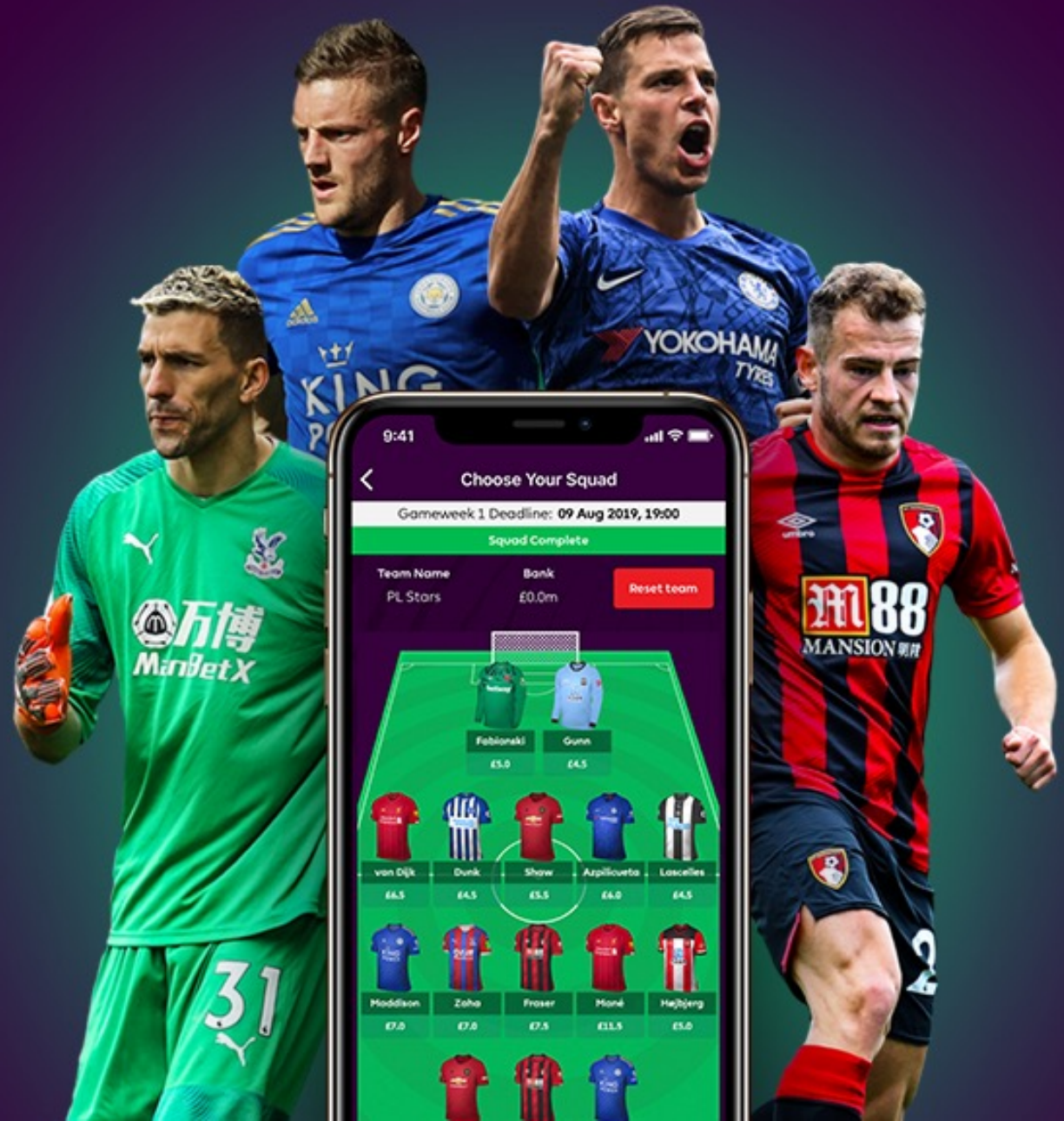


INTRODUCTION

- Fantasy Premier League
- Point Prediction



Data Acquisition

Fantasy Premier League API

1 season data

Over 700 players for 38 weeks

SAMPLE JSON
DATABASE



Storage

- ➡ Tabular format
- ➡ Different tables
- ➡ Connected with a common key

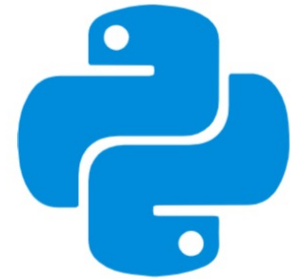
SQL



Modeling

- Get data
- Linear regression model
- Save for later

SQLAlchemy



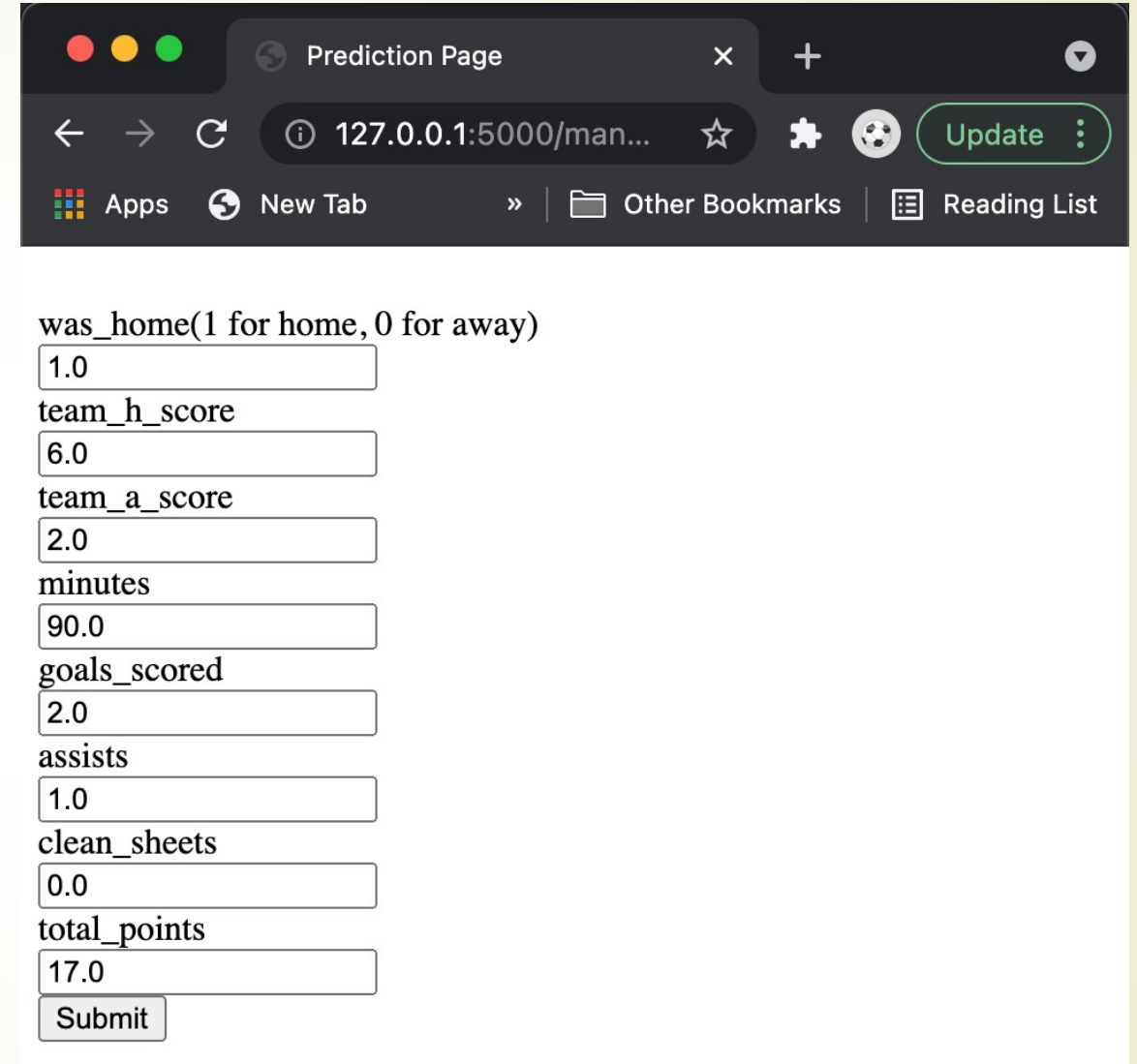
Production

- ▶ Code cannot die in the notebook
- ▶ Let's make a web app
- ▶ Take input from user
- ▶ Interact with our model and database



Functionality 1

- ▶ /manual-predict
 - ▶ Flask posts input to the model from user
 - ▶ Model returns the prediction to flask for user.



The screenshot shows a web browser window with the title "Prediction Page". The address bar displays "127.0.0.1:5000/man...". The browser interface includes navigation buttons (back, forward, refresh), a search bar, and a bookmark bar with "Apps", "New Tab", "Other Bookmarks", and "Reading List". A green "Update" button is visible in the top right corner of the browser window.

