



# PUBG Analysis

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# 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





# Deaths Place (Miramar)

Entire match

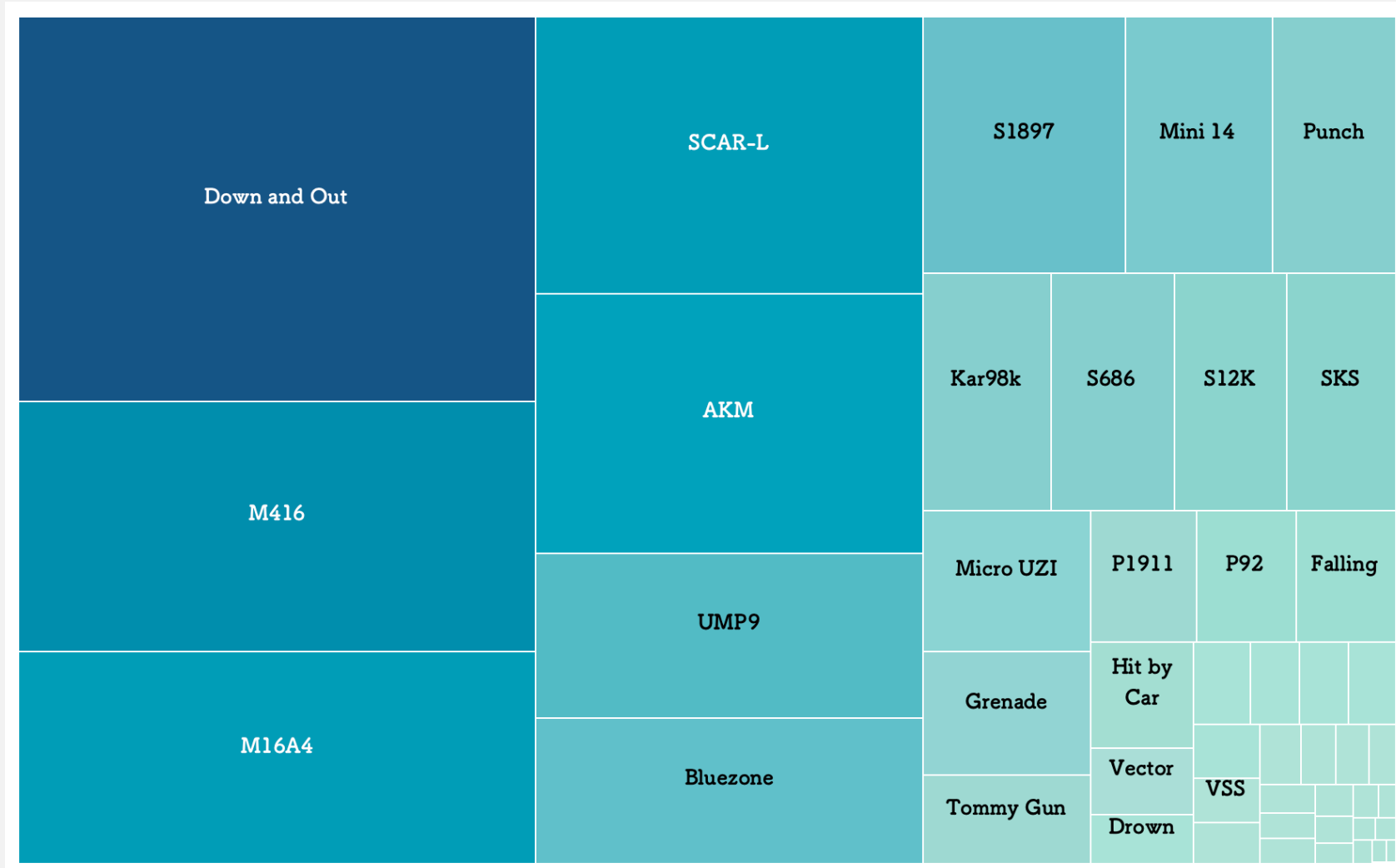


Four minutes





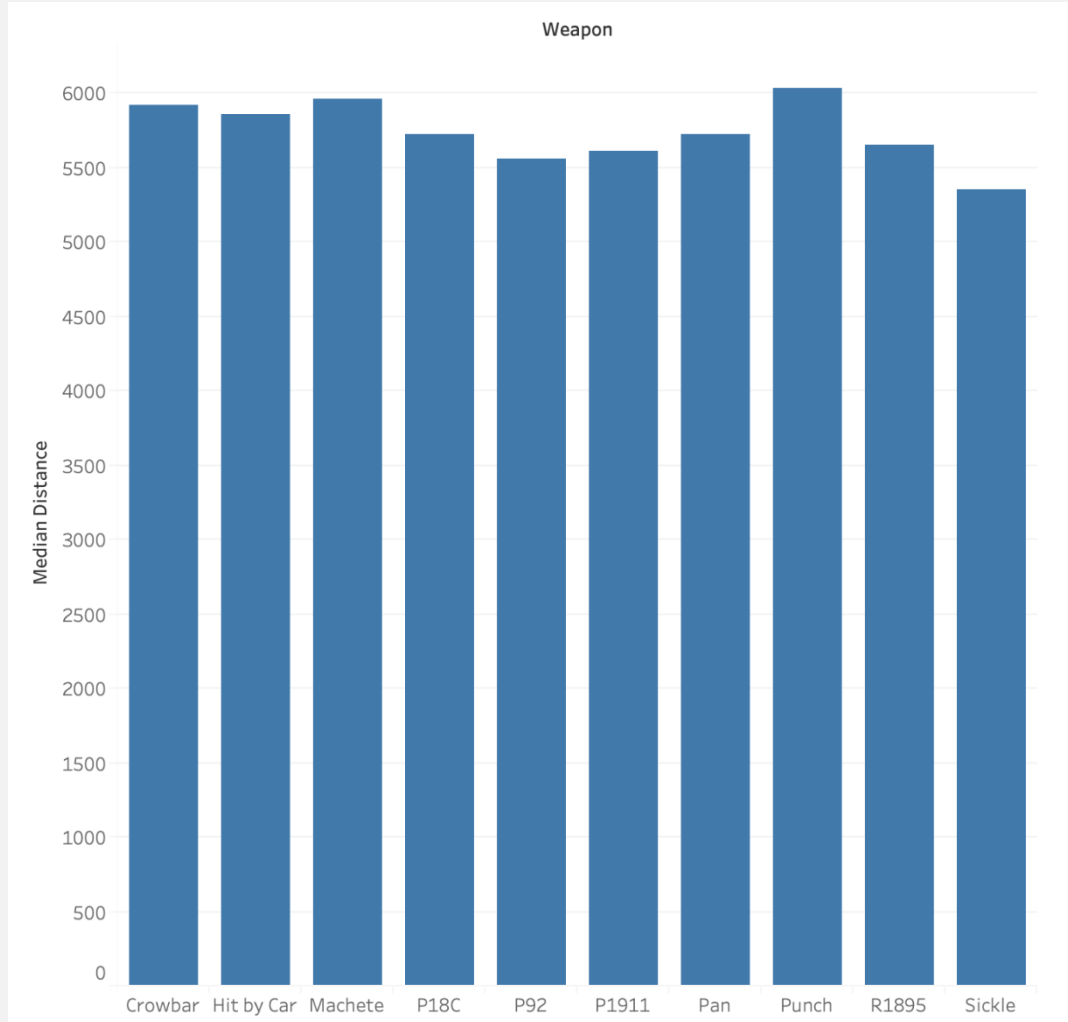
# Deaths Reasons



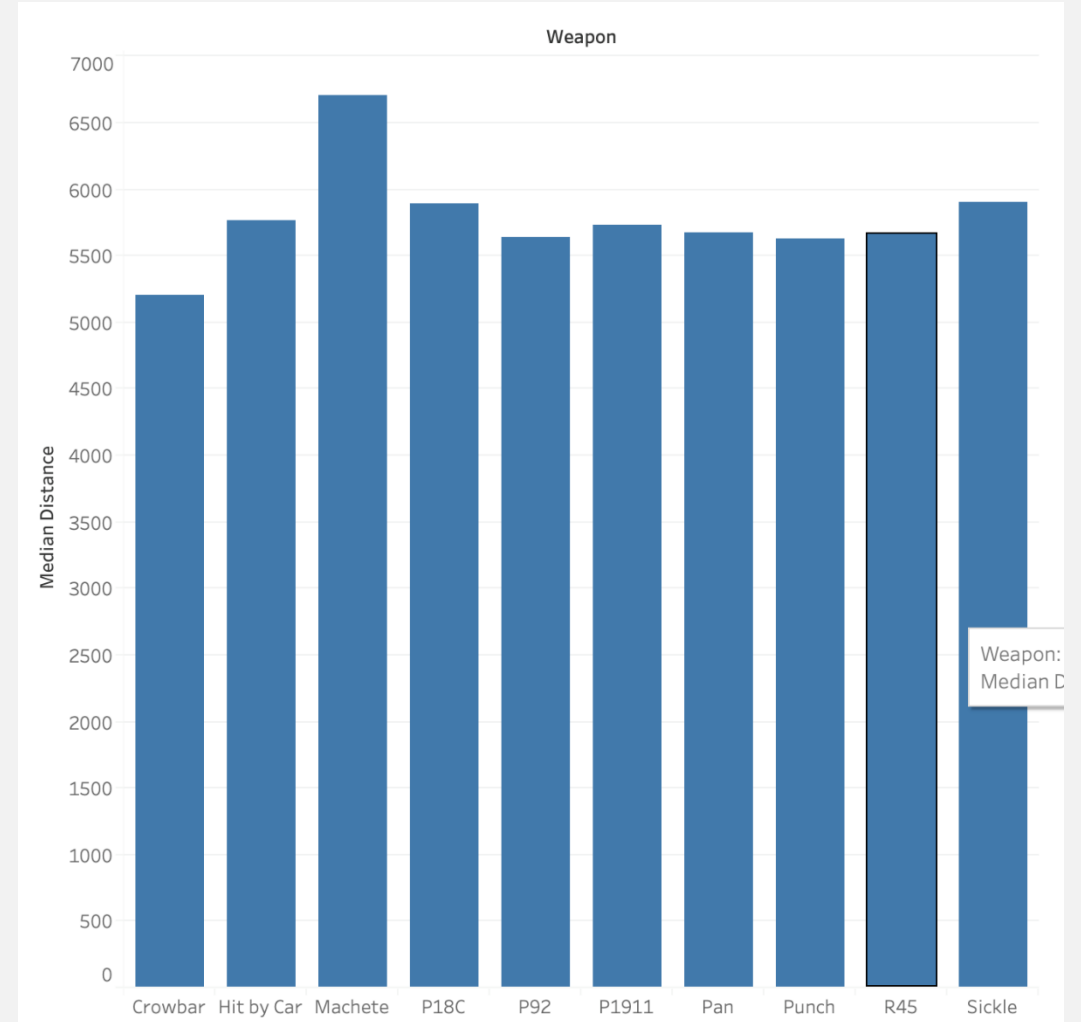


