

# Assignment: Full-Stack Movie Management Application

## Objective

Build a simple full-stack application to manage movie data using **Node.js (backend)**, **React (frontend)**, and a **database (MongoDB or SQL)**. This assignment is designed to evaluate your understanding of basic full-stack development concepts, clean coding, and API integration.

## Assignment Requirements

### 1. Backend (Node.js + Express.js)

You are required to:

- Set up a basic **Node.js backend** using **Express.js**
- Create APIs to manage movie data
- Implement the following **CRUD operations**:
- Create a movie
- Get all movies
- Get a movie by ID
- Update a movie
- Delete a movie
- Use proper API structure and status codes

### 2. Database (MongoDB or SQL)

You are required to:

- Design a simple database schema for movies (single table/collection)
- Store the following fields (minimum):
- Movie Name
- Genre
- Release Year
- Rating
- Implement data storage and retrieval functionality
- Connect the database with the backend APIs

### 3. Frontend (React)

You are required to:

- Build a minimal **React application**
- Create a **movie listing page** that displays all movies
- Integrate the frontend with backend APIs
- (Bonus) Add a simple form to add new movies

## Evaluation Criteria

Candidates will be evaluated based on:

- Code structure and readability
- API design and data handling
- Proper frontend-backend integration
- Basic UI/UX clarity

- Git commit hygiene and project setup
- Bonus points for clean architecture and error handling

### **Submission Guidelines**

- Push your code to a **GitHub repository**
- Include a clear **README.md** with:
- Setup instructions
- Tech stack used
- API details
- Share the repository link for evaluation