San Francisco Giants Database
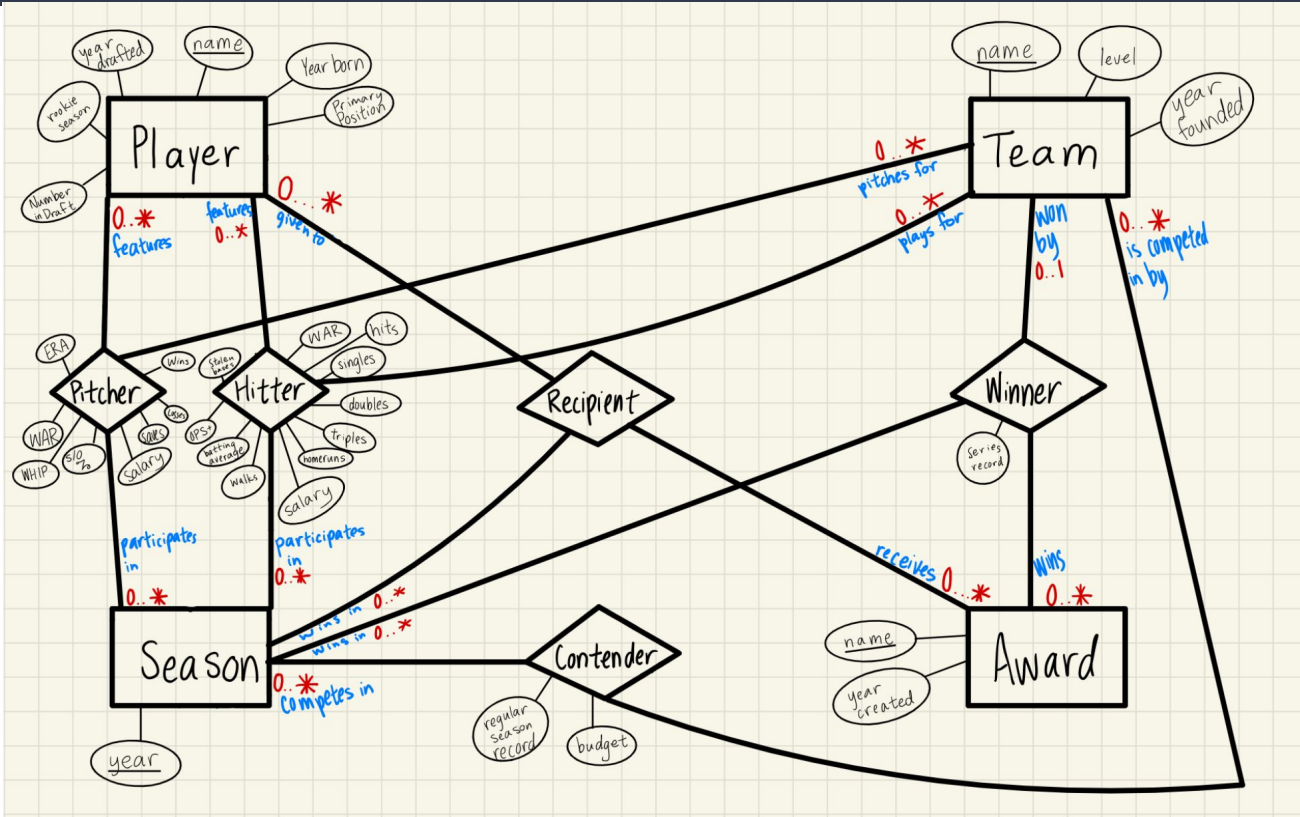
By Izzy Tilles

Concept

- **SF Giants Database for administrators within the team**

- **Goal: show players throughout time and rank them**

- **Analyze achievements both by individual players and by teams: end goal is how can past success be recreated?**

ER Diagram

Queries

all_time_hitter : `SELECT p.player_name, SUM(h.games_played) as games_played, SUM(h.salary) as salary, SUM(h.war) as war, SUM(h.hits) as hits, SUM(h.singles) as singles, SUM(h.doubles) as doubles, SUM(h.triples) as triples, SUM(h.homeruns) as home_runs, SUM(h.stolen_bases) as stolen_bases, ROUND(AVG(h.batting_avg), 3) as batting_avg, ROUND(AVG(h.ops), 3) as ops, ROUND(AVG(h.slg), 3) as slg

        FROM hitter h JOIN player p USING (player_name)

        WHERE p.primary_position = ?

        GROUP BY p.player_name`,

Populating Data

- **Original: by hand, via baseball-reference.com**

- **Later, for testing - via AI**

Testing Code

- **Constantly running the server**

- **console.log('Player:', player);**
  console.log('Season:', season);

- **Adding more values (thank you AI)**

Final Thoughts – roadblocks and next steps

- **Python → Node.js**
- **Originally going to include minor league players, scrapped due to lack of time**
- **Left Outer Join to get hyperlinks**

- **Currently more for fans viewing pleasure**
- **Include minor leaguers, rank prospects**
- **Hover over data to get more info (for awards)**
- **Validate user data when coming from search bars**
- **Expand scope to include other teams for scouting reports**