# Mostly Used Weapons by Cheaters

## Erangel



## Miramar

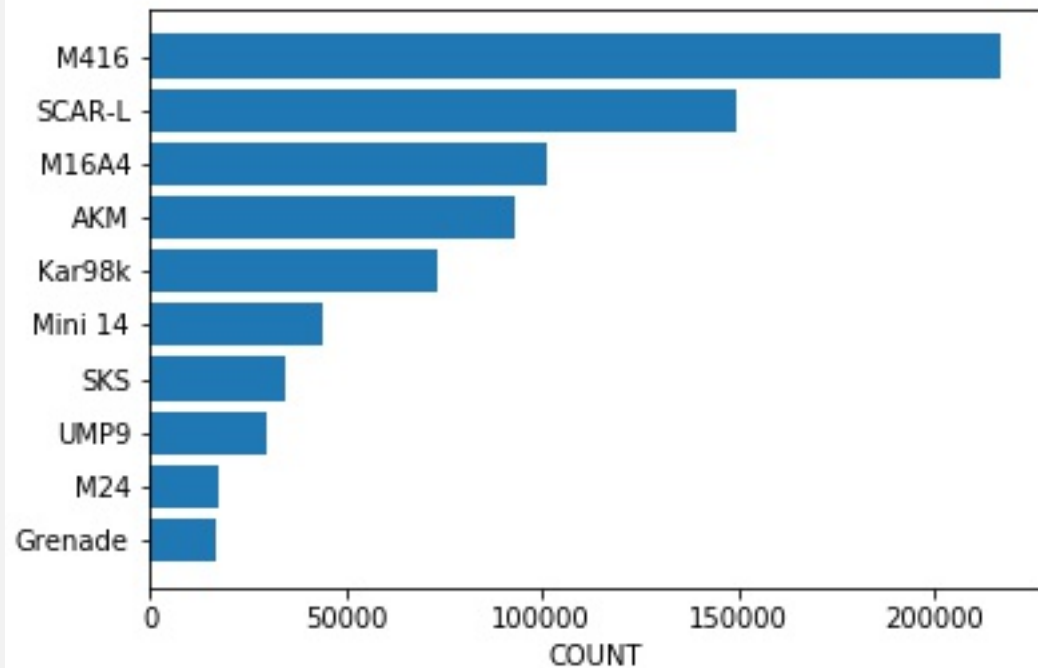




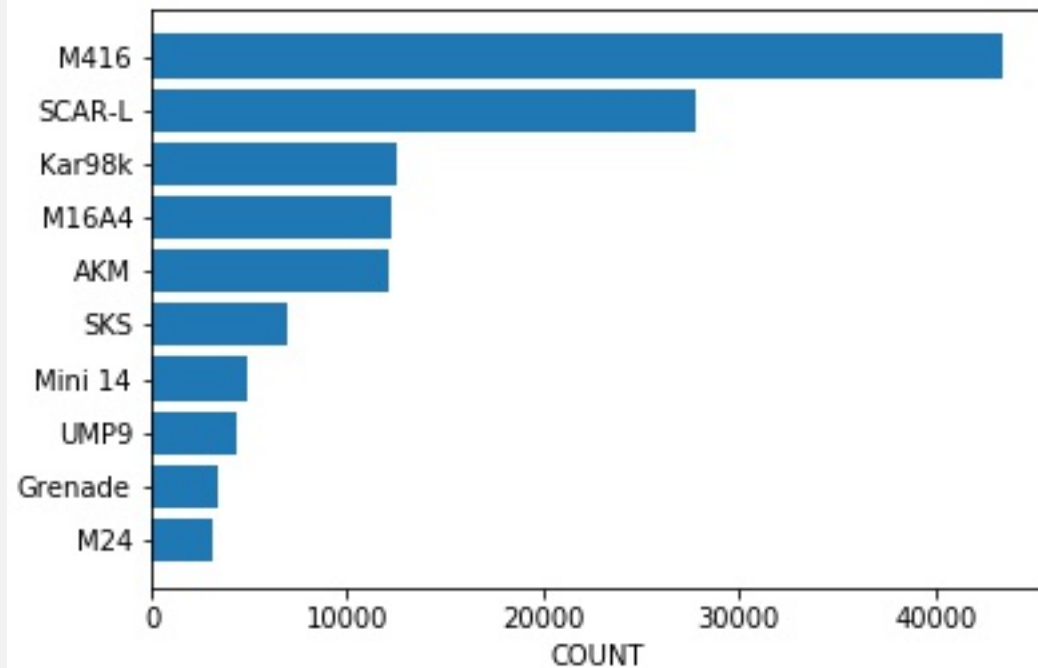


# Top 10 Weapons

## Erangel



## Miramar

