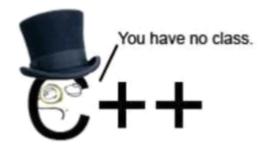
# C++ 1 - Assignment3

#### Goal

The goal of this assignment is to become more familiar classes. The basic syntax, constructors & destructors, getters & setters and member variables.





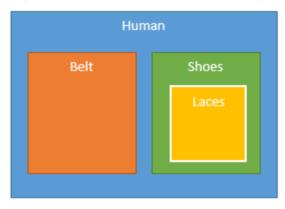
### **Steps**

- 1. Create the third assignment project in your visual studio homework solution.
- 2. Create four different classes (each with a header and cpp):
  - a. Human
  - b. Belt
  - c. Shoes
  - d. Laces
- 3. Each of these classes should have a default constructor and destructor.
- 4. Create these **PRIVATE** member variables (Remember to, #include "" the correct files when needed):
  - a. Human:
    - mBelt of type Belt.
    - mShoes of type Shoes.
    - mName of type string.
  - b. Belt:
    - mSize of type int.
  - c. Shoes:
    - mColour of type string.
    - mLaces of type Laces.
  - d. Laces:
    - mTied of type bool.
- 5. Initialize the member variables in each class through the initialization list. This should be done on all Constructors (including the defined constructors [see number 7])!!
- 6. Create **PUBLIC** Getter and Setter methods for all member variables in each class.
- 7. Add these defined constructors. Each bullet point should be its own defined constructor:
  - a. Belt:
    - Integer parameter to set the belt size.
  - b. Shoes:
    - String parameter to set the colour of the shoes.
  - c. Human:
    - String parameter to set the name.
    - String parameter to set the name, Integer parameter to set belt size and a String to set the colour of

the shoes. [In the initialization list you can call the defined constructors for the mBelt and mShoes member variables. Take a look at the Vehicle defined constructor from class for how to do this.].

## <u>Hints</u>

Here is a good visualization of what you are trying to create:



These are the "HAS A" relationships you are trying to create.

- A Human **HAS A** Belt & Shoes.
- Shoes HAVE Laces.

You will still need to add main.cpp and the main function so the program will compile. During this assignment make small commits and pushes to source tree. Commit at each step, while the code is compiling.

#### **Due Date**

This assignment has a HARD DUE DATE of: October 11th, 2017 at 11:59:59 PM!

Please, do your homework! If you need help feel free to email me anytime!