

```

<html>
<head>
<script type="text/javascript" src="app.js">
    </script>
<link rel="stylesheet" href="styles.css">
<script src="https://d3js.org/d3.v7.min.js"></script>
<script src="https://d3js.org/d3-scale-chromatic.v1.min.js"></script>

</head>
<body onload=e_sports_analysis()>

<div>
<h2 class="section">E-Sports Team/Player Analysis</h2>

<br>
<div>
<h3>KD/A Scatter Plot</h3>
<div id="radio_scatter" class="center_plot">
    <input type="radio" id="scatter_t1" name="region" value="Cloud9">
    <label for="Cloud9">Cloud9</label>
    <input type="radio" id="scatter_t2" name="region" value="Vision
Strikers">
    <label for="Vision Strikers">Vision Strikers</label>
    <input type="radio" id="scatter_t3" name="region" value="OpTic
Gaming">
    <label for="OpTic Gaming">OpTic Gaming</label>

</div>

<div id="scatter">

    </div>
    <h4>Plot:</h4>
    <div id="scatter_plot" class="center_plot">
    </div>

</div>

</div>

```

```
<p>
    This is a scatter plot with each dot representing each players.
    The main purpose of this graph was to answer "Which player has the
highest kda", and it is kind of obvious to check.
    <br>
    However, if you press the button on top, which are the three teams
that
    I was interested in, you can see the team's specific players. For
instance, it was interesting to see Vision Striker to have
    players with a big difference of kda, but I found out that Lakia (the
player with lower kda) plays supporting character, which is a
    character that is hard to get kills. This is also little bit different
from my original proposal, but I fixed it for my own interest.

</p>
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```
<div>
<h3>Average Combat Score Per Map</h3>
```

```
<div id="bar">

    </div>
    <h4>Plot:</h4>
    <div id="bar_plot" class="center_plot">
        <br>
        <br>
    </div>
</body>
```

As mentioned in the proposal, this is a bar graph comparing ACS (average combat score) for each map.

I used columns ACS, and map.

This graph answers the question of "Does a certain map makes ACS to drop?", meaning that is there

any map that are harder to play. <br>

Furthermore, animation of bar graph is added because flipping and changing color is not an animation as

the gradescope regrade suggested. This particular animation is a graph entering one by one.

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    </body>
</div>
<br>
<br>

<div>
<h3>Team K/D/A Graph</h3>

<div id="stacked_bar">

    </div>
    <h4>Plot:</h4>
    <div id="stacked_bar_plot" class="center_plot">
    </div>
</div>
<p>
    This is stacked bar graph answering the question "What is Team's
    average kda". I also changed this and wrote it down via gradescope.
    <br>
    If you hover over the graph, you can see the average kills of each
    team. Notice that average k, d, a differs a lot because
    some teams had more matches. This made me thought of making
    standardized version of the graph.

</p>
<div>
<h3>Player Numbers For Different Regions</h3>

<div id="choropleth">
    </div>
    <h4>Plot:</h4>
    <div id="choropleth_graph" class="center_plot">
    </div>
</div>
<p>
    This is choropleth with blue dots representing players in that
    country. If the circle is bigger, that means there are more players
    from that country. I can see that there are lots of players from North
    and South America.
    <br>

```

```

    I can zoom in through the map using the mouse to anywhere I want as
    well to see more carefully.

</p>

<h3>Network Tree for Famous Teams</h3>

<div id="network">
    </div>
    <h4>Plot:</h4>
    <div id="network_graph" class="center_plot">
    </div>
</div>
<p>
    This is a network with top 5 team as the node. The line represents the
    relationship between teams for the
    average kda and assists.
    <br>

