**Composite Class Assignment with UMLS**

**Outcome:**

* Student will demonstrate the ability to create a user-define data type (Class)
* Student will demonstrate the ability to under the “HAS A” relationship
* Student will demonstrate the ability to create a class using another class (composite class)
* Student will demonstrate the ability to generate all necessary methods within the user defined data types.
* Student will demonstrate the ability to write code in the setters to validate data.
* Student will use SETTER METHODS in CONSTRUCTORS instead of the ASSIGNMENT OPERATOR. You should NEVER use the assignment operator in a CONSTRUCTOR.

**Program Specifications:**

Create a program that has at least three classes.

1. The class with main.
2. A class that defines a Name (first name, middle name, and last name)
3. A class that defines a Person (name, gender, age, and salary)
4. You will define all setters and getters, constructors and toString methods
5. You will create and attach a UML for the Person and Name classes.
6. You do not need to create or attach a design tool for this assignment (other than the UMLs)

* The program will create and populate at least three different people.
* The program will allow a user to change the fields for a person.
* The program will output all three people.

Rules:

1. Gender must equal M or F only.

2. Age must be between 1 and 120.

3. Salary must be a positive number.

4. The first and last name must be in sentence case. (Dennis B. Hunchuck)

5. A middle name is optional (the code will account for this)

You will turn in your zipped-up project and your class UML(s) placed in the project folder

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\*see page 324\*

**Submission Requirements:**

* You must follow the rules from the second assignment.

**YOU CANNOT:**

* Use global variables
* Use the word goto
* Use the break command outside a case statement