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SimpleBookstore – Project Summary
Author: peterkmxx

Contents

1   Functional description
SimpleBookstore is a C# .NET 8 console application implementing CRUD (Create, Read, Update, Delete) operations on an in-memory list List<BookItem>. The set of CRUD use cases is illustrated in the next sections.

The BookItem entity has 5 data members:

- Title
- Authors
- Publisher
- Year
- Id

2   Main menu
After starting the application, the main menu is shown

```
App: M02-L20, v.2.0.0.3
Today is 3/02/2024 22:23:36

Welcome to Simple Bookstore application
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

3   Option (6): the autogenerate function
If needed, autogenerate function can be used. This function will populate the backend with 3 objects of type BookItem.

```
Enter your menu choice:
6
[Adding 3 books...]
[DONE]
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

4   Option (5): view book list

This function will show all items present in the in-memory backend. When inserting into the backend, unique Id properties are generated automatically. This is visible in the list.

```
Enter your menu choice:
5
------------------------
Showing books list
------------------------
Title: The C# Programming Language
Authors: Anders Hejlsberg
Publisher: Wiley
Year: 2014
Id: 1

Title: Beginning gRPC with ASP.NET Core 6
Authors: Anthony Giretti
Publisher: Apress
Year: 2022
Id: 2

Title: Learn PHP 8
Authors: Steve Prettyman
Publisher: Apress
Year: 2020
Id: 3


------------------------
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

5   Option (3): edit a book from in-memory backend

In this case we select book Id = 2 and modify book publication year from 2022 to 2023.

```
Enter your menu choice:
3
Enter Book Id:
2
Current Title:
Beginning gRPC with ASP.NET Core 6
Enter book title:
Beginning gRPC with ASP.NET Core 6
Current Authors:
Anthony Giretti
Enter authors:
Anthony Giretti
Current Publisher:
Apress
Enter publisher:
Apress
Current year of publication
2022
Enter year of publication (from 1900 until next year):
2023
[DONE]
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

6   Option (2) view the details of a selected book

We select option 2 and use book Id = 2 to check book details.

```
Enter your menu choice:
2
Enter Book Id:
2
Title: Beginning gRPC with ASP.NET Core 6
Authors: Anthony Giretti
Publisher: Apress
Year: 2023
Id: 2

Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

7   Option (1) : add new book

```
Enter your menu choice:
1
Enter book title:
Visual Studio Code Distilled
Enter authors:
Alessandro Del Sole
Enter publisher:
Apress
Enter year of publication (from 1900 until next year):
2021
[DONE]
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
```

Now we use option (5) to see all books. Indeed the new book is in the list.

```
Enter your menu choice:
5
----------------------
Showing books list
----------------------
Title: The C# Programming Language
Authors: Anders Hejlsberg
Publisher: Wiley
Year: 2014
Id: 1

Title: Beginning gRPC with ASP.NET Core 6
Authors: Anthony Giretti
Publisher: Apress
Year: 2023
Id: 2

Title: Learn PHP 8
Authors: Steve Prettyman
Publisher: Apress
Year: 2020
Id: 3

Title: Visual Studio Code Distilled
Authors: Alessandro Del Sole
Publisher: Apress
Year: 2021
Id: 4

----------------------
```

8   Option (4) : remove book

We select option (4) and remove book with Id = 2.
Next, we choose option (5) to view the resulting list.
In this case, book with Id = 2 is indeed removed.

```
Enter your menu choice:
4
Enter Book Id:
2
[DONE]
Book Menu:
(1) Add book to list
(2) Read boek details
(3) Edit book
(4) Remove book from List
(5) View book list
(6) Autogenerate book list
(7) Exit application
Enter your menu choice:
5
-----------------------
Showing books list
-----------------------
Title: The C# Programming Language
Authors: Anders Hejlsberg
Publisher: Wiley
Year: 2014
Id: 1

Title: Learn PHP 8
Authors: Steve Prettyman
Publisher: Apress
Year: 2020
Id: 3

Title: Visual Studio Code Distilled
Authors: Alessandro Del Sole
Publisher: Apress
Year: 2021
Id: 4

-----------------------
```

9   Conclusion

The above tests of the use cases show that the application implements CRUD operations on a list of book items.