

## Project Name: Book Catalog BackEnd

Based on the current project, we need to enhance it by adding the following new features:

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### 1. Authentication & Authorization

- **Task:** Implement user authentication (e.g., using JWT tokens) to secure the API.
  - **Details:** Allow only authorized users (e.g., admins) to perform CRUD operations (Create, Read, Update, Delete) on the books. Regular users can only view the catalog.
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### 2. Logging

- **Task:** Add logging to track actions taken on the API (e.g., when a book is added, updated, or deleted).
  - **Details:** Implement logging using a logging library like Serilog or NLog. Logs should be stored in files.
  - **Tools/Technologies:** Serilog, NLog, Application Insights
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### 3. Error Handling

- **Task:** Implement global error handling to return meaningful error responses for failed requests.
  - **Details:** Use a centralized error handling mechanism (like a middleware) to catch all exceptions and return a consistent error response format.
  - **Tools/Technologies:** ASP.NET Core Middleware, Custom Exception Filters
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### 4. Search and Filtering Enhancements

- **Task:** Implement full-text search for books based on title and description.
- **Details:** Add a search endpoint that allows users to search for books by title or description (e.g., /books/search?query=keyword).
- **Tools/Technologies:** LINQ Contains method or more advanced libraries (like Elasticsearch if you scale).

**Estimation: 3 Days**

**Time Deliver: 24/08/2025**