FinTech - Project 1

Soccer "Money" Ball"

Meet the project team

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The WHY

Defining why are we doing this is a key step in any project. The why forms the whole reason and motivation for doing this, it is the origin and objective all other tasks inherit from.

"Create The Best Fantasy Football Teams on the Globe"

The WHAT

Building on the why, defining the what gives us clarity of scope for this project. What are the deliverables.

"Deliver Notebooks, Reports, Dashboards and Images using programmatic statistical analysis to -

"Create The Best Fantasy Football Teams on the Globe"

The HOW

Now we understand the why and the what how will we do this.

"Our Project team will utilise Markdown, Python, Pandas, Plotting libraries, Published APIs, Postgresql and CSV files to -

"Deliver Notebooks, Reports, Dashboards and Images using programmatic statistical analysis to -

"Create The Best Fantasy Football Teams on the Globe"

We Need Data - But where is it?

In this project we found many sources of data and data types. We chose the following data sources.

Kaggle European Soccer Database - SQLDBlite Database

RapidAPI API - API-FOOTBALL API

FutDB - Database API for FIFA 22

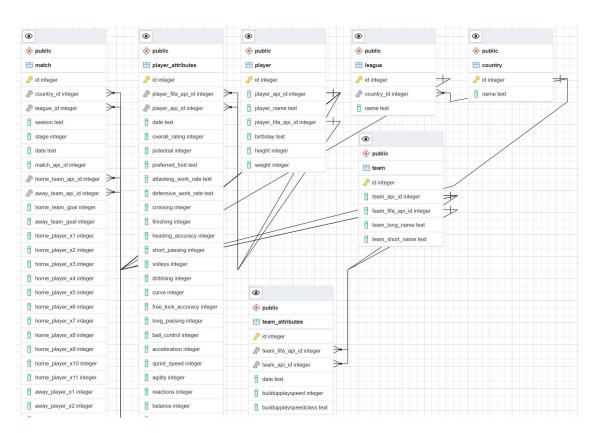
ISO.org - ISO.org CSV File

We Need Data - But where is it?

The selection of these data sources was a deliberate decision by the project team. This intention is to demonstrate our ability using not just one, but three very prevalent data source types you'd expect to come across in the industry

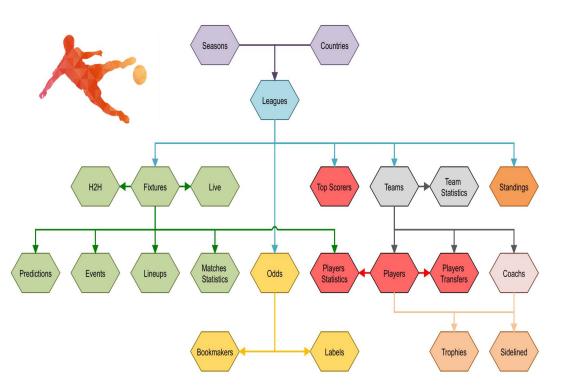
- SQL Databases
- API
- CSV Files

Kaggle - Euro_soccer_db ERD



- 7 Tables
- 200,000 rows
- Inspected data
- Clean data
- Created Postgres DB
- Created schema
- Applied Schema
- Created constraints
- Generate ERD
- Seed data
- Run Queries

RapidApi - Football-API



- Created Pro access paid account
- 19 USD per month
- 7500 requests per day limit
- Overage charge 0.0025 cents per request
- 300 requests per minute rate limit

FutDB API - Database API for FIFA 22

Statistic

Real time statistics of our players that a stored at the moment in our database.

Players

18.251

Cards

40

Nations

Leagues

Clubs

159

49

668

- Created Premium access paid account
- 19.99 Euro for 30 day access
- 200,000 requests per day limit
- Rate Limit Unknown

SO Org - Officially Assigned Country Codes

English short name	•	French short name	Alpha-2 code	Alpha-3 code
Afghanistan		Afghanistan (l')	AF	AFG
Albania		Albanie (l')	AL	ALB
Algeria		Algérie (l')	DZ	DZA
American Samoa		Samoa américaines (les)	AS	ASM
Andorra		Andorre (l')	AD	AND
Angola		Angola (l')	AO	AGO
Anguilla		Anguilla	Al	AIA
Antarctica		Antarctique (l')	AQ	ATA
Antigua and Barbuda		Antigua-et-Barbuda	AG	ATG

- Freely Available
- Copied to local csv
- Provided the Alpha-3 code for plotting

We Have Data! Let's do some preliminary analysis

- What are the biggest Leagues in the World and How many Games do they play
- Are different leagues more attacking or defensive ?
- Are there any factors that unilaterally influence the number of goals scored in a game by a team
- Does the amount of home vs away advantage change per season ?
- Does the amount of home vs away advantage change per league ?

Looking good, but did we pick the right sport?

- Where do these Soccer players come from is it truly a global sport ?
- Which Countries have professional Soccer Leagues and how many?
- Are there continents where Soccer is more popular ?
- Is there a relation between developed countries and Soccer Leagues ?
- Does this sport transcend a countries economic status

Preliminary analysis complete - Let's play Soccer "Money" Ball

From the ground work we completed we now have a better understanding of the data. Through this process we narrowed our scope to the following leagues

- English Premier League
- Italy Serie A
- France Ligue 1
- Spanish LIGA

We know these are the most attacking leagues and play the most games. We also understand that there is a definite home team advantage, and there is a loose trend of more goals being scored each year then the previous year. We have also confirmed that Soccer is truly a global sport played in many countries and represents a good choice of sport as there will be many fantasy football competitions across the globe we can enter.

Using all of this data we have assembled the following fantasy football teams for each of the 4 Top Leagues

English Premier League



France Ligue 1 League



Italy Seria A



Spain La Liga



Player1



Player7



Player2



Player8



Player3



Player9



Player4



Player10



Player5



Player11



Player6

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The End

Thank you from Project Team 4 for your participation

Link to Project Files <u>here</u>