UNIVERSITY OF CALGARY

CPSC 481 - HUMAN-COMPUTER INTERACTION: FOUNDATIONS AND PRINCIPLES

PROFESSOR: TIAGO SILVA DA SILVA

Project 1

USER PROJECT RESEARCH

ZHEYU JEREMY YING
KHALID JOMHA
WILFREDO JR. PASADILLA
HEEJUN KIM
ZACHARY METZ

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1 Project Idea

Player's Advantage is the next platform for all Fortnite players to analyze their own stats as well as their opponents. This platform will house the stats of millions of players to help improve skills to gain an edge over one's opponents. Stay up to date with your performance in the game and measure your rate of improvement using our statistics straight from the Fortnite API.

Our team at Player's Advantage strive to give the player access to information otherwise hidden within the Fortnite interface. We want to serve as a one-stop shop for all users looking to analyze their gameplay. Through the use of our product, the Fortnite player-base could track their improvement and have all their stats stored in one place.
Ideally, this platform will include the following statistics:

Career Stats:

- Number of Total Wins
- Win percentage over all game modes
- Number of Total Kills
- Kill/Death Ratio

Solo Gamemode Stats:

- Number of Solo Gamemode Wins
- Win percentage within solo gamemode
- Number of Top 10 finishes in solo
- Number of Top 25 finishes in solo
- Number of Kills in solo
- Kill/Death Ratio in solo
- Average kills per match in solo

Duo Gamemode Stats:

- Number of Duo Gamemode Wins
- Win percentage within duo gamemode
- Number of Top 5 finishes in duo
- Number of Top 12 finishes in duo
- Number of kills in duo
- Kill/Death Ratio in duo

- Average kills per match in duo

Squad Gamemode Stats:

- Number of Squad Gamemode Wins
- Win percentage within squad gamemode
- Number of Top 3 finishes in squad
- Number of Top 6 finishes in squad
- Number of kills in squad
- Kill/Death Ratio in squad
- Average kills per match in squad

2 Recent Match History

A match history would be provided to allow the player to monitor their performance in their most recent gaming sessions. This feature allows the player to reflect on how they played to in turn improve their future games. A big selling point of statistic websites are showing off to friends and fellow gamers. Match histories are perfect for recording highlight games to share afterwards.

The match history will bring similar info to light as highlighted above, for example:

- Gamemode played
- Number of Kills

3 Use Cases

Bragging to one's friends or peers is a large part in gaming culture nowadays. The competitive spirit within us all, desires to be better than those around us. Many games lack an effective way of sharing one's achievements. Through publicizing these statistics, players have access to all their achievements. The internet is readily available in modern society, so we are able to streamline the sharing of player statistics.

With the emergence of esports culture and the rise of competition within the gaming environment, statistics are a good representation of a gamer's skill. Competition within the scene is at an all time high with the many success stories that spawned from humble beginnings. For example, the growth of Twitch Streamer "Ninja" shows how skill within a game could translate to a large fanbase and mountain high viewership. Such huge successes in the industry are spawning more and more gamers who wish to strive for the same degree of success within their chosen videogame. We are here to provide a tool for these people to help them improve and display their skills through the numbers and not only through word of mouth. Player statistics

could be one's ticket to recognition and a separation from the large crowd of people who make up the casual player base. Our service is their resume and their gateway to improvement, as they reflect on their past achievements and build upon their foundations.

We at Player's Advantage are here for the people, but we also desire to aid the developers of the game and bring improvements to what is lacking. We look to publicize otherwise hidden statistics to bring attention to the problems within the game. Balancing issues plague the competitive gaming industry due to the nature of the practice and the almost zero chance of perfecting the art. Through analyzing the numbers, balancing faults could be found and possibly eased with game patches in the future.

4 Stakeholders

The team at Player's Advantage look to provide a service to compete with the others within the environment. We are striving to be the leading platform in our niche and ideally plan to expand past our focus on a single game. Our developers at Player's Advantage all hold a stake within the project to motivate an approach to greatness.

The Team

- Zachary Metz
- Khalid Jomha
- Jeremy Ying
- Wilfredo Jr. Pasadilla
- Heejun Kim

5 Secondary Research

We chose to conduct secondary research for an IDEO method approach. Our project is still in its early development, so researching other established websites should be beneficial to the development of our own site. Looking at other websites and learning about their features, design, user experience they offer will help shape and improve our own product. In our research we will be visiting 4 similar tracking services for the game "Fortnite" (our initial target platform) as well as a similar tracking websites for a different game (Destiny 2). While current tracking options have no particular flaws, we aim to offer an improved product by expanding on and enhancing some similar features as well as adding some of our own. A particular area of improvement that we can offer is to add support for multiple games. While some of these trackers do offer multi-game support, they include only the most popular titles. By capitalizing on a wide-network of supported games (including less popular games that have

lower product saturation) we can differentiate ourselves from some of the competition. One particular feature that seems to be missing for the researched sites is the existence of a friends list. If you wanted to view the stats of a friend in 4 different games, then you may have to ask him for 4 different usernames to research. Integration of a wide range of games can allow people to view the game statistics of a person across many different games.

Fortnite Tracking Websites:

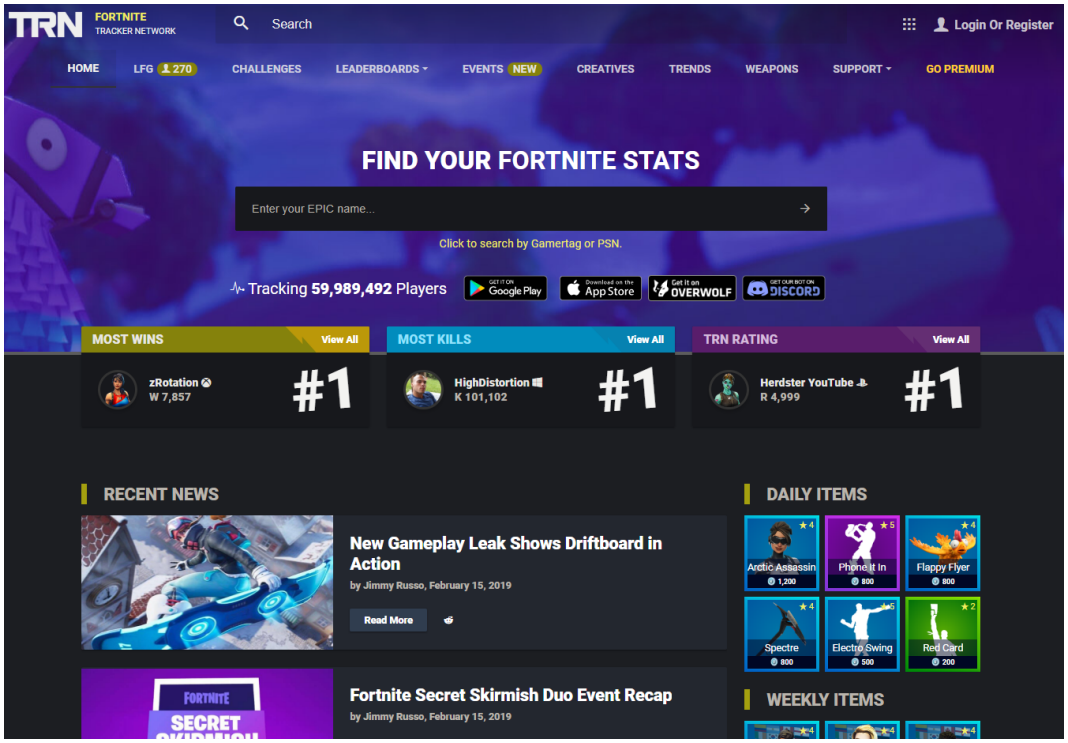
- https://fortnitetracker.com/
- https://www.fortnitescout.com/
- https://fortnitestats.net/
- https://www.stormshield.one/battle-royale

Other Websites:

- https://guardian.gg/2 - Tracking website for "Destiny 2"

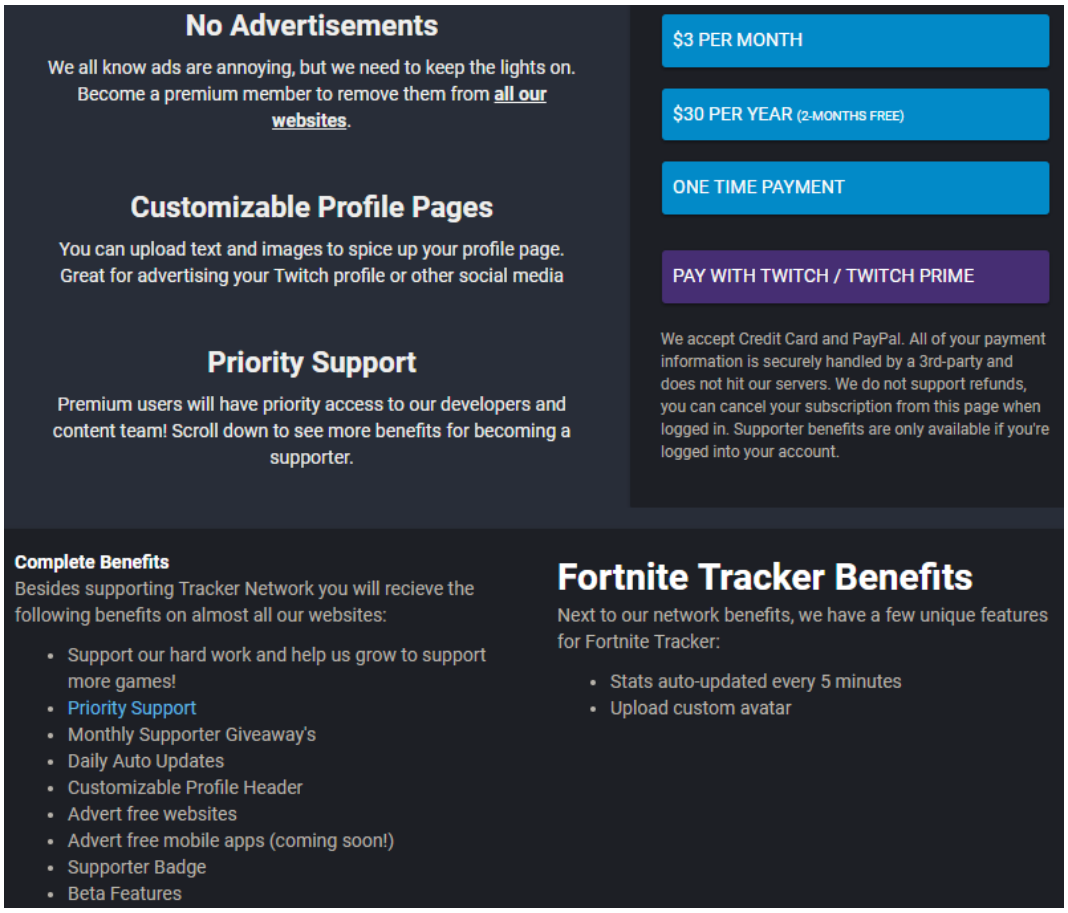
5.a https://fortnitetracker.com/

5.a.1 Homepage:



