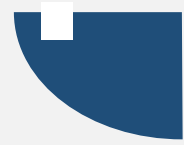
The background of the slide features a pattern of overlapping squares. Some squares are outlined with solid blue lines, while others are outlined with dashed blue lines. These squares are scattered across the left and bottom portions of the slide, creating a geometric, architectural feel.

# PUBG Analysis

NAIQING CAI  
YUCHEN ZENG  
HAO PAN  
QINTAO YING



# Our Goal

- 1. Provide some advice to players to gain a higher rank**
- 2. Try to detect some cheaters**



# Dataset

## Aggregate

| player_dist_ride | player_dist_walk | player_dmg | player_kills | player_name | player_survive_time | team_id | team_placement |
|------------------|------------------|------------|--------------|-------------|---------------------|---------|----------------|
| 2870.72400       | 1784.847780      | 117        | 1            | Snuffles    | 1106.320            | 4       | 18             |
| 2938.40723       | 1756.079710      | 127        | 1            | Ozon3r      | 1106.315            | 4       | 18             |
| 0.00000          | 224.157562       | 67         | 0            | bovize      | 235.558             | 5       | 33             |
| 0.00000          | 92.935150        | 0          | 0            | sbahn87     | 197.553             | 5       | 33             |
| 2619.07739       | 2510.447000      | 175        | 2            | GeminiZZZ   | 1537.495            | 14      | 11             |

## Deaths

| killed_by    | killer_name      | killer_placement | killer_position_x | killer_position_y | map     | match_id  | time |
|--------------|------------------|------------------|-------------------|-------------------|---------|---|------|
| Grenade      | KrazyPortuguese  | 5.0              | 657725.10         | 146275.2          | MIRAMAR | 2U4GBNA0YmnLSqvEycnTjo-KT000vfUnhSA2vfVhVPe1QB... | 823  |
| SCAR-L       | nide2Bxiaojiejie | 31.0             | 93091.37          | 722236.4          | MIRAMAR | 2U4GBNA0YmnLSqvEycnTjo-KT000vfUnhSA2vfVhVPe1QB... | 194  |
| S686         | Ascholes         | 43.0             | 366921.40         | 421623.9          | MIRAMAR | 2U4GBNA0YmnLSqvEycnTjo-KT000vfUnhSA2vfVhVPe1QB... | 103  |
| Down and Out | Weirdo7777       | 9.0              | 472014.20         | 313274.8          | MIRAMAR | 2U4GBNA0YmnLSqvEycnTjo-KT000vfUnhSA2vfVhVPe1QB... | 1018 |
| M416         | Solayuki1        | 9.0              | 473357.80         | 318340.5          | MIRAMAR | 2U4GBNA0YmnLSqvEycnTjo-KT000vfUnhSA2vfVhVPe1QB... | 1018 |

