Take Home W12

You have managed to decipher the code that Professor Cipher left. Now, it is your turn to embark on an adventure to save the professor. You have to define your own character.

A character must have these following attributes:
- Name (Name can't be changed once the character is created)
- Level (Starts from 1)
- Experience Points (Starts at 0, and the amount of experience to level up is calculated as follows: level * 10)
- HP (Start at 5)
- MP (Start at 3)
- Attack (Start at 3)
- Defense (Start at 2)

Before going on an adventure, you have to train yourself first. The world of Codington is not as forgiving as it seems. There are several trainings that you can do:
- Strength Training (Increases your experience by 3 and attack by 1)
- Durability Training (Increases your experience by 3 and defense by 1)

Leveling up means that your character will have improved HP and MP. HP and MP will scale by 5 and 3 respectively each time the character level up.

There will be an example app attached for your reference.

Scoring

Clear use of variables naming	0 / 2
Use of class	0 / 3
Implementation of Encapsulation	0 / 5
Able to store multiple characters	0 / 3
Able to select character	0 / 5
Able to display character information	0 / 3
Able to train	0 / 3 / 6
Able to level up	0 / 3
Leveling up improves HP and MP	0 / 2
Correct calculation of required experience	0 / 3
All above scoring fulfilled	0 / 5

EXTRA MILES

You can put an autosave mechanism in the game. Which means that when the program is closed, the characters created before can be loaded again with all the attributes correctly when the program is started again

BONUS SCORE: 0 / 20