CPSC 304 Project Cover Page

Milestone #: ____1____

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Group Number: _ 26_____

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Project description

1. Domain of the application and aspects of the domain are modeled by the database:

The domain of our application is Pokemon data collection and game strategy management. The application supports Pokemon trainers in managing their Pokemon collections, understanding Pokemon, optimizing team composition, and analyzing Pokemon performance.

Our database models have 4 key aspects:

1. Pokemon Species Data Collection Management:
   The database stores essential Pokemon species data, such as PokemonID, Name, Weakness, and Ability, enabling users to manage Pokemon collections effectively. It also models evolution relationships, helping users to track a specific Pokemon evolutionary progression. For example, trainers could use our database to identify their Pokemon and understand their evolution path.
   By modeling Pokemon attributes and Evolution attributes, users can easily find and collect the Pokemon they prefer, understand the relationship between evolution and Pokemon, and develop their Pokemon into desired generations.

2. Data Analysis and Pokemon performance:
   The datasets modeled Pokemon stats. This enables trainers to assess the overall strength of their Pokemon and teams. And the analysis on the category and training focus of Pokemon can help trainers optimize their Pokemon's growth, evolution, and performance.

3. Gaming Mechanics and Strategy :
   Our database modeled the Type and Category of Pokemon. allowing trainers to analyze Pokemon's weaknesses and resistances to develop better game strategies. For example, if a trainer has one Pokemon which is resistant to water, it's a good choice for him/her to use this Pokemon to battle with water type Pokemon.

4. Team improvement:
   By modeling the relationship between trainers, Pokemon, and teams, our database can help trainers optimize their team compositions. For example, if a team contains too many fire-type Pokemon but lacks grass-type Pokemon, the trainer may consider catching more grass Pokemon to balance the type of Pokemon.

2. Database specifications:

The database lets users store and retrieve Pokemon data, including species, abilities, weaknesses, evolution and so on. Trainers can use our database to search for specific Pokemon, track their evolution, and organize their collections and optimize their Pokemon combination in the teams. Additionally, trainers can compare Pokemon stats in our database to make better game decisions and improve their game strategies.

3. ER diagram

ER Diagram is attached at the end.

Comment on ER diagram:

The Reason For Beginning Trainer and Advanced Trainer only have one attribute:

Because they share an ISA relationship with Trainer. Since Trainer already has TrainerID as the primary key, the Beginning Trainer and Advanced Trainer inherit it and do not require a separate primary key.

4. AI tools acknowledgment

We used Grammarly to improve sentence fluency and correct syntax mistakes.