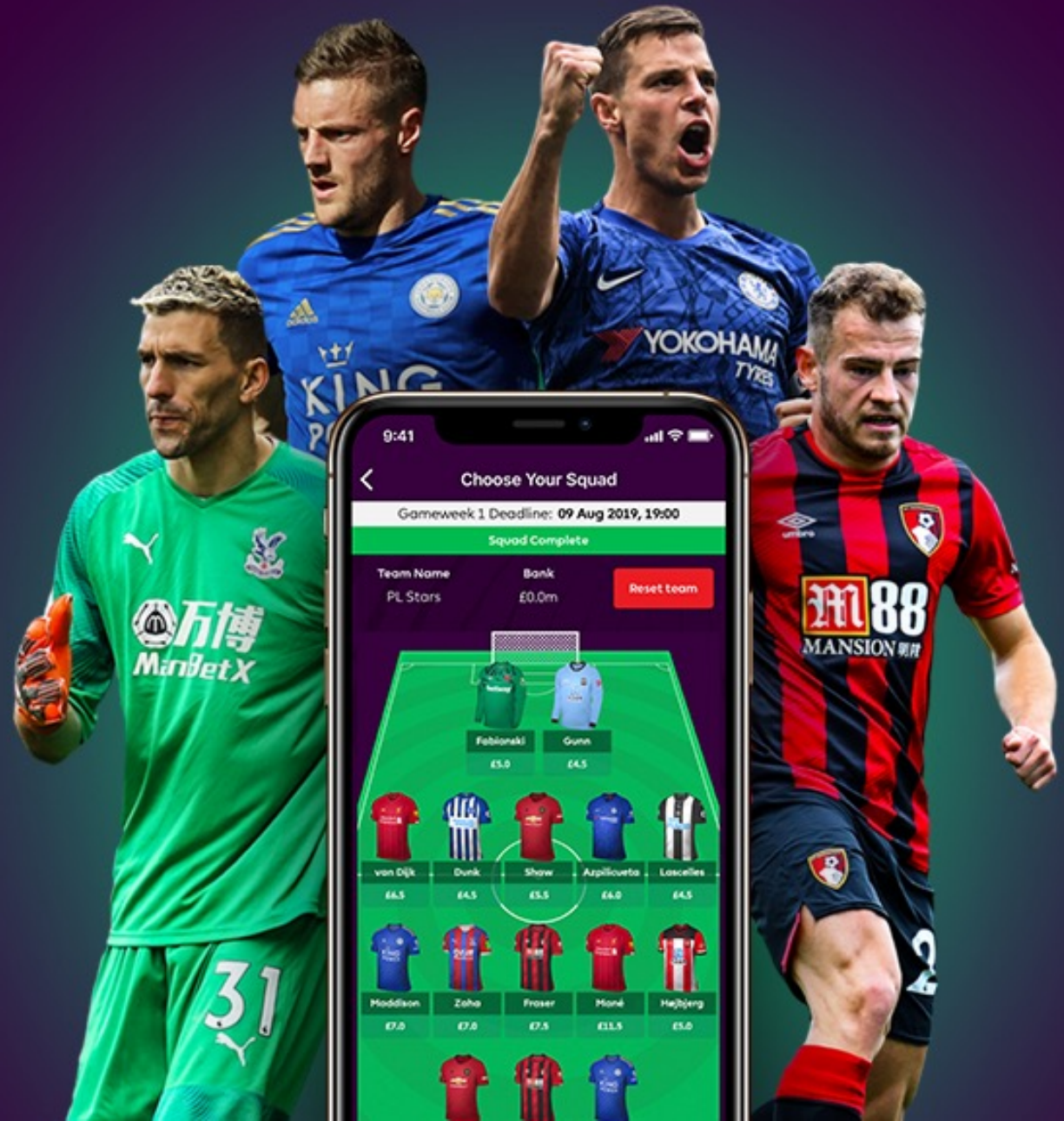


# INTRODUCTION

- 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

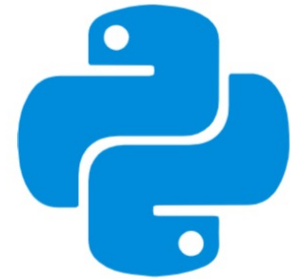
SQL



# Modeling

- Get data
- Linear regression model
- Save for later

SQLAlchemy





