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**SimpleBookstore – Project Summary**

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# 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

# Main menu

After starting the application, the main menu is shown

A computer screen shot of a black screen

Description automatically generated

# Option (1) : add new book

A screenshot of a computer program

Description automatically generated

After adding a new book, now we use option (5) to see all books. Indeed the new book is in the list.

A screen shot of a computer program

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

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

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

In this case we select book Id = 1 and modify book publication year from 2021 to 2022.

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After editing a book, now we use option (5) to see all books. Indeed the year of publication was changed.

A screen shot of a computer

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# Option (4): remove book

We select option (4) and remove book with Id = 1.

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Next, we choose option (5) to view the resulting list.

In this case, the list is empty

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# Option (6): the autogenerate function

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

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After using the autogenerate function we can check the status of the backend using option (5). This is shown in the next section.

# 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.

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# Option (7): exit application

Choosing option 7 starts the exit procedure for the application.

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The console is closed after pressing any key.

# Conclusion

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