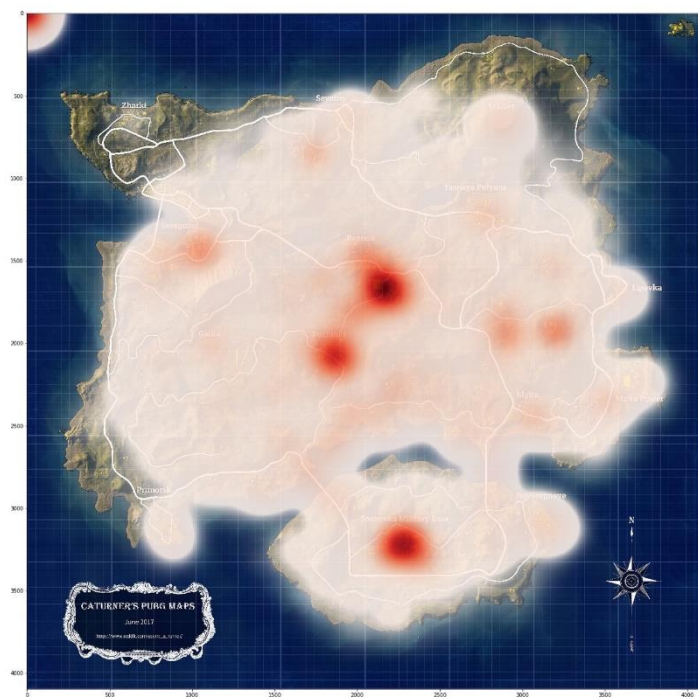


Death part

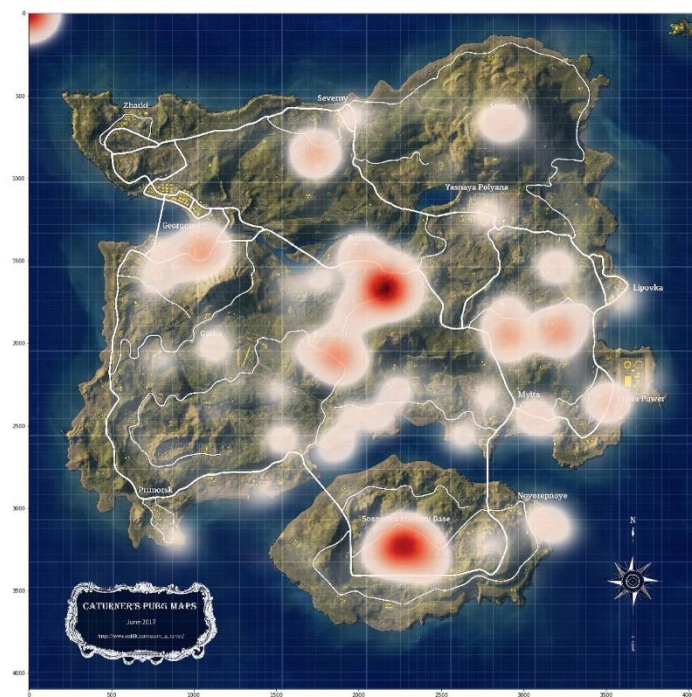


# Death Place (Erangel)

Entire match



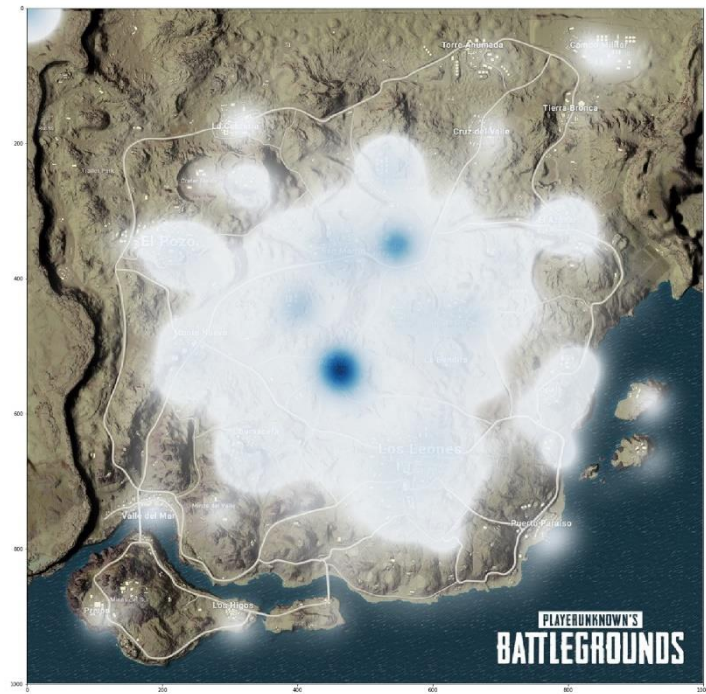
