Pokedex

Rudy Peralta

Josh Bell

Anything that has changed from the previous document will be written in red to indicate what is different!

Project Part 1

Overview

We chose to review our options and we changed our topic to a Pokedex. We find it simpler to recreate the Pokedex, the list of all pokemon, as a database than recreating the OSU course catalog. A Pokedex is a log of each pokemon based around the game series named after the ladder.

For those who don't know what pokemon are, they are animals with special powers. Each of them is classified under specific areas where they were first found. Think of a dog that can breathe fire, for instance, that can be classified as a pokemon. It'll then be given a name, let's say Firedog, a region from where it's found, like America, its type category, like Fire-type, weight: 120lbs, Height: 2'6", etc. Then we have the information to classify a pokemon in this database. **[Change from Figure 4]**

The purpose of this database is to archive information on all current pokemon. As of April of 2021, 8 regions contain a total of 893 pokemon, that have a combined amount of 266 abilities, with 18 types. Information on this genre is researched constantly as there are lots to remember, playing in the series constantly as children we consistently go to the internet to try and find the information we need. This will be a public database that will be used to gather this type of information and display it to those who need it.

Database Outline

Entities

- Regions: Plural **[Change from Figure 3]**
- Description: The different locations that our Pokemon are associated with.
    - region_name: nvarchar(255), NOT NULL
    - region_generation: int, NOT NULL, DEFAULT 0, PK
    - relationships:
        - Region -> Types: **NO RELATIONSHIP**
        - Region -> Abilities: **NO RELATIONSHIP**
        - Region (0 to Many) -> Pokemon: M:M, A region may have many pokemon, and many pokemon can be in many regions. **[Change from Figure 2]**
- Types: Plural
    - pokemon_id: int, unique, NOT NULL, DEFAULT 0
    - type1: not unique, not NULL **[Change from Figure 1]**
    - type2: nvarchar(255)
    - relationships:
        - Types -> Region: **NO RELATIONSHIP**
        - Types -> Abilities: **NO RELATIONSHIP**
        - Types -> Pokemon: M:1, There can be many types to every 1 pokemon. Every Pokemon must have at least one type, but types are not limited to one Pokemon.
- Abilities: Plural
    - pokemon_id: int, NOT NULL, PK
    - ability1: nvarchar(255), NOT NULL
    - ability2: nvarchar(255)
    - hidden: nvarchar(255)
    - relationships:
        - Abilities -> Region: **NO RELATIONSHIP**

        - Abilities -> Types: **NO RELATIONSHIP**
        - Abilities -> Pokemon: **M:1**, There can be many abilities to 1 Pokemon. Every Pokemon must have at least one ability, but abilities are not limited to one Pokemon.
- Pokemon: Plural
    - name: nvarchar(255), NOT NULL, not unique
    - pokedex_number: int**,** unique, NOT NULL
    - classification: nvarchar(255), not unique
    - origin_generation: int
    - height: float
    - weight: float
    - relationships:
        - Pokemon (M) -> Region(M): **M:M,** Many pokemon belong to many regions, and regions can hold many pokemon. **[Change from Figure 2]**
        - Pokemon -> Types: **1:M,** One pokemon must have at least one type, but can also have many types.
        - Pokemon -> Abilities: **1:M,** One pokemon must have 1 ability, but can have many different abilities.

