Chicken for Dinner

Team #24

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Questions we sought to answer

- Does luck have more precedence than skill?
- Where is the best place to start the game?
- What’s the most effective range for each weapon?

Data Cleaning part1 : Aggregate

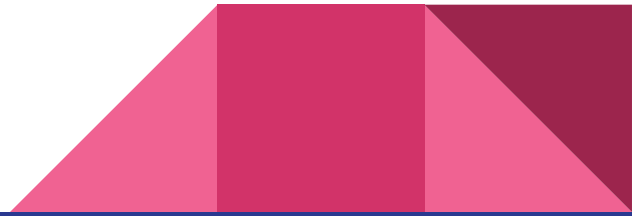
Undesired attributes:

- Date
- Player_name
- Game_size

- more...

Rows with:

- Missing value
- Party_size ！= 1
- Team_placement > 70



Data Cleaning part2 : Kills_stats

Undesired attributes:

- Killer _name
- Victim_name

Removed rows with:

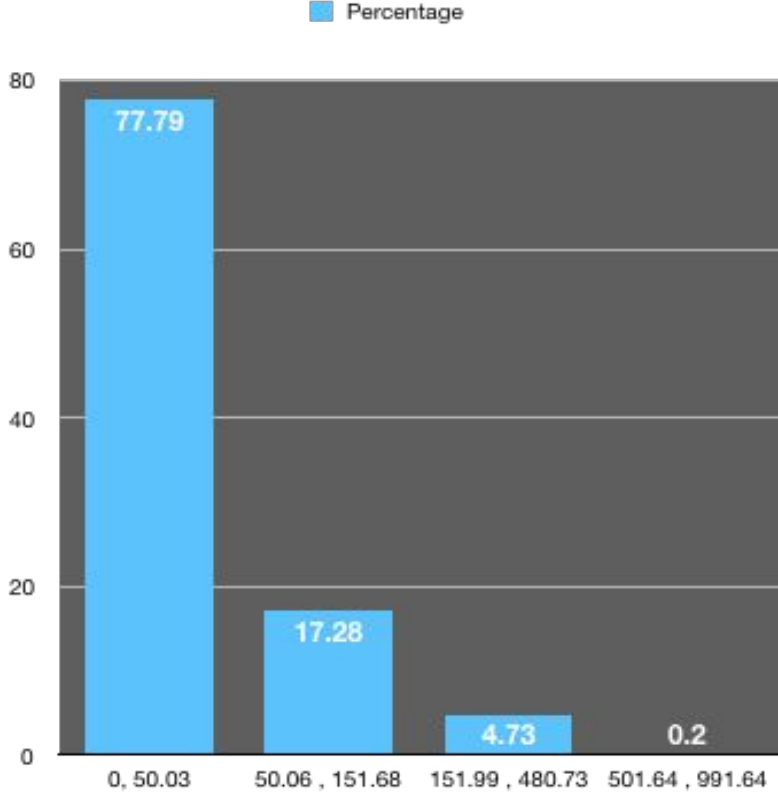
- Down_and_out
- Falling

Tools used

Classification/clustering

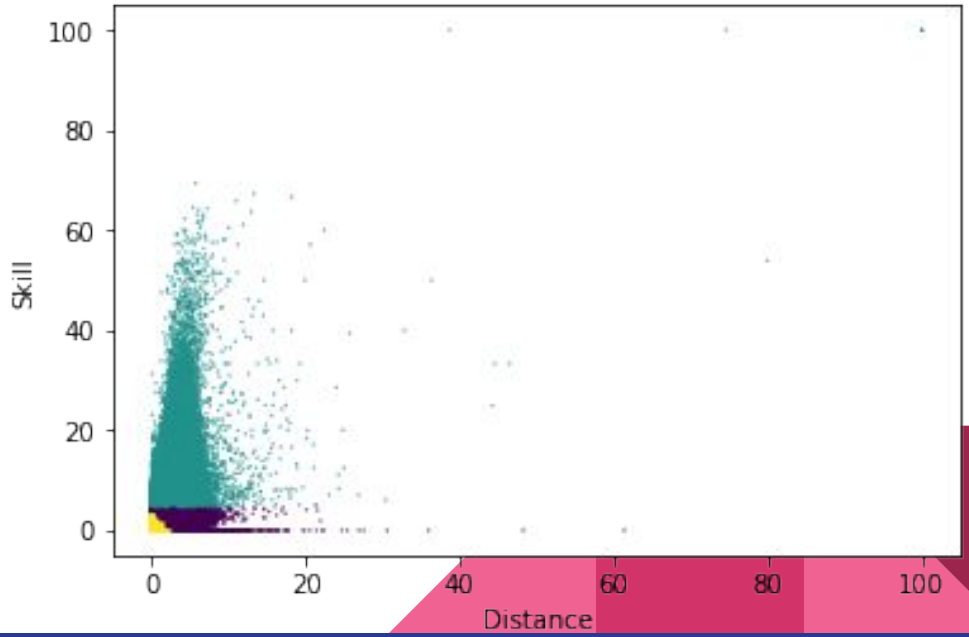
- Weapon range analysis

```
In [205]: Kmean(4)

          Cluster 0:
           center:  16.77
           count:  7779
           range: ( 0.0 , 50.03 )


          Cluster 1:
           center:  220.43
           count:  473
           range: ( 151.99 , 480.73 )


          Cluster 2:
           center:  769.33
           count:  20
           range: ( 501.64 , 991.64 )


          Cluster 3:
           center:  83.33
           count:  1728
           range: ( 50.06 , 151.68 )
```