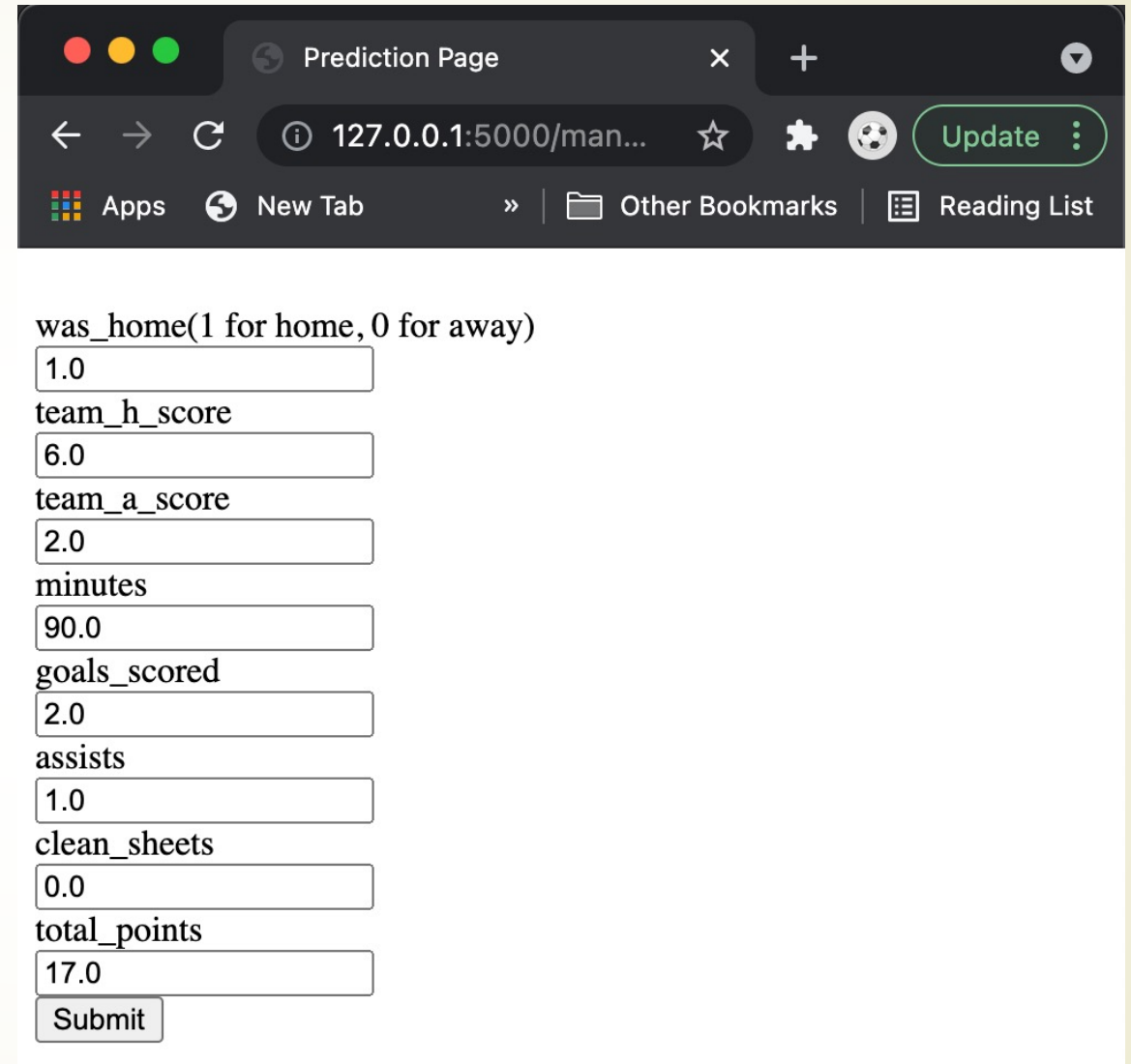
# Production

- ▶ 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 toolbar with icons for apps, new tabs, and bookmarks. A green "Update" button is visible in the top right corner of the browser window.