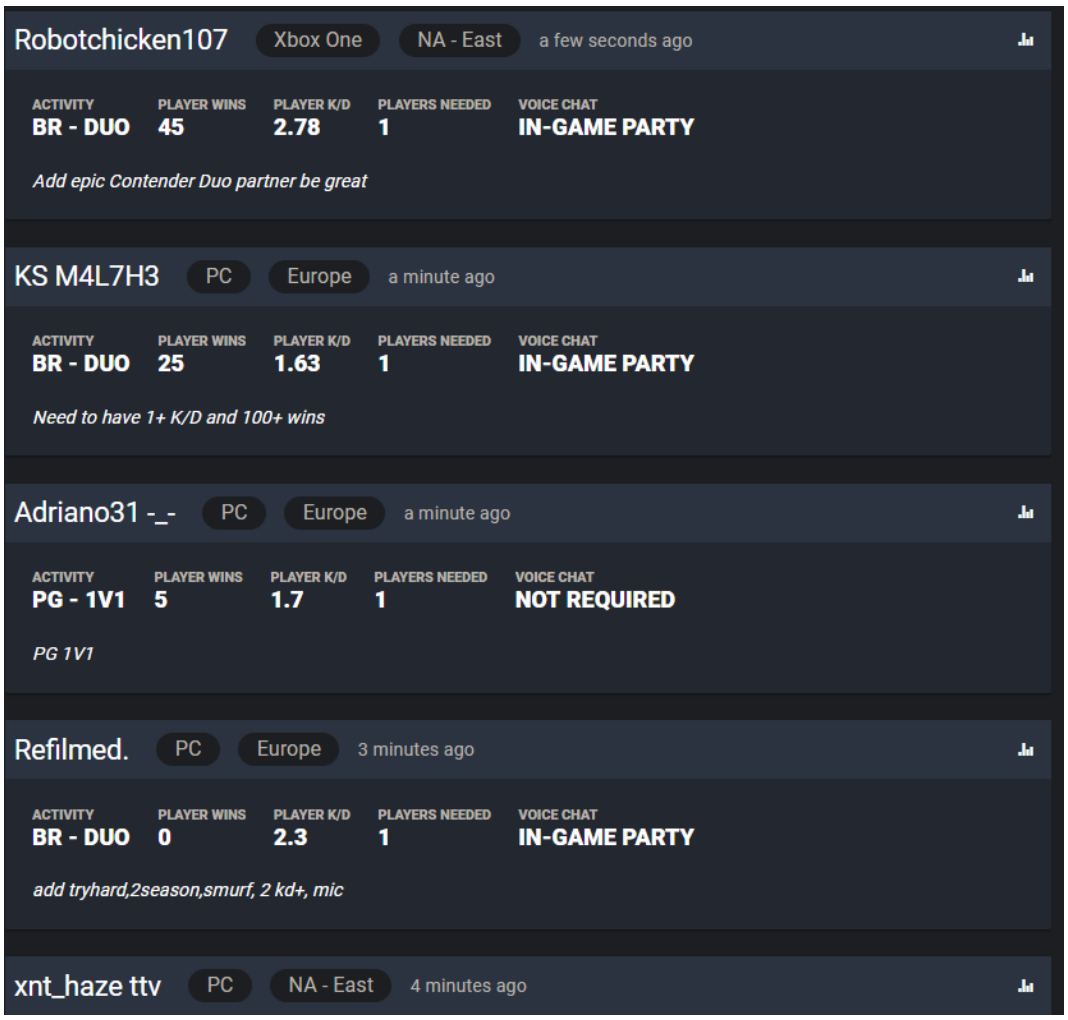
Fornite Tracker's homepage opens up and displays a Username search bar, fortnite news, and daily items/featured items in the Fortnite in-game shop (real money is needed to purchase items in the shop). An account system is in place. Registering with the website will allow access to other TRN websites, customer Leaderboard rankings for your Country, city. Or state, as well as a deeper statistic overview of your game account.

5.a.2 Premium Subscriptions:



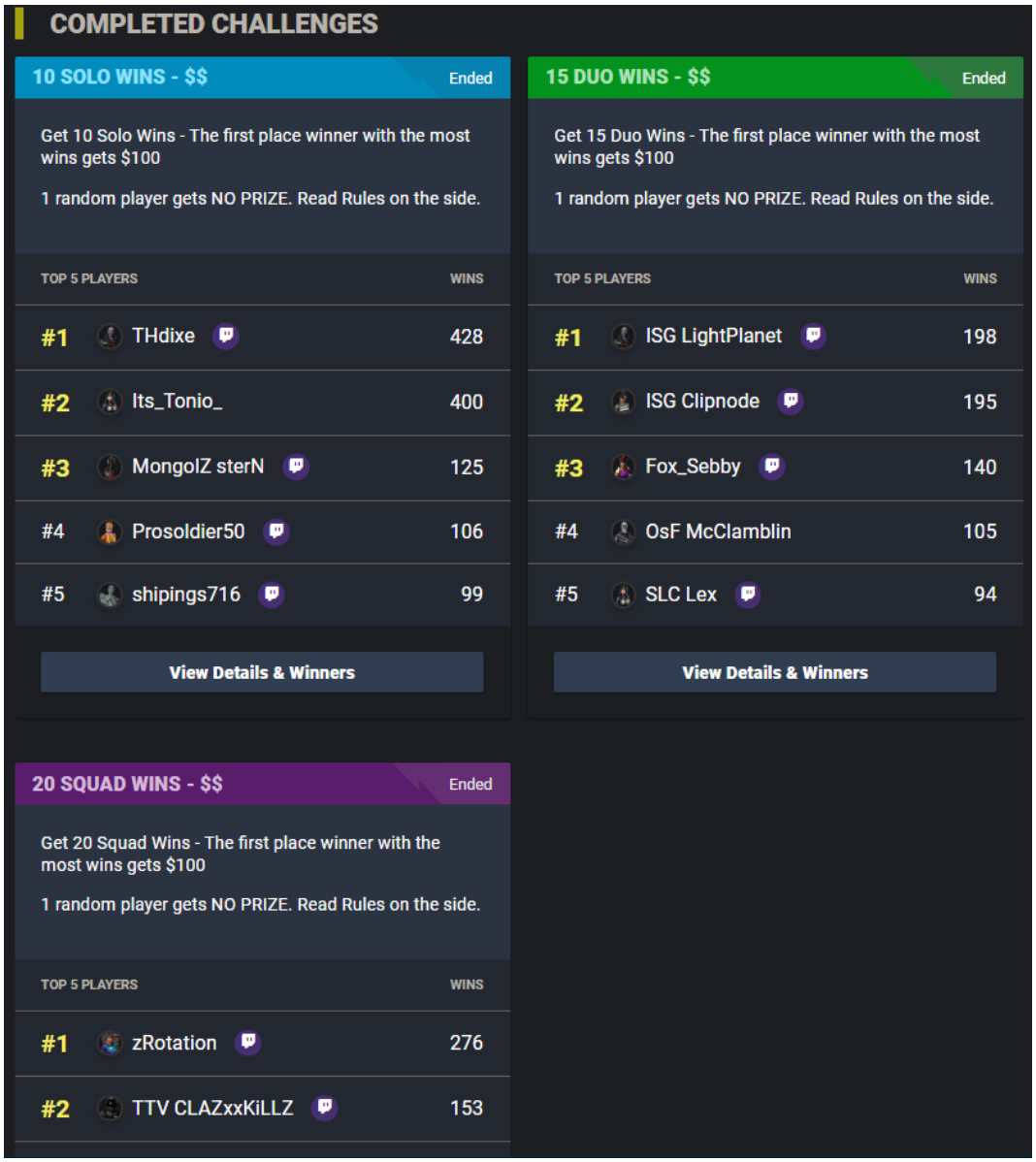
“Premium” features are available starting at 3 USD/month. Purchasing a premium subscription will allow for the removal of ads, customer Profile pages, Priority customer support, daily updates, Monthly giveaways and more.