Four minutes



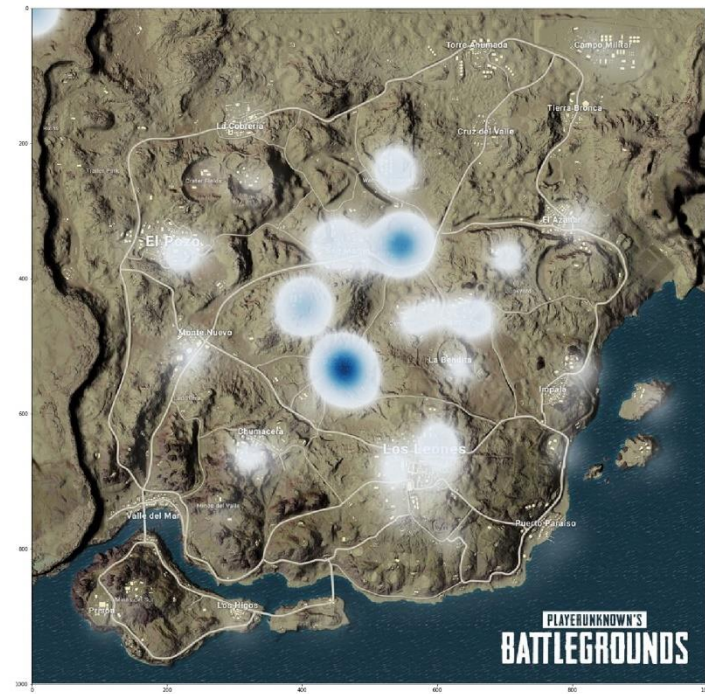


# Death Place (Miramar)

Entire match

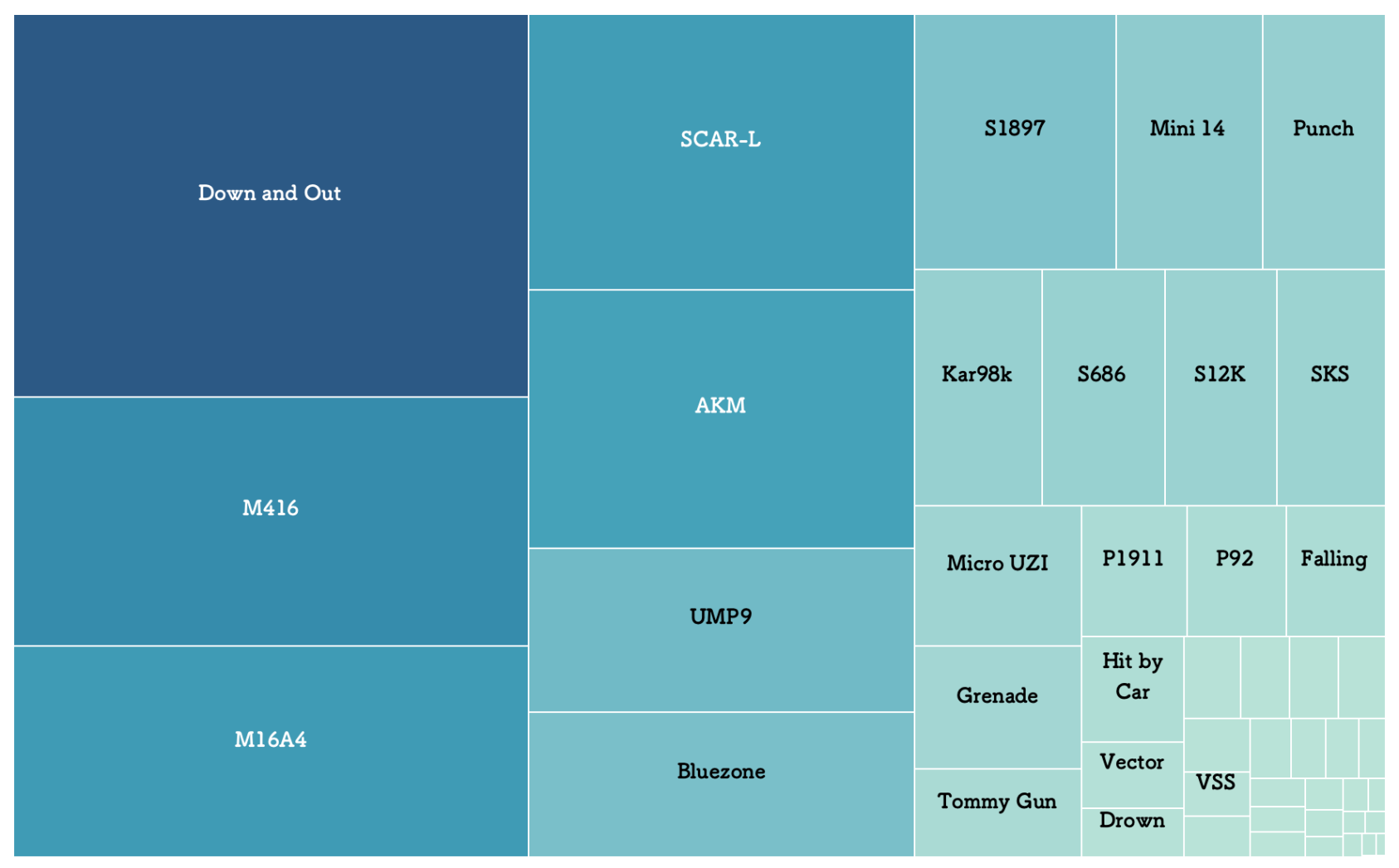


Four minutes





