

Project Design Phase  
Proposed Solution

Date	21-06-2025
Team ID	LTVIP2025TMID53185
Project Name	BookNest: Where Stories Nestle
Maximum Marks	2 Marks

Proposed Solution

**BookNest** is envisioned as a dynamic, community-driven platform tailored to avid readers, authors, and book clubs. It bridges the gap between discovery, discussion, and digital library curation. The platform will offer personalized recommendations, book tracking tools, social features, and author-reader interaction.

The core solution integrates intuitive UI/UX design with scalable backend infrastructure, enabling seamless browsing, intelligent suggestion algorithms, and real-time engagement. Key technologies such as React (frontend), Node.js (backend), PostgreSQL (database), and AI-driven recommendation engines will support the functionality.

This platform aims to not only facilitate individual reading goals but also to nurture a shared culture of storytelling through virtual bookshelves, reviews, reading challenges, and events.

Proposed Solution for BookNest: Where Stories Nestle

Component	Description	Technology/Tool
User Interface	Clean, modern design focused on user accessibility and interaction	React, Tailwind CSS
Authentication	Secure login/signup with options for social media login	OAuth 2.0, JWT
Book Database	Centralized repository with metadata, ratings, reviews	PostgreSQL, Google Books API
Recommendation Engine	Personalized book suggestions based on user behavior and preferences	Python, TensorFlow, Collaborative Filtering
Social Features	Book clubs, discussion forums, friend connections	WebSockets, REST APIs
Reading Tracker	Allows users to log, track, and review their reading progress	Custom Module in Backend + Frontend UI
Author Pages	Verified authors can host live chats, share updates, and interact with fans	Custom CMS, Live Chat Integration

Component	Description	Technology/Tool
Admin Dashboard	Moderation tools, analytics, and content management	Node.js Admin Panel, Chart.js
Mobile Responsiveness	Optimized for tablets and smartphones	Responsive Web Design, PWA Capabilities
Security	Ensures data protection and privacy	HTTPS, Data Encryption, OWASP Practices