5.a.3 Looking For Group (LFG)



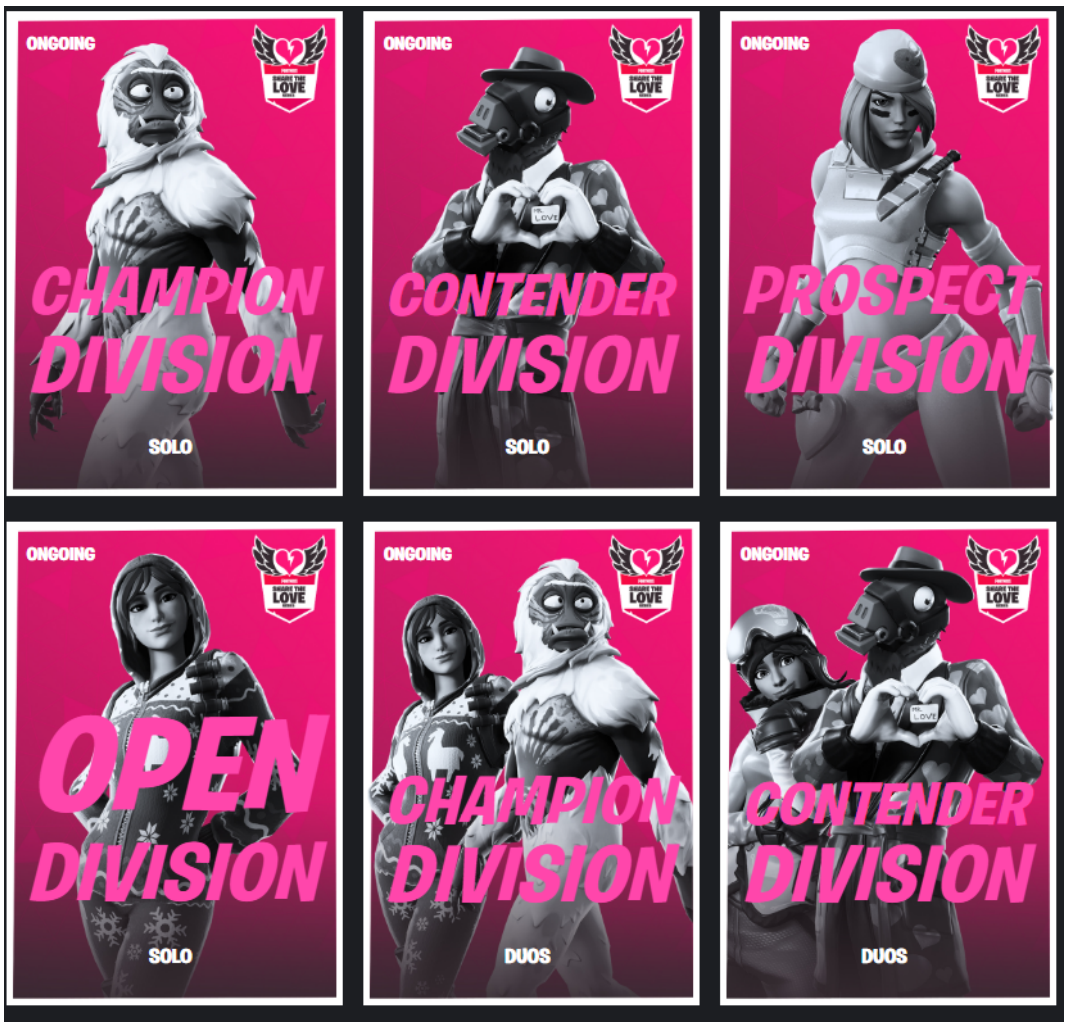
Looking For Group or LFG is a service provided from the website that lets players find others people to play with. LFG can be a very useful tool for those who are trying to achieve certain goals. Requirements to join a certain group can be posted, filtering allows players with similar objectives to group together. A group of players that want to climb the fortnite leaderboards for example, use the LFG functionality to find like-minded people to play with.

5.a.4 TRN Challenges



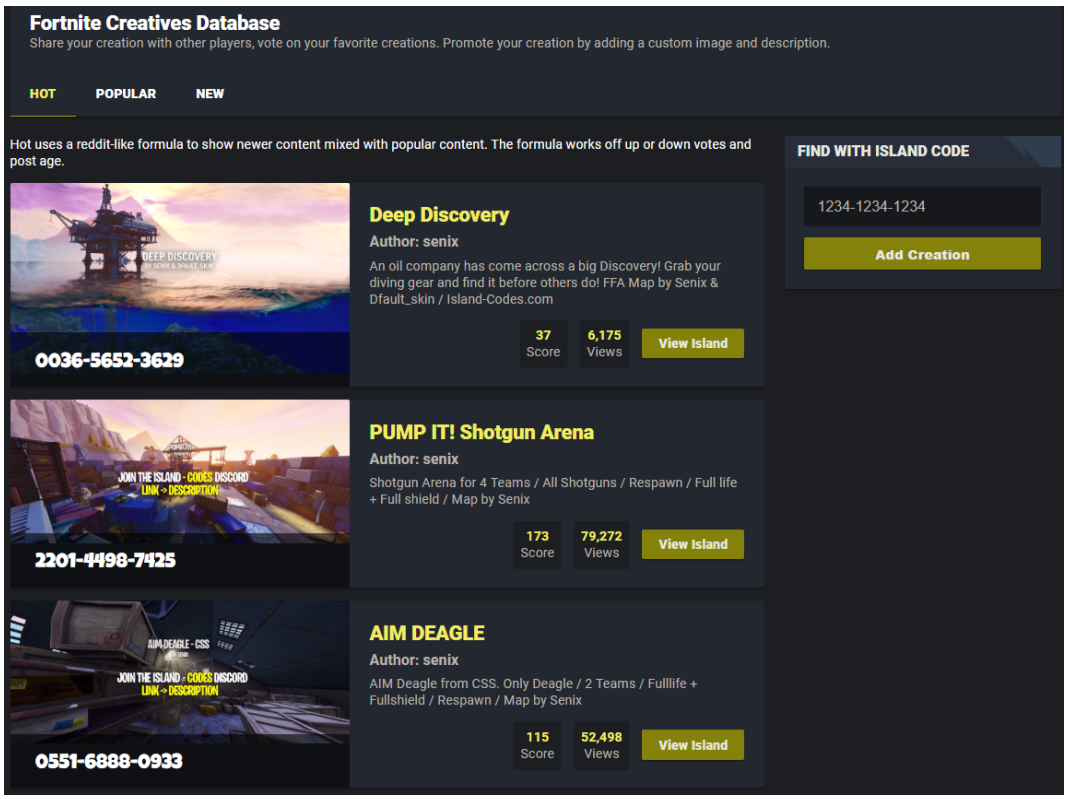
Fortnite tracker periodically hosts challenges for the players that are registered in their stats tracker. These objectives create an easy short-term goal for people to chase. The top player on the leaderboard after the challenge is over will get 100 USD from Fortnite tracker.

5.a.5 Event Tracker



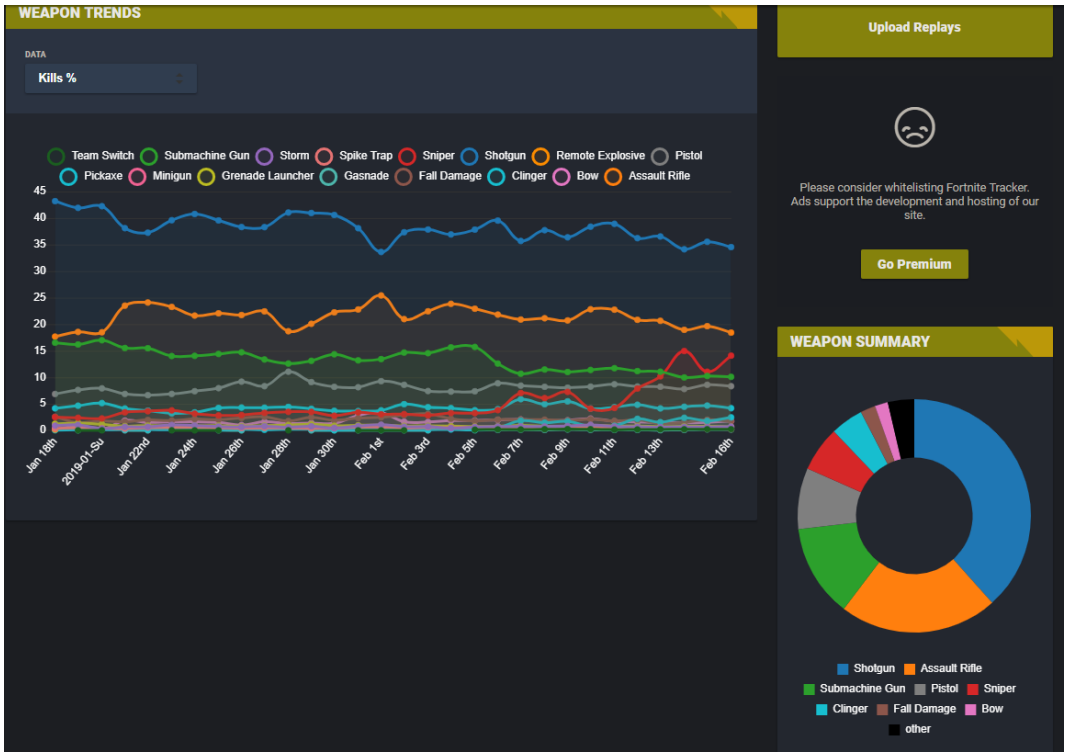
Official fornite events can also be tracked from the website. The top participants of each event can be viewed on a leaderboard.

5.a.6 Creative Database



Player-made fan content can be advertised on the website. A user can post their own customer maps in the Creative Database that will allow other people to join the map and play in the fortnite game. Scores are given to the maps as an indicator for content quality.

5.a.7 Weapon Trends



The total percentage of kills for each weapon type is displayed. This shows the popularity of each weapon type.

