

Software Dev. & Problem Solving II CSEC/SWEN-124

Unit 2 Practice Problems Assignment 3.1

Goals of the Assignment

The goal of this assignment is to give you an opportunity to practice writing solutions to problems that are similar to those that you will see on a practical exam. Please read this document ***in its entirety*** before seeking help from the course staff.

Activities

1. Create a new `enum` to represent Pokémon types. You may add as many types as you want to, but at a minimum, you will need types for *grass*, *fire*, and *water*.
2. Create a new class to represent a Pokémon that meets the following requirements.
 - a. Every Pokémon has a **name**, **type**, and **level**.
 - b. A Pokémon may be created with a name, type, and level or with just a name and a type, in which case the default level should be 1.
 - c. A Pokémon's name should be accessible from outside of the class. A Pokémon trainer may choose to change the Pokémon's name at any time.
 - d. A Pokémon's type should be accessible from outside of the class. The Pokémon's type can never change.
 - e. A Pokémon's level should be accessible from outside the class. The level cannot be directly modified, but the Pokémon can level up one level at a time to a max level of 100.
 - f. The Pokémon should have a `String` representation in the format `"Pokemon{name=<name>, type=<type>, level=<level>}"`.
 - g. Two Pokémon are considered equal if they have the same type and level. The name does not matter.
3. Create a JUnit unit test for your Pokémon. You should write at least one test method for each of the non-trivial methods in your class (i.e. you do not need to test accessors or mutators). You still may *use* these methods in your other tests.

Submission Instructions

You must ensure that your solution to this assignment is pushed to GitHub *before* the start of the next lecture period. See the [course syllabus](#) for the rubric that will be used to evaluate your submission.