</p>

</body>
</html>

```

data.csv

Country	Player	Team	Maps	K	D	A	KD	KDA	ACS/Map	K/Map	D/Map	A/Map
Japan	Ade	Crazy Raccoon	10	95	148	59	0.64	1.04	125.5	9.5	14.8	5.9
Japan	Fisker	Crazy Raccoon	10	122	164	39	0.74	0.98	176.5	12.2	16.4	3.9
South Korea	Bazzi	Crazy Raccoon	5	62	74	25	0.84	1.18	208	12.4	14.8	5
South Korea	Munchkin	Crazy Raccoon	14	272	229	69	1.19	1.49	193.75	19.43	16.36	4.93
Japan	Neth	Crazy Raccoon	14	183	212	73	0.86	1.21	177.5	13.07	15.14	5.21
Japan	Zepher	Crazy Raccoon	4	62	67	10	0.93	1.07	202	15.5	16.75	2.5
South Korea	Medusa	Crazy Raccoon	9	125	150	40	0.83	1.1	195.25	13.89	16.67	4.44
Japan	Rion	Crazy Raccoon	4	46	67	16	0.69	0.93	148	11.5	16.75	4
Finland	Derke	Fnatic	25	498	416	119	1.2	1.48	204	19.92	16.64	4.76
Czechia	Magnum	Fnatic	29	461	444	131	1.04	1.33	167.375	15.9	15.31	4.52
Croatia	Doma	Fnatic	25	398	372	199	1.07	1.6	152.25	15.92	14.88	7.96

United Kingdom,Mistic,Fnatic,29,408,404,215,1.01,1.54,159.125,14.07,13.93,7.41  
United Kingdom,Boaster,Fnatic,29,396,442,178,0.9,1.3,131.75,13.66,15.24,6.14  
Argentina,Klaus,KRÜ Esports,33,438,489,171,0.9,1.25,185.625,13.27,14.82,5.18  
Chile,Keznit,KRÜ Esports,27,490,451,129,1.09,1.37,191.875,18.15,16.7,4.78  
Chile,Mazino,KRÜ Esports,33,464,518,218,0.9,1.32,184.5,14.06,15.7,6.61  
Argentina,Bnj,Ninjas in Pyjamas,20,224,269,112,0.83,1.25,163.25,11.2,13.45,5.6  
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Chile,Delz1k,KRÜ Esports,33,421,509,178,0.83,1.18,172,12.76,15.42,5.39  
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South Korea,Solo,NUTURN Gaming,11,137,167,65,0.82,1.21,188,12.45,15.18,5.91  
South Korea,Suggest,NUTURN Gaming,11,146,158,36,0.92,1.15,186,13.27,14.36,3.27  
South Korea,Peri,NUTURN Gaming,11,151,142,43,1.06,1.37,184,13.73,12.91,3.91  
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United States,ShahZaM,Sentinels,30,511,429,167,1.19,1.58,226,17.03,14.3,5.57  
United States,Sick,Sentinels,30,473,435,189,1.09,1.52,211,15.77,14.5,6.3  
United States,Dapr,Sentinels,30,395,435,183,0.91,1.33,184.5,13.17,14.5,6.1  
United States,Zombs,Sentinels,30,366,421,224,0.87,1.4,158.5,12.2,14.03,7.47  
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Brazil,Gaabxx,Sharks Esports,5,65,66,17,0.98,1.24,199,13,13.2,3.4  
Brazil,DeNaro,Sharks Esports,5,45,69,24,0.65,1,161,9,13.8,4.8  
Brazil,Light,Sharks Esports,5,35,67,22,0.52,0.85,125,7,13.4,4.4  
Brazil,Fra,Sharks Esports,5,35,69,17,0.51,0.75,122,7,13.8,3.4  
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Belgium,Nivera,Team Liquid,20,311,272,71,1.14,1.4,197.5,15.55,13.6,3.55  
Finland,Jamppi,Team Liquid,29,483,438,113,1.1,1.36,219.5,16.66,15.1,3.9  
