# The Beautiful Game

Investigating European Soccer Database

# Data

- Obtained from Kaggle
- Over 25k matches
- 10k+ player records
- 7 tables and 199 columns
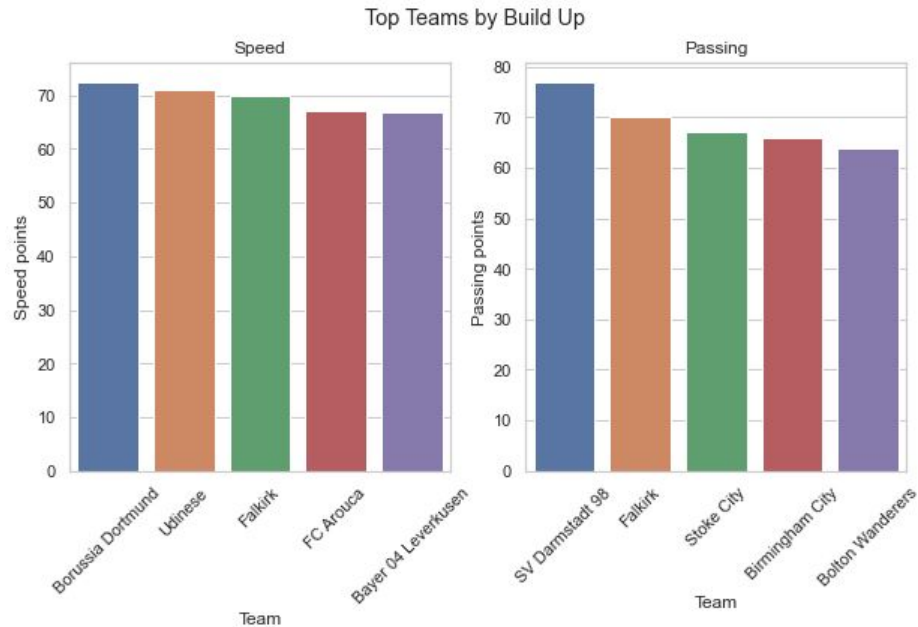- Credit goes to Hugo Mathien

|   | type | name | tbl_name | rootpage | sql |
|---|------|------|----------|----------|-----|
| 0 | table | sqlite_sequence | sqlite_sequence | 4 | CREATE TABLE sqlite_sequence(name,seq) |
| 1 | table | Player_Attributes | Player_Attributes | 11 | CREATE TABLE "Player_Attributes" (\n\t`id`\tIN... |
| 2 | table | Player | Player | 14 | CREATE TABLE `Player` (\n\t`id`\tINTEGER PRIMA... |
| 3 | table | Match | Match | 18 | CREATE TABLE `Match` (\n\t`id`\tINTEGER PRIMAR... |
| 4 | table | League | League | 24 | CREATE TABLE `League` (\n\t`id`\tINTEGER PRIMA... |
| 5 | table | Country | Country | 26 | CREATE TABLE `Country` (\n\t`id`\tINTEGER PRIM... |
| 6 | table | Team | Team | 29 | CREATE TABLE "Team" (\n\t`id`\tINTEGER PRIMARY... |
| 7 | table | Team_Attributes | Team_Attributes | 2 | CREATE TABLE `Team_Attributes` (\n\t`id`\tINTE... |

