PRCP-1008-NBAShotSelection

Problem Statement

Task 1:-Prepare a complete data analysis report on the given data.

Task 2:- Help all stakeholders develop more effective game strategies. The goal is to find the best model that has the highest accuracy and F1-score.

Task 3:-Our objective is to build a shot prediction model, whether the player will score or not score, based on the circumstances under which they are made into consideration.

Dataset Link:

This data contains the location and circumstances of every field goal attempted by Kobe Bryant took during his 20-year career. Your task is to predict whether the basket went in (shot_made_flag).

Domain: Sports

Link : https://d3ilbtxij3aepc.cloudfront.net/projects/CDS-Capstone-Projects/PRCP-1008-NBAShotSelection.zip

Attribute Information :

The field names are self explanatory and contain the following attributes:

- action_type
- combined_shot_type
- game_event_id
- game_id
- lat
- loc_x

- loc_y
- lon
- minutes_remaining
- period
- playoffs
- season
- seconds_remaining
- shot_distance
- shot_made_flag (this is what you are predicting)
- shot_type
- shot_zone_area
- shot_zone_basic
- shot_zone_range
- team_id
- team_name
- game_date
- matchup
- opponent
- shot_id

Model Comparison Report

Create a report stating the performance of multiple models on this data and suggest the best model for production.

Report on Challenges faced

Create a report which should include challenges you faced on data and what technique used with proper reason.

Note:-All above task has to be created on single jupyter notebook and share the same for final submission.