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| Checkpoint I | Checkpoint I: Project Proposal | |
| Group: | <G11> |
| Date: | <2022/09/23> |
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# Domain

Pokémon is a series of video games in which you can make teams of animal-like creatures (Pokémon) and battle them against other people’s teams. There is a yearly, worldwide tournament of Pokémon Battles: the Pokémon World Championship.

Each team can have up to six Pokémon.

Each Pokémon has the following main attributes:

* A set of Base Stats (Health Points, Attack, Defense, Special Attack, Defense, Special Defense);
* An ability, which may give them an advantage in battle (abilities may be split into groups according to function);
* An item they may carry and which may have an effect;
* A nature, which influences their reaction to items;
* A set of up to four moves (associated with a type and damage class – special, physical, or status –, and with the attributes accuracy and power)
* One or two types, which influence the effectiveness of their moves and the Pokémon’s reaction to items and abilities;
* A generation of games which they were first created in;

In this project, we will be analyzing common patterns in Pokémon attributes - both in the games, and in Pokémon competitive playing.

# Dataset

## Dataset description:

## We will be using 19 joint datasets: all regarding information related to the competitive Pokémon video game with particular reference to the period February - August 2022 and valid for the Pokémon World Championship in London in August 2022.

## The data used is available at <https://www.kaggle.com/datasets/giorgiocarbone/complete-competitive-pokmon-datasets-may-2022>. We will build 19 database tables from this information and use them to interpret the information as necessary.

# Example Questions

Provide a description that allows for the understanding of the questions and their complexity. This will be reflected on your grade. Question enunciation must be as clear and concrete as possible. Avoid making questions that are too similar or just instances of the same meta-question, e.g., both “Does the age influence the daily calory intake?” and “Does the daily number of steps decrease with age?” are trying to check how one continuous variable (age) affects other continuous variables (daily calory intake and daily number of steps). If the dataset does not allow you to tackle different scopes of the domain, it is probably too simple, and you should choose another one.

# What attribute has more influence in player choices in competitive play?

# What is the minimum base HP Stat considered by players for competitive play?

# What are the most and least used Pokémon types in competitive play?

# What is the favored team combination in competitive play and why?

# What is the most relevant teammate Pókemon, for Pikachu, in each generation?

# What are the Fire Type Pokémon with the highest Speed between generation 6 and 8?

# Data Sample

(from “df\_pokemon.csv”)

id; name; [...]; generation; [...]; Type1; Type2; [...]; HP; [...]; Speed; [...]

890; Eternatus; [...] ; 8; [...]; Poison; Dragon; [...]; 140; [...]; 130; [...]

(from “bridge\_pokemon\_pokemon\_USED\_IN\_TEAMS\_WITH.csv”)

Use\_Percentage(%); Pokemon; Teammate

25.902%; Pikachu; Incineroar