Soccervis - Visualizing Football Transfers

Final Presentation

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June 23, 2015

Introduction

Facts:

- Over 10000 football transfers per year
- Billion dollar market

Our goal:

- Gather data
- Analyze
- Visualize on world map

$\rightarrow$ New insights for football fans

Crawler

→ Crawling data from www.soccerbase.com

Java 8

JSoup HTML parser
(www.jsoup.org)

Geocoder

→ Find exact coordinates of the team's home grounds

Python 2

OpenCage Geocoding API

Database

Neo4j Graph Database

Data

- Data crawled from www.soccerbase.com
- Contains 100 leagues, 5000 teams, 100000 players, 300000 transfers
- Database needs to be updated only when the transfer windows are open (Jan-Feb and Jun-Aug)

Website
→ Visualize Data

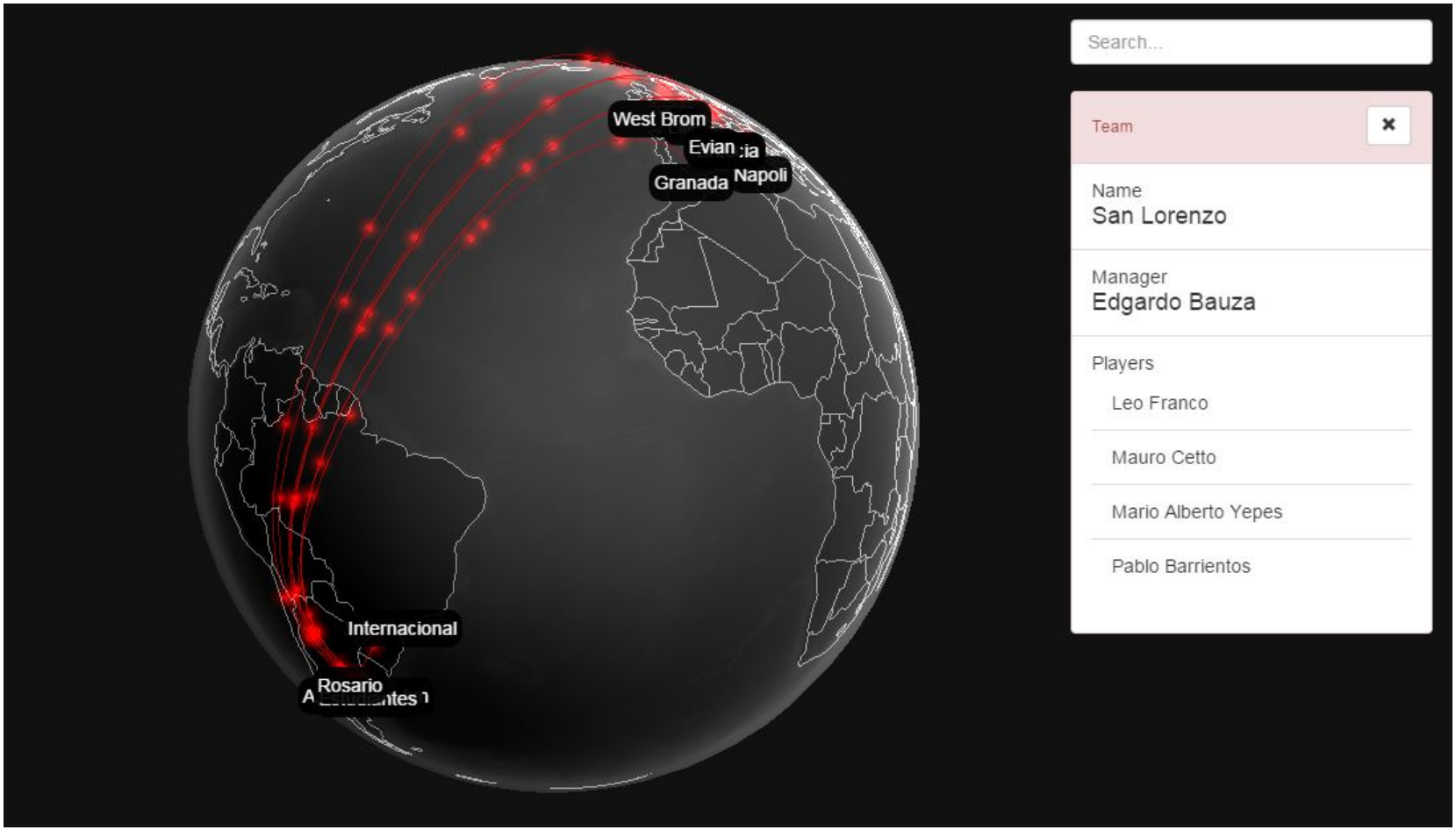
Node.js - Server-side platform

Three.js - Javascript 3D library

Outline

- Visualization of the football transfer graph ✓
- Analysis and visualization of team/player statistics from the football transfer graph
- Calculation of popularity of teams using Twitter
- Inclusion and analysis of transfer rumors from different sources (Transfermarkt & Twitter) ✓
- Classification and visualization of fan opinions ✓

Demo


West Brom
Granada
Napoli
Internacional
Rosario
Search...
Team
Name
San Lorenzo
Manager
Edgardo Bauza
Players
Leo Franco
Mauro Cetto
Mario Alberto Yepes
Pablo Barrientos

Missing Locations

→ directly measured

- 1165 out of 5356 teams have no result (21.75%)

Wrong Locations

→ needs manual verification

- Sample size: 250
- 147 (58.8%) correct
- 44 (17.6%) wrong
- 59 (23.6%) no result

→ needs manual verification

- difficult as most of the posts are informative (www.transfermarkt.co.uk)
- should be neutral
- scores mostly slightly positive

→ Future Work: Inclusion of Twitter posts

Future Work

- Adding missing locations and fix wrong ones
- Inclusion of Twitter posts for sentiment analysis
- Analysis and visualization of team/player statistics from the football transfer graph
- Calculation of popularity of teams using Twitter