

Basic info:

Title:Data Visualization of the Legends in the League

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Website:<https://wolftec071018.github.io/leagueofdatavis/>

Background and Motivation:

As long as I can remember, I was always a gamer, I loved the challenges it presented. Games served as a way I could escape my everyday life for hours on end. However, games never really last, you complete them or get bored of them after a while. However I've been playing league since 2014 and it is the only game I've played when attending college. For me, League was more than just a game, it was a way to keep in touch with friends online, make friends, or just serve as a game. Since release the game has changed a lot over the years specifically they have added so many new champions, and I would like to offer some good information about the champions in the game.

Project Objectives:

The objective of the project is to have easy to read data about the champions in league of legends.

-stats of the champion this objective is fulfilled by graph (1) as labeled in the drawing. Graph one allows the user to see the stats of all the champions in the league. With the ability to pick which one the user wants to see.

-current pick rate(maybe per season if I can get the data)is fulfilled by graph (3) as labeled in the drawing. Gives the most recent pick rate in the past month. This allows the user to see which champion is meta(popular).

-current win rate which is fulfilled by graph (2) as labeled in the drawing. This allows the user to see which champion wins the most in the past month. (add seasons if possible)

-current ban rate which is fulfilled by graph (4) as labeled in the drawing. This allows the user to see which champion is banned the most. This allows the user to be able to help with the banning process or the game or give the user an expectation on whenever or not they will be able to play that champion.

To sum it up, Graph one allows the user to see the stats he most wants, for example if he wanted to play a tank he would look at highest Health. Graph 2 allows the user to see how well all champions are doing and if he should consider banning them. Graph 3 shows how often a champion is pick, so say if graph 2 has a extremely high win rate champion he can see if that is because that champion player base are just one tricks who knows the in and out of the champion or if the champion is over powered/broken so

the vast majority of players can pick the champion and win. Graph 4 shows the ban rate so he can see what others don't like playing against.

Data/Data processing:

So far I've found on the league of legends official web site a json file that gives basic stats of all champions a few patches ago in json. (

https://developer.riotgames.com/docs/lol#data-dragon_champions) I plan on using this file as a json or converting it to a csv with panda(python). For other stats I can do one by one such as pick rate/win rate from external website sources, all data will be from platinum+ since all ranks below that...the players don't really know what to do. (plat and above make up the top 6-8% of all ranked players in the game). (<https://champion.gg/statistics/>). I need to look into how they are getting the data since I don't see an official api from Riot games.

Must Have Features:

Ver1:

- 1) **Page 1:**
 - a) First page should be a bar graph with all the champions with the measure of their stats. (hp,mana, attack speed...ext) I plan on having the user able to decide based on what they click display as the bar chart.
- 2) **Page 2:**
 - a) Second page can be a node link diagram where I group up champions by main role/the role they are most played in, and when the user hovers it can show the pick,win,banned rate of the champion. The size of the node can be the pick rate since they will be the most popular.
- 3) **Page 3:**
 - a) Have another barchart comparing the top five win rate for each major region in league of legends. (North America, Europe, China, Korea)

Ver2:

We will be moving to a dashboard aka one page

- 1) The page will be composed of bar graphs that interacting with one can affect the other charts on that page as well. 1 chart will show all the champions with the measure of their stats. (hp,mana, attack speed...ext) I plan on having the user able to decide based on what they click display as the bar chart. Next chart will show the win percentage. The next will be the pick percentage and the last will be Ban percentage. Users can change the data shown by sort order, or region. If time permits, users can also choose to see the data from past seasons.

Related Work:

There's not much when it comes to something using graphs to show champion data, however there are websites such as

(<https://www.leaguespy.gg/league-of-legends/champions>)

That will show you numbers such as 54% win rate, 3.14% pick%. User has to scroll down all 154 champions instead of having it all in one graph.

Optional Features:

Somehow get data on the previous seasons since the game is always changing it would

be nice to see how things progressed throughout the year. Allow user to toggle which season they would like the data of display.

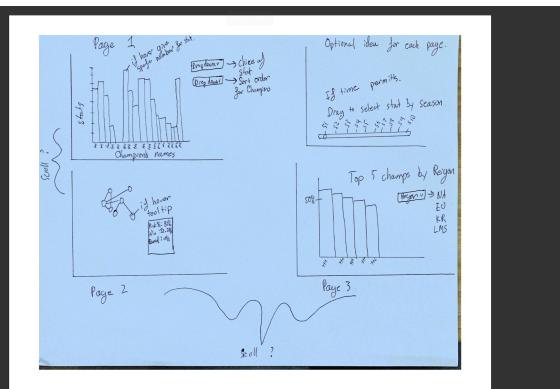
Time Line:

Mar 31	Project Proposal	
April 7	Revised proposal, Related work, and Website	<p>Start finalizing data, fix the project proposal with the given feedback.</p> <p>Have a link to a website with your name title of the project and description of the project on the website.</p>
April 12	Alpha Release	<ul style="list-style-type: none"> -By this week, at least set up the website. (have a link we can visit) set up a nav bar, and things that don't really affect the graphs. - start a graph to test if we are able to use the data.
April 19		<ul style="list-style-type: none"> -finish all the graphs(hopeful but maybe not)? -see how fitting everything on one dashboard works -play around with it
April 26	Beta Release	<ul style="list-style-type: none"> -for sure most likely finish all the graphs.(without user interactions) -think about how each graph looks and if I need to change anything.
		<ul style="list-style-type: none"> -100% finish all graphs by now. -have a drop down menu for users. -start adding the interaction with the graphs. -start gathering the extra data needed for the extra

		seasons - really clean it up(pick good color pallets...no more than 4 colors) -Finish up all bugs before final presentation/ record the video. -
May 10	Final Project Presentation	

Visualization Design:

Ver1:



Ver2:

League of Legend's champion's stats Dashboard

Andrew Lao