# Question 1: Which team had scored the most goals from 2008 to 2016?
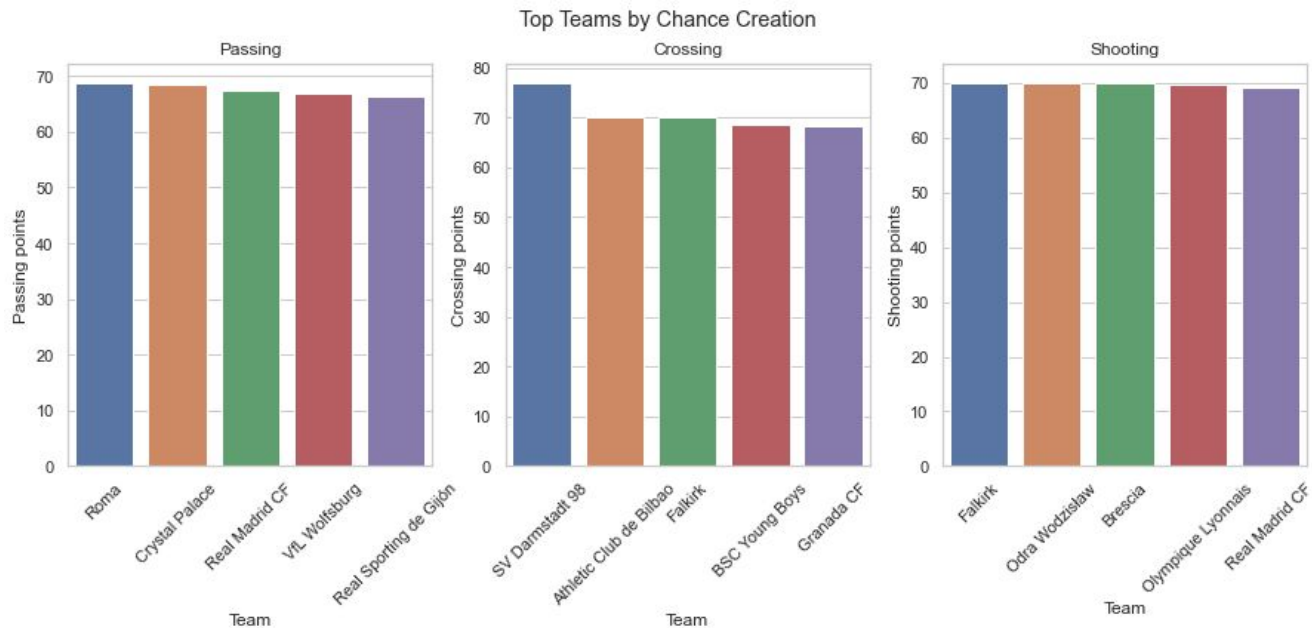
Top 5 teams with most goals from 2008 to 2016
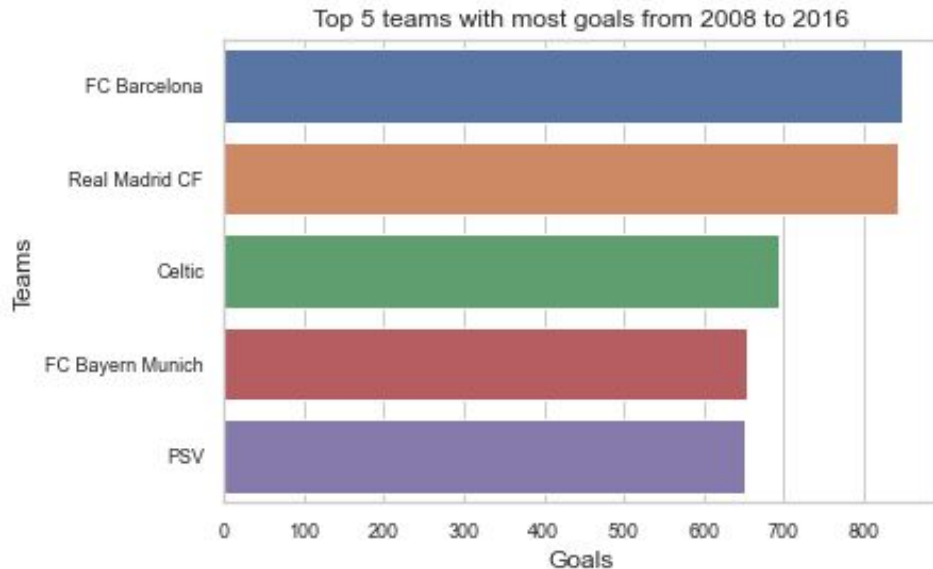
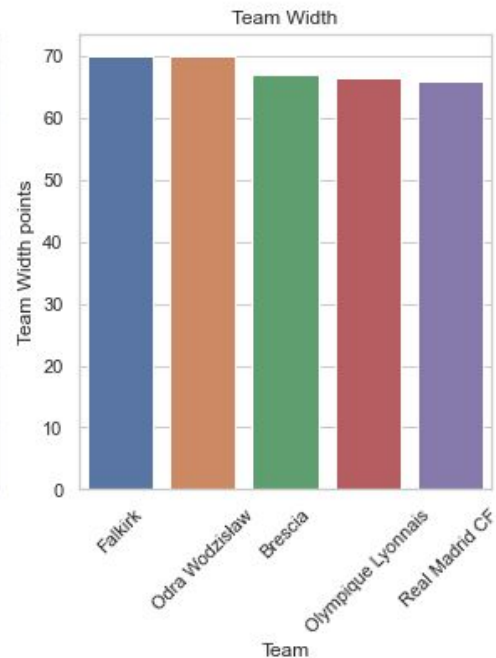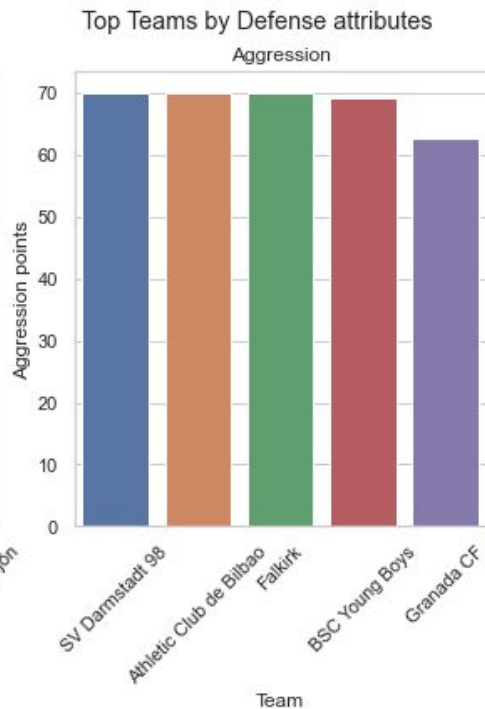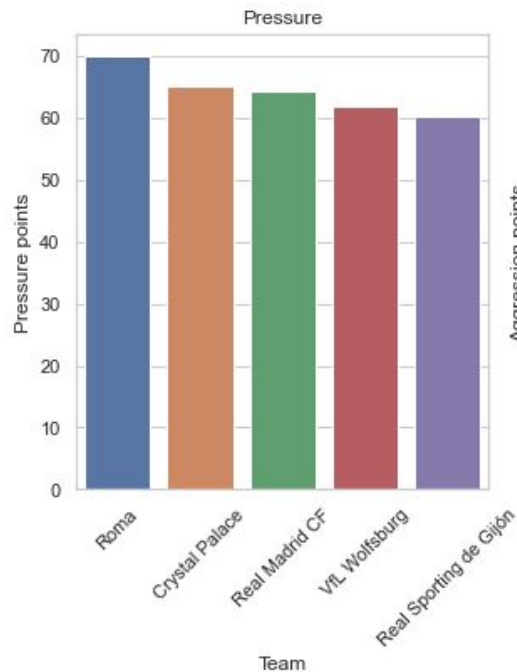| | Team | Goals |
|---|---|---|
| 75 | FC Barcelona | 849 |
| 211 | Real Madrid CF | 843 |
| 49 | Celtic | 695 |
| 77 | FC Bayern Munich | 653 |
| 184 | PSV | 652 |
| 15 | Ajax | 647 |
| 76 | FC Basel | 619 |
| 161 | Manchester City | 606 |
| 51 | Chelsea | 583 |
| 162 | Manchester United | 582 |

