

Pokémon

TM

Database

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PRESS START



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HP

Lv. 99



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The Team





The Pokemon Data Problem:

- Simply put, there's too much of it!
- A well compiled source of Pokemon data could greatly enhance the playing experience of beginners and advanced players alike



Vision & Objectives

- Create a one-stop shop for all Pokemon information needs
- Improve gaming experience
- Gather and share community knowledge
- Reduce time it takes to find wanted Pokemon info



Mission

- Allow Pokemon players to learn, share, and better strategize their Pokemon and teams, to create an all-around better gaming experience



Mission

- Build and maintain the database as an open-source project, encouraging community engagement, ensuring accessibility, and building trust with our users

Services

- **Extensive Pokémons Index:** Detailed information on every Pokémons, including stats, abilities, evolutions, and habitats.
- **Regular Updates:** Continuous updates to reflect the latest game releases, updates, and more.
- **Transparency:** Open-source database allowing community validation and contributions.

Requirements

- **Comprehensive Pokémon Information Management:**
 - Store and manage detailed attributes (stats, evolutions, abilities, habitats, etc.).
 - Track changes in Pokémon data from new game releases or meta shifts.
 - Accommodate evolving player needs for team compositions, move sets, and counters.
- **Regular Updates and Maintenance:**
 - Add new Pokémon with each game release.
 - Maintain the database for current, accurate information.
- **Community Engagement:**
 - Open-source database for user insights and data sharing.
 - Community validation to identify and resolve data gaps or errors.

Current Release

- Fully functional database navigable via SQL editor.
- Essential access to detailed Pokémon information.
- Allows players to retrieve and utilize data efficiently.
- Enables easy analysis of key attributes, moves, abilities, and stats.

