Database Project Proposal

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Create a database to analyze how NBA rosters are constructed, to help find visualize what factors have a correlation to more winning. With the usage of analytics in sports increasing drastically over the past decade, our goal is to use MySQL and DBMS to aggregate data on teams and player.. We will use our database to track, store and analyze various player statistics over the course of games and seasons, with the ultimate end goal to build the "perfect" NBA team (that's also possible, given the teams have a salary cap on what they can pay in total for all ~15 players' salaries).

We will track players, and statistics about them and their performance in games over the course of multiple seasons. The idea is to find when/where/what conditions players play their best, and build the optimal team around that. We could potentially use it to analyze the best teams and what they all have in common and make assumptions on what aspects of the team are the reasons why and how doing those similar things could help our team be better as well. Players contracts will be stored, including how large and how long the contract is, which will allow us to very specifically identify players to sign to our team in the offseason (assuming the Player is a free agent). It could also be used to tweak our team lineup for every game depending on who we play - using statistics about the opposing teams and using a lineup that tends to win more against that team (maybe a different player who can guard their point guard very well because when he plays against taller players he does poorly...for example). It can also be used to decide on whether or not we want to resign a player when their contract is up.