5.a.8 Weapons Database

WEAPON	RARITY	DPS	DAMAGE	ENV DAMAGE	FIRE RATE	MAGAZINE	RELOAD TIME
Assault Rifle (Burst Rare)	Epic	56	32	32	1.75	30	2.5s
Assault Rifle (Burst Rare)	Legendary	57.8	33	33	1.75	30	2.3s
Assault Rifle (Burst)	Common	47.2	27	27	1.75	30	2.9s
Assault Rifle (Burst)	Uncommon	50.8	29	29	1.75	30	2.7s
Assault Rifle (Burst)	Rare	52.5	30	30	1.75	30	2.6s
Assault Rifle (M4)	Common	165	30	30	5.5	30	2.3s
Assault Rifle (M4)	Uncommon	170.5	31	31	5.5	30	2.2s
Assault Rifle (M4)	Rare	181.5	33	33	5.5	30	2.2s
Assault Rifle (SCAR)	Epic	192.5	35	35	5.5	30	2.1s
Assault Rifle (SCAR)	Legendary	198	36	36	5.5	30	2.1s

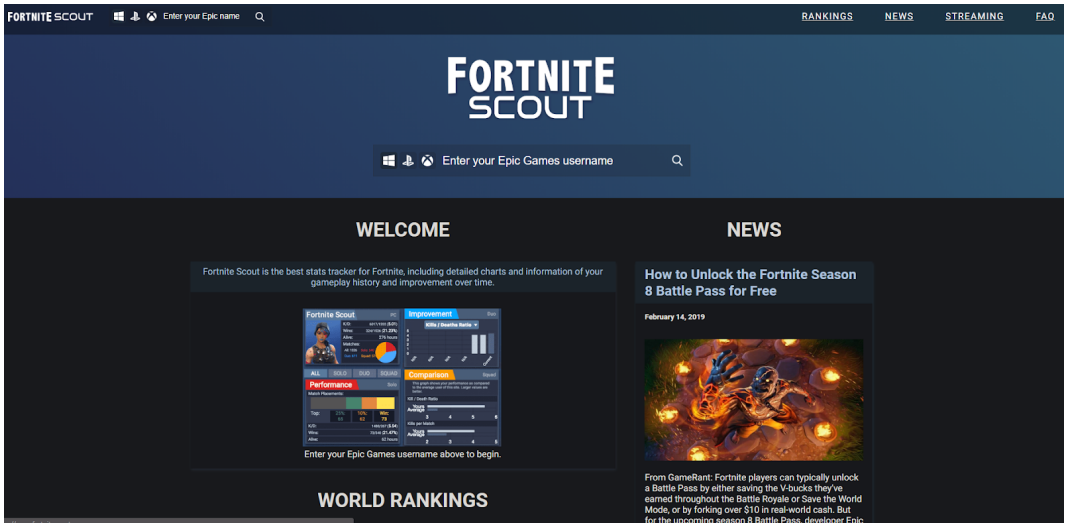
The weapon's database displays all the different stats for the weapons in games. This can be a useful tool for people to judge important gun statistics like damage, fire rate, magazine size, and reloading speed.

5.a.9 Statistics Tracking

The core functionality of the website is the ability to track player stats in a more descriptive, detailed, and efficient way than in the actual fortnite game. Statistics here are displayed either for the past week or lifetime stats, with important values like Kills per Death (K/D), Win percent, and Score per match being displayed to act as metric to evaluate your own player skills. Your statistics can be compared to other players by giving percentile ratings to all your statistics.

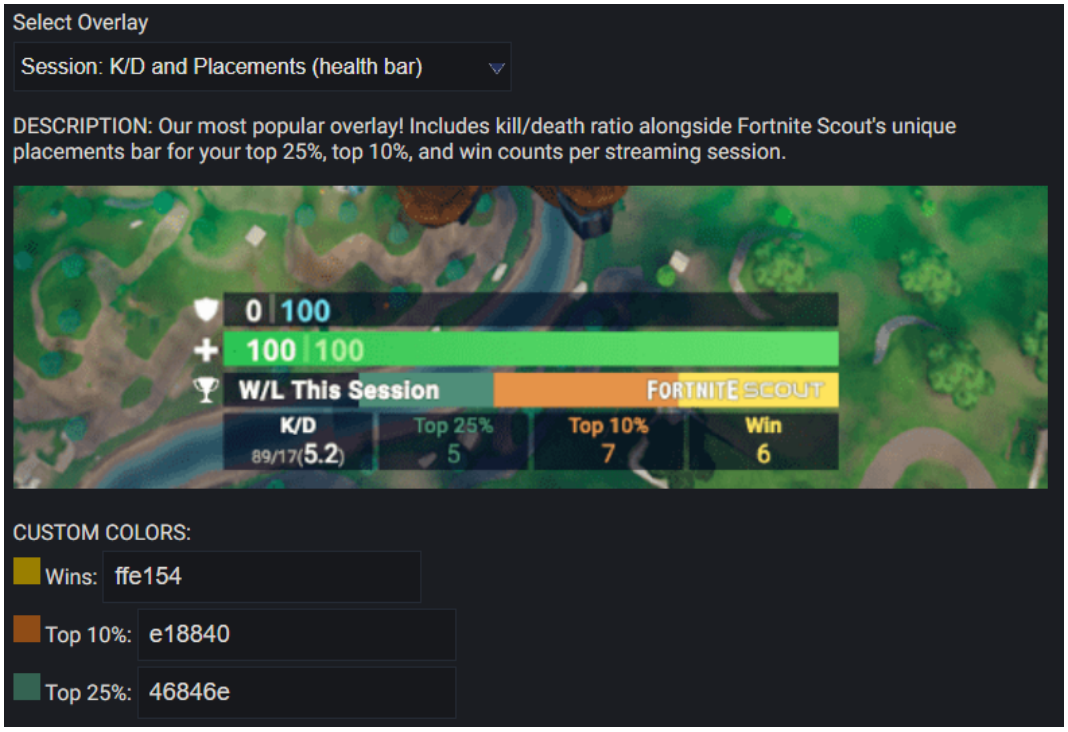
5.b https://www.fortnitescout.com/

5.b.1 Homepage



Fortnitescout provides a simplistic website. Fortnite news items are displayed on the right bar and a Global leaderboard for PC, Playstation, Xbox are displayed.

5.b.2 Streaming Overlay:



A streaming overlay is provided that allows Twitch Streamers to display an overlay on their screen. The overlay displays the statistics of their current session for people watching the stream.

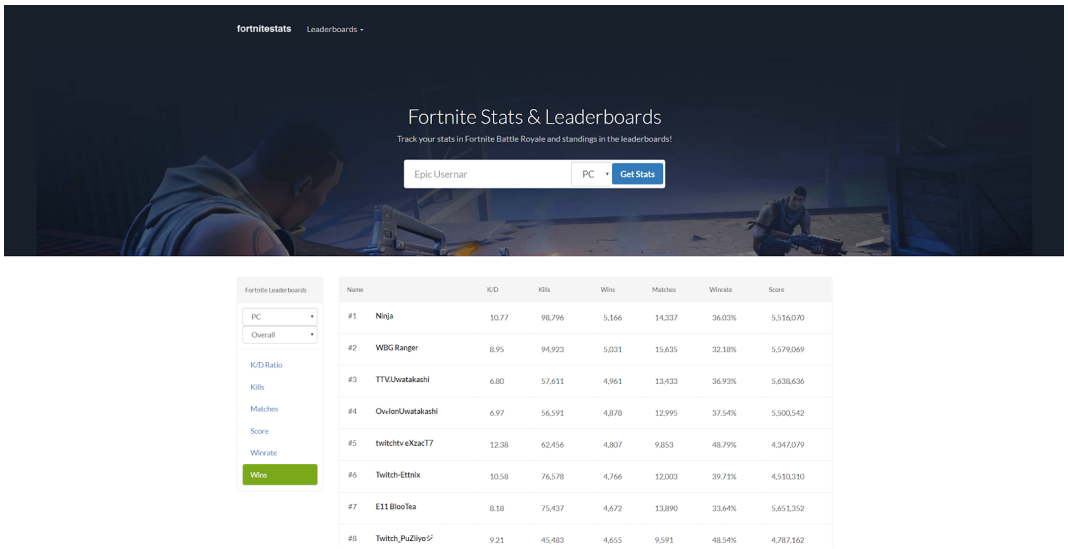
5.b.3 Statistics:

Fortnite scout presents similar statistics to the other websites, like Kill Death ratio, Win rate, and score per match but also shows a graph that indicates personal improvement. This allows a player to track their own stats overtime view their performance over time.

