TECHNOLOGY STACK (ARCHITECTURE AND STACK)

Date	23 JUNE 2025
Team Id	LTVIP2025TMID53096
Project name	BOOK NEST: WHERE STORIES NESTLE
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TECHINICAL ARCHITECTURE:

🎌 **Technical Architecture of BookNest**

The technical architecture of BookNest follows a modern, scalable Three-Tier Architecture and can be extended to a Microservices-based or Serverless model depending on scale and flexibility needs.

🧱 **1. Architecture Layers**

📍 **A. Presentation Layer (Frontend)**

- **Technology Stack:**

    o **HTML5, CSS3, JavaScript**

    o **React.js or Angular (for dynamic SPA)**

    o **Tailwind CSS or Bootstrap (for UI styling)**

- **Responsibilities:**

    o **Display user interface (UI)**

    o **Communicate with backend via REST APIs**

    o **Provide interactive experience (search, filters, cart, etc.)**
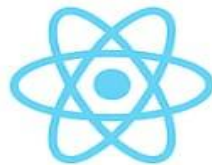
📍 **B. Application Layer (Backend/API)**

- **Technology Stack:**

    o **Node.js with Express.js / Django / Spring Boot**

    o **RESTful API (or GraphQL if needed)**

    o **JWT for authentication**

    o **Bcrypt/Argon2 for password hashing**

- **Responsibilities:**

    o **Business logic (cart handling, order processing, user auth)**

    o **API endpoints for frontend**

    o **Integration with payment gateways (e.g., Razorpay, Stripe)**

Technology Stack for Booknest

FRONTEND

BACKEND

DATABASE

INFRASTRUCTURE