December TW 1 Report

December 2, 2021

1 GSF Sigma December 2021 TW 1 Report

1.1 Load Data

```
[]: import pandas as pd

file = 'Dec_TW_1.csv'

data = pd.read_csv(file, index_col = 0)
 data = data.drop(['Instance','AllyCode','DiscordTag'], axis = 1)
 data = data.set_index('Name')
```

1.2 Data Cleaning

```
[]: categories = data['MapStatId'].unique()
    df = []
    for category in categories:
        df.append(data[data['MapStatId']==category].drop('MapStatId', axis=1))
        df[-1].rename({'Score': category}, axis = 1, inplace = True)

[]: df = pd.concat(df, axis = 1).fillna(0)
    df['banner_efficiency'] = df['attack_stars']/df['disobey']
```

1.3 Guild Performance

[]: print(df)

	attack_stars	disobey	set_defense_stars	stars	\
Name					
Exeel	275.0	16	158	433	
Agave	241.0	14	342	583	
JustinAlexander11	236.0	14	120	356	
Plucky Haydon	215.0	12	94	309	
Argarax	203.0	17	244	447	
Tommyboy85	194.0	12	278	472	
OttoVonGens	176.0	10	184	360	
Gryphix	174.0	10	188	362	
ShootMeow	165.0	9	248	413	
Loadage	156.0	11	278	434	

Flywire 150.0 10 214 36 TacoPizza 137.0 8 154 29 Chaunce 135.0 7 218 38 Revanche Gilder 134.0 8 214 36 Wolfman314 123.0 6 214 33 MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 38 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 AKB 92.0 7 338 43 Calens 79.0 6 180	51
TacoPizza 137.0 8 154 29 Chaunce 135.0 7 218 38 Revanche Gilder 134.0 8 214 34 Wolfman314 123.0 6 214 33 MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 38 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	64
Chaunce 135.0 7 218 38 Revanche Gilder 134.0 8 214 34 Wolfman314 123.0 6 214 33 MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	91
Revanche Gilder 134.0 8 214 34 Wolfman314 123.0 6 214 33 MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 26 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	53
Wolfman314 123.0 6 214 33 MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	48
MINI Stewabob 119.0 6 150 26 MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	37
MarkKenoburger 116.0 8 180 29 JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	69
JamesBond007 112.0 6 240 35 Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	96
Elros Halfelven 111.0 7 124 23 joker 111.0 7 150 26 Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 28	52
Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	35
Sultan2309 105.0 8 184 28 Dark Penguin 103.0 6 158 26 Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	61
Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	89
Larping Soccer Moms 99.0 5 124 22 MINI xipokemastrix 97.0 6 184 28 Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 28	61
Philo Beddoe 96.0 6 34 13 Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	23
Promethean 94.0 5 218 31 AKB 92.0 7 338 43 Calens 79.0 6 180 25	81
AKB 92.0 7 338 43 Calens 79.0 6 180 28	30
Calens 79.0 6 180 25	12
	30
	59
M1TTH 79.0 6 154 23	33
Zhil Axfow 79.0 6 188 26	67
Baxston Kane 77.0 4 278 35	55
Wil043 70.0 6 90 16	60
Theflavorgreen 63.0 6 154 21	17
SloppySaberFlavor 59.0 3 154 21	13
Masajj Vemtits 58.0 4 214 27	72
Heywood Jablowme 56.0 3 278 33	34
BabyYodaHitta 53.0 5 60 11	13
ONE 53.0 7 154 20	07
Tel Nadda 40.0 4 128 16	68
Maxaron Lexilon 38.0 2 124 16	62
EvilCoyote2011 16.0 1 214 23	30
Guntha Arbos 0.0 2 308 30	80

banner_efficiency

Name	
Exeel	17.187500
Agave	17.214286
JustinAlexander11	16.857143
Plucky Haydon	17.916667
Argarax	11.941176
Tommyboy85	16.166667
OttoVonGens	17.600000
Gryphix	17.400000
ShootMeow	18.333333
Loadage	14.181818
wamakima5004	13.909091
Flywire	15.000000

TacoPizza	17.125000
Chaunce	19.285714
Revanche Gilder	16.750000
Wolfman314	20.500000
MINI Stewabob	19.833333
MarkKenoburger	14.500000
JamesBond007	18.666667
Elros Halfelven	15.857143
joker	15.857143
Sultan2309	13.125000
Dark Penguin	17.166667
Larping Soccer Moms	19.800000
MINI xipokemastrix	16.166667
Philo Beddoe	16.000000
Promethean	18.800000
AKB	13.142857
Calens	13.142057
M1TTH	13.166667
Zhil Axfow	13.166667
Baxston Kane	19.250000
Wi1043	11.666667
Theflavorgreen	10.500000
SloppySaberFlavor	19.666667
Masajj Vemtits	14.500000
Heywood Jablowme	18.666667
BabyYodaHitta	10.600000
ONE	7.571429
Tel Nadda	10.000000
Maxaron Lexilon	19.000000
EvilCoyote2011	16.000000
Guntha Arbos	0.000000

1.4 Lowest 10 Defensive Banners

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Tel Nadda

```
[ ]: [ n = 10 ]
    print(df['set_defense_stars'].sort_values().head(n))
    Name
    Philo Beddoe
                             34
    BabyYodaHitta
                             60
    Wil043
                             90
    Plucky Haydon
                             94
    wamakima5004
                             98
    JustinAlexander11
                            120
    Maxaron Lexilon
                            124
    Elros Halfelven
                            124
    Larping Soccer Moms
                            124
```

Name: set_defense_stars, dtype: int64

1.5 Lowest 10 Banner Efficiency

```
[]: print(df['banner_efficiency'].sort_values().head(n))
    Name
    Guntha Arbos
                       0.000000
    ONE
                       7.571429
    Tel Nadda
                       10.000000
    Theflavorgreen
                       10.500000
    BabyYodaHitta
                       10.600000
    Wil043
                       11.666667
    Argarax
                       11.941176
    Sultan2309
                       13.125000
    AKB
                       13.142857
    M1TTH
                       13.166667
    Name: banner_efficiency, dtype: float64
```

1.6 Top 10 Defensive Banners

```
[]: print(df['set_defense_stars'].sort_values(ascending = False).head(n))
    Name
    Agave
                         342
    AKB
                         338
    Guntha Arbos
                         308
    Tommyboy85
                         278
    Loadage
                         278
    Baxston Kane
                         278
    Heywood Jablowme
                         278
    ShootMeow
                         248
    Argarax
                         244
    JamesBond007
                         240
    Name: set_defense_stars, dtype: int64
```

1.7 Top 10 Banner Efficiency

F 7	() C [1]	
[]:	print(df['banner_eff	<pre>iciency'].sort_values(ascending = False).head(n))</pre>
	Name	
	Wolfman314	20.500000
	MINI Stewabob	19.833333
	Larping Soccer Moms	19.800000
	SloppySaberFlavor	19.666667
	Chaunce	19.285714
	Baxston Kane	19.250000
	Maxaron Lexilon	19.000000
	Promethean	18.800000

Heywood Jablowme 18.666667 JamesBond007 18.666667

Name: banner_efficiency, dtype: float64