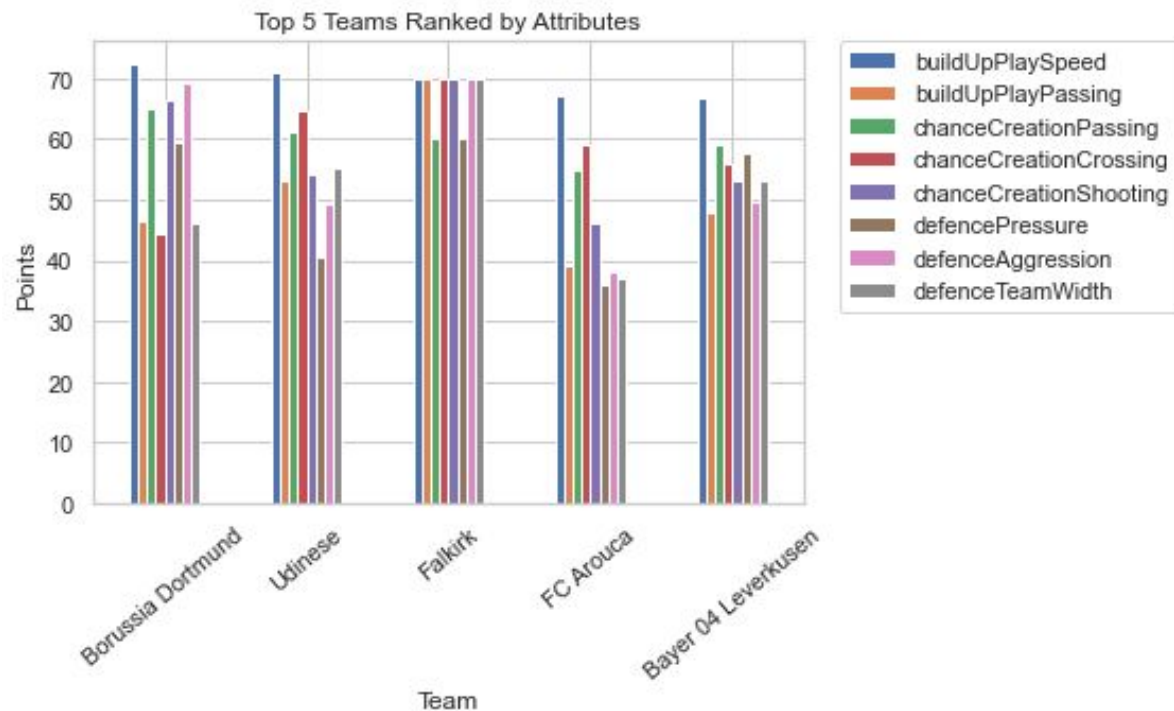# Question 2: What team improved the most over the time period?



