

Lab #2

Exploring Classes

Write a definition of a class that has the following properties.

1. The name of the class is `secretType`.
2. (Private) - The class `secretType` has four member variable: `name` (a string), `age` and `weight` (int), `height` (double)
3. (Public) - The class `secretType` has the following member functions: (Make the accessor functions const)
 - a. `print` – outputs the data in the member variables in a nice format
 - b. constructor – that sets the `name`, `age`, `weight` and `height`
 - c. `getName` – value returning function returns the `name`
 - d. `getAge` – value returning function returns the `age`
 - e. `getWeight` – value returning function returns the `weight`
 - f. `weightStatus` – value returning function that returns a string according to the following chart (taken from:
<http://www.whatthehealth.com/bmi/formula.html> You can find the formula for BMI (body mass index) at that same site):

| BMI | Weight Status |
|------------|---------------|
| Below 18.5 | Underweight |
| 18.5 -24.9 | Normal |
| 25 - 29.9 | Overweight |
| 30 & Above | Obese |

4. Write definitions of all the member functions of class `secretType`.
5. Complete the program and capture the output of 3 runs in a word document