United Kingdom,L1NK,Team Liquid,29,417,401,176,1.04,1.48,181.75,14.38,13.83,6.07  
United Kingdom,Soulcas,Team Liquid,29,403,423,217,0.95,1.47,193.25,13.9,14.59,7.48  
United Kingdom,Kryptix,Team Liquid,9,104,117,54,0.89,1.35,161,11.56,13,6  
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Brazil,Sutecas,Team Vikings,13,189,196,70,0.96,1.32,178,14.54,15.08,5.38  
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Brazil,Frz,Team Vikings,13,161,212,59,0.76,1.04,154,12.38,16.31,4.54  
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Canada,Penny,Version1,10,185,173,40,1.07,1.3,227,18.5,17.3,4  
Canada,Effys,Version1,10,161,146,69,1.1,1.58,186,16.1,14.6,6.9  
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Thailand,Foxz,Xerxia,23,349,369,131,0.95,1.3,195.75,15.17,16.04,5.7  
Thailand,Crws,Xerxia,23,300,367,157,0.82,1.25,169.25,13.04,15.96,6.83  
Thailand,Sushiboyz,Xerxia,23,354,352,95,1.01,1.28,192.75,15.39,15.3,4.13  
Thailand,Sscary,Xerxia,23,329,338,176,0.97,1.49,187.5,14.3,14.7,7.65  
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United States,Ethan,100 Thieves,10,159,148,50,1.07,1.41,212,15.9,14.8,5  
United States,Nitr0,100 Thieves,10,161,128,62,1.26,1.74,202,16.1,12.8,6.2  
United States,Hiko,100 Thieves,10,128,124,65,1.03,1.56,187,12.8,12.4,6.5  
Canada,Steel,100 Thieves,10,120,152,57,0.79,1.16,174,12,15.2,5.7  
Turkey,Cned,Acend,24,435,345,99,1.26,1.55,246,18.13,14.38,4.13  
Poland,Zeek,Acend,24,389,334,154,1.16,1.63,224.5,16.21,13.92,6.42  
Poland,Starxo,Acend,24,344,344,148,1,1.43,188.5,14.33,14.33,6.17  
Spain,Kiles,Acend,24,289,353,127,0.82,1.18,158.5,12.04,14.71,5.29  
Finland,BONECOLD,Acend,24,291,342,146,0.85,1.28,160.5,12.13,14.25,6.08  
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South Korea,FiveK,F4Q,10,105,155,45,0.68,0.97,159,10.5,15.5,4.5  
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Spain,Koldamenta,G2 Esports,14,170,179,95,0.95,1.48,177,12.14,12.79,6.79  
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Russia,Nats,Gambit Esports,32,542,425,188,1.28,1.72,237.5,16.94,13.28,5.88  
Russia,Chronicle,Gambit Esports,32,540,411,193,1.31,1.78,229,16.88,12.84,6.03  
Russia,D3ffo,Gambit Esports,32,516,447,99,1.15,1.38,223,16.13,13.97,3.09  
Russia,Sheydos,Gambit Esports,32,480,434,139,1.11,1.43,201.5,15,13.56,4.34  
Russia,Redgar,Gambit Esports,32,407,428,222,0.95,1.47,169,12.72,13.38,6.94  
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Brazil,Murizzz,Keyd Stars,11,160,164,54,0.98,1.3,201.5,14.55,14.91,4.91  
Brazil,Ntk,Keyd Stars,6,81,93,32,0.87,1.22,178,13.5,15.5,5.33  
Brazil,V1xen,Keyd Stars,11,130,146,72,0.89,1.38,151,11.82,13.27,6.55  