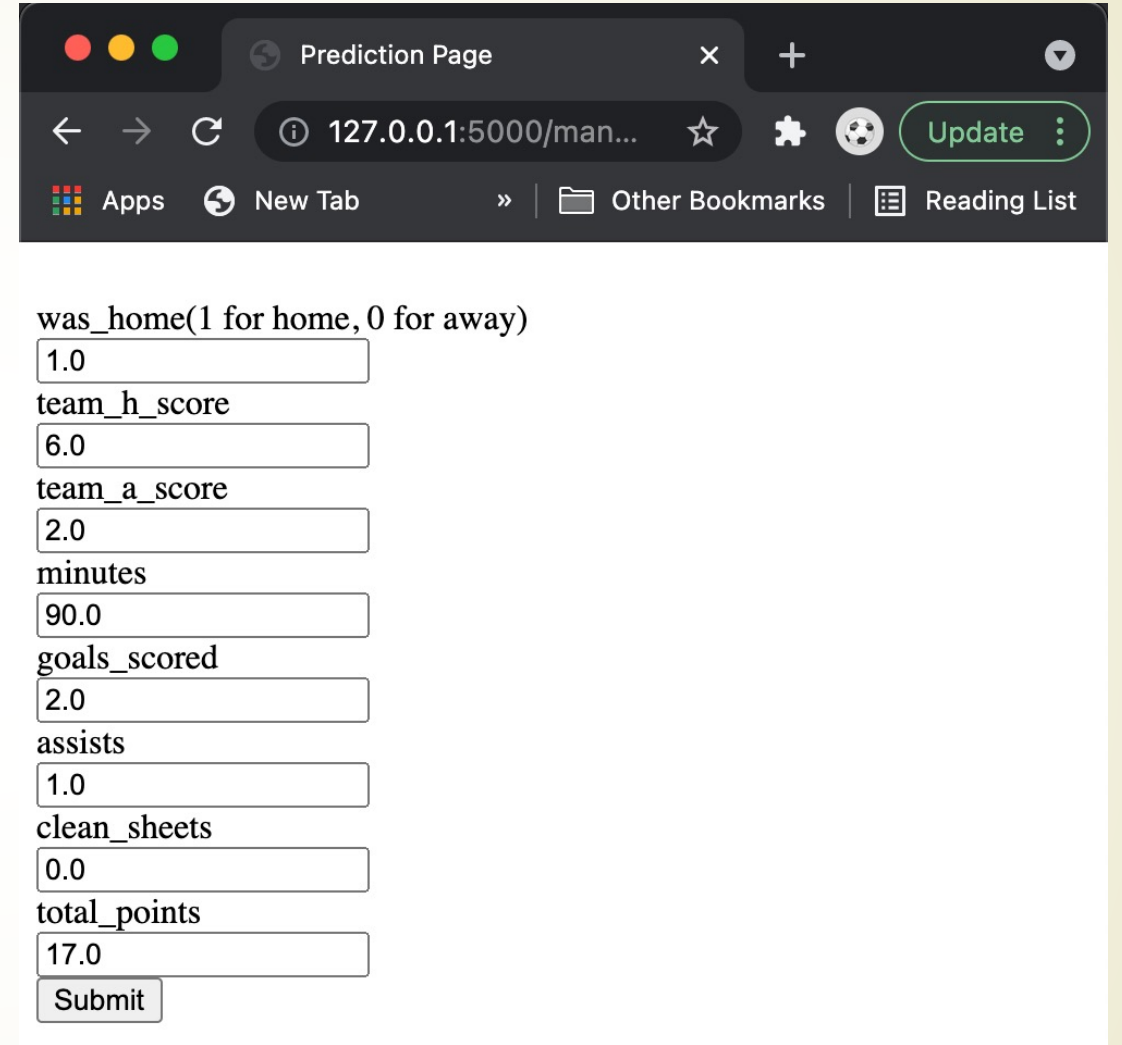
The form contains the following fields and values:

- was_home(1 for home, 0 for away): 1.0
- team_h_score: 6.0
- team_a_score: 2.0
- minutes: 90.0
- goals_scored: 2.0
- assists: 1.0
- clean_sheets: 0.0
- total_points: 17.0

A "Submit" button is located at the bottom of the form.

Functionality 2

- ▶ /Semi-Auto-predict
 - ▶ Dropdown menu for selection
 - ▶ User input is used to query the database for
 - ▶ Model receives data to make prediction



Prediction Page

127.0.0.1:5000/man... Update

Apps New Tab Other Bookmarks Reading List

was_home(1 for home, 0 for away)
1.0

team_h_score
6.0

team_a_score
2.0

minutes
90.0

goals_scored
2.0

assists
1.0

clean_sheets
0.0

total_points
17.0

Submit



Future Work

- ▶ More Functionality
 - ▶ Make prediction for top n players to score highest



Thank you,
People!!

Bernard Opoku

