Marquette University Basketball Heatmap

(Data Dawgs or some other team named idk)

Project Members and Responsibilities

- Nirmay Kathuria - Data cleanup and analysis
- Nathen Rusch – get data set, clean data, create model
- Jack Anderson - Data visualization
- Juan De Los Santos – Data Analysis
- [Wilson] - Slides

Dataset Description

For this project we are going to analyze and visualize shot data from the 2024-2025 Marquette University Men's basketball team. Some of the following datasets we will use include the following

1. Kaggle NBA Shots Dataset (2001–Present) http://tiny.cc/6odc001

    - This dataset contains the following information. Detailed shot locations, player names, teams, shoot results.
    - We will filter this dataset to focus on Marquette basketball or bucks basketball whatever we decide
    - Key Variables: player_name, shot_distance, shot_result, shot_location, game date

2. CBB Analytics Shot Chart Tool   https://cbbanalytics.com/tools/shot-charts

    - This is a tool we will use that provides shot chart data for NCAA teams. We will be using this for validation and help with our data collection

    - Dataset contains vast amounts of data that will be extracted accordingly

Project goal

The project's primary objective is to create a heatmap visualization of the Marquette University shot attempts for the 2024-2025 season

The answers we hope to achieve are

- Where on the court the players take the most shots
- How does shot selection vary by player and game
- Which areas of the court have the most successful shooting percentage
- Are there any trends in shot attempts over time

This project will leverage ggplot2, plotly, pandas, and other undetermined technologies