Development

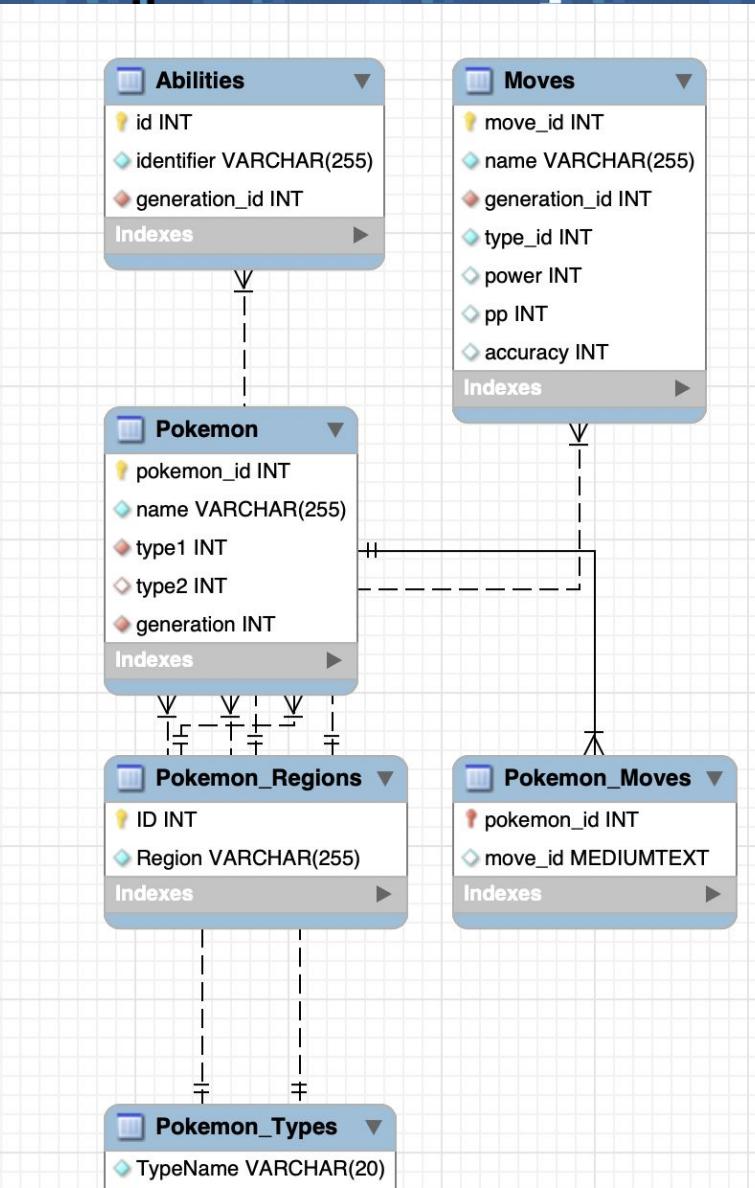


Table Creation

```
CREATE DATABASE pokemon_db;
```

```
USE pokemon_db;
```

```
CREATE TABLE Pokemon_Regions (
    ID INT PRIMARY KEY,
    Region VARCHAR(255) NOT NULL
);
```

```
CREATE TABLE Abilities (
    id INT PRIMARY KEY,
    identifier VARCHAR(255) NOT NULL,
    generation_id INT NOT NULL,
    FOREIGN KEY (generation_id) REFERENCES Pokemon_Regions(ID)
);
```

```
CREATE TABLE Pokemon_Types (
    TypeName VARCHAR(20) NOT NULL,
    NumberID INT PRIMARY KEY
);
```

```
CREATE TABLE Moves (
    move_id INT PRIMARY KEY,
    name VARCHAR(255) NOT NULL,
    generation_id INT NOT NULL,
    type_id INT NOT NULL,
    power INT,
    pp INT,
    accuracy INT,
    FOREIGN KEY (generation_id) REFERENCES Pokemon_Regions(ID)
);
```

```
CREATE TABLE Pokemon (
    pokemon_id INT PRIMARY KEY,
    name VARCHAR(255) NOT NULL,
    type1 INT NOT NULL,
    type2 INT DEFAULT NULL,
    generation INT NOT NULL,
    FOREIGN KEY (type1) REFERENCES Pokemon_Types(NumberID),
    FOREIGN KEY (type2) REFERENCES Pokemon_Types(NumberID),
    FOREIGN KEY (generation) REFERENCES Pokemon_Regions(ID)
);
```

```
CREATE TABLE Pokemon_Moves (
    pokemon_id INT,
    move_id MEDIUMTEXT,
    PRIMARY KEY (pokemon_id),
    FOREIGN KEY (pokemon_id) REFERENCES Pokemon(pokemon_id)
);
```

Data Population

```
-- Load data into Pokemon_Regions table
LOAD DATA INFILE '/var/lib/mysql-files/Pokemon_Regions.csv'
INTO TABLE Pokemon_Regions
FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(ID, Region);

-- Load data into TypesOfPokemon table first
LOAD DATA INFILE '/var/lib/mysql-files/pokemon_types.csv'
INTO TABLE Pokemon_Types
FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(TypeName, NumberID);

-- Load data into Pokemon table, treating empty strings as NULL
LOAD DATA INFILE '/var/lib/mysql-files/pokemon.csv'
INTO TABLE Pokemon
FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(pokemon_id, name, type1, @type2, generation)
SET type2 = NULLIF(@type2, ''');
```

```
-- Load data into Moves table
LOAD DATA INFILE '/var/lib/mysql-files/moves.csv'
INTO TABLE Moves
FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(move_id, name, generation_id, type_id, @power, @pp, accuracy)
SET power = NULLIF(@power, ''),
pp = NULLIF(@pp, '');

-- Load data into Abilities table
LOAD DATA INFILE '/var/lib/mysql-files/abilities.csv'
INTO TABLE Abilities
FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(id, identifier, generation_id);

-- Loads data in Pokemon_Moves table
LOAD DATA INFILE '/var/lib/mysql-files/pokemon_moves.csv'
INTO TABLE Pokemon_Moves
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(pokemon_id, move_id);
```

Database Samples

TypeName	NumberID
Normal	1
Fire	2
Water	3
Electric	4
Grass	5
Ice	6
Fighting	7
Poison	8
Ground	9
Flying	10
NULL	NULL

pokemon_id	name	type1	type2	generation
1	bulbasaur	5	8	1
2	ivysaur	5	8	1
3	venusaur	5	8	1
4	charmander	2	NULL	1
5	charmeleon	2	NULL	1
6	charizard	2	10	1
7	squirtle	3	NULL	1
8	wartortle	3	NULL	1
9	blastoise	3	NULL	1
10	caterpie	12	NULL	1

Future Releases

- **Expanded Database:**
 - Implement additional tables for cities, gyms, and game versions.
 - Provide a more comprehensive resource for players.
- **Front-End Web Application:**
 - Develop an intuitive interface for easy database access.
 - Include advanced search capabilities, filters, and visualization tools.
- **Strategy Guides and Community Tools:**
 - Publish basic strategy guides for gameplay optimization.
 - Enhance GitHub repository for streamlined contributions and reviews.
 - Foster a collaborative, community-driven platform.

Conclusion

- **Significant Advancement:**
 - Provides comprehensive, reliable, and easily accessible Pokémon information.
- **Ultimate Resource:**
 - Develops a robust and navigable database.
 - Plans for future functionality expansion and community involvement.
- **Support and Growth:**
 - Integrates detailed data and user-friendly interfaces.
 - Fosters an open-source environment for player support at all levels.
 - Empowers the Pokémon community with tools and knowledge to excel.