

Project Design Phase
Proposed Solution Template

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| Date | 12 February 2026 |
| Team ID | LTVIP2026TMIDS34775 |
| Project Name | BookNest : where stories nestle |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

| S.No. | Parameter | Description |
|-------|--|--|
| 1. | Problem Statement (Problem to be solved) | Many existing online bookstores have poor navigation, complicated checkout processes, lack of engaging UI, and weak backend integration. Users struggle to discover books easily and complete purchases smoothly and securely. |
| 2. | Idea / Solution description | BookNest is a MERN stack-based online bookstore that provides secure user authentication, 100+ categorized books, advanced search & filtering, cart management, order tracking, and a responsive animated UI. It is deployed on Render (Backend) and Vercel (Frontend) with MongoDB Atlas as the cloud database. |
| 3. | Novelty / Uniqueness | The platform combines modern MERN architecture, secure JWT authentication, animated user interface, structured filtering system, and cloud deployment to provide a seamless digital book purchasing experience. The focus on user-friendly design and smooth navigation enhances engagement. |
| 4. | Social Impact / Customer Satisfaction | BookNest improves accessibility to books for students and professionals, reduces dependency on physical stores, enhances reading culture, and provides a convenient digital platform for discovering and purchasing books. It increases customer satisfaction through simplicity, speed, and security. |
| 5. | Business Model (Revenue Model) | Revenue can be generated through book sales margin, commission from publishers, premium memberships, featured book promotions, advertisements, and future integration of payment gateway & subscription model. |
| 6. | Scalability of the Solution | The solution is cloud-deployed and scalable. MongoDB Atlas supports database scaling, and backend/frontend services can be scaled independently. The architecture allows future integration of payment systems, AI-based recommendations, and mobile app expansion. |

