#### University of British Columbia, Department of Computer Science

# **CPSC 304**

## **Cover Page for Project Part 3**

Date: 23 November, 2020

**Project Group Number on Canvas: 73** 

## **Group Members:**

<u>Name</u>	Student Number	CS Alias (Userid)	Preferred E-mail Address
Kristen Foong	58380510	<u>f7v2b</u>	kristen.foong@gmail.com
Derrick Sutanto	30529168	m7h1b	derrick_sutanto@msn.com
Shawn Pak	19555366	<u>u8m2b</u>	shawnpak99@gmail.com

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

## **Pokedex**

The Pokedex provides users with a comprehensive record of the known Pokemon in the world. Included in the Pokedex is an index of the Pokemons' abilities, combat statistics, evolution, as well as an organizer for the trainer's captured Pokemon and accessories.

#### **Features**

The Pokedex places considerable information-processing capability in the trainer's hands. Through the Pokedex trainers have a repository of encyclopaedic information on known Pokemon in the world, their types, powers, and strengths, and also their weaknesses. Trainers can also view Pokemon evolutionary pathways.

In addition to access to detailed entries on various species, trainers can evaluate the key strengths, weaknesses, and offensive and defensive powers of the Pokemon they have captured. Trainers armed with the Pokedex' informative databases can be sure they have all the requisite information to make the best strategic use of their inventory. The Pokedex also gives trainers the option to rename, customize, or release their Pokemon.

### Design changes

A number of changes were made to the original design to better focus the application towards presenting only the most basic of information about Pokemon without reference to other aspects such as training and breeding. The Nature entity and its associated relations were removed for this reason. Attributes that were found to be too specific, random, or inconsequential (ex.: pokemonWeight, friendshipLevel, genderRatio) were also removed from the final product.

#### **Attributes**

- Added ownedID attribute in Pokemon, which is now the PK
- Added a HiddenAbility attribute in Species
- Changed abilities in Species to two attributes: ability1 and ability2
- Changed gender in Pokemon to varchar instead of boolean
- Changed timeCaught to timestamp instead of datetime
- Removed increase, decrease in Stats
- Removed genderRatio in Species
- Removed weight, friendshipLevel in Pokemon

#### **Tables**

- Removed Nature, born\_with, and determines
- Renamed various entities whose names clashed with SQL keywords (requires, uses, etc.) Most of these now begin with a p\_.

#### Relationships

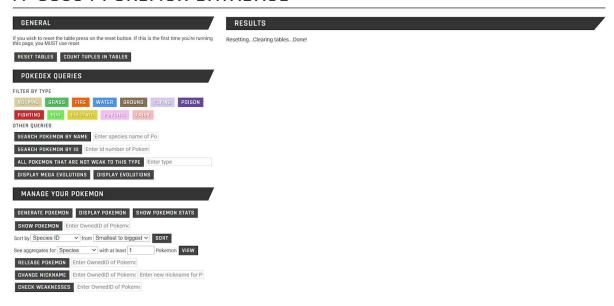
• Species no longer participates totally in has

