**Description:**

The power rankings given are based on offense, defense, star power, number of clutch players, and a team’s mindset.

* Offense is calculated by points per game and three-point attempts and efficiency using stats from the previous year from [basketball-reference](https://www.basketball-reference.com/).
* Defense is calculated with [FiveThirtyEights](https://fivethirtyeight.com/features/a-better-way-to-evaluate-nba-defense/)’s new defensive measure, DRAYMOND.
* Stars are determined by combination of offense and defense from above.
* Clutch is found from this [website](https://stats.inpredictable.com/nba/ssnPlayerSplit.php?season=2018&pos=ALL&team=ALL&po=0&frdt=2019-10-22&todt=2020-10-11&shot=both&dst=plyr).
* Mindset is also found from basketball-reference by looking at how many years a player has been in the league.

Version 1.0

**Notes:**

* Only the top 7 players of each team are looked at to avoid inflated numbers of less used players
* 4 extra teams are analyzed due to them having an injured star player. This extra analysis shows their true potentials if they had their key player. (Warriors, Nets, Trail Blazers, Wizards)
* Usage rates were considered but can’t be used because star players coming in from other teams had high usage rates when they were lone stars. They will adjust their usage rates for their team to be successful over the course of this season.

**Improvements:**

* Offense: I need to consider better ways to analyze a team’s offensive capabilities because some teams are still strong on offense even though they aren’t a three-point shooting team. (Lakers, Bucks, Trail Blazers)
* Defense: Something that DRAYMOND favors is big men. Not arguing that big men aren’t good defenders, but it undervalues guards. Need to find a way to rank the guards.
* Stars: Find a way to give value to off-ball presence, incorporate assists and screens. Defense values the big men more. Some popular stars widely agreed on that are not mentioned: Westbrook, Chris Paul.
* Clutch: Need to reconsider whether this measure is really that important to a team’s overall success.
* Mindset: Rookies not included, making a team “win now” instead of “rebuilding”.

Version 2.0

12/29/2020

**Changes:**

* Fixed error with indexing in the offensive and defensive rankings
* Combined all of the notebooks into one so there are less notebooks and less csv’s
* Created an overall ranking to sort by
* Updated stars ranking system to differentiate mvp players vs bottom tiered stars vs average player
* Star count ranking value is reduced because it comes from offense and defense ranking. But I want to reward teams with stars still because they’re more consistent than average players

**Improvements:**

* Not using projection stats, only strictly based on past stats which doesn’t benefit younger teams
* Model doesn’t consider rookies at all which leaves younger teams at disadvantage (Miami, New Orleans, Denver)
* The model is currently not reproducible because DRAYMOND stats were only done for this year and not updated annually
* Find a way to look at all players instead of top 7 players per team