Brazil,JhoW,Keyd Stars,11,120,159,67,0.75,1.18,157,10.91,14.45,6.09  
Brazil,Krain,Liberty,4,50,63,19,0.79,1.1,205,12.5,15.75,4.75  
Brazil,Shion,Liberty,4,54,69,7,0.78,0.88,193,13.5,17.25,1.75  
Brazil,Pleets,Liberty,4,46,62,24,0.74,1.13,181,11.5,15.5,6  
Brazil,Liazzi,Liberty,4,48,61,8,0.79,0.92,180,12,15.25,2  
Brazil,Myssen,Liberty,4,40,61,18,0.66,0.95,156,10,15.25,4.5  
Indonesia,F0rsakeN,Paper Rex,15,268,246,47,1.09,1.28,234.5,17.87,16.4,3.13  
Malaysia,D4v41,Paper Rex,15,200,230,99,0.87,1.3,185,13.33,15.33,6.6  
Indonesia,Mindfreak,Paper Rex,15,174,229,105,0.76,1.22,155,11.6,15.27,7  
Singapore,Benkai,Paper Rex,15,196,205,67,0.96,1.28,166,13.07,13.67,4.47  
Singapore,Shiba,Paper Rex,5,48,77,31,0.62,1.03,128,9.6,15.4,6.2  
Turkey,Izzy,SuperMassive Blaze,8,133,119,24,1.12,1.32,221,16.63,14.88,3  
Turkey,Russ,SuperMassive Blaze,8,118,118,46,1,1.39,212,14.75,14.75,5.75  
Turkey,Brave,SuperMassive Blaze,8,113,120,56,0.94,1.41,209,14.13,15,7  
Turkey,Paura,SuperMassive Blaze,8,110,113,38,0.97,1.31,191,13.75,14.13,4.75

Turkey,Turko,SuperMassive Blaze,8,103,103,47,1,1.46,163,12.88,12.88,5.88  
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United States,Crashies,OpTic Gaming,39,619,568,279,1.09,1.58,202.75,15.87,14.56,7.15  
United States,Victor,OpTic Gaming,39,606,606,279,1,1.46,197.75,15.54,15.54,7.15  
Canada,Marved,OpTic Gaming,39,651,598,285,1.09,1.57,211,16.69,15.33,7.31  
Canada,FNS,OpTic Gaming,39,487,612,181,0.8,1.09,165.25,12.49,15.69,4.64  
South Korea,BuZz,DRX,28,468,419,114,1.12,1.39,230.25,16.71,14.96,4.07  
South Korea,MaKo,DRX,28,439,361,230,1.22,1.85,220.25,15.68,12.89,8.21  
South Korea,K1Ng,Vision Strikers,13,170,181,54,0.94,1.24,182,13.08,13.92,4.15  
South Korea,Rb,DRX,28,375,395,151,0.95,1.33,181.5,13.39,14.11,5.39  
South Korea,Stax,DRX,28,426,380,187,1.12,1.61,195.75,15.21,13.57,6.68  
South Korea,Lakia,Vision Strikers,2,22,30,4,0.73,0.87,175,11,15,2  
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Japan,Crow,ZETA DIVISION,26,299,364,147,0.82,1.23,164.5,11.5,14,5.65  
Japan,Reita,ZETA DIVISION,5,47,74,11,0.64,0.78,152,9.4,14.8,2.2  
Japan,Barce,ZETA DIVISION,2,13,28,12,0.46,0.89,113,6.5,14,6  
Japan,Makiba,ZETA DIVISION,3,18,44,17,0.41,0.8,110,6,14.67,5.67  
United States,Leaf,Cloud9,10,210,176,58,1.19,1.52,263,21,17.6,5.8  
United States,Xeppaa,Cloud9,10,154,174,77,0.89,1.33,195,15.4,17.4,7.7  
United States,Mitch,Cloud9,10,152,156,42,0.97,1.24,184,15.2,15.6,4.2  
South Korea,Xeta,Cloud9,10,153,151,87,1.01,1.59,179,15.3,15.1,8.7  
United States,Vanity,Cloud9,20,285,337,160,0.85,1.32,178.5,14.25,16.85,8  
