

Style Guide

Use of IDE

- All developers working on the project must install cLion and edit code on cLion. This ensures we have the same resources when working on the project, such as a **Prettier** and debugger.

Using GitHub

- Inline comments should be provided to logic that is complicated/hard to interpret.
- Provide meaningful commit message
- The branch should be created if a major change to the program is planned ahead. To create backups to roll back.

Use of ASCII Image

- To ensure the same image quality for user experience, the following must be followed:
 - The ASCII art is generated from the same website: <https://emojicombos.com/>
 - When generating the ASCII art. Do not fill the inner space within the lines unless it is absolutely necessary.
 - The Regular(non-legendary) Pokemon should have about 30 lines of ASCII art
 - The legendary Pokemon should have about 50 lines of ASCII art
 - When labeling ASCII art text files:
 - Legendary Pokemon should begin with a capital letter to differentiate them from ordinary Pokemon
 - Example: "Mew.txt"
 - Regular Pokemon should have all lowercase
 - Example: "bulbasaur.txt"

Docstring

- The docstring is included in the .cpp file with the corresponding header file.
- The docstring includes the following:
 - File name
 - Author
 - Purpose
 - Version
 - Resources

Error Handling

- To prevent corner cases and handle errors, use the function `getInt` to receive input from the user and receive Y/N answers.
- Try catch can also be implemented in applicable situations

Use of Inline Functions

- To ensure efficient use of computing power, all functions under the line length of 10 should be inline.

Naming the variables and functions

- All names of the functions are in camelcase, followed by an underscore indicating the functions' usage locations.
 - For example, `int mainPage_page2(vector<Pokemon> &);`
- If the function is used within the page it is indicated with the letter 'I' meaning "inner".
 - For example, `int damageStep_page4I()`.
- If the function is used on multiple pages, the function will be considered general. This is indicated by having no page as a usage location
 - For example, `Attacks attackConstructor(const string &name);`

Formatting the Code

- The code format is adjusted using the program **Prettier**, which is available by default on cLion.
- **Prettier** enforces a consistent style by parsing your code and re-printing it with its own rules that take the maximum line length into account, wrapping code when necessary.¹
- All if/else if/else/for/while statement/looped is indented according to the number of nesting with four spaces.
- starting curly brace { goes with the initialization
- ending curly brace } gets its own line
- prefix increments are preferred for efficiency.

Use of the Goto command

- The goto function can be used when the function's return type is void.
- The style guide encourages the usage of the Goto command to end the function. This decreases the complexity of the code and increases the readability.

Loops

- The range-based loop should be used in an applicable situation. This increases the readability of the code.
- Refrain from using while loops for fixed range usages. This is to prevent non-ending loops.

Use of the Global Variables

- Global variables are created in separate header files(*global/Variable.h*) to track what has been created.
- The global variables **must** be constant and cannot be altered within the code.
- Constant variables must be spelled with all capitalized letters. Therefore, all global variables should be capitalized.
- All proper nouns specific to the game, such as types and attack moves, should be made constant global variables. Due to its dependency on the correct string spelling to make the rest of the code functional.

Use of the ENUM

- Enum is replaced by const global variable to prevent the issue of having different int for the same variable name.

¹ <https://github.com/prettier/prettier>

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