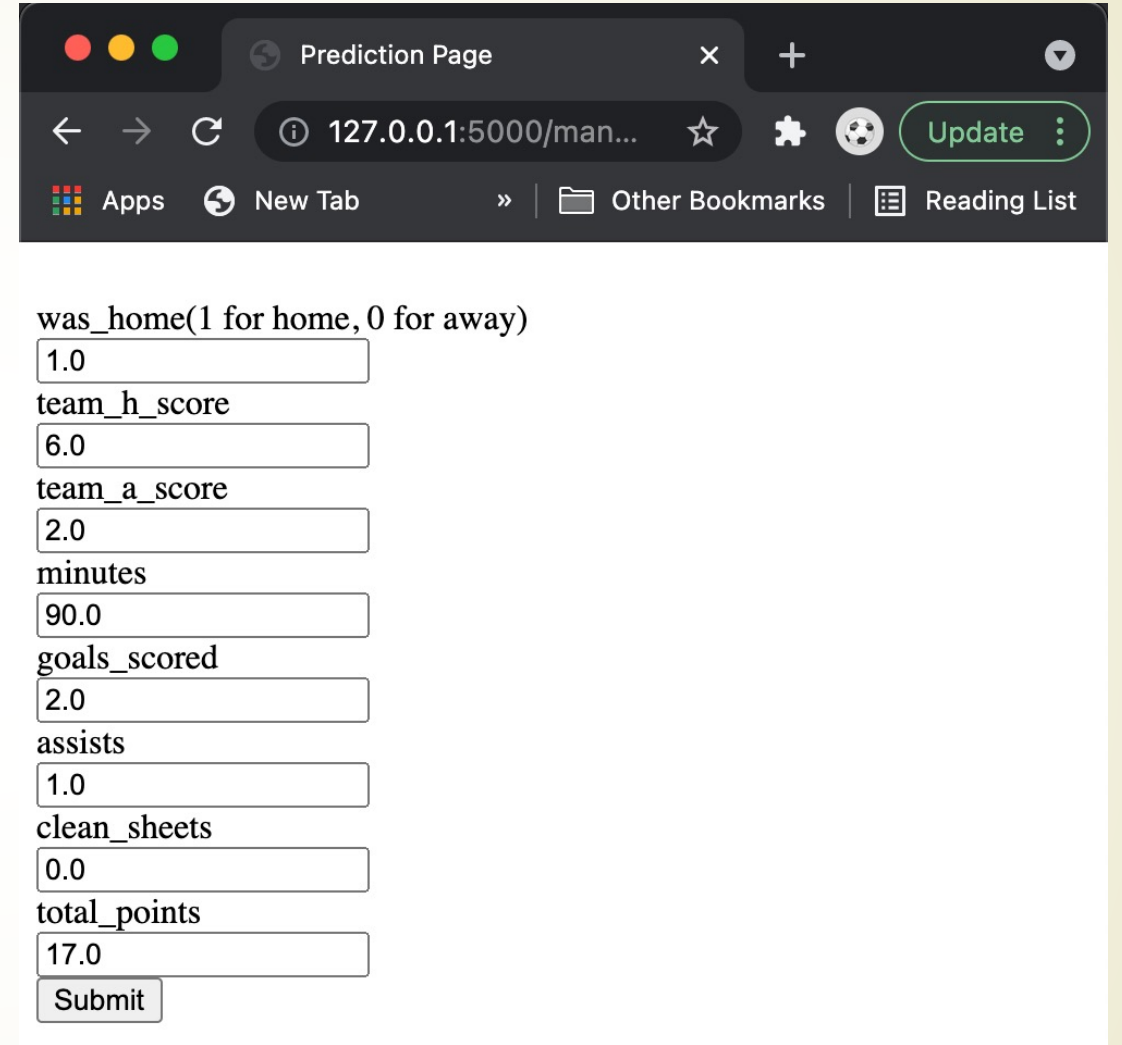
The form contains the following fields and values:

- 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



The screenshot shows a web browser window titled 'Prediction Page'. The address bar displays '127.0.0.1:5000/man...'. The browser interface includes navigation buttons, a search bar, and a bookmarks 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 main content area of the page contains a form with 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.



## Future Work

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





Thank you,  
People!!

Bernard Opoku