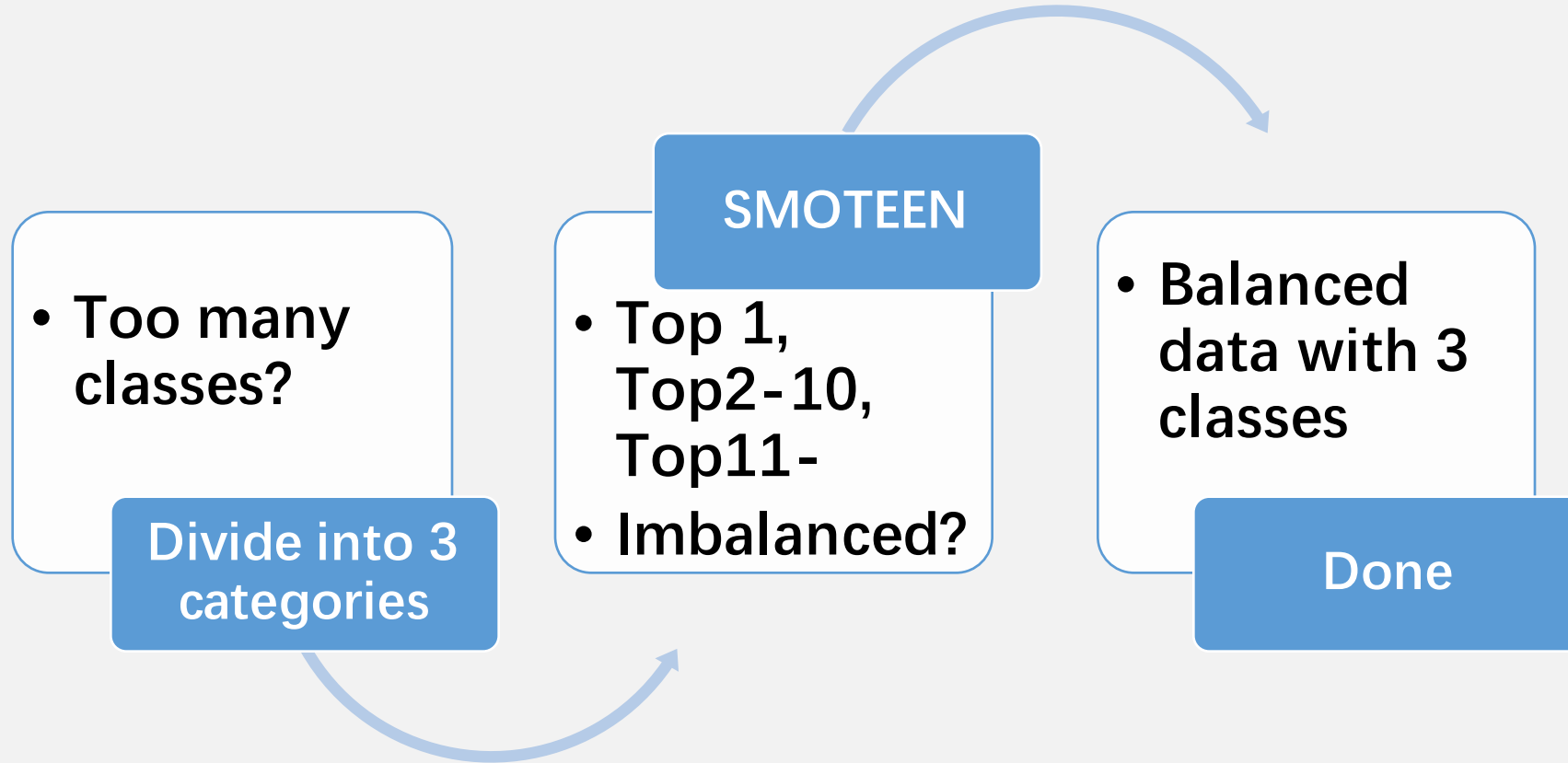




Aggregate part



# Data Preprocessing



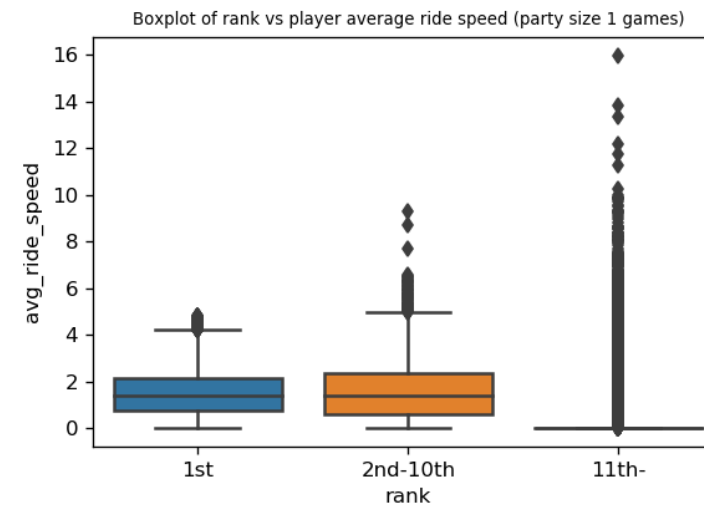
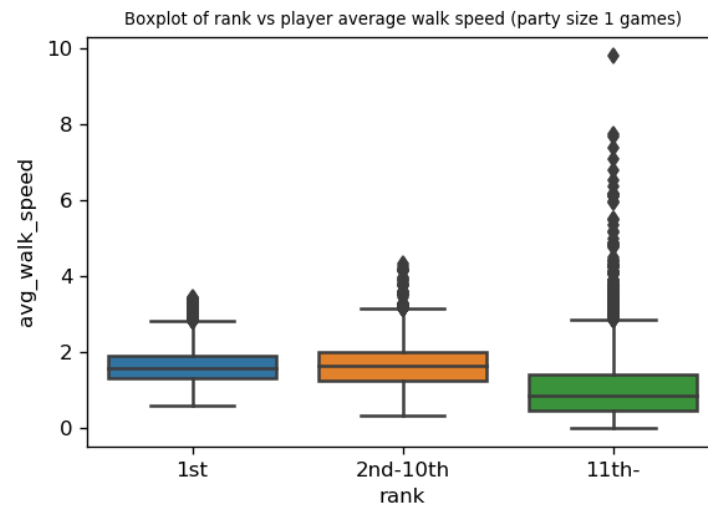
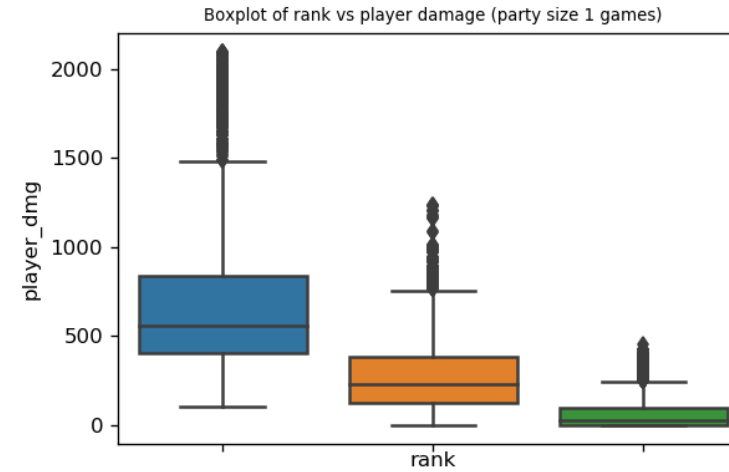