5.c https://fortnitestats.net/

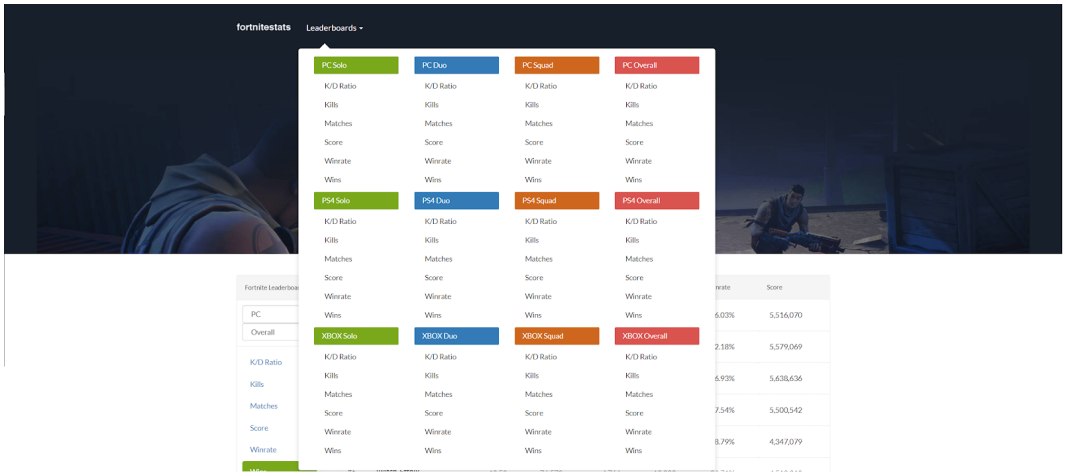
Fortnight stats is a very simple website with a homepage and a privacy policy yet functional in retrieving stats and does not contain any unnecessary extra information or features. Very minimal in design

5.c.1 Home Page:



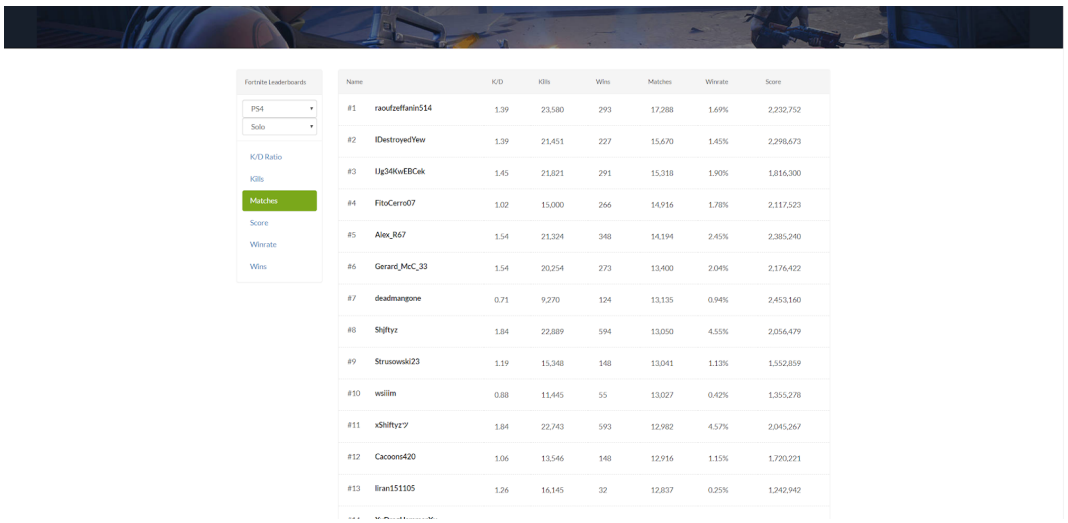
The homepage of fortnight tracker is pretty simple, it doesn't have much of a landing it just gets straight to functionality with all the search options present on the left hand menu

5.c.2 Menu:



Alternatively you can visually find the filter you would like to search by via a menu

5.c.3 Statistics:



Fortnite Leaderboards

PS4

Solo

K/D Ratio

Kills

Matches

Score

Winrate

Wins

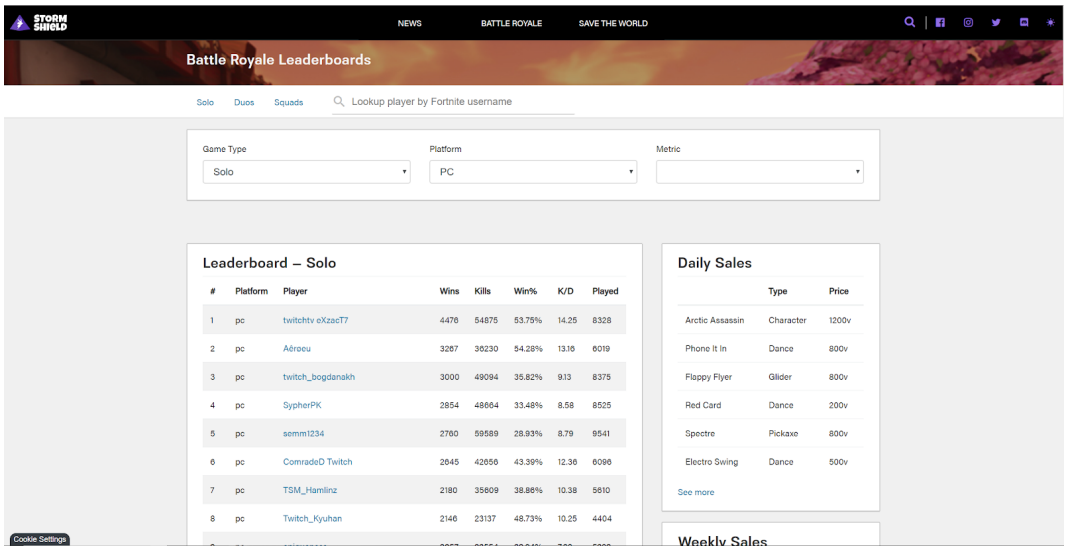
	Name	K/D	Kills	Wins	Matches	Winrate	Score
#1	raoufzeffanin514	1.39	23,580	293	17,288	1.69%	2,232,752
#2	IDestroyedYew	1.39	21,451	227	15,670	1.45%	2,298,673
#3	IJg34KwEBCek	1.45	21,821	291	15,318	1.90%	1,816,300
#4	FitoCerro07	1.02	15,000	266	14,916	1.78%	2,117,523
#5	Alex_R67	1.54	21,324	348	14,194	2.45%	2,385,240
#6	Gerard_McC_33	1.54	20,254	273	13,400	2.04%	2,176,422
#7	deadmangone	0.71	9,270	124	13,135	0.94%	2,453,160
#8	Shjftyz	1.84	22,889	594	13,050	4.55%	2,056,479
#9	Strusowski23	1.19	15,348	148	13,041	1.13%	1,552,859
#10	wsiiim	0.88	11,445	55	13,027	0.42%	1,355,278
#11	xShiftyz'7	1.84	22,743	593	12,982	4.57%	2,045,267
#12	Cacoons420	1.06	13,546	148	12,916	1.15%	1,720,221
#13	liran151105	1.26	16,145	32	12,837	0.25%	1,242,942

Stats are displayed in a simple list with the available information (this is the same as the home page)

5.d https://www.stormshield.one/battle-royale

Website that displays players stats from both the battle royal and save the world game, the site also has a news section with updates from the game. There is also a database of all the weapons and skins available in the game.

5.d.1 Battle Royale Leaderboard:



STORM SHIELD

NEWS BATTLE ROYALE SAVE THE WORLD

Battle Royale Leaderboards

Solo Duos Squads

Lookup player by Fortnite username

Game Type: Solo

Platform: PC

Metric

Leaderboard – Solo

#	Platform	Player	Wins	Kills	Win%	K/D	Played
1	pc	twitchtv eXzacT7	4476	54875	53.75%	14.25	8328
2	pc	Aéroeu	3267	36230	54.28%	13.16	6019
3	pc	twitch_bogdanakh	3000	49094	35.82%	9.13	8375
4	pc	SypherPK	2854	48664	33.48%	8.58	8525
5	pc	semm1234	2760	59589	28.93%	8.79	9541
6	pc	ComradeD Twitch	2645	42656	43.39%	12.36	6096
7	pc	TSM_Hamlinz	2180	35609	38.86%	10.38	5610
8	pc	Twitch_Kyuhan	2146	23137	48.73%	10.25	4404

Daily Sales

	Type	Price
Arctic Assassin	Character	1200v
Phone It In	Dance	800v
Flappy Flyer	Glider	800v
Red Card	Dance	200v
Spectre	Pickaxe	800v
Electro Swing	Dance	500v

