

CSE 102L Computer Programming Laboratory – Exercise 3

Due Date: 23:59 Friday April 2nd

Disclosure

You will submit your file to an assignment that is given through MS teams. Your filename should be *Ex3_yourStudentNumber.java*. You are not required to provide a main method, however you can write one to test your code. Submissions made after the deadline will not be accepted, be sure to submit your work before the due date. Your code will be automatically controlled, so be sure to have the same class, method, variable names. Failure to do so may result in you receiving 0 from this exercise. All classes should be written to a single Java file.

Exercise

Write the following classes according to given specifications and declare all attributes as private:

1. Author

- Attributes:
 - name: String
 - surname: String
 - mail: String
- Methods:
 - Constructor that takes *name*, *surname*, and *mail*
 - getName(): String
 - getSurname(): String
 - getMail(): String
 - setMail(mail: String): None

2. Book

- Attributes:
 - isbn: String
 - title: String
 - author: Author
 - price: double
- Methods:
 - Constructor that takes *isbn*, *title*, *author*, and *price*
 - Constructor that takes *isbn*, *title*, and *author*. Set price to 15.25
 - getIsbn(): String
 - getTitle(): String
 - getAuthor(): Author
 - getPrice(): double
 - setPrice(price: double): None

3. EBook – a child of Book

- Attributes:
 - `downloadUrl`: String
 - `sizeMb`: double
- Methods:
 - Constructor that takes *isbn*, *title*, *author*, *price*, *downloadUrl*, and *sizeMb*
 - Constructor that takes *isbn*, *title*, *author*, *downloadUrl*, and *sizeMb*
 - `getDownloadUrl()`: String
 - `getSizeMb()`: double

4. PaperBook – a child of Book

- Attributes:
 - `shippingWeight`: int
 - `inStock`: Boolean
- Methods:
 - Constructor that takes *isbn*, *title*, *author*, *price*, *shippingWeight*, and *inStock*
 - Constructor that takes *isbn*, *title*, *author*, and *inStock*. Set *shippingWeight* to a random number between 5-15.
 - `getShippingWeight()`: int
 - `getInStock()`: Boolean
 - `setInStock(inStock: boolean)`: None