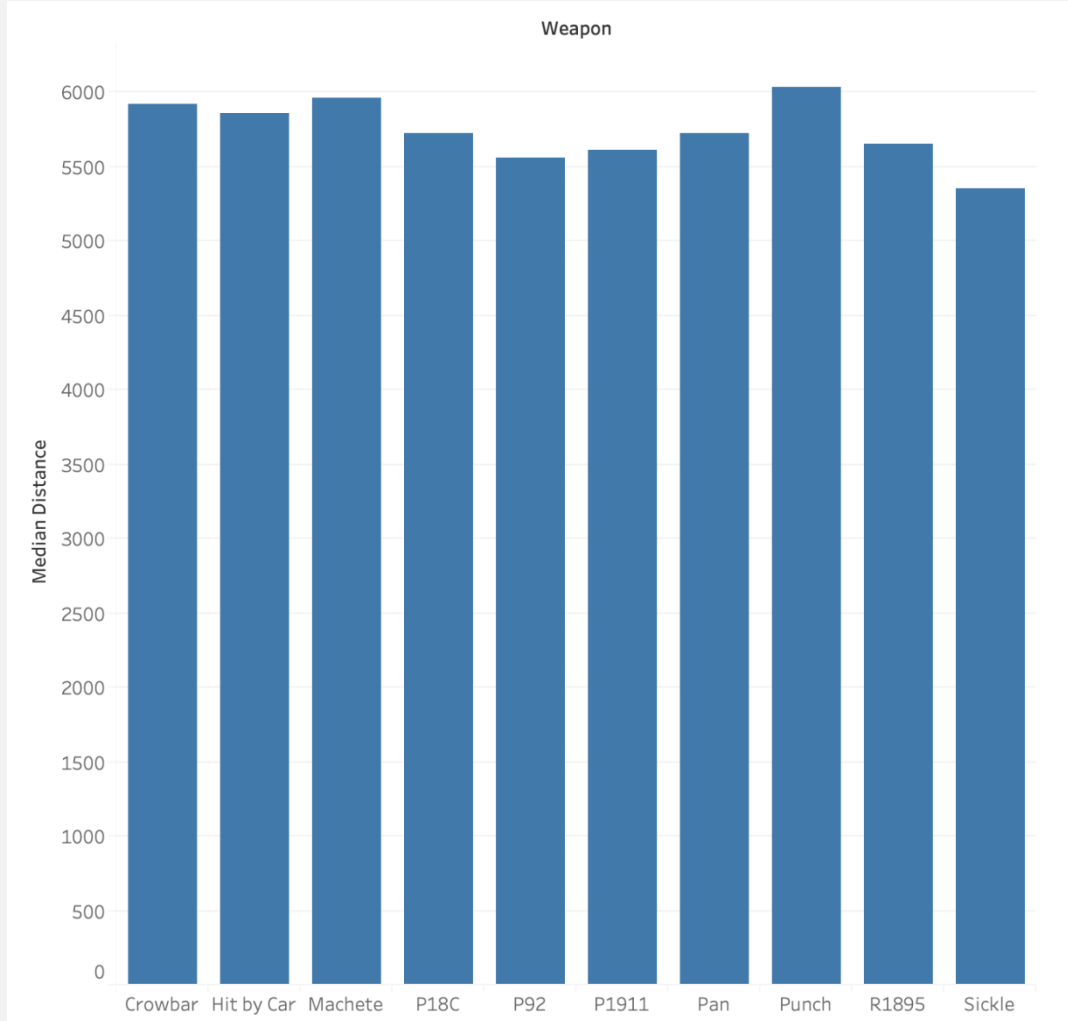
# Death Reasons



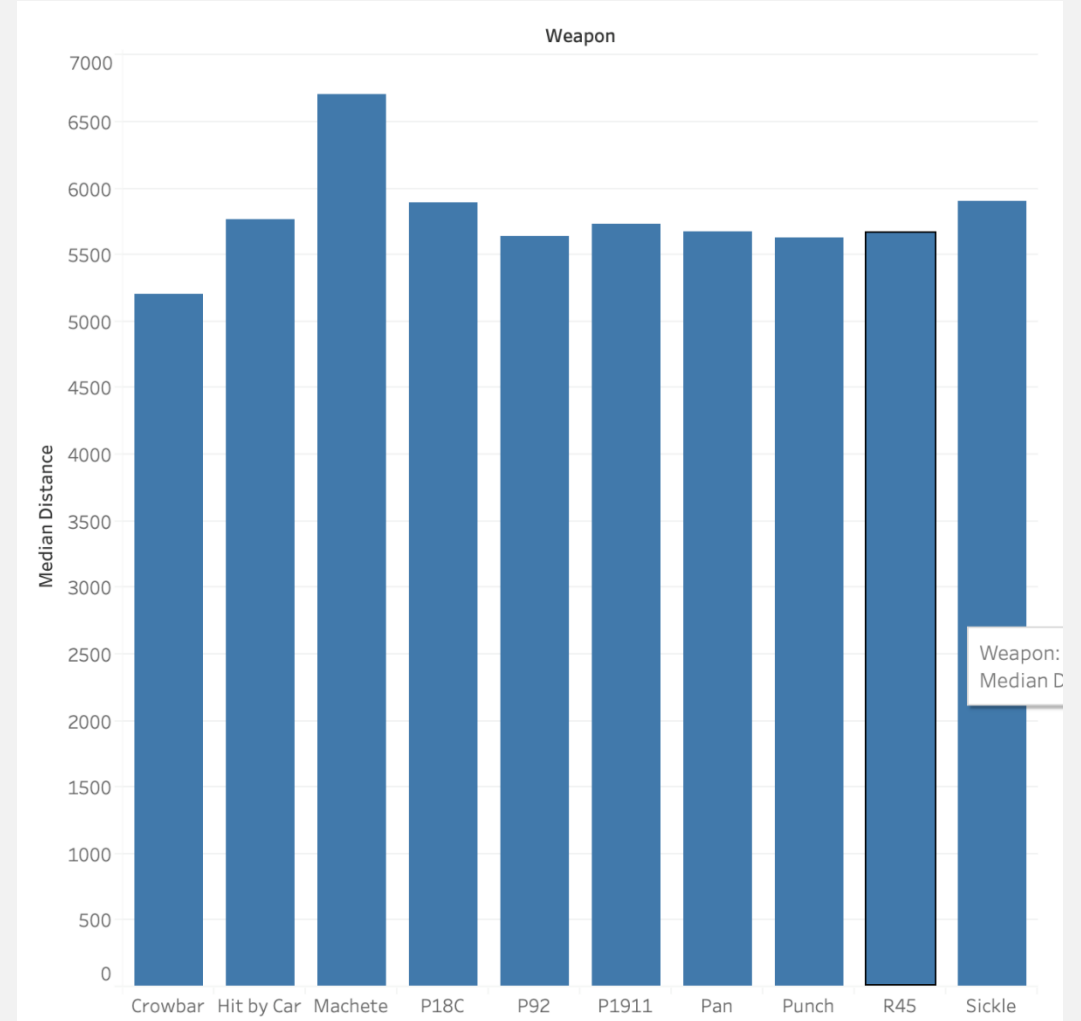


# Mostly Used Weapons by Cheaters

## Erangel



## Miramar

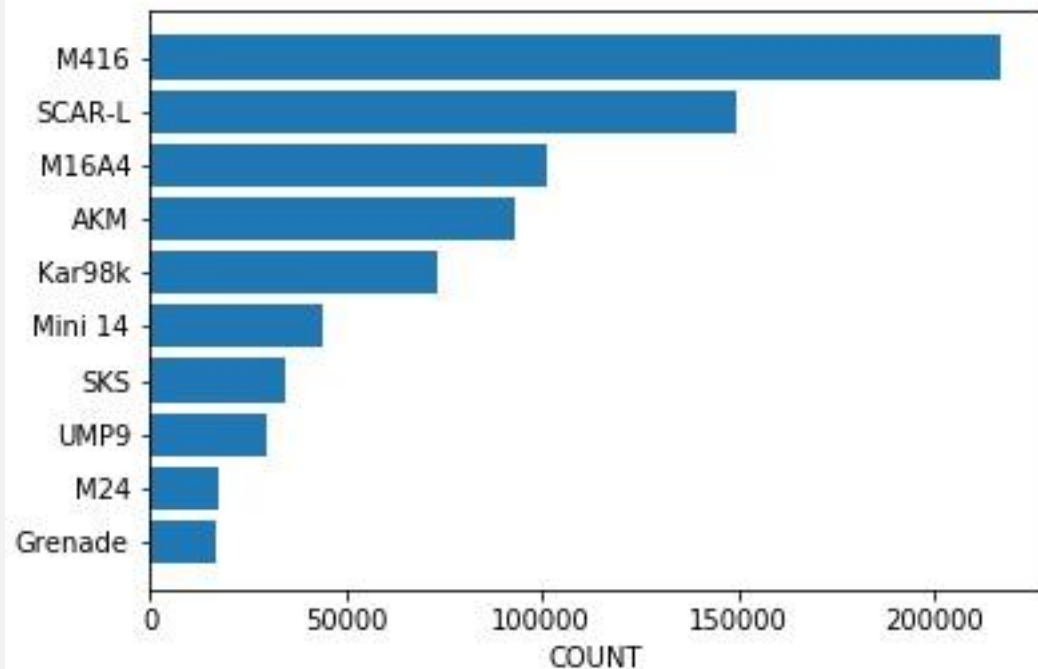




