

BibliotekApp – Logbook (28 Nov – 4 Dec 2025)

Date	Ideas / Tasks	Action Taken	Time Spent	Problems & Solutions	Next Steps
28/11/2025	Plan project structure	Defined main features: User management, Book management, Borrow/Return, Search & Sort. Sketched database schema.	2h	No major problems.	Set up project in Visual Studio Code
29/11/2025	Implement User class & Registration/Login	Created User class with Id, Username, Password, IsAdmin. Implemented registration and login functions in console	3h	Had trouble with role check for admin, solved by adding IsAdmin boolean property.	Test login functionality and start Book class
30/11/2025	Implement Book class & CRUD	Created Book class with Id, Title, Author, ISBN. Added methods for Add, Remove, Update, Show books.	4h	Forgot to call db.SaveChanges() after each operation, fixed.	Test book CRUD, start Borrowing system
1/12/2025	Implement Borrowing system	Created Borrowing class. Implemented Borrow and Return functionality. Updated ShowBooks to show availability.	3h	Issue: Book could be borrowed twice. Fixed by checking ReturnDate == null in Borrowings table.	Test borrowing system, plan search and sort
2/12/2025	Implement Search & Sort	Added manual search for Title, Author, ISBN. Implemented Bubble Sort by Title.	3h	Initial sort logic incorrect, fixed swapping in Bubble Sort loop.	Test search and sort, integrate with user/admin menus
3/12/2025	Integrate Admin/User menus	Created separate console menus for admin and normal users. Linked all features to menus.	4h	Challenge: Looping menus to prevent exit after one action. Solved using while(running) loops for menus.	Full testing of menus
4/12/2025	Final testing & polish	Tested all features: registration, login, add/remove/update books, borrow/return, search & sort. Fixed minor console output issues. Prepared project for submission.	3h	Minor bugs in return book messages, fixed.	Prepare GitHub repository, write Planning & Documentation