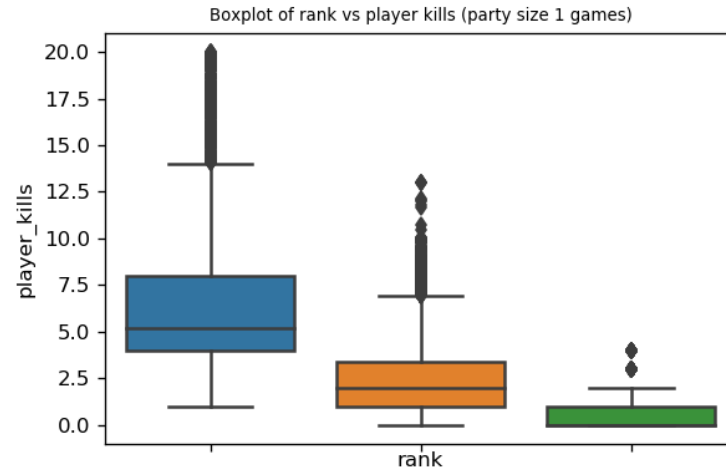


# Aggregate——Prediction

		Random Forest	Adaboost	Logistic Regression	KNN
party size 1	Training	0.972	1	0.772	0.984
	Testing	0.968	0.964	0.773	0.968
party size 2	Training	0.941	0.967	0.699	0.974
	Testing	0.943	0.904	0.695	0.949
party size 4	Training	0.920	0.976	0.747	0.962
	Testing	0.926	0.902	0.751	0.931

