

**Project Name:** BookOrg

## Core Logic Test Case

<b>Test Case ID:</b> T_2	<b>Test Designed by:</b> Michal Bielina
<b>Test Name:</b> Transactions, Views, and Logic Verification	
<b>Brief description:</b> Testing the loan process, which requires database transactions updating multiple tables, viewing history, testing validation logic.	
<b>Pre-conditions:</b> T_0 successful. The database is populated with at least one Customer and one Book with stock > 0.	
<b>Dependencies and Requirements:</b> Windows OS, software must support WPF C# framework, .NET 8.0 (or compatible version). [Running application, SQL Server connection]	

Step	Test Steps	Test Data	Expected Result	Notes
1	Navigate to "Books" from the Main Menu and note the "In Stock" count of a specific book.	Target Book.	The stock count is displayed (e.g., 5).	-
2	Navigate to "Loans" ("Ongoing Loans") and click the Add (+) button.	-	A new row appears in the DataGridView.	-
3	Select a Customer and the Target Book. Set "Start Date" to today and "Due Date" to yesterday.	Dates: Start=Today, Due=Yesterday.	Input validation triggers. Error message displayed: "The Due Date must be later than the Start Date."	-
4	Correct the date to a valid future date and save (click off the row or press enter).	Status: "active"	The Loan is saved. The database transaction executes successfully.	-
5	Navigate back to the "Books" menu.	-	The "In Stock" count for the Target Book has decreased by 1.	-
6	Navigate back to "Loans". Find the active loan and change status to "returned".	-	The row moves from "Ongoing" to "Returned Loans" tab.	-
7	Switch to the "Returned Loans" tab.	--	The loan appears with all details (Customer Name, Book Title, Price).	-
8	Navigate back to "Books".	-	The "In Stock" count for the Target Book has increased by 1.	-