Top Teams by Build Up
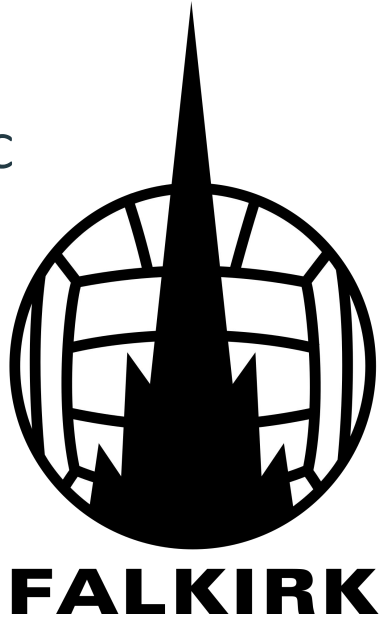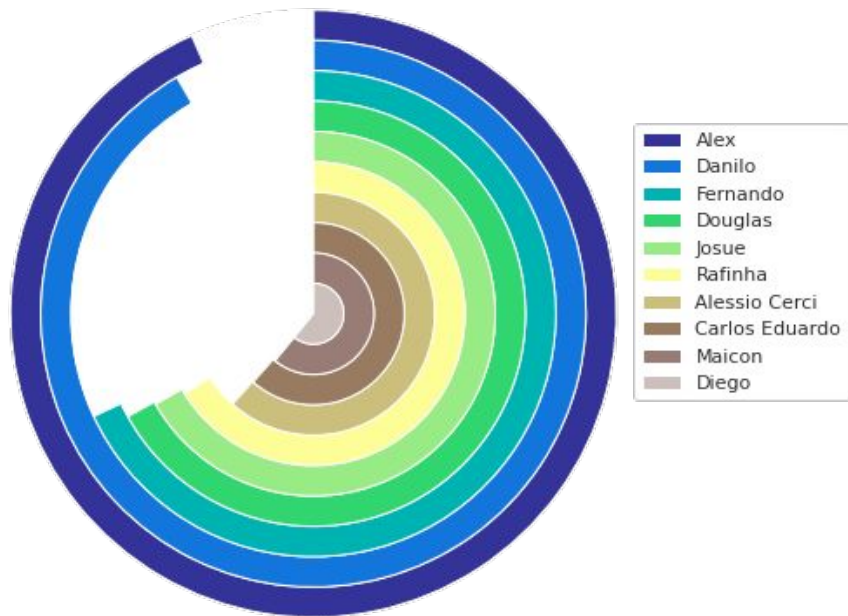
# Cont.