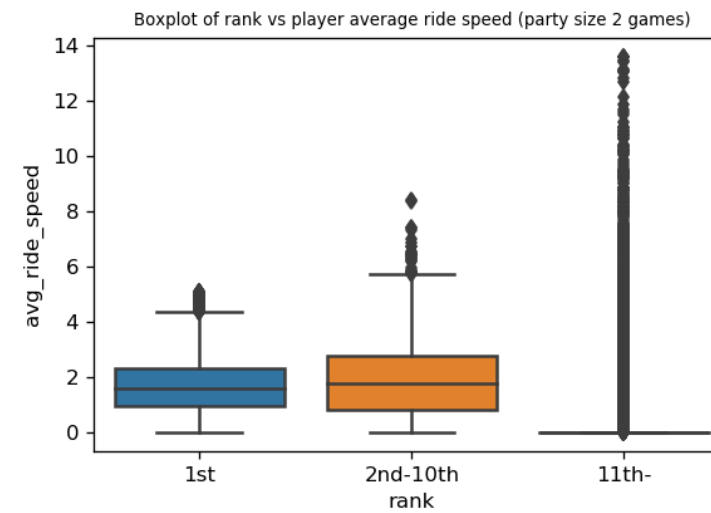
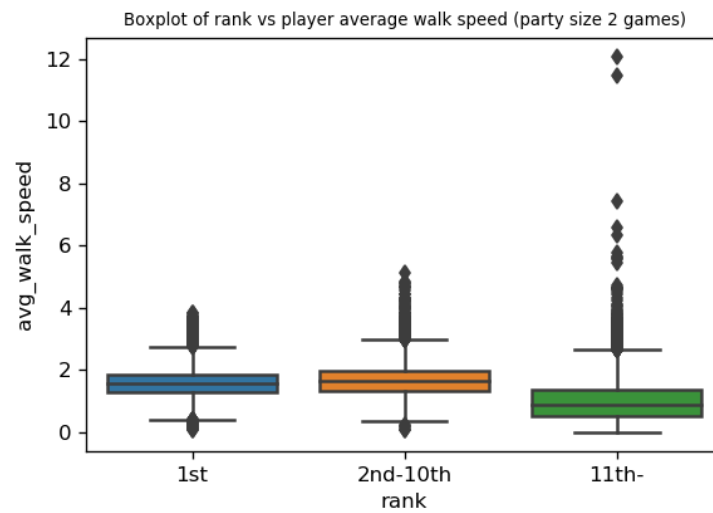
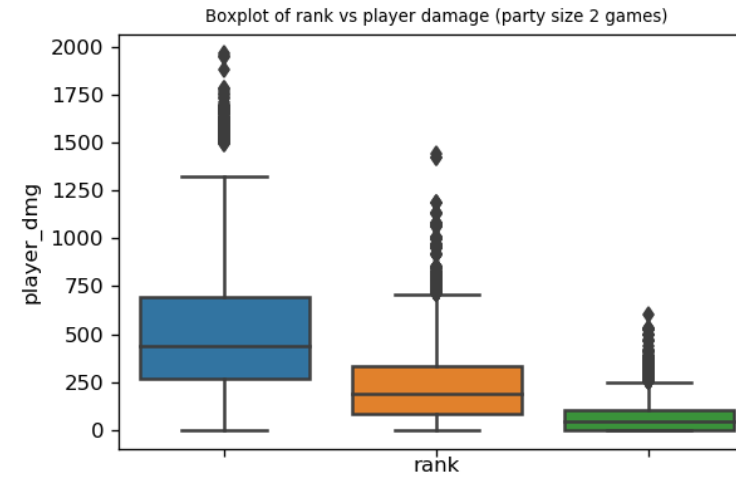
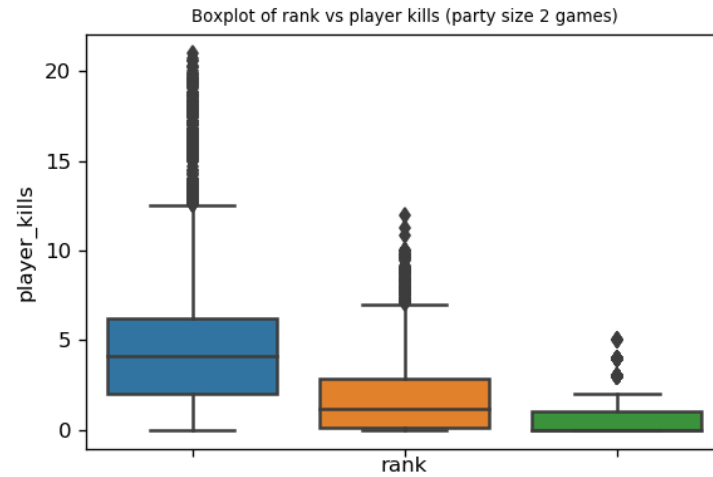


