4460 Project Overview from Team Oh My Pokémon

Topic: Pokémon Dataset

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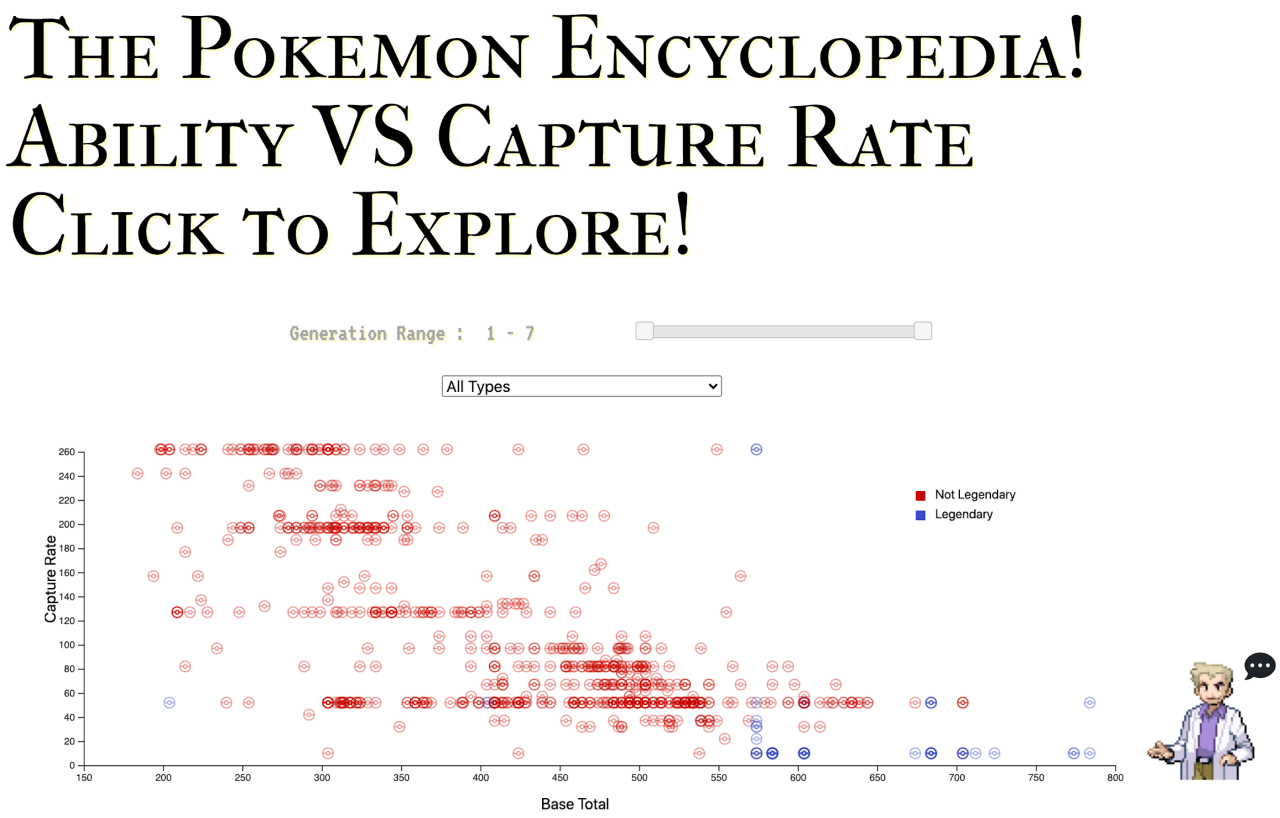
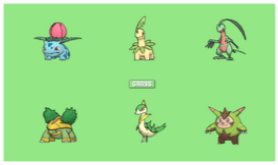
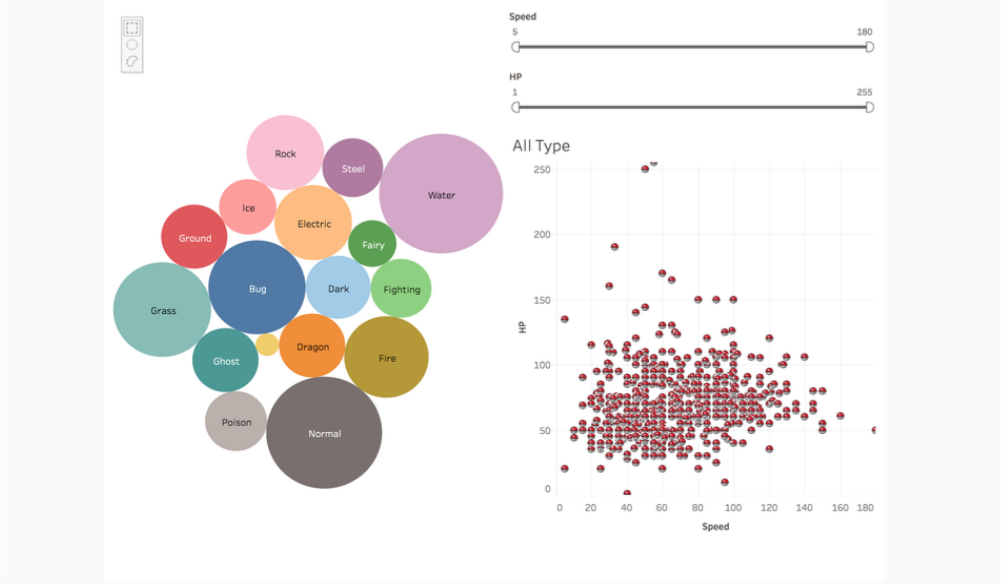
Screen Shots



POKÉMON TYPES MATTERS!