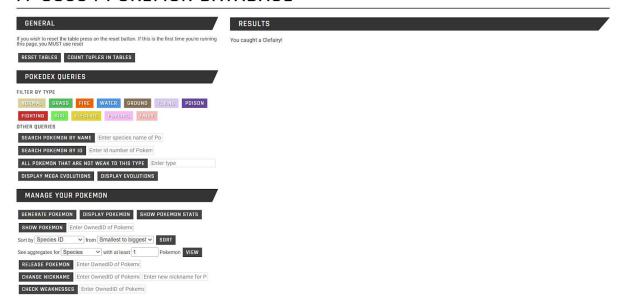
#### **ER** diagram

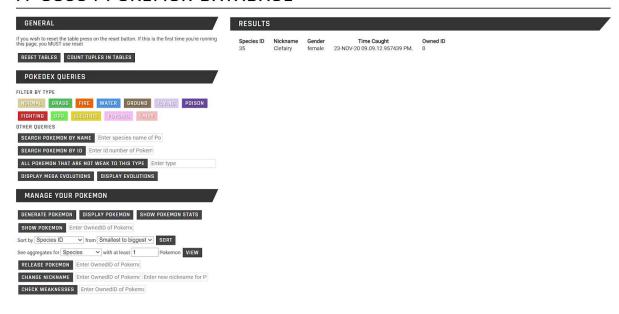
#### Screenshots

1. Begin with reset, then generate a random pokemon and display pokemon

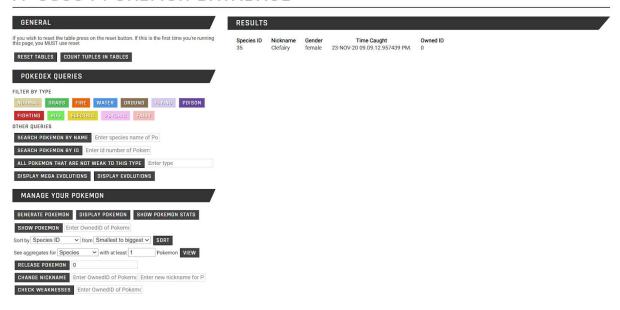
#### // CS304 POKEMON DATABASE

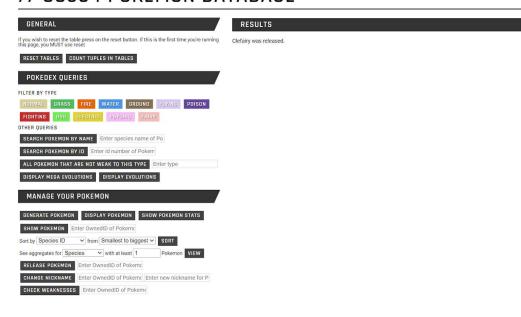




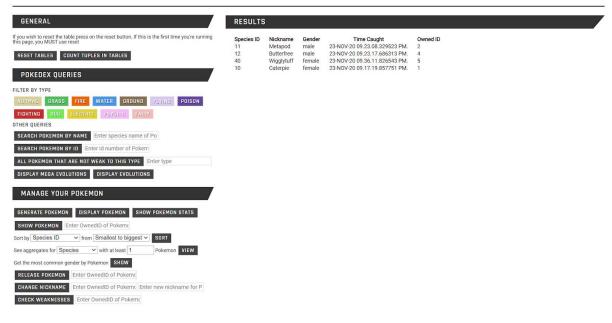


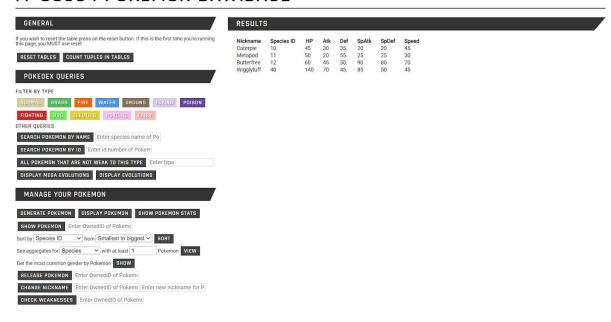
#### 2. Release Pokemon



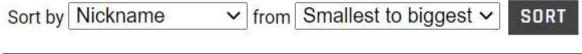


#### 3. Show Pokemon Stats





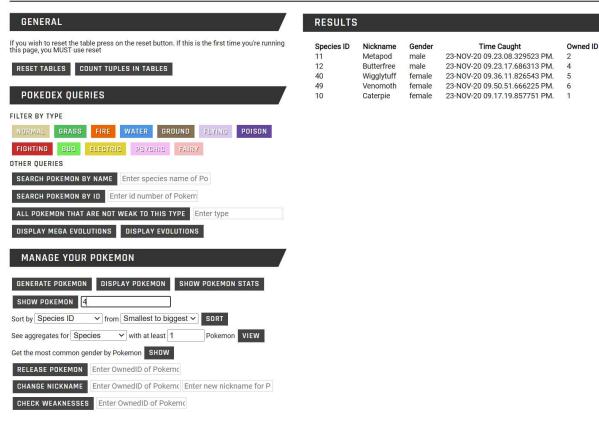
#### 4. Sort By Nickname from Biggest to Smallest

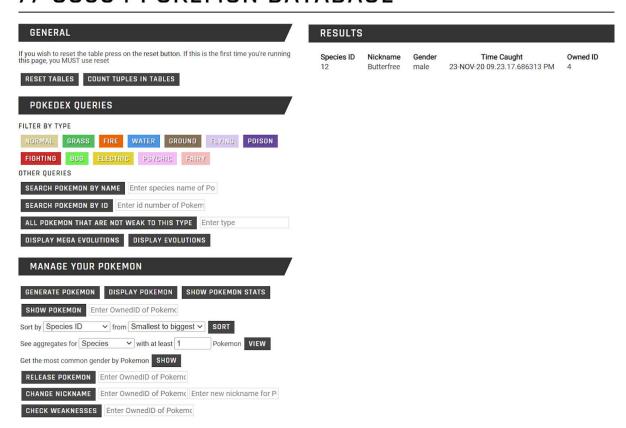


RESULTS										
Species ID	Nickname	Gender	Time Caught	Owned ID	HP	Attack	Defence	Sp. attack	Sp. defence	Speed
12	Butterfree	male	23-NOV-20 09.23.17.686313 PM	4	60	45	50	90	80	70
10	Caterpie	female	23-NOV-20 09.17.19.857751 PM	1	45	30	35	20	20	45
11	Metapod	male	23-NOV-20 09.23.08.329523 PM	2	50	20	55	25	25	30
40	Wigglytuff	female	23-NOV-20 09.36.11.826543 PM	5	140	70	45	85	50	45

