

Summary of work

Bookstore.java

This is the main class which implements the following interface:

```
public interface BookList {  
    public Book[] list(String searchString);  
    public boolean add(Book book, int quantity);  
    public int[] buy(Book... books);  
}
```

The following status have been implemented for the buy methods:

- OK(0)
- NOT_IN_STOCK(1)
- DOES_NOT_EXIST(2)

Book.java

The class “Book” shall contain the following variables:

```
public class Book {  
    private String title;  
    private String author;  
    private BigDecimal price;  
}
```

BookQ.java

This class extends Book.java and adds the quantity as a field. This helps managing the books that users buy and the quantity of each book they get (instead of adding new entries for each purchases). This makes the programme more neat.

Show list of commands for the command line

To see the commands at any time, type:

```
$ c
```

Please type one of the following commands:

```
[L]: To list all the books or [$ L author] or [$ L title]  
[B]: Buy a book [$ B ID (quantity)]
```

[K]: Show basket
[D]: Delete a book from Basket [\$ D BookID in the basket (quantity)]
[C]: Show commands
[X]: Exit

Search & List books

In order to list all the books, the following command (in front of \$ and in **bold face**) can be used:

\$ L

List of books:

```
[0]: Mastering åäö, Average Swede, 762.00 kr    Stock: 15
[1]: How To Spend Money, Rich Bloke, 1,000,000.00 kr  Stock: 1
[2]: Generic Title, First Author, 185.50 kr    Stock: 5
[3]: Generic Title, Second Author, 1,748.00 kr  Stock: 3
[4]: Random Sales, Cunning Bastard, 999.00 kr    Stock: 20
[5]: Random Sales, Cunning Bastard, 499.50 kr    Stock: 3
[6]: Desired, Rich Bloke, 564.50 kr            Stock: 0
```

In order to search for a book, please use the following commands:

\$ L author

List of books:

```
[2]: Generic Title, First Author, 185.50 kr    Stock: 5
[3]: Generic Title, Second Author, 1,748.00 kr  Stock: 3
```

OR

\$ L Random

List of books:

```
[4]: Random Sales, Cunning Bastard, 999.00 kr    Stock: 20
[5]: Random Sales, Cunning Bastard, 499.50 kr    Stock: 3
```

Buying a book (or adding to basket)

To add a book in the basket the following command can be used:

\$ B 5

Book/s added to basket!

Which adds *one* copy of the following book:

```
[5]: Random Sales, Cunning Bastard, 499.50 kr
```

Or

\$ B 5 2

Book/s added to basket!

Which adds 2 copies of the following book:

```
[5]: Random Sales, Cunning Bastard, 499.50 kr
```


Show basket

The content of the basket can be seen using the following:

```
$ B 0 2
```

```
$ B 5 3
```

```
$ K
```

```
List of books in your basket:
```

```
[0]: Mastering åäö, Average Swede, 762.00 kr,   Quantity: 2
```

```
[1]: Random Sales, Cunning Bastard, 499.50 kr,   Quantity: 3
```

```
Total price: 1,261.50 kr
```

Please note that in addition to the quantity, the *total price* is also shown.

Delete from basket

The following can be used to delete items from basket.

The command below deletes one copy of book ID 1 from the basket

```
$ D 1
```

```
Items removed!
```

And the following deletes 2 copies of book ID 0 from the basket:

```
$ D 0 2
```

```
Item removed!
```

To see, what is left in the basket, see below:

```
$ K
```

```
List of books in your basket:
```

```
[0]: Random Sales, Cunning Bastard, 499.50 kr,   Quantity: 2
```

```
Total price: 499.50 kr
```

Adjusting quantity in stock and basket

Once a book is added, the quantity of the book is reduced in the book store. This can be checked by typing \$ L. For instance, we do the following:

1. see the full list of books in book store
2. make a purchase
3. see the basket
4. see the books in book store and check the stock

```
$ L
```

```
List of books:
```

```
[0]: Mastering åäö, Average Swede, 762.00 kr   Stock: 15
```

```
[1]: How To Spend Money, Rich Bloke, 1,000,000.00 kr  Stock: 1
[2]: Generic Title, First Author, 185.50 kr          Stock: 5
[3]: Generic Title, Second Author, 1,748.00 kr       Stock: 3
[4]: Random Sales, Cunning Bastard, 999.00 kr        Stock: 20
[5]: Random Sales, Cunning Bastard, 499.50 kr        Stock: 3
[6]: Desired, Rich Bloke, 564.50 kr                   Stock: 0
```

\$ B 1

Book/s added to basket!

\$ B 2 4

Book/s added to basket!

\$ K

List of books in your basket:

```
[0]: How To Spend Money, Rich Bloke, 1,000,000.00 kr,      Quantity: 1
[1]: Generic Title, First Author, 185.50 kr,              Quantity: 4
Total price: 1,000,185.50 kr
```

\$ L

List of books:

```
[0]: Mastering åäö, Average Swede, 762.00 kr      Stock: 15
[1]: How To Spend Money, Rich Bloke, 1,000,000.00 kr Stock: 0
[2]: Generic Title, First Author, 185.50 kr       Stock: 1
[3]: Generic Title, Second Author, 1,748.00 kr    Stock: 3
[4]: Random Sales, Cunning Bastard, 999.00 kr      Stock: 20
[5]: Random Sales, Cunning Bastard, 499.50 kr      Stock: 3
[6]: Desired, Rich Bloke, 564.50 kr                Stock: 0
```

Exit

Type **\$ x** to exit the program:

\$ x

Thank you and bye!

It's possible to expand the book store with new items, which can be added to bookstore.txt, or alternatively, the code is written (and commented) to add them directly to the memory.

Unit Tests

Unit tests are added to check the following tasks:

- LISTING all the books
- SEARCHING by Author
- SEARCHING by Title
- ADDING to the basket
 - When there is enough book in stock (TRUE)
 - When there is NOT enough book in stock (FALSE)
- DELETING from the basket
 - Deleting what exists in the basket (TRUE)
 - Deleting what doesn't exist in the basket (FALSE)
- BUYING multiple books
 - Adding 2 valid books to basket with output [0,0]
 - Adding 1 valid and 1 out of stock, with output [0,1]
 - Adding 1 valid, 1 out of stock, and 1 non-existent book, with output [0,1,2]