Project Part 2

Fixes based on Feedback from Step 1

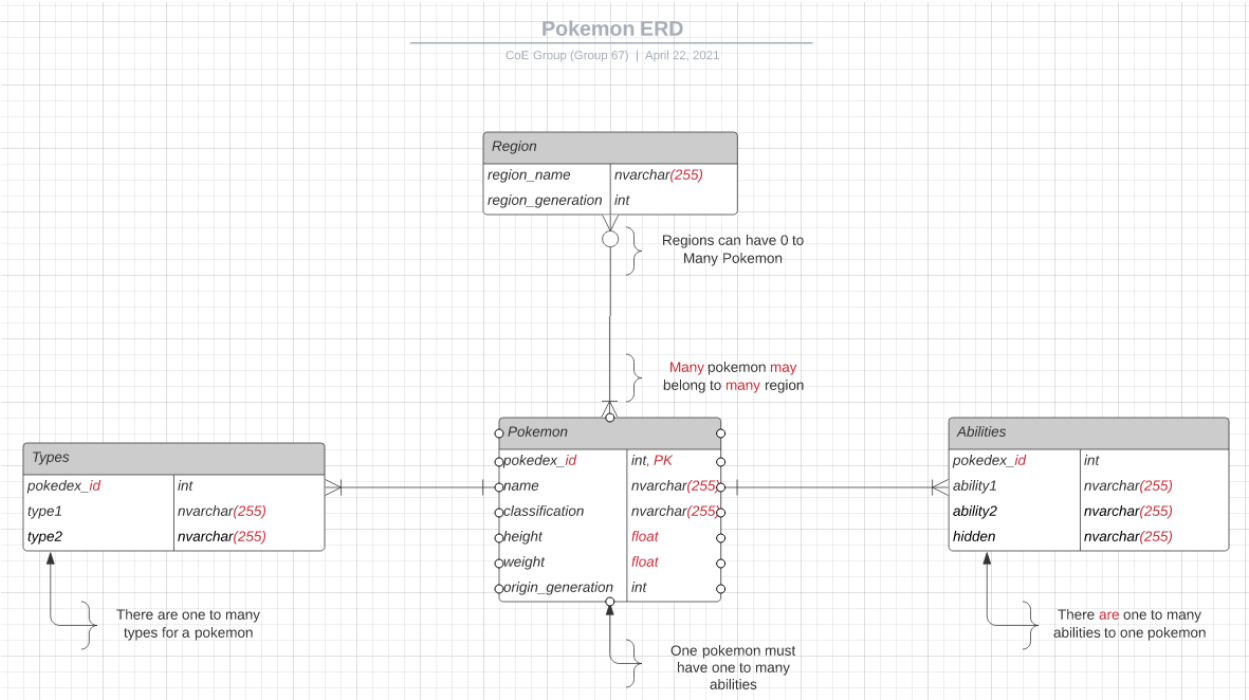
Due to changing the entire project, we have restarted everything. We have taken the notes from our previous submission and done our best to resolve any issues we had before. We hope that we can update our points from the previous step so that we can maintain a pace for the A in the class we both desire!

Project Outline and Database Outline

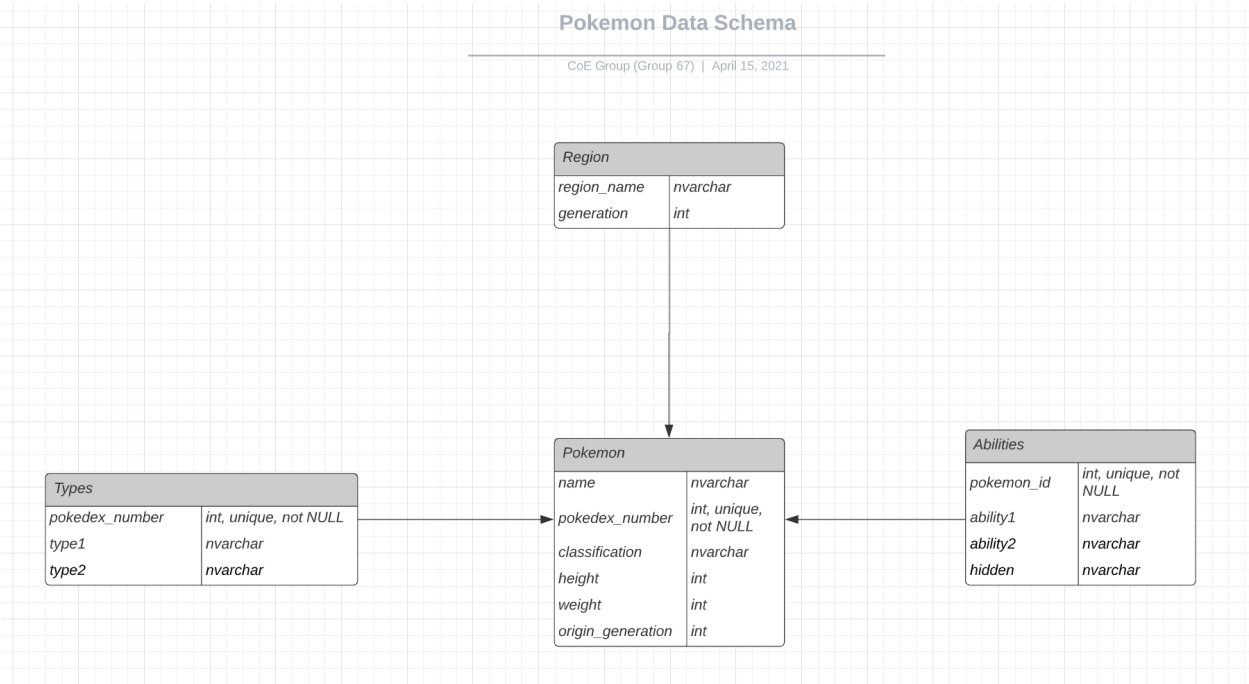
The same information from before!