# Aggregate——Party Size 1



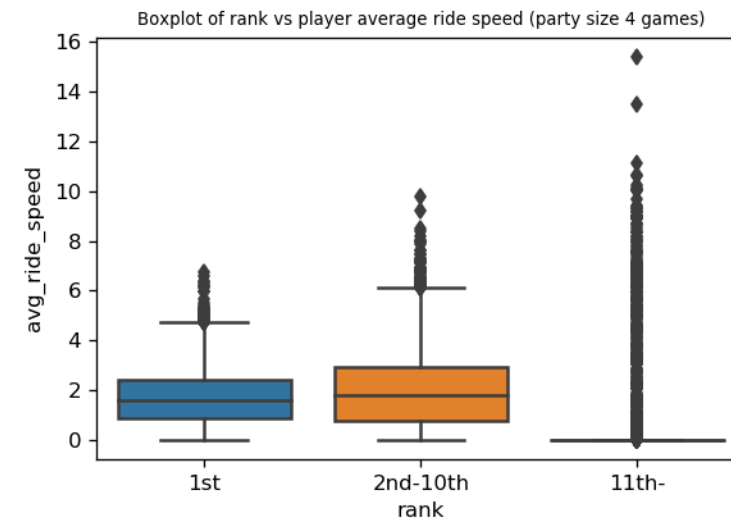
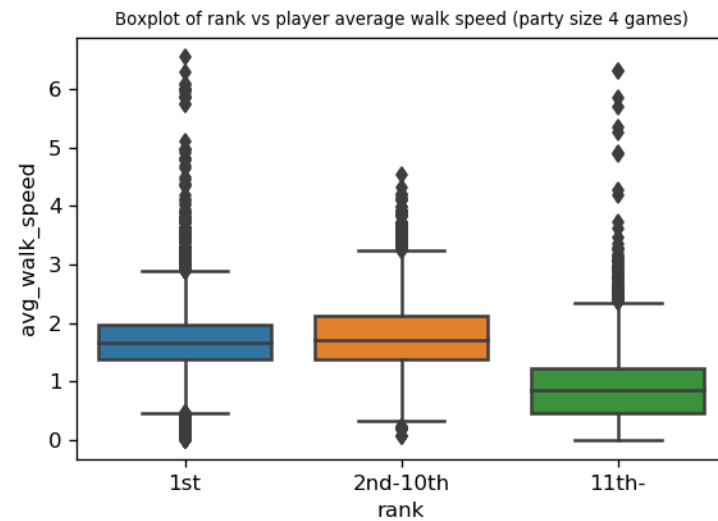
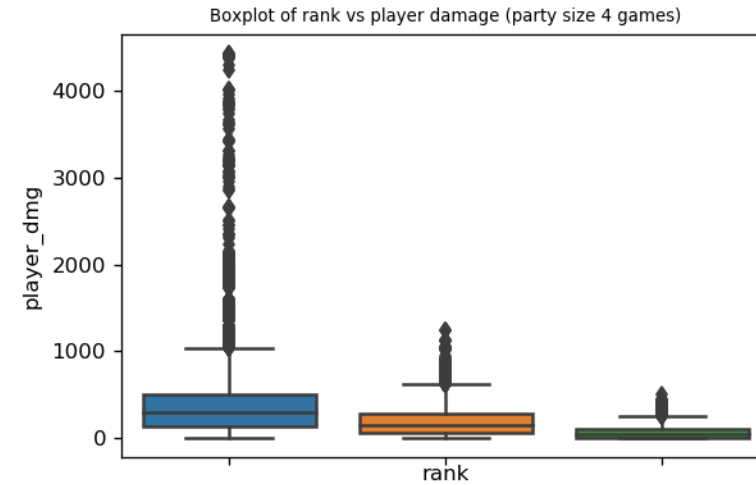
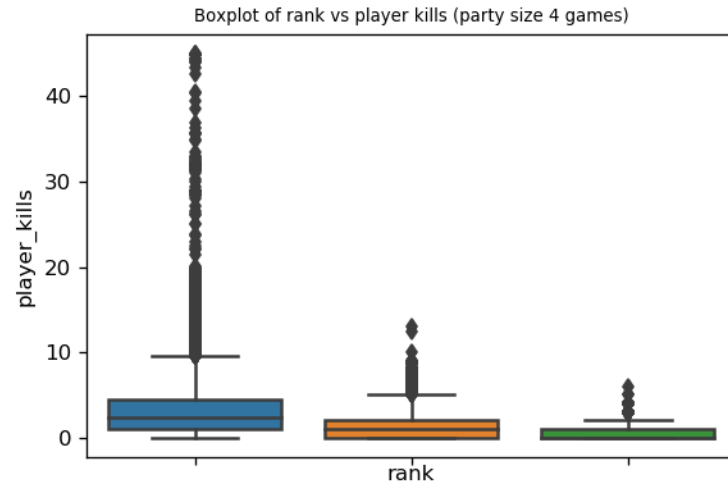


# Aggregate——Party Size 2





# 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.



**Thanks !**

