# PokemonGO stats

## 1. Subject area

You are being asked to create a useful application for a new PokemonGO application. It will help players to check which pokemon have what . All the data collected to this point is stored in this .CSV file through using an efficient and intuitive way that is a C++ app with a Qt GUI based on Model-View internal design, implemented through Master-Detail user interface pattern.

## 2. Data model (This database is represented in 7 columns)

1. Pokemon No.

2. Name: The original name of the pokemon.

    2.1. Attribute "Name" is Master in Master-Detail pattern (it represents entries in the Master list).

3. First Type: What type of pokemon it is.

4. Second Type: Some pokemon can have two types, if they don't, this cell is empty.

5. Max CP: This is the maximum amount of damage a pokemon can infringe.

6. Max HP: The maximum amount of damage a pokemon can receive.

7. URL: This is a link to the pokemon's image on bulbagarden.

# 3. Basic features

There are a few things you must do in order to satisfy the establishment. Your application must be structured properly. It must display the main menu frame at the launch, where the user could have two options to select from: "Info" and "Start".

3.1. Start

Clicking on that option brings the user to the frame defined by the following requirements.

● The window should have a list view on the left side for the Master aspect, and a Detail view on the right side, which activates when an entry from the Master list is selected.

● The user should be able to mark/delete/add pokemons

● Your application must be capable of loading the database from a .CSV file and save changes to a .CSV file. (update button)

● A total counter of all pokemons

● There should be UI elements implemented which would represent the number of pokemons with each type (Water, Normal, Poison, Grass, Fire, Flying, Psychic) and number of pokemons who have two types.

*Additional part*

–Marked pokemons can be shown on the top, also there can be an UI element which will count sum of CP, HP of marked pokemons
–Would be great if the user could chose types to represent (For example I want to look for how many pokemons with two types or how many pokemons with Fire and Flying type)

–A possibility to sort by type/types

–Calculate an average power of each chosen type of pokemons

–The best pokemon of the day (Apply any ideas how to choose the best pokemon)

## 3.2. Info

Clicking on that option brings the user to the frame defined by the following requirements.

● You are required to implement a subitem labeled "About", that would open a dialog window with anonymous information about the author in the form "Student No.###"(the number will be provided to you by the course administration) at activation.

● Said dialog window must also contain a logo made by using the given Qt tools and overriding the paintEvent() method. You are forbidden from loading the logo from an external file, your logo must be visualized after execution of code utilizing the Qt libraries.

● It is recommended to make a logo with thunder)

## 4. GUI sketch

## APP                    – □ X

```
        ┌─────────────────┐
        │     Start       │ ──────────────────┐
        └─────────────────┘                   │
                                              │
          ┌───────────┐                       │
          │   info    │                       │
          └───────────┘                       │
               │                              │
               ▼                              │
```

## MASTER
## APP

| Bulbasaur | Pokemon No. 001 |
|-----------|-----------------|
| Ivysaur | NAME: Bulbasaur |
| Venusaur | TYPE: Grass |
| Charmander | TYPE 2: Poison |
| – – – – | Max CP: 1079 |
| – – – – | Max HP: 83 |
| – – – – | Image URL: _ _ _ _ |
| – – – – | |

```
┌──────┐ ┌────────┐ ┌──────────┐
│ add  │ │ delete │ │  update  │
└──────┘ └────────┘ └──────────┘
┌──────┐  ( reset )
│ Main │
└──────┘
```

## APP

```
        ┌─────────────────┐
        │     about       │
        └─────────────────┘

          ┌───────────┐
          │   back    │ ◄──────────
          └───────────┘
               │
               ▼
```

## APP

```
┌──────────┐      ┌──────────────┐
│  about   │ ───► │   about      │
└──────────┘      │ ⚡ Student NA│
┌──────────┐      │          OK  │
│  Close   │      └──────────────┘
└──────────┘
```