Entity-Relationship Diagram

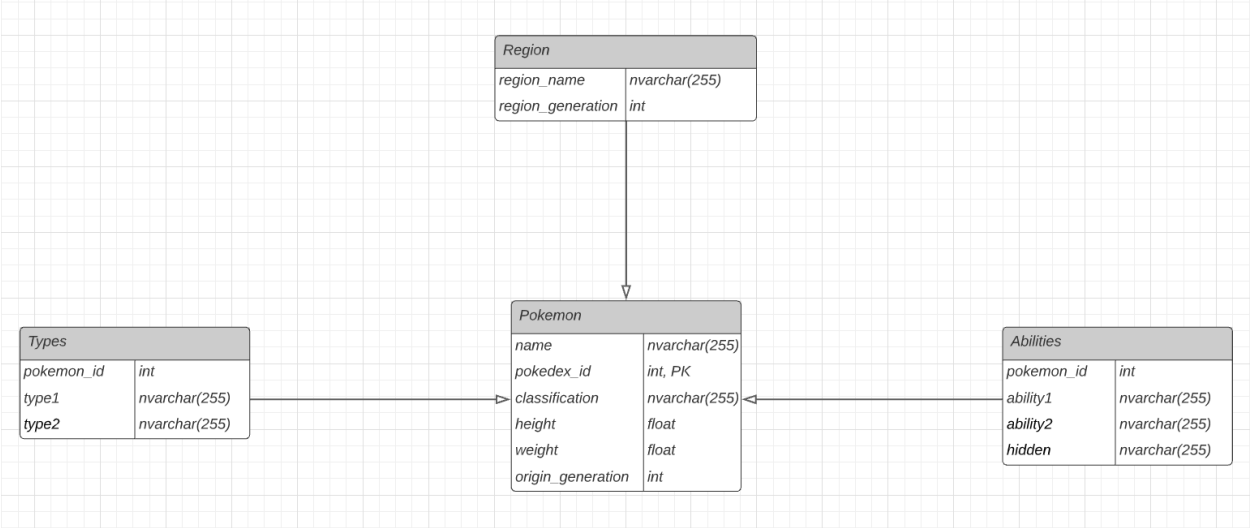
We decided to use LucidChart to create our ERD diagram - CHANGE pokemon_number TO pokemon_id! **[Change from Figure 5]**



Schema



New Schema



Changes from ED Discussion

·Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

- There is a capitalization error that I noticed on the draft. Otherwise the draft is consistent throughout.
  - "Type 1" is capitalized under the "Types" entity but on the ERD and schema it is shown as "type1".

Figure 1 - Benjamin Kielhold

Benjamin is showing us an inconsistency within our database outline, we changed it for better consistency.

Are 1:M relationships correctly formulated? Is there at least one M:M relationship?

1:M relationships are correctly formed, however, the Region/Pokemon M:M should be more easily identifiable on the ERD, Schema and Outline. There is no Junction entity defined in the schema which would make implementation difficult.

Figure 2 - Ryan Clymer

Ryan is explaining that our original outline should have our relationship between Region and Pokemon be M:M which does make more sense, so we added that to the list of changes.

Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

The project is *largely* consistent in conventions, however, Region seemingly should be Region**s** based on the Outline and other entities.

Figure 3 - Ryan Clymer

Similar to figure 1's consistency issue, adding an 's' to the end of our entity name would make more sense grammatically, so we implemented the change.

Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities?

It does outline the details of each entity but does not describe the purpose of each. For someone that is unfamiliar with pokemon, this might prove to be useful.

Figure 4 - Vincent Lee

Added a new paragraph to our overview explaining what a Pokemon is and how we would add it to our database for those who do not know what Pokemon are

Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

You have pokedex_number in types on the schema and ERD but I'm not seeing it on your outline. Otherwise, there is consistency between the above mentioned fields.

Figure 5 - Vincent Lee

We made a mistake. We meant to have 'pokedex_number' be 'pokedex_id' we changed so the outline matched the diagram.