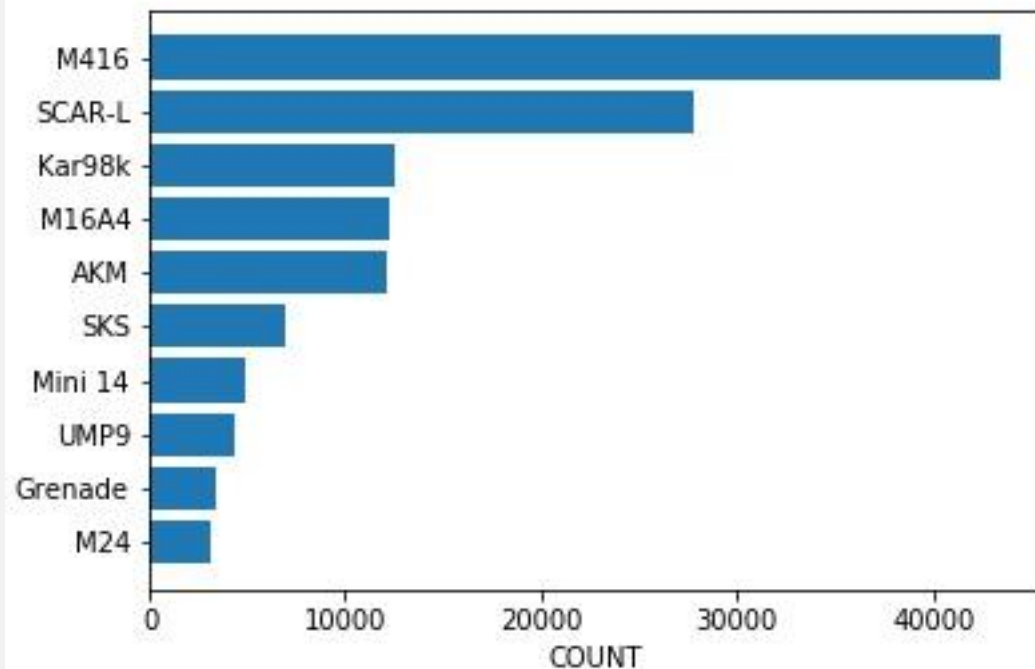


# Top 10 Weapons

## Erangel



## Miramar

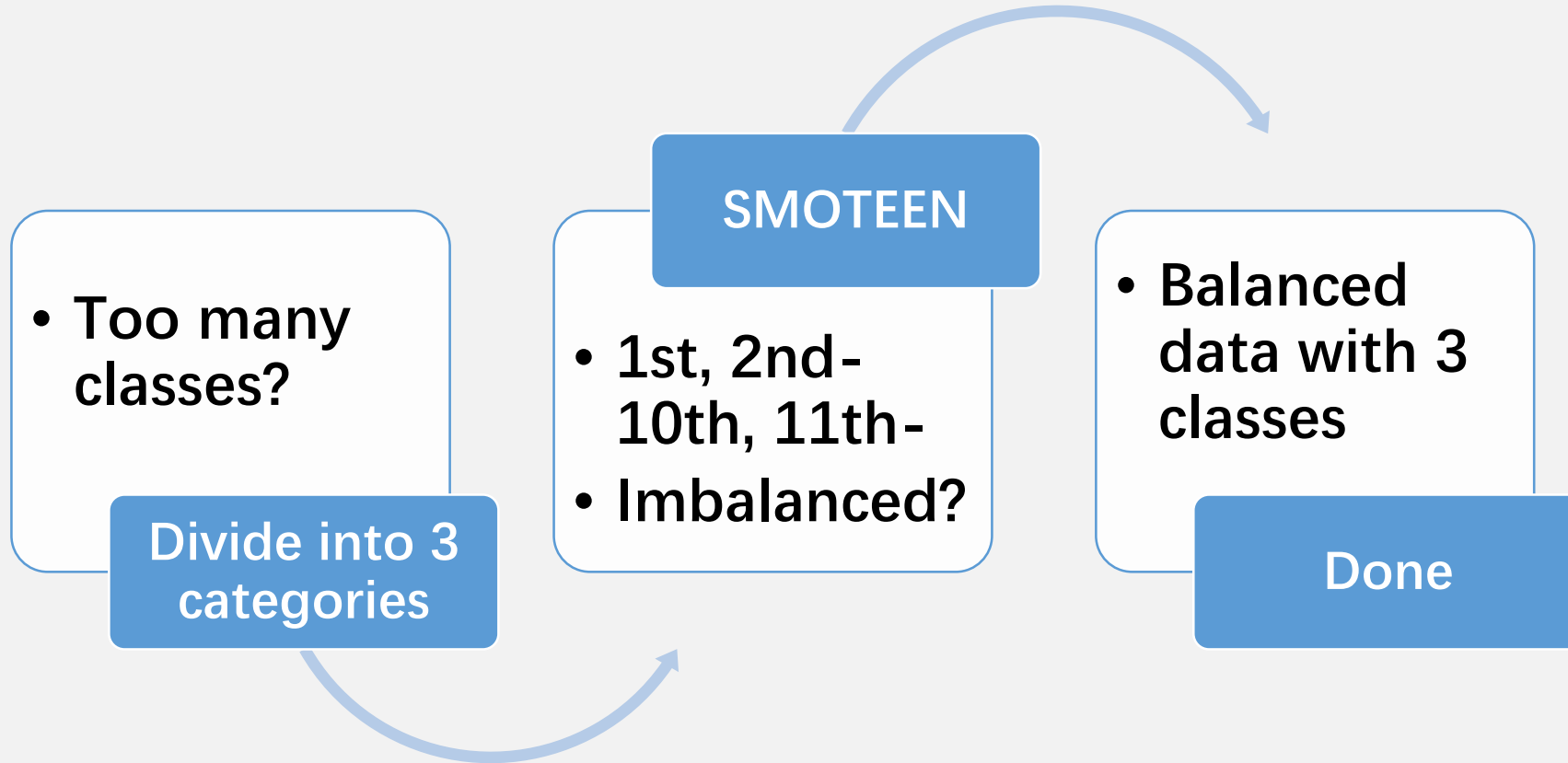




Aggregate part



