

Personal Pokedex Schema

Trainer (TrainerID, TrainerName, TrainerSex, TrainerHometown)

- Primary Key TrainerID

Table name explanation: In the Pokemon world, people who capture Pokemon are called trainers.

Entity represented: This table represents the users.

Relation to other tables: A trainer has multiple CaughtPokemon

Evidence of normalization: 1NF with CaughtPokemon table, 3NF all columns rely on TrainerID

Column name explanation: Each trainer has a primary key in TrainerID, a name, a sex, and a hometown.

PokemonSpecies (SpeciesID, SpeciesName, SpeciesPokemonName, SpeciesImageUrl, SpeciesType1, SpeciesType2, SpeciesHeight, SpeciesWeight, SpeciesText, SpeciesBaseHP, SpeciesBaseAttack, SpeciesBaseDefense, SpeciesBaseSpecial, SpeciesBaseSpeed)

- Primary Key SpeciesID

Table name explanation: A pokedex in an encyclopedia of discovered pokemon species.

Entity represented: This table represents the discovered pokemon species.

Relation to other tables: A CaughtPokemon has a PokemonSpecies. PokemonSpecies have multiple PokemonMoves.

Evidence of normalization: 1NF with PokemonMoves table, 3NF all columns rely on SpeciesID

Column name explanation: Each PokemonSpecies has a primary in SpeciesID, each Species has a name, each species has a Pokemon name, each species has an image, each species has 2 types, each species has a height and a weight, each species has a descriptive flavor text, each species has RPG style statistics.

CaughtPokemon (CaughtPokemonID, TrainerID, SpeciesID, CaughtPokemonSex, CaughtPokemonLevel, CaughtPokemonNickname, CaughtPokemonMoveID1, CaughtPokemonMoveID2, CaughtPokemonMoveID3, CaughtPokemonMoveID4)

- Primary Key CaughtPokemonID
- Foreign Key TrainerID references Trainer
- Foreign Key SpeciesID references PokemonSpecies
- Foreign Key CaughtPokemonMoveID1 references Move
- Foreign Key CaughtPokemonMoveID2 references Move
- Foreign Key CaughtPokemonMoveID3 references Move
- Foreign Key CaughtPokemonMoveID4 references Move

Table name explanation: Pokemon Trainers capture pokemon to fill out their pokedex.

Relation to other tables: CaughtPokemon have a PokemonSpecies. Caught pokemon have 4 Moves. Caught pokemon have a trainer.

Evidence of normalization: 3NF all columns rely on CaughtPokemonID and foreign key SpeciesID

Column name explanation: CaughtPokemon have a UUID in CaughtPokemonID, a TrainerID to reference their Trainer, a species id to reference their PokemonSpecies, a sex, an RPG-like level, a nickname, and four PokemonMoves.

Move (MoveID, MoveName, MoveType, MoveText, MovePP, MoveBase, MoveAccuracy)

- Primary Key MoveID

Table Name Explanation: This table describes the moves of any pokemon. Since each pokemon will have moves

Entity Representation: This table represents the detail of moves

Relation to other tables: The table is related to PokemonMove table through "moveID"

Evidence of Normalization: 3NF all columns rely on MoveID

Column name explanation: Each move has primary MoveID, each move has MoveName, each move has MoveType, each move has MoveText, each move has MovePP, each move has MoveBase, and each move has MoveAccuracy

PokemonMove(PokemonSpeciesID, Requirement, MoveID)

- Composite Key PokemonSpeciesID, Requirement, MoveID

Table Name Explanation: Pokemon can only learn specific moves

Entity Representation: This table represents the moves that Pokemon can learn.

Relation to other tables: pokemon_name maps to "name" in the PokemonSpecies table, while move_name maps to "name" in the Move table.

Evidence of Normalization: 1NF with PokemonSpecies and Move, 2NF whole key is needed

Column Name Explanation: A Pokemon name with the corresponding move it can learn is listed

- Foreign Key PokemonSpeciesID references PokemonSpecies
- Foreign Key MoveID references Move