

Introduction

Book Donors Nepal is a cutting-edge online platform created to streamline the process of donating and acquiring books and PDF files. With a focus on user-friendly design, this platform allows individuals to share their educational materials with those in need. By utilizing React for the frontend and a robust backend, Book Donors Nepal ensures a seamless and secure experience for all its users. This platform provides a holistic solution for both donors and recipients. Donors can effortlessly upload the books or PDF files they want to donate, while recipients can explore the available resources and request the ones they require. One of the standout features of Book Donors Nepal is its integrated chatbot, which offers personalized recommendations and answers to common queries. Moreover, users can interact with articles and blog posts covering various topics like book reviews and study techniques.

The website is equipped with a Donor-Seeker chat function, enabling users to interact directly. This enhances coordination and ensures efficient donation processes. Popular or recommended books are prominently featured on the homepage, providing the community with easy access to quality reads. Book Donors Nepal is dedicated to building a supportive community. The platform promotes the reuse of educational materials, reducing waste, and encourages a culture of learning and sharing. Whether you wish to donate, find books, explore informative content, or connect with similar individuals, Book Donors Nepal delivers a seamless and enriching experience for everyone.

Learning outcomes

Throughout the progression of the Book Donors Nepal initiative, I faced a variety of obstacles that significantly enhanced my problem-solving abilities and solution identification. The utilization of programming languages such as React, HTML, and CSS for the frontend allowed me to refine my skills in creating a responsive and user-friendly interface. Utilizing Visual Studio Code as the primary development environment facilitated efficient coding and debugging. The project also provided me with the opportunity to deepen my understanding of Java Spring Boot as a backