Ideas for Ars Futbolistica graphs

- Table stuff with just point totals
  - Number of points to insure safety in EPL.
  - Share of poitns generated by top half of table (and other fractions)... across the leagues (also La Liga, Bundesliga)
  - Largest point difference in upper half of table as function of season and league... team
- Using actual results (including goals for and against)
  - Correlation between goal difference and league position
  - Arsenal's points accrued against top 5 or 4 for each season
  - When goals are scored globally (in game time). Is it approximately random? Assume fewer early and late on...
  - How hard is it to stay in the PL, probability of relegation in first season up.
  - Arsenal goals against major changes in the defense (Tony Adams leaving or Viera say)
  - do mini league table of bottom 6 teams and correlate to final league positions to see if six pointers really do determine the relegation places.
- Having goal time stamps for each result
  - Goals scored in last 5 minutes by Man U (by percentage)
    - Supposedly they are good at this, don't think so, compare to another random
- "Upward mobility" – how often do teams finish above whta they did the previous year and how this varies across the years and leagues
- "Bottom feeders" – is there a trend in the relegated sides in terms of goal difference or points etc...

Python methods/dictionaries/classes that will be needed

- create dictionary of each season where each key is a team, at each subdictionary has points, goal difference whatever, (global stuff), final position in the table.
  - Each key should have a submatrix with results away and home against the other teams

  - How to deal with time stamps on goals though? create another subdictionary with each matrix element having a dictionary itself i guess..
    * The keys would be final score, half time score?, list of home team goals with scorer and time stamp next to them, and the same for away side.
    * This last thing may be identified as actual teams as well I suppose # Improvements to code

- Currently all the data is reloaded into dictionaries, should I create saved dictionary? Probably not worth it I guess.
- Logo should be watermark on graphs, and tables. Tried just latex writing, looks okay specially if I add a twist of a symbol in there (on the F)
- Need to make really eyepopping graph style, scientific style just does not work. Need different color background (than white) and fancy font for the ticks etc... probably want italics, ubuntu like font, with ticks rotated slightly or alot.
- Trawl the internet for examples of fancy stats/graphs/table fonts
- Need to fix bar graphign code to place text at location independent of xy scale from data.
  - year location are terrible (move all over)
- Need to increase size of figures, too compressed, don't quite look nice enough.
- Of course, need to program bar thing with negative axis as well.
- Sometimes matching name can be off (1. FC Koln and 1. FC Kaiserlautern), currently set to auto, maybe should change (keeping track of which names have been rejected to make it quicker)
- when plotting goals for and against would be nice to have two sided bar graph (alternate colors)
- Make aspect ratio longer and flatter (seems nicer)

Vital link for data

- `http://www.clearlyandsimply.com/clearly_and_simply/2010/05/combine-tables-and-charts-on`
- `http://www.loria.fr/~`

Updated 3/15/2013