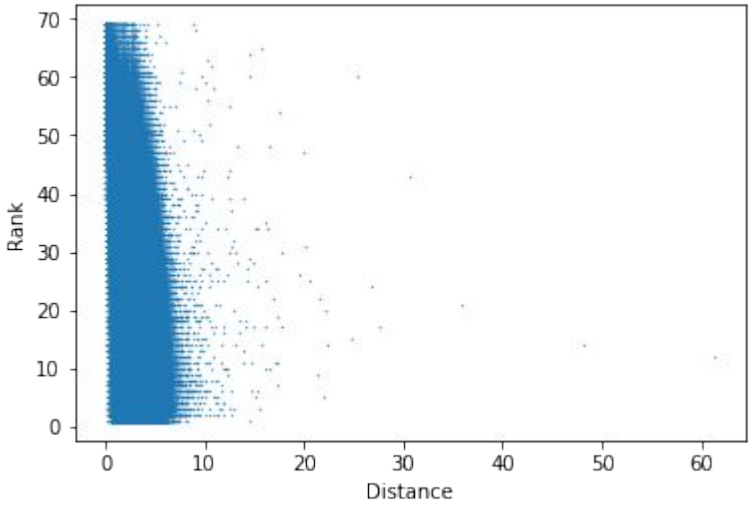
Skill vs Luck

- Calculate the total travel distance and skill
- Normalize total travel distance and skill
- Kmeans clustering

