

# **Submission rules:**

- 1. Due date: Sunday, September 25th, 2022 at 11:59 pm
- 2. You can discuss answers with your colleagues. **But no copying.**
- 3. Submit it to lms.ksu.edu.sa. Email submissions will not be accepted.
- 4. The exported project name must be: *Lab02\_ID\_FirstName\_LastName.zip*.
- 5. Use the default package.
- 6. <u>You are not allowed Java Collections like (List, ArrayList, LinkedList...</u> <u>etc). Use an array otherwise you will receive a ZERO</u>.
- 7. Write your name and university ID as a comment at the start of all java files.
- 8. Make sure to use the correct spelling for classes, methods, and variables.

# Lab Exercise 1



Class *Book*:

Attributes:

- *title*: represent the title of the book.
- *author*: represent the author of the book

#### Methods:

- *Book(title:string, author:string)*: a constructor.
- getTitle(): title getter.
- *getAuthor()*: author getter.

#### Class AudioBook:

Attributes:

- *duration*: length of the audio clip in minutes.
- *narrator*: name of the person whose voice is recorded.

Methods:

- *AudioBook(title:string, author:string, duration:int, narrator:string)*: a constructor.
- getDuration(): duration getter.
- *getNarrator()*: narrator getter.

#### Class WrittenBook:

Attributes:

• *nPages*: count of the pages of the book.

Methods:

- WrittenBook(title:string, author:string, nPages:int): a constructor.
- getNPages(): nPages getter.

Class **PrintedBook**:

Attributes:

- *isbn*: the international standard book number.
- *hardCover*: it's true if the book has a hardcover, false otherwise.

Methods:

- *PrintedBook(title:string, author:string, nPages:int, isbn:int, hardCover:boolean)*: a constructor.
- *PrintedBook(title:string, author:string, nPages:int)*: a constructor. It initializes isbn to 0 and hardCover to false.
- *getIsbn()*: isbn getter.
- *isHardCover()*: hardCover getter.

## Class *EBook*:

Attributes:

• *size*: storage size of the ebook file in MBs.

## Methods:

- *EBook(title:string, author:string, nPages:int, size:int)*: a constructor.
- getSize(): size getter.
- *print()*: returns an object of type **PrintedBook** that has that same title, author and nPages as the current **EBook**.