

Personal Planning

Subtask A:

Plan	The main objective for this subtask is to create a class that represents a book and methods for getting and setting the book's details. After that, a method should be created to add the book in a list and print them in the terminal.
Implement	Firstly, I created a class called "book.java" in the package "models" that contain an object "book" and the variables (title, id, author, genre, publishDate, price) which are important for any book, all of them in the kind of (String) except price that is (double). "book.java" has also methods which can be used for adding book's information or updating any of them. In "GetBooksResource" I created two books, added them to a list and printed them in the terminal.
Reflect	It wasn't difficult to plan for this task and how to coding while the assignment is very well explained, but it took me much time to know how the list will be printed in the terminal when the localhost is called in the browser and why we write everything in the function getBooks and how it works "and I still misunderstand the function". But the subtask done finally with the help of online tutors.

Subtask B:

Plan	The objective of this subtask is to convert the book object into JSON object and print it to be shown in the terminal
Implement	I converted the list to an JSON object by create an ObjectMapper. Then I created a string "jsonInString" and used "writeValueAsString()" method to convert the list that contain the books to a string. The converting handle the exceptions of

	converting to catch any error and print a stack trace if any error may occur when the program run.
Reflect	It's my first time to use json object and object mapper so it was a little bit difficult at first but managed it by googling.

Subtask C:

Plan	The objective of this subtask is to show the book in a list when calling the URL <code>http://localhost:9090/#/books</code>
Implement	I used <code>writerWithDefaultPrettyPrinter()</code> to print JSON object in a pretty form and then I returned it. So, the string <code>"jsonInString"</code> will be printed in the browser when calling the URL <code>"http://localhost:9090/api/books"</code> and the book will be shown in the list after clicking Books button in <code>"http://localhost:9090/"</code> .
Reflect	It was hard to implement but I got some help from friend and google because it's my first time to work on this kind of coding with JSON object

Improvements:

I made a new constructor for the book object that makes the creation of the object easier while the user knows all the information and to instead of using the adding method for each information of a book. I create `"toString"` method in the book class that return the book's title. It helps the printing of a book. By this method one can prints the object directly without calling and typing the method name.

I thought about more improvements that make the program better by adding more details for the book as `"the edition, ISBN number and language"` I thought also about creating search function by title or author or any information of a book. I can manage those two features in the back end of the program but I don't know how to

make changes in the front end and implement them while it is finished and I do not have any idea about how to make changes in it so I really couldn't know the kind of improvements I can apply.

Vision Document:

I had a trouble in the writing of the vision doc as I do not have an idea about what it is and what should one include in it. It could be easier if you provide an example of the documents so we can have an idea about it. I wrote a short introduction about the program and its benefits for the client, how it designed and its functions. I got help by searching on the internet.

Project Plan:

In the project plan, I tried to write an introduction and background to the application and its functionality. Describe the how the application designed, how it is implemented, and what the user can benefit from it. I outline the main user and include the estimated time for completing the project and where it is done. If more information is needed to include I will do it during the course and if we know more about the application during the course. Again, I got information from the internet and I do not know if what I did is enough while there is no explanation in the assignment about the project plan.