Home Assignment

Title:

Document Access Approval System

Objective:

Design and implement a small but well-structured REST API for managing access requests to internal documents. This assignment mimics a real-world enterprise scenario where sensitive documents require an approval workflow.

Business Requirements:

Actors:

- User – can request access to a document
- Approver – reviews and accepts/rejects requests
- (Optional) Admin – manages access

Use Cases:

1. A user submits an access request to a document, including:
   - Document ID
   - Reason for access
   - Requested access type (Read / Edit)

2. The approver sees a list of pending requests and can:

   - Approve or reject with a comment

3. The user can check the status of their requests

Technical Requirements:

- ASP.NET Core
- EF Core using SQLite or InMemory
- Minimum structure: API + Application logic layer
- Domain entities: AccessRequest, Decision, User, Document
- Use DTOs to decouple models from requests/responses
- At least one unit test for a meaningful logic scenario

Optional Enhancements (if you have time):

- Authentication and role separation (User / Approver)
- Swagger docs
- CQRS
- Background job or event simulation (e.g., sending notification after approval)

Assumptions & Clarifications:

This task is intentionally open to interpretation. If anything is unclear, feel free to make reasonable assumptions.

What matters most is that you can explain and justify your decisions during the interview.

Please focus on clean architecture, maintainability, and clarity rather than full functionality.

Deliverables:

- GitHub repository or archive with source code
- A brief README.md that explains:

    - Project structure and key design decisions
    - Any assumptions or trade-offs you made
    - How to run the app and the tests
    - What you would improve if you had more time