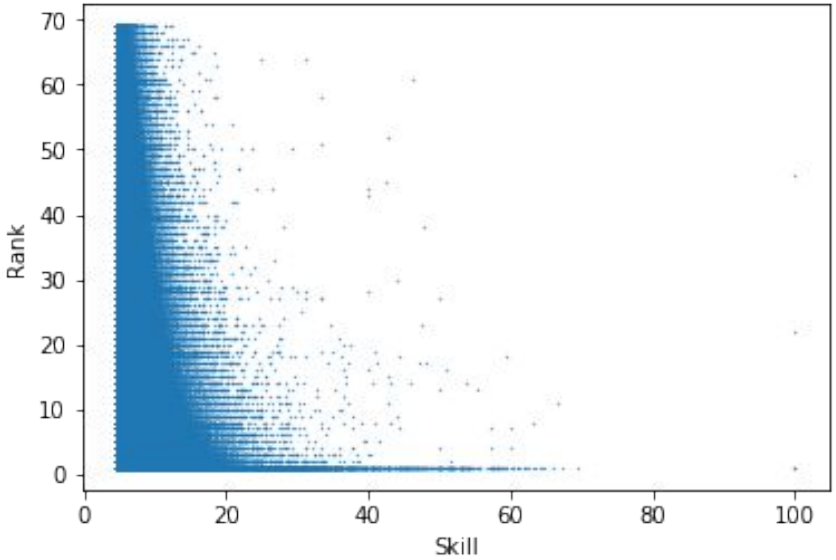


Lucky

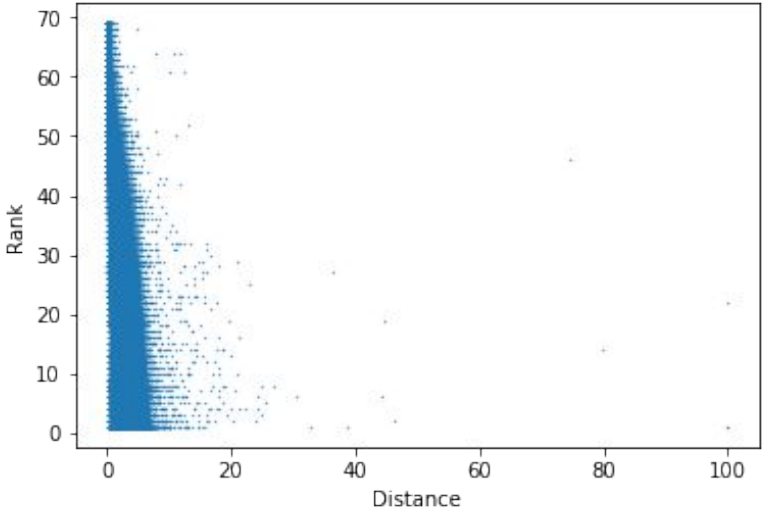
- Cluster 1
- Bottom left corner



- Cluster 2



Cluster 2 skill vs rank



Cluster 2 total travel distance vs rank

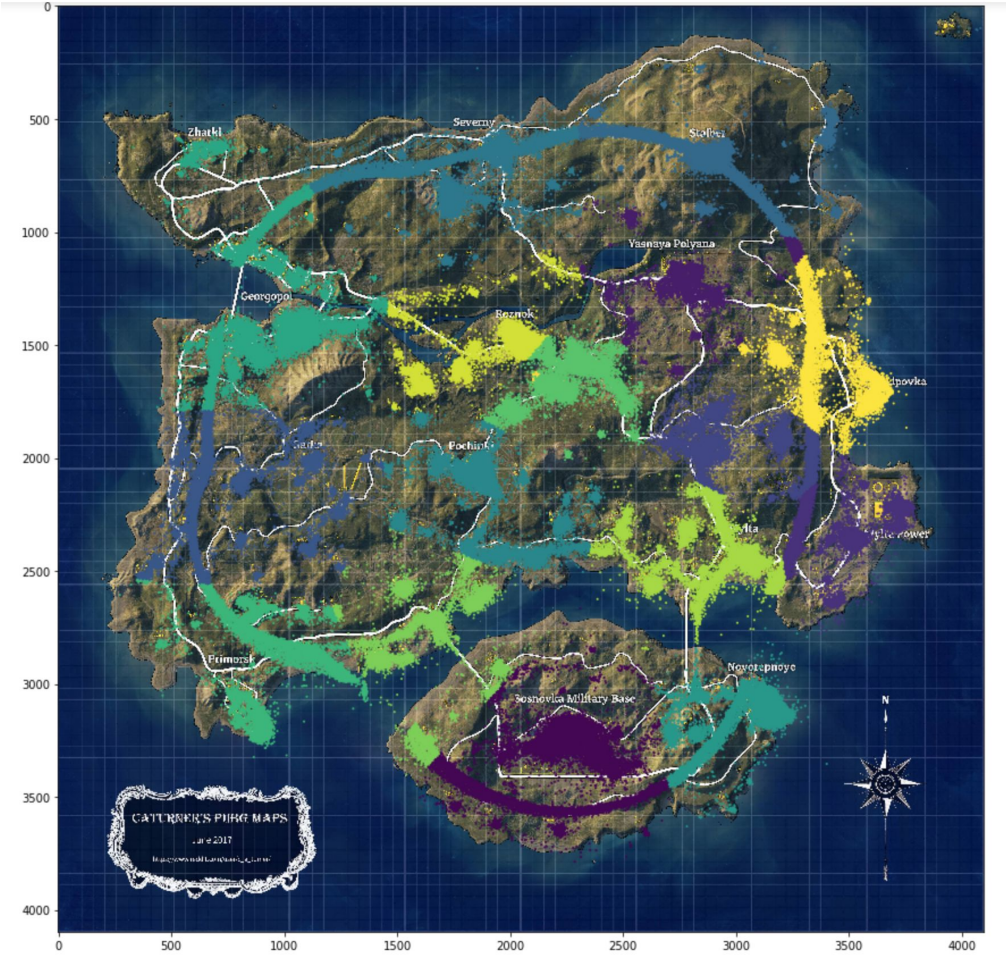
Jump Locations

- Wanted to know where to jump
- Analysed first 100 sec of a game
- Clusters are deaths in that time
- Avoid high density areas

Interesting relationship

Plane auto-drop area

120 sec (plane flight time)



Knowledge gained & Application

- Effective range for each weapons
  - Help the player choose their weapons
- Total travel distance doesn’t really affect player’s final ranking
  - Skill has a higher precedence
- Jump locations - to be based on overall cluster density