SMU Bootcamp - Project 4 – Group 2

Pokémon Trainers

Project 4: Data Machine Learning & Tableau Visualization

Date: 09-07-2023

Team Members:

- Rob Maysent
- Daniel Hall
- Ryan Johnson

Facilitators:

- Alex Booth - Instructor
- Sherhone Grant - TA
- Sean Fleming - SSM

Project Description:

Datasets Used:

https://www.kaggle.com/datasets/rounakbanik/pokemon

https://www.kaggle.com/code/jonathanbouchet/pokemon-battles

https://www.kaggle.com/datasets/abcsds/pokemon?select=Pokemon.csv

- Source - Kaggle.com

Inspiration:

https://public.tableau.com/app/profile/ryo.hiromoto/viz/pokemon_15527268108810/pokemon

https://public.tableau.com/app/profile/julien/viz/PokemonAnalytics_0/POKEDEX

https://public.tableau.com/app/profile/agustine.deo.labayani/viz/PokemonSurvey/PokemonSurveyDB

https://public.tableau.com/app/profile/oliver6880/viz/Pokemon_15872038119720/TypesStatsandComparison

https://public.tableau.com/app/profile/bausili/viz/PokemonViz/JudahsPokemonStatDashboard

https://public.tableau.com/app/profile/ludovic.tavernier/viz/PokemonGenerations/Pokemon

Context Summary:

Pokémon, the electronic game series from Nintendo debuted in Japan in February 1996 as *Pokémon Green* and *Pokémon Red*. The franchise later became wildly popular in the United States and around the world. The series, originally produced for the company's Game Boy line of handheld consoles, was introduced in 1998 to the United States with two titles, known to fans as *Red* and *Blue*. In the games, players assume the role of Pokémon trainers, obtaining cartoon monsters and developing them to battle other Pokémon. Pokémon became one of the most successful video game franchises in the world, second only to Nintendo's Super Mario Bros. The original Pokémon is a role-playing game based around building a small team of monsters to battle other monsters in a quest to become the best. Pokémon are

divided into types, such as water and fire, each with different strengths. Battles between them can be likened to the simple hand game rock-paper-scissors.

The datasets used include statistics such as HP, Attack, Defense, Name, Type, and Generation of 700+ Pokémon.

Expected Outcome:

This project work will be intended to assemble a machine-learning model with the data selected to coincide with a Tableau visualization. Based on the user's input our model will predict which Pokémon will be the best fit for them, either based on personal preferences or battle strategies.

Future Work:

If time constraints become an issue, in the future, we would like to pursue a model that provides users an option to compare two chosen Pokémon in hopes of helping decide which would come out victorious in a battle. This would be decided on by their base stats, type, ability multiplier, etc.

Color Palette:

Color schemes and palettes will be chosen directly from the game's franchise and animated show (i.e., blue, yellow, red, green, white)

Roles:

Rob - Machine Learning

Danny - Machine Learning and Tableau Dashboard 2

Ryan - Tableau Dashboard 1

*Roles and responsibilities will be shared and given out as necessary

Git Repository:

DannyPhantom2023/SMU-Project-4-Pokemon_Prediction (github.com)