# Data Preprocessing



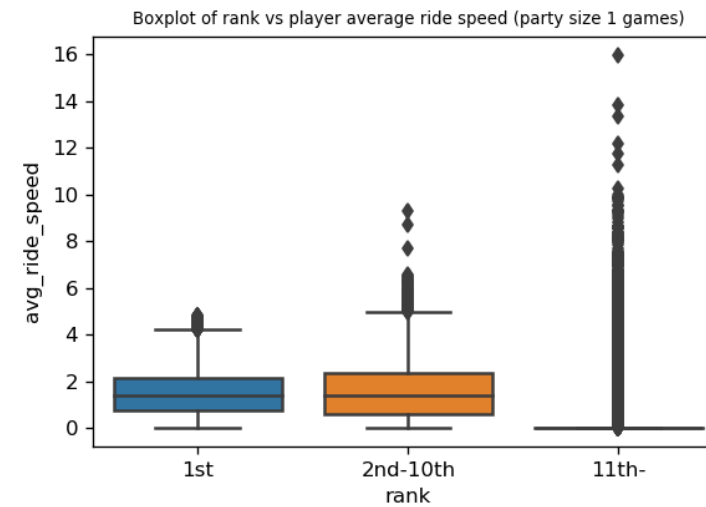
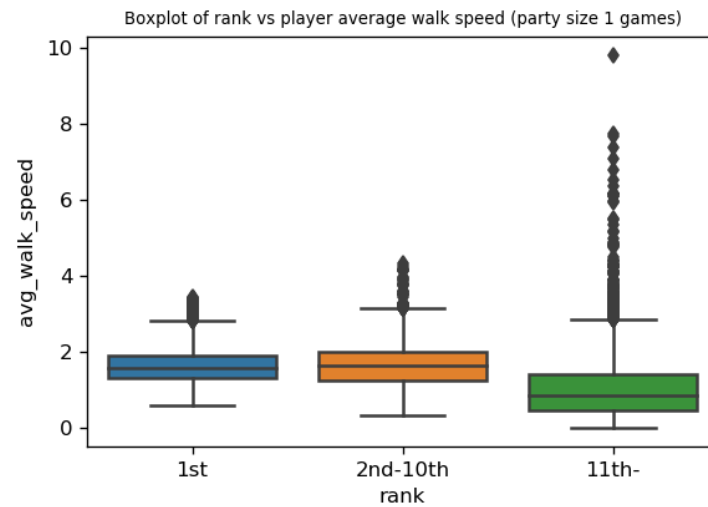
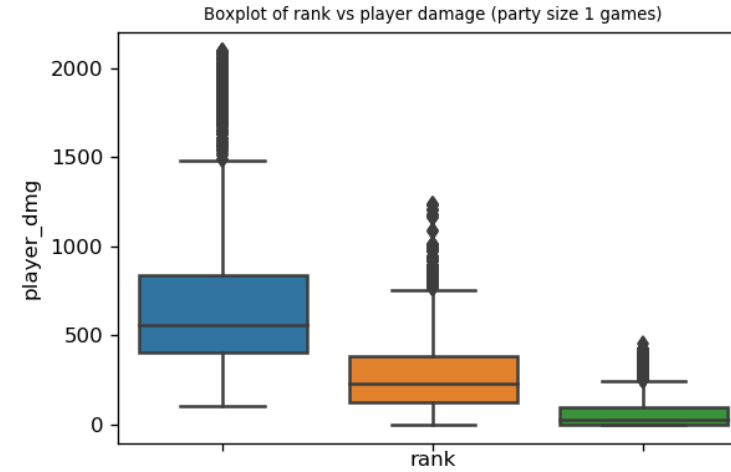
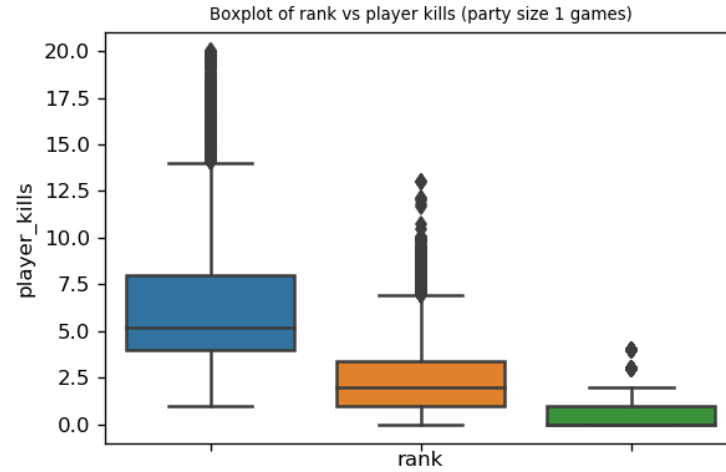