Thailand,LAMMYSNAX,FULL SENSE,4,61,65,20,0.94,1.25,213,15.25,16.25,5  
Thailand,JohnOlsen,FULL SENSE,4,53,68,16,0.78,1.01,192,13.25,17,4  
Thailand,SuperBusS,FULL SENSE,4,52,61,18,0.85,1.15,179,13,15.25,4.5  
Thailand,PTC,FULL SENSE,4,48,62,26,0.77,1.19,168,12,15.5,6.5  
Thailand,ChAlalala,FULL SENSE,4,41,58,9,0.71,0.86,139,10.25,14.5,2.25  
Brazil,Xand,FURIA Esports,6,106,103,23,1.03,1.25,231,17.67,17.17,3.83  
Argentina,Nozwerr,FURIA Esports,6,97,85,38,1.14,1.59,205,16.17,14.17,6.33  
Brazil,Khalil,FURIA Esports,6,88,103,41,0.85,1.25,196,14.67,17.17,6.83  
Brazil,Qck,FURIA Esports,6,89,92,32,0.97,1.32,188,14.83,15.33,5.33  
Brazil,Mazin,FURIA Esports,6,81,99,35,0.82,1.17,161,13.5,16.5,5.83  
Philippines,DubsteP,Team Secret,9,141,123,18,1.15,1.29,237,15.67,13.67,2  
Philippines,Dispenser,Team Secret,9,132,112,42,1.18,1.55,212,14.67,12.44,4.67  
Philippines,Witz,Team Secret,9,117,115,43,1.02,1.39,204,13,12.78,4.78  
Philippines,JessieVash,Team Secret,9,101,120,64,0.84,1.38,201,11.22,13.33,7.11  
Philippines,BORKUM,Team Secret,9,103,105,41,0.98,1.37,165,11.44,11.67,4.56  
Brazil,Aspas,LOUD,11,211,168,35,1.26,1.46,249,19.18,15.27,3.18  
Brazil,Sacy,LOUD,11,169,159,72,1.06,1.52,202,15.36,14.45,6.55  
Brazil,Less,LOUD,11,166,164,61,1.01,1.38,202,15.09,14.91,5.55  
Brazil,PANcada,LOUD,11,165,172,58,0.96,1.3,180,15,15.64,5.27  
Brazil,Xand,Ninjas in Pyjamas,7,125,108,25,1.16,1.39,241,17.86,15.43,3.57  
Brazil,Cauanzin,Ninjas in Pyjamas,7,102,108,45,0.94,1.36,207,14.57,15.43,6.43

Brazil,Benzn1,Ninjas in Pyjamas,7,92,108,51,0.85,1.32,191,13.14,15.43,7.29  
Brazil,John,Ninjas in Pyjamas,7,93,113,32,0.82,1.11,181,13.29,16.14,4.57  
South Korea,Sayaplayer,The Guard,5,95,75,15,1.27,1.47,251,19,15,3  
Canada,JonahP,The Guard,5,77,80,20,0.96,1.21,198,15.4,16,4  
United States,Nats,The Guard,5,67,77,14,0.87,1.05,179,13.4,15.4,2.8  
United States,Valyn,The Guard,5,67,78,43,0.86,1.41,178,13.4,15.6,8.6  
United States,Trent,The Guard,5,63,79,19,0.8,1.04,162,12.6,15.8,3.8  
South Korea,Zest,DRX,13,194,171,64,1.13,1.51,196,14.92,13.15,4.92  
Finland,H1ber,Fnatic,4,63,73,22,0.86,1.16,231,15.75,18.25,5.5  
France,Enzo,Fnatic,4,68,61,19,1.11,1.43,229,17,15.25,4.75  
Finland,Hoody,G2 Esports,6,105,97,38,1.08,1.47,242,17.5,16.17,6.33  
Sweden,Meddo,G2 Esports,6,69,91,15,0.76,0.92,152,11.5,15.17,2.5  
Singapore,Jinggg,Paper Rex,10,184,168,51,1.1,1.4,250,18.4,16.8,5.1  
Thailand,Surf,Xerxia,7,121,120,16,1.01,1.14,212,17.29,17.14,2.29  
Japan,TENNN,ZETA DIVISION,21,324,327,94,0.99,1.28,221,15.43,15.57,4.48  
Japan,SugarZ3ro,ZETA DIVISION,21,345,298,146,1.16,1.65,221,16.43,14.19,6.95  
Japan,Dep,ZETA DIVISION,21,299,312,105,0.96,1.29,194,14.24,14.86,5