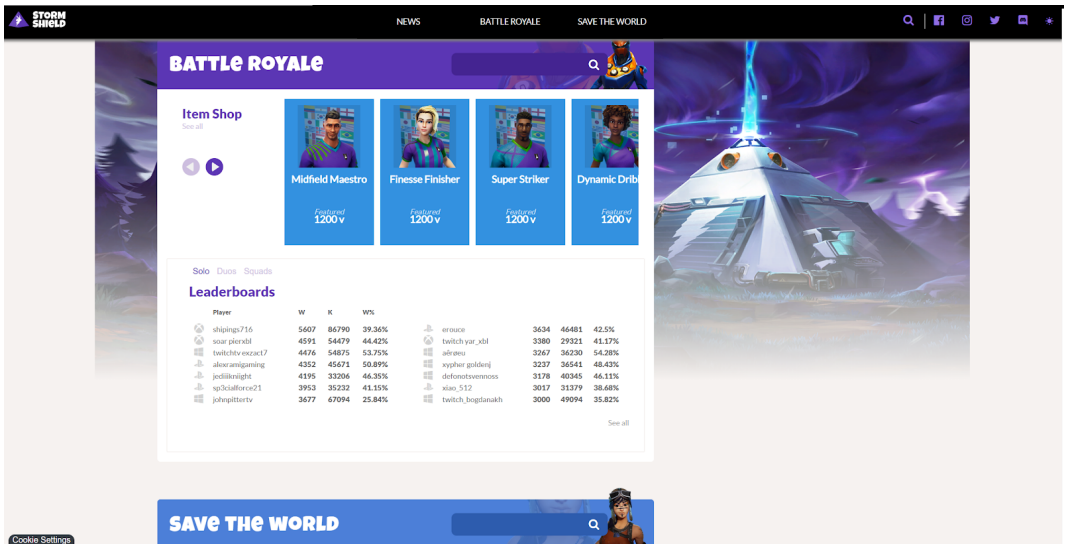
See more

Weekly Sales

Cookie Settings

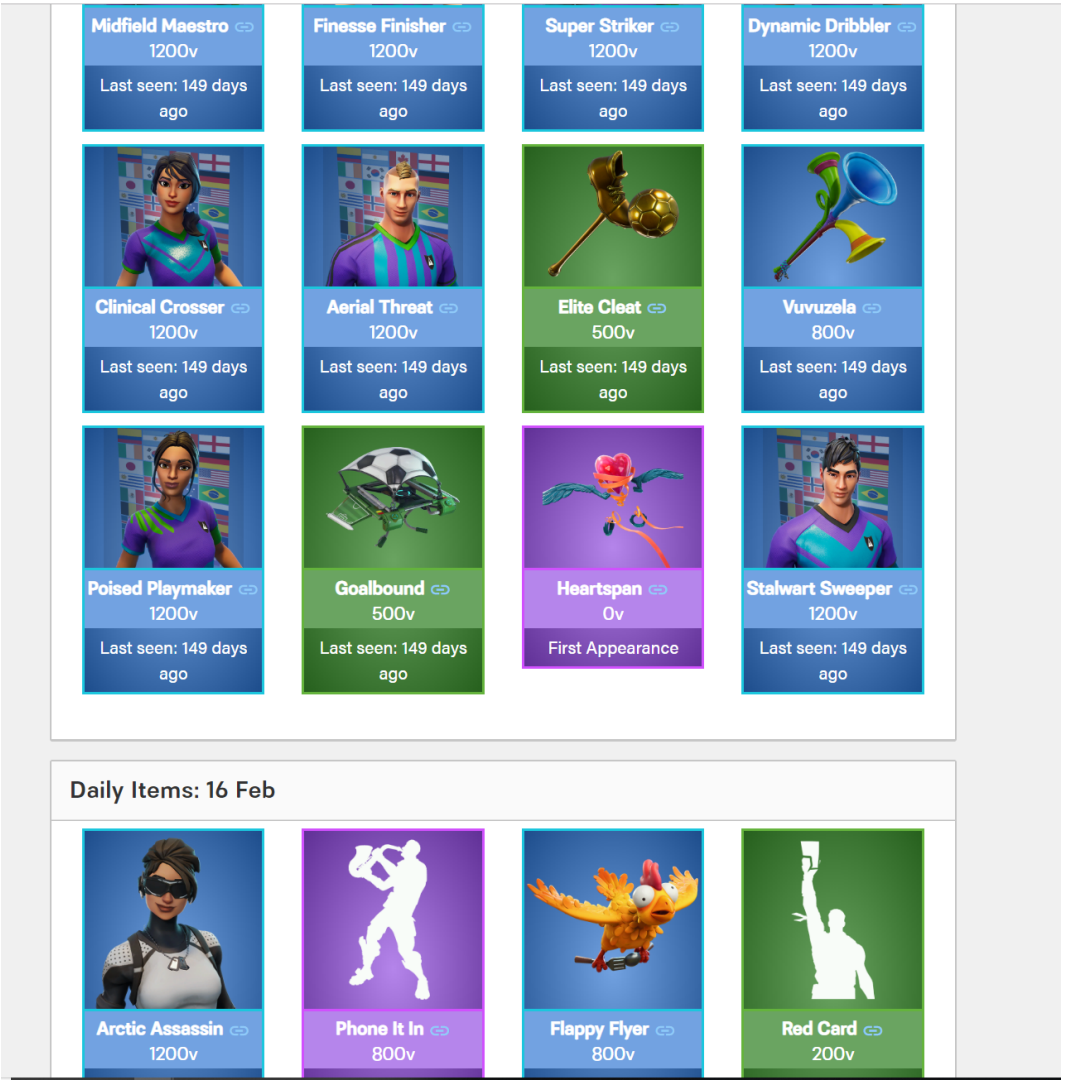
Storm Shield has a more detailed leaderboard page with additional info compared to others in the same category

5.d.2 Homepage:



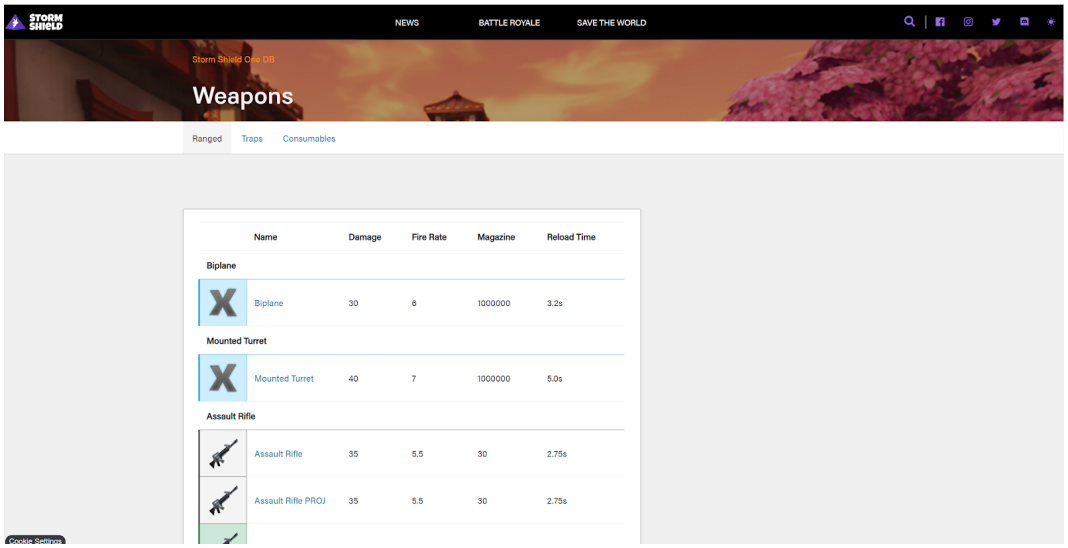
The homepage contains a bit of each category allowing you to either search for a specific player, view the available gear and leaderboards for different game modes.

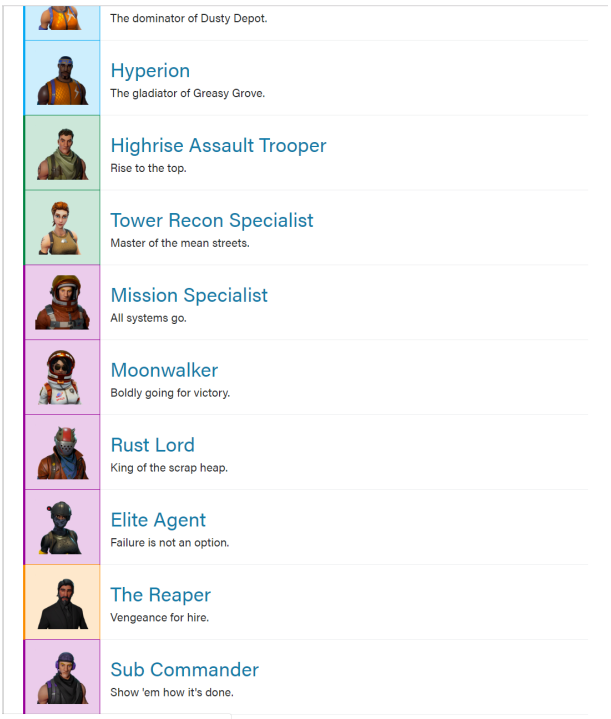
5.d.3 Sales:



They have a page where all of the available gear can be viewed that is currently for sale or has been for sale previously

5.d.4 Item Database:



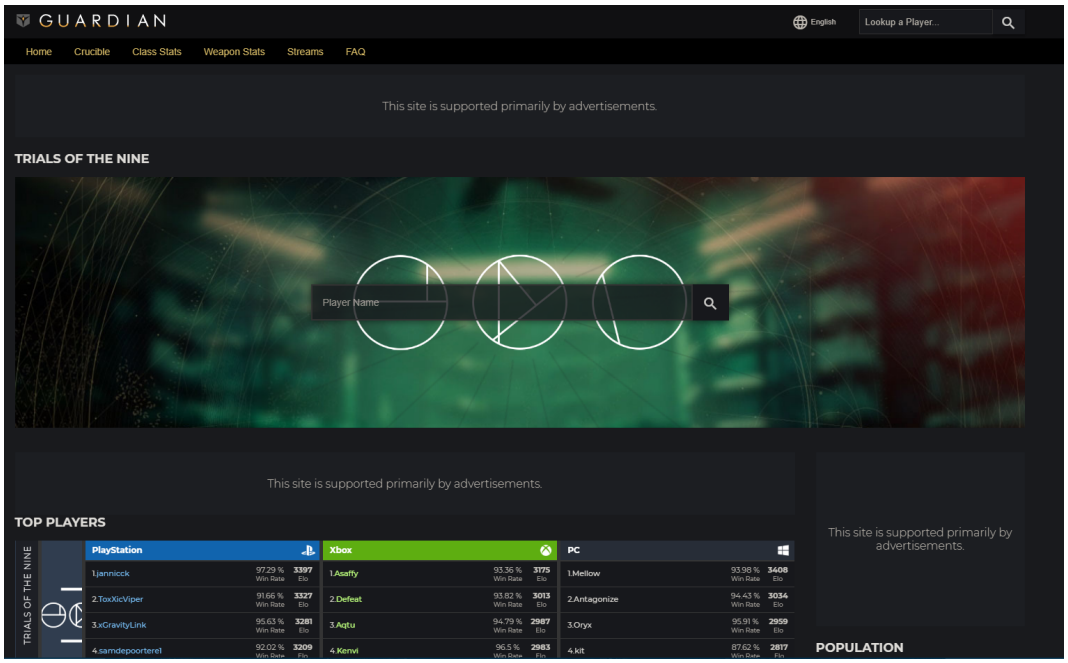


Storm Shield has a viewable database of all the items within the game and their respective parameters along with pictures.