# Aggregate——Prediction

|              |          | Random Forest | KNN        | Adaboost | Logistic Regression |
|--------------|----------|---------------|------------|----------|---------------------|
| party size 1 | Training | 97%           | 98%        | 100%     | 77%                 |
|              | Testing  | <b>97%</b>    | <b>97%</b> | 96%      | 77%                 |
| party size 2 | Training | 94%           | 97%        | 97%      | 70%                 |
|              | Testing  | <b>94%</b>    | <b>95%</b> | 90%      | 70%                 |
| party size 4 | Training | 92%           | 96%        | 98%      | 75%                 |
|              | Testing  | <b>93%</b>    | <b>93%</b> | 90%      | 75%                 |

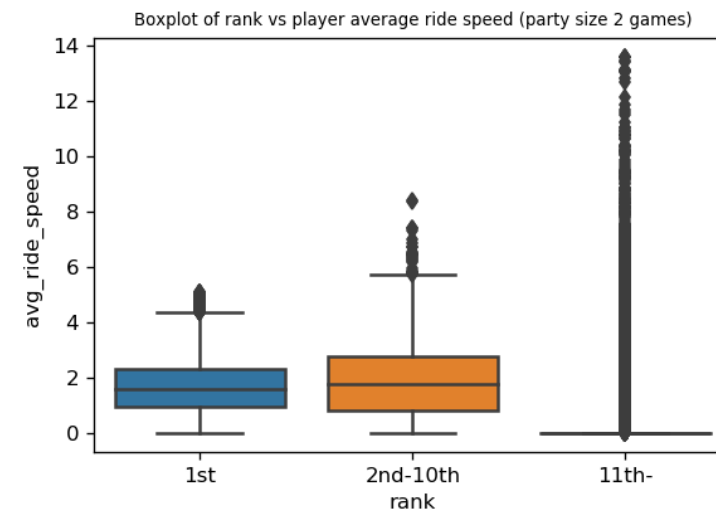
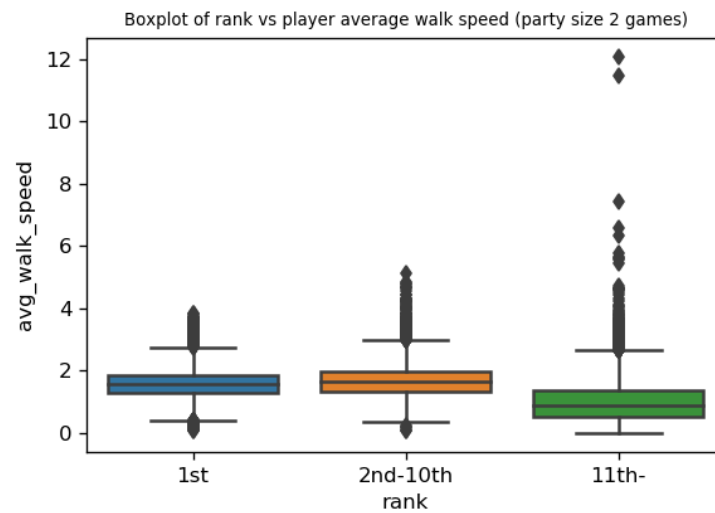
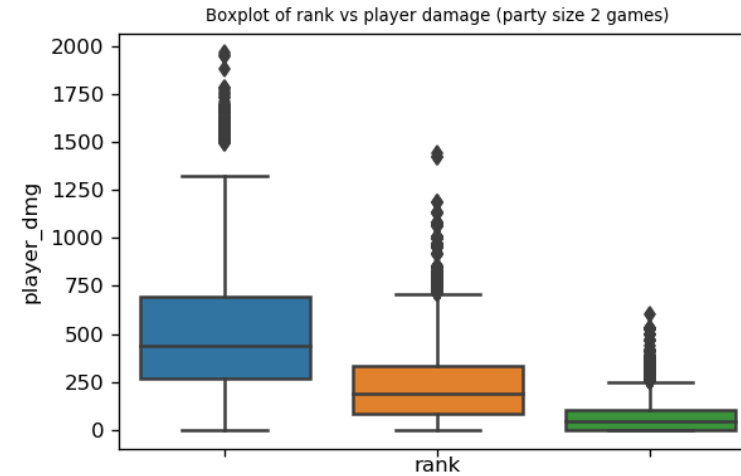
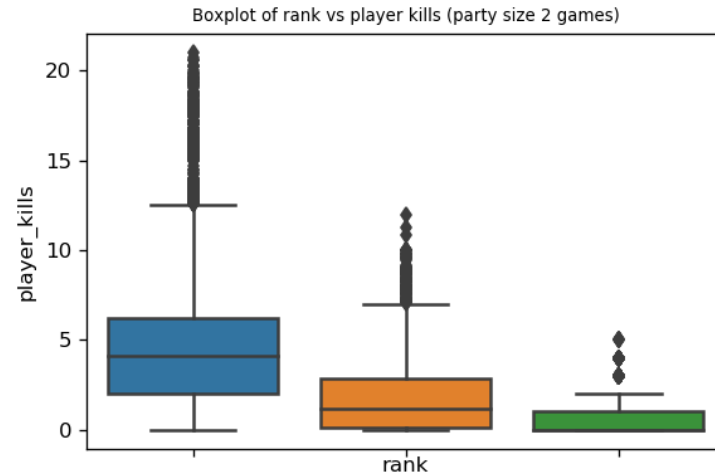