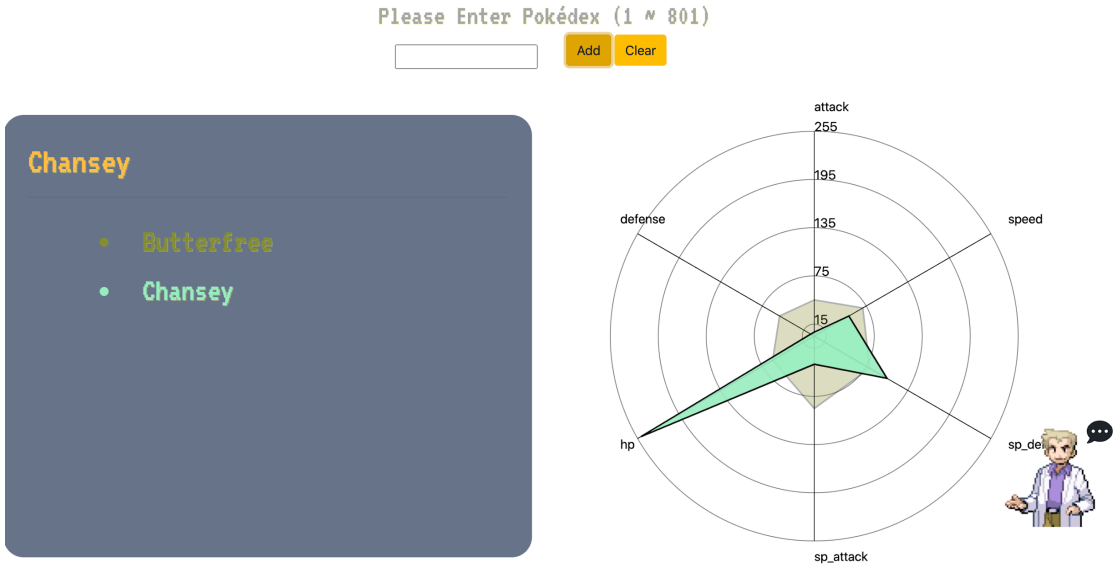
DIFFERENT TYPES = DIFFERENT ABILITIES





FIND YOUR FAVORITE POKÉMON!

Try it Yourself!



Problem Description

To become a brilliant Pokémon player, it's important to be familiar with the attributes of Pokémon. And to become the winner in a battle, it's essential to choose the Pokémon with best performance. Utilizing the two datasets containing the information and images of 801 Pokémon, our goal is to use data visualization tools, D3.js and Tableau, to show our users the information behind the datasets, and to help them explore the Pokémon dataset through the interactions with different functions, so that they can find their favorite Pokémon for battle. Since the visualization is clear and easy to understand, it's both entertaining and useful for people who want to learn more about Pokémon and people who are already familiar with Pokémon.

Project Overview

In our project, we included four different visualizations. The first one introduces Pokémon, from all 7 generations, by putting them on a scatterplot: the x-axis defines "capture rate" and the y-axis defines "base total ability". A pop-up window will show up when the user clicks on a pokéball in the plot, telling more information about the Pokémon. Thus, this visualization acts like an encyclopedia for all 801 Pokémon.

As the second visualization focuses on the 18 types of Pokémon, we use a bubble chart, and the size of each bubble represents the amount of Pokémon in each type. By clicking on a bubble, users can access the distribution of that type of Pokémon based on speed and HP value.

In the third section, to aid in referencing and comparing Pokémon, we use a grid with filters based on attributes, such as generation, types, and base statistics (HP, Attack, Defense, etc.). Users can scroll over the images of the Pokémon remaining in the grid to gain more information.

Finally, we make an interactive radar chart for the comparison of Pokémon. Users can add Pokémon to the chart by entering pokédex, and then start comparing Pokémon to find the strengths and weaknesses in each of them.

Link to the web page for the final product: https://chenqin001.github.io/cs4460-final-project/
Link to GitHub for original files: https://github.com/chenqin001/cs4460-final-project

Libraries and tools

D3.js

Tableau

References

Gif Ash Throwing pokéball: https://archive.nyafuu.org/vp/thread/34819010/

Image of Pokémon logo: https://commons.wikimedia.org/wiki/File:International_Pokémon_logo.svg

Gif images for types: http://rebloggy.com/post/gaming-pokemon-water-type-sprites-fire-type-grass-type-hopefully-recent-gifs4-st/76067761350

Pokémon Red and Blue: https://en.wikipedia.org/wiki/Pokémon_Red_and_Blue

Pokémon Go: https://en.wikipedia.org/wiki/Pokémon_Go

Pokémon Sword and Shield: https://en.wikipedia.org/wiki/Pokémon_Sword_and_Shield