5.e https://guardian.gg/2

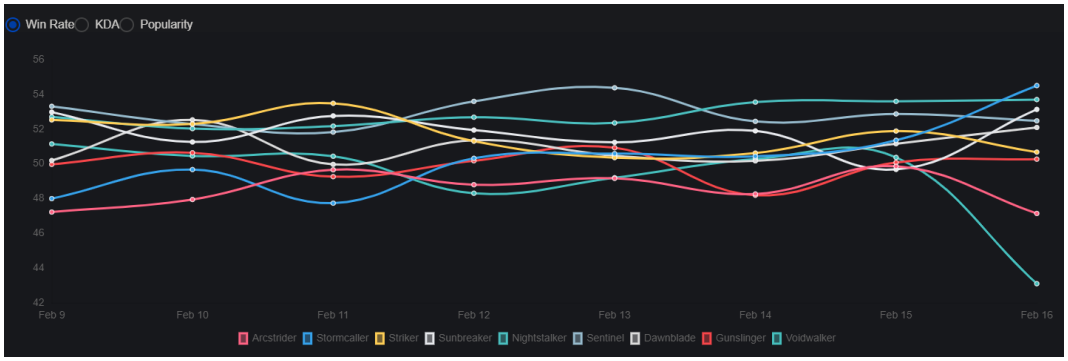
Guardian is a player tracking website for the video game Destiny 2. It provides a similar functionality to the Fortnite trackers

5.e.1 Homepage:



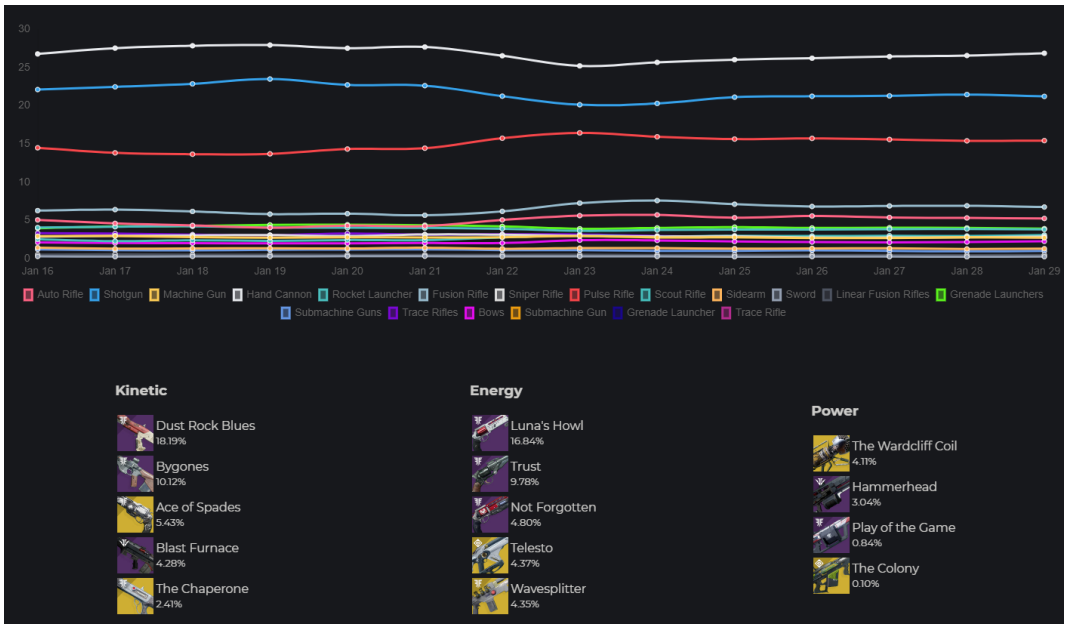
On the homepage, the game provides leaderboards for all of the Player Versus Player (PVP) game modes in Destiny 2. The total player count for the game is displayed on the bar on the right. Popular weapons in the game are displayed by ranking and the most popular twitch PvP twitch streamers are linked on the website.

5.e.2 Class Stats:



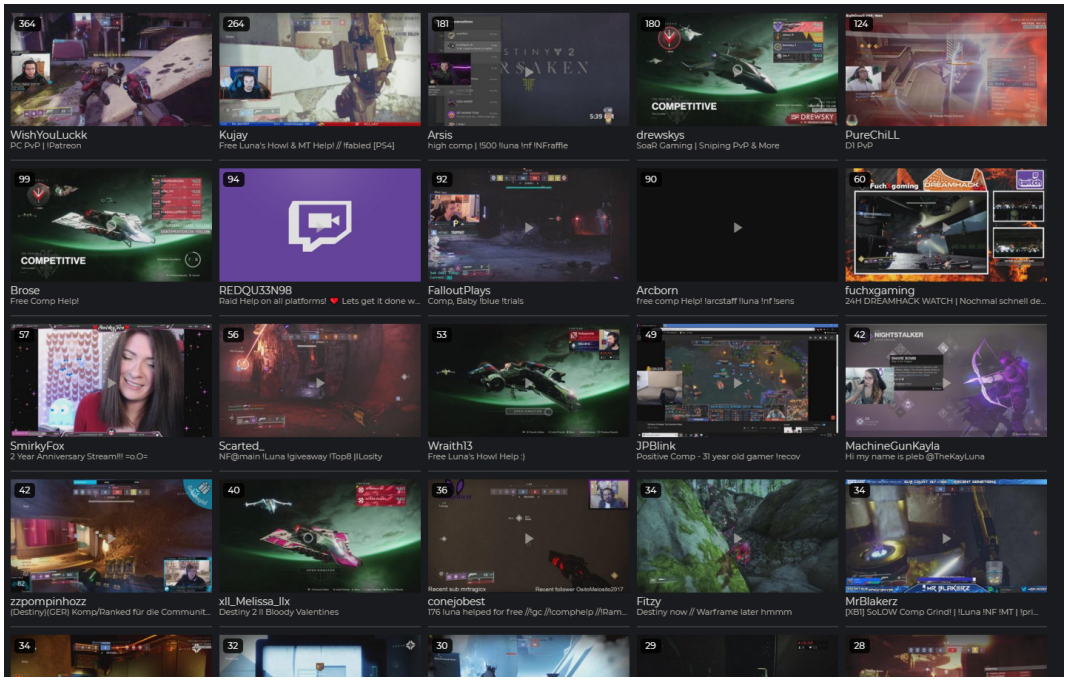
Destiny 2 features 3 character classes as well as 3 sub-classes. The popularity/win rate/ Kill Death Assist ratio of each subclass in PvP is displayed over time.

5.e.3 Weapon Stats:



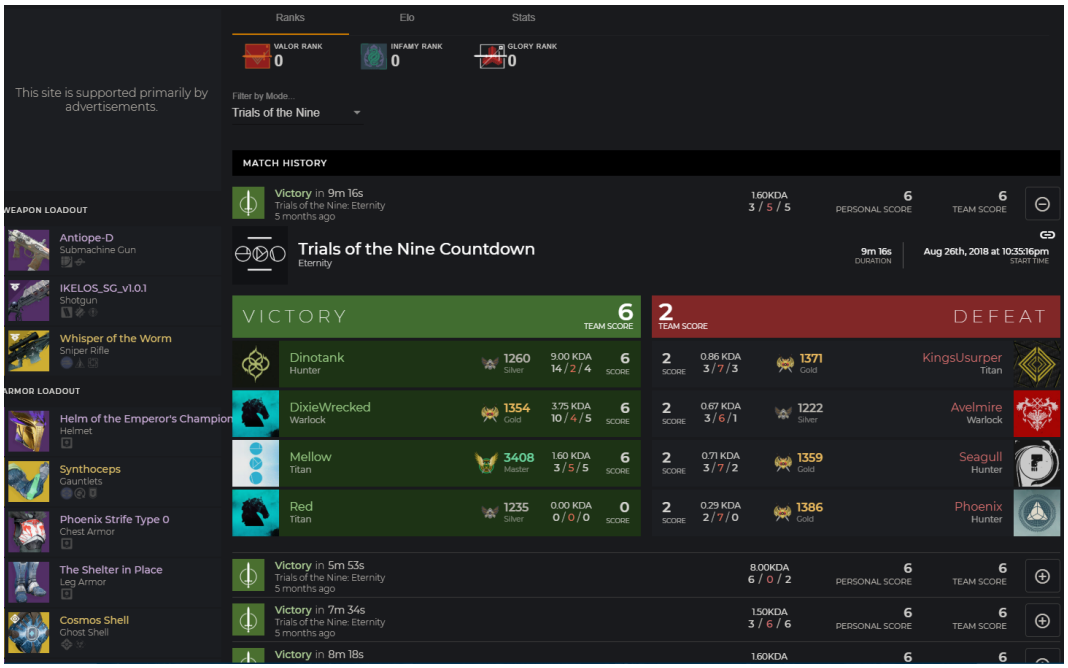
The graph displays the popularity of each weapon type in PvP over time, with the most popular weapons listed down below by player usage percentage.

5.e.4 Live Twitch Streamers:



A list (sorted by popularity) of all live twitch streamers is available on the website for anyone that wants to watch live gameplay.