# Aggregate——Party Size 1



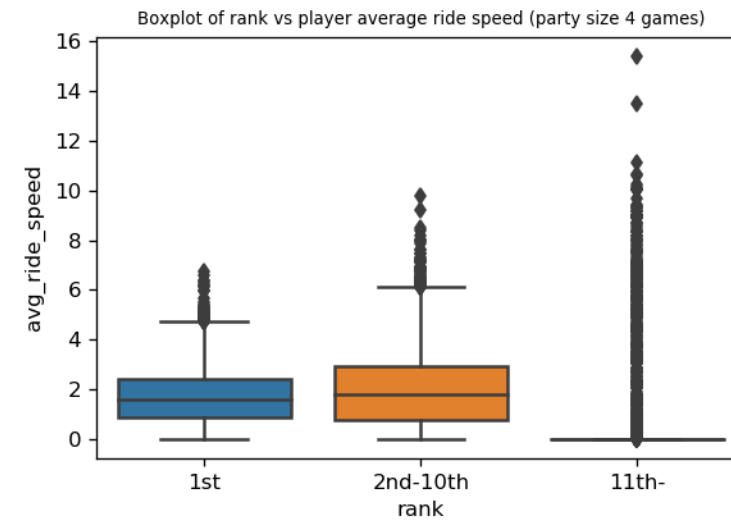
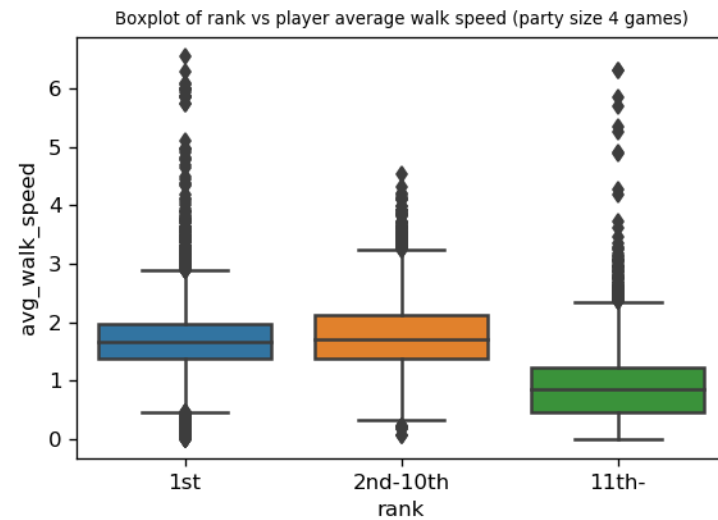
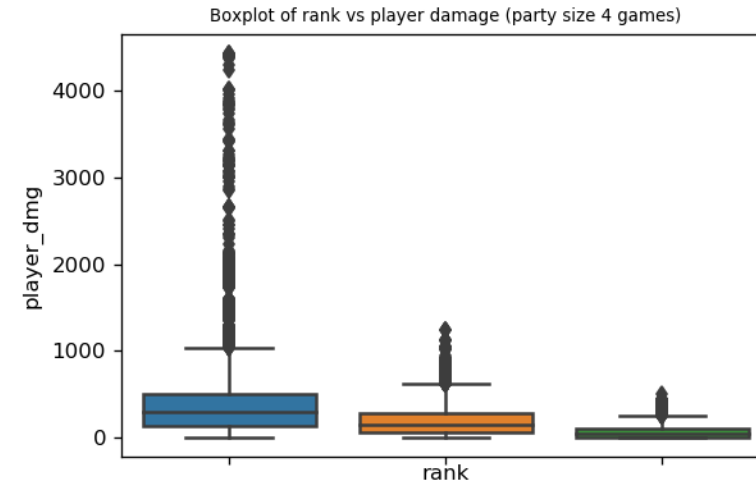
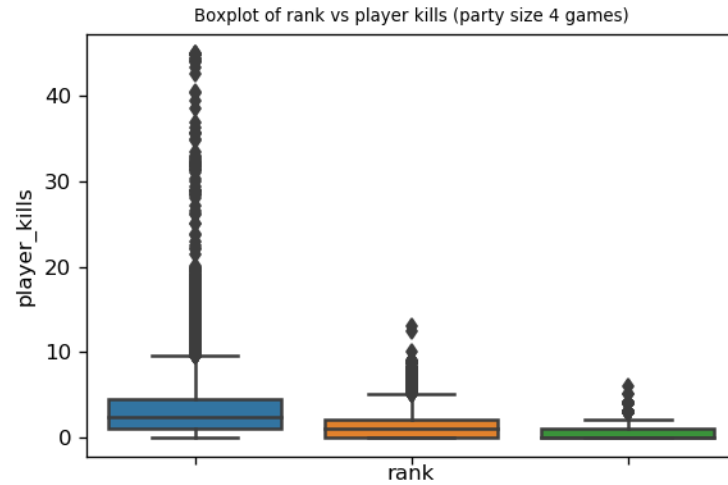


# Aggregate——Party Size 2





# Aggregate——Party Size 4





# Strategy Analysis

- 1 The most popular weapons are M416, followed by SCAR-L. And the best sniper is Kar98K
- 2 Perhaps you can avoid those areas that have high death rate in the first four minutes.
- 3 Kill more players, cause more damage, walk and drive faster





## Specific Suggestion

- 1 It is player kills and player damage that count.
- 2 Average driving speed and player damage are most important.
- 3 Focus more on two average moving speed.

A cluster of overlapping squares in the top-left corner. Some squares have solid blue borders, while others have dashed blue borders. They are arranged in a somewhat chaotic, overlapping pattern.

**Thanks !**

A cluster of overlapping squares in the bottom-right area. These squares all have dashed blue borders and are arranged in a more organized, grid-like pattern compared to the top-left cluster.