#### 5. Show specific pokemon given OwnedID

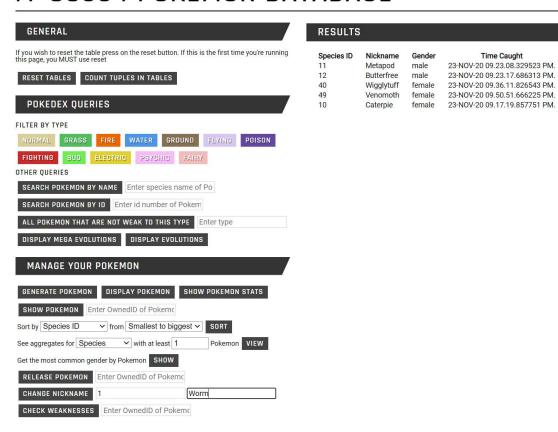
## // CS304 POKEMON DATABASE

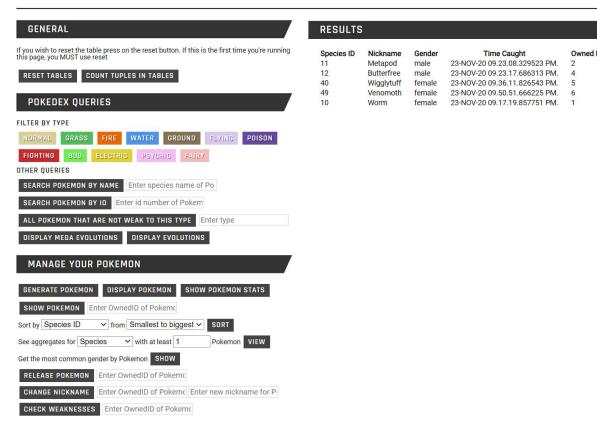




#### 6. Change Pokemon Nickname

### // CS304 POKEMON DATABASE

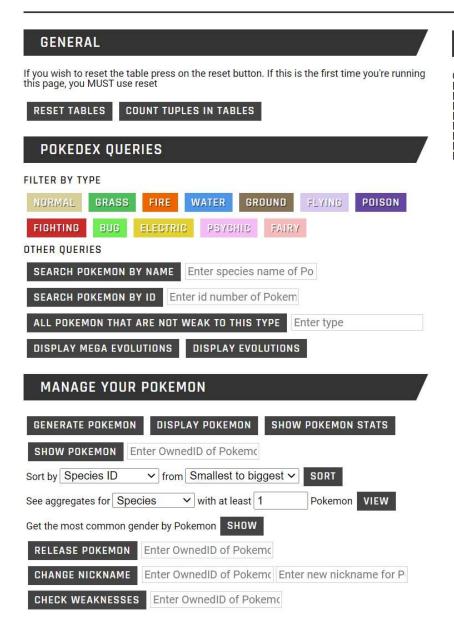




#### 7. Check a Pokemon's Weaknesses



Species ID	Nickname	Gender	Time Caught	Owned ID
11	Metapod	male	23-NOV-20 09.23.08.329523 PM.	2
12	Butterfree	male	23-NOV-20 09.23.17.686313 PM.	4
40	Wigglytuff	female	23-NOV-20 09.36.11.826543 PM.	5
49	Venomoth	female	23-NOV-20 09.50.51.666225 PM.	6
10	Worm	female	23-NOV-20 09.17.19.857751 PM.	1



#### RESULTS

Checking Worm's weaknesses... Bug weak against Fighting Bug weak against Flying Bug weak against Poison Bug weak against Ghost Bug weak against Steel Bug weak against Fire Bug weak against Fairy Bug weak against Rock

### 8. Filter Pokemon By Type (Gif)

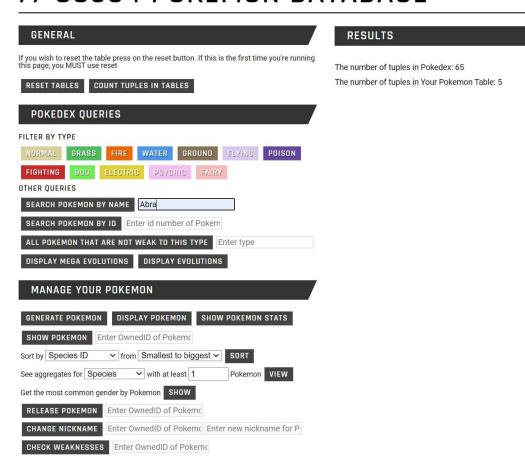
## // CS304 POKEMON DATABASE



#### RESULTS

The number of tuples in Pokedex: 65
The number of tuples in Your Pokemon Table: 5

#### 9. Search Pokemon By Name



RESULTS

Species ID

Species

Ability 1

Ability 2

Type 2

Type 1

Magic guard



#### 10. Display Pokemon that are Not Weak to a type (given user input type)