5.e.5 Player Stats:

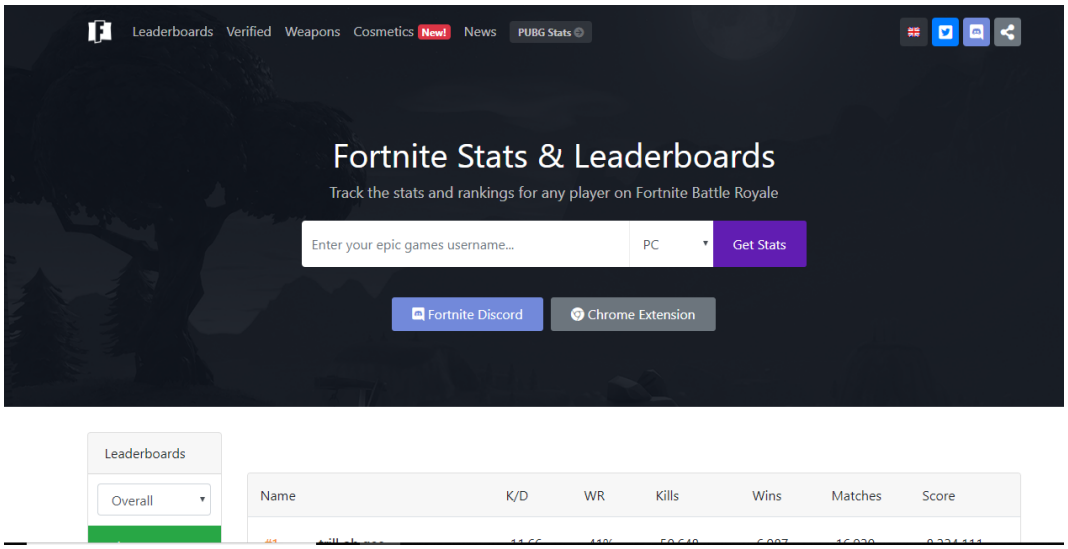


The equipment that each player uses is displayed on the left bar, with a summary of their rankings at the top. Instead of focusing on overall statistics, Guardian chooses to emphasize stats for PvP rounds instead. The score the round as well as individual player performance can be viewed.

6 Flow Analysis

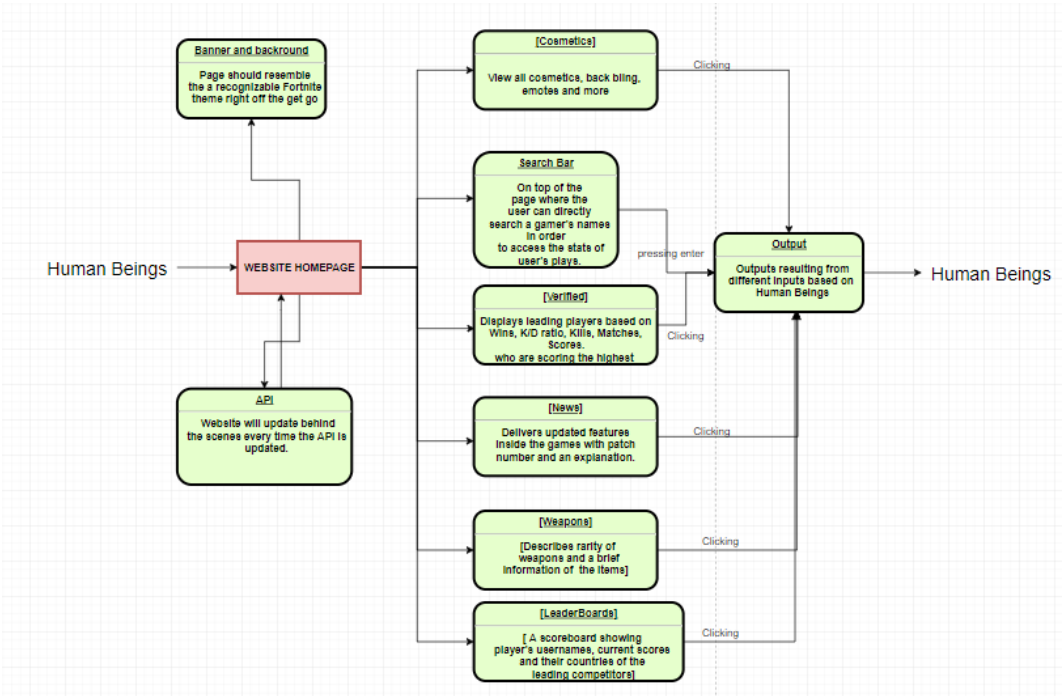
Another research method that we chose to conduct was Flow Analysis. Looking at other websites and learning about their features helped us to organize our thinking and ideas. With these ideas, in order to make our ideas and thinking real and concrete, the method Flow Analysis was introduced. Flow Analysis was really helpful in away that it focuses on even a very small detail that users could interact with the website from the front page to the end. In this project we will be visiting several websites that tracks and show statistics of the game Fortnite. By doing this, we aim to find possible flaw to the current products and provide a better product to the client.

6.a https://fortnitestats.com/



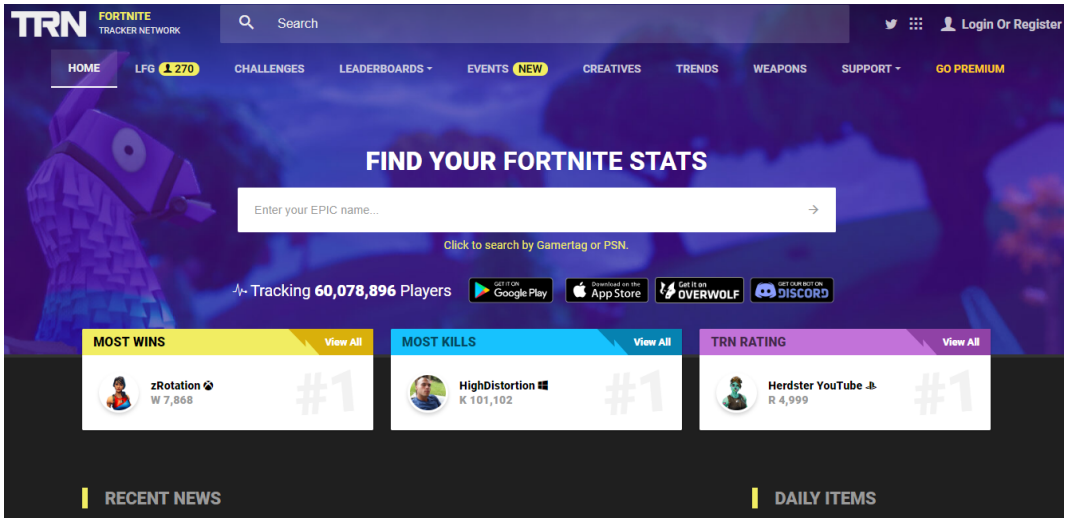
This website is very minimal in design and focuses on the functionalities.

The flowchart is shown here:

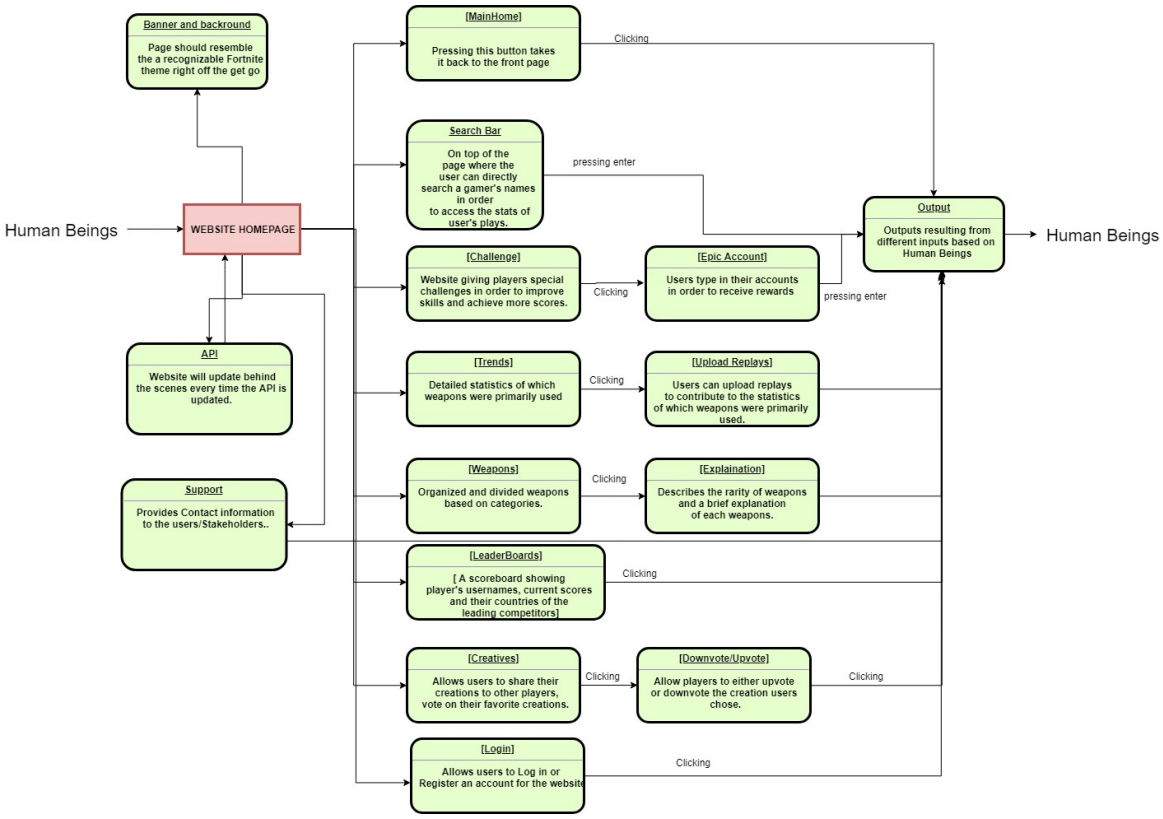


6.b https://fortnitetracker.com/

This website has a lot more features compare to the previous website we looked at. Login or Register features available, Creation of user's work available.



Flow Analysis of the Website is Shown Here:



By conducting Flow Analysis method, as expected, it helped our ideas to be more visible and concrete. Websites that we have visited had common functionalities such as a search bar, Drop down menu which most likely we will implement it as well. However we would do a design choice of the website differently such that we would get rid of the Home button on the top because the logo on the very top left does the same functionality which we found unnecessary to keep it.