# Cont



Top Teams by Defense attributes

# Cont



Top 5 Teams Ranked by Attributes

# Cont. Who is the common denominator?

Falkirk F.C

# Question 3: Which player had the most penalties?



Legend:
- Alex
- Danilo
- Fernando
- Douglas
- Josue
- Rafinha
- Alessio Cerci
- Carlos Eduardo
- Maicon
- Diego

**Top 10 Player in Penalties**
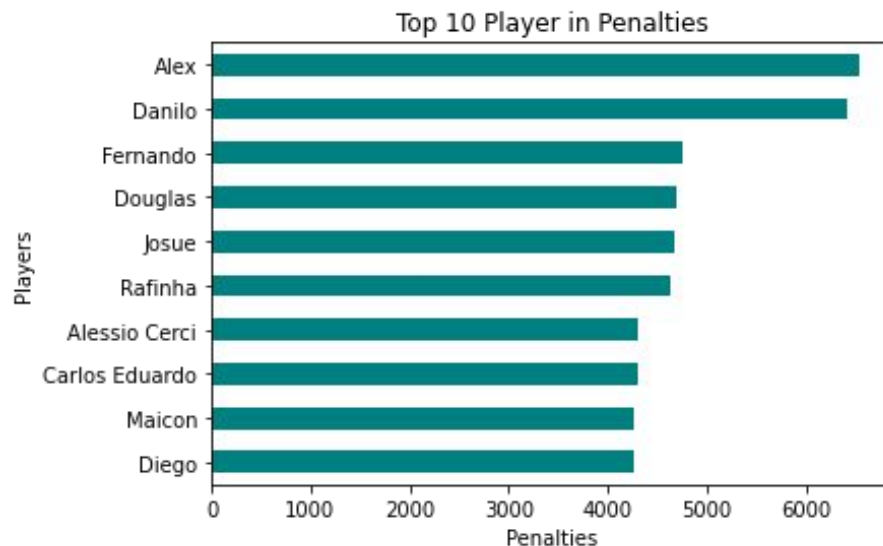
# Lessons Learned

- Allocate time
- Version control save lives!
- Jupyter notebook checkpoints