Wrocław, 22.04.2024

Encapsulation/access to attributes/methods – practice

1. Create two classes: Employee and Manager. Manager should inherit after Employee.
2. Fill the classes with exemplary attributes and methods. You should have at least 4 attributes and methods for Employee and additional two for Managers. Some of these attributes should be initialized during creation of the object by data given for user (i.e. name) and some of them should be created by operating on this data (like e-mail created based on the name).
3. Some of your attributes (at least 3) should have limitations during their creation. For example age of worker can be only set between 18 and 99. You should use @property decorator. In both cases you should raise proper exceptions.
4. Create class diagram for two classes you created in previous points.
5. Change your code to show usage of two conventions (single trailing underscore and double trailing underscore). (choose examples in that way that using them make sense). If you need you can create new attributes/methods or change existing one.
6. Create some instances of your classes to show how they are mentioned to work ☺ . Show how your code: conventions usage (single or double \_) and using property decorator influence possibilities of access to attributes/methods.
7. Check if the attribute defined with double trailing underscore in the parent class can be accessed in the method in child class. If not, how we can achieve this?