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1. A clear and detailed description of the problem. (1 paragraph)

- LeBron James, the greatest basketball player of all time, is soon to retire! Many new NBA fans fail to recognize his importance to the game, and how his game has evolved and continued to improve over time. We plan to create a dashboard where players can learn about LeBron's statistics throughout time, and learn how his performance varies in different situations.

2. Broad analytical questions relevant to that problem. (1 question per team member)

- How has LeBron's PPG changed over time?
- How has the distribution of LeBron's shots changed over time? Is it predominantly layups, dunks, three pointers, etc?
- How has LeBron's plus-minus changed over time?

3. Data sources and justification of why those sources are relevant. (1 paragraph)

The primary data source for this will be the NBA API, which allows access to the game stats for a given player going back to 1997. This will allow us to easily request and store game logs for LeBron's career. These game logs contain all the information necessary to track LeBron's statistics throughout the years. It will allow us to calculate average points, assists, steals, etc. for each year, and will allow us to see whether Bron's performance changes based on the time or location of the game. The API also allows us to specifically search for LeBron's specific stats against another player.

4. A plan for data generation or acquisition. This includes whether you intend to collect your own data, import an existing dataset, or both. If you plan to collect your own data, explain how you will do so and what data you will collect. If you plan to use an existing dataset, provide the link to the dataset and describe the data in detail. It is important to justify why these datasets are relevant to the questions being asked and how they will help answer them. (1-2 paragraphs)

Data will be acquired through the NBA API `playergamelogs` and `playervsplayer` endpoints, providing statistics from every game of LeBron's career and his specific statistics against another player. These will be stored in a database and accessed via the dashboard. The dashboard will check if a given game or player exists in the database, and if not request it using the NBA API. Below is a link to the `playergamelogs` JSON format

https://github.com/swar/nba_api/blob/master/docs/nba_api/stats/endpoints/playergamelogs.md

Returning the followings features for the game

```
['SEASON_YEAR', 'PLAYER_ID', 'PLAYER_NAME', 'TEAM_ID', 'TEAM_ABBREVIATION',  
'TEAM_NAME', 'GAME_ID', 'GAME_DATE', 'MATCHUP', 'WL', 'MIN', 'FGM', 'FGA', 'FG_PCT', 'FG3M',
```

'FG3A', 'FG3_PCT', 'FTM', 'FTA', 'FT_PCT', 'OREB', 'DREB', 'REB', 'AST', 'TOV', 'STL', 'BLK', 'BLKA', 'PF', 'PFD', 'PTS', 'PLUS_MINUS', 'NBA_FANTASY_PTS', 'DD2', 'TD3', 'GP_RANK', 'W_RANK', 'L_RANK', 'W_PCT_RANK', 'MIN_RANK', 'FGM_RANK', 'FGA_RANK', 'FG_PCT_RANK', 'FG3M_RANK', 'FG3A_RANK', 'FG3_PCT_RANK', 'FTM_RANK', 'FTA_RANK', 'FT_PCT_RANK', 'OREB_RANK', 'DREB_RANK', 'REB_RANK', 'AST_RANK', 'TOV_RANK', 'STL_RANK', 'BLK_RANK', 'BLKA_RANK', 'PF_RANK', 'PFD_RANK', 'PTS_RANK', 'PLUS_MINUS_RANK', 'NBA_FANTASY_PTS_RANK', 'DD2_RANK', 'TD3_RANK']

Of these, the most important will be SEASON_YEAR, GAME_DATE, MATCHUP, WL which all provide information about the game itself and FGM, FGA, FG3M, FG3A, OREB, DREB, AST, TOV, STL, BLK, PTS, which all provide information about LeBron's performance that game.

The playervsplayer endpoint can be found at the following link

https://github.com/swar/nba_api/blob/master/docs/nba_api/stats/endpoints/playervsplayer.md

And returns similar statistics about LeBron's performance and shot selection when a player is on or off the court.

5. Please indicate which parts of the above (1-4) you need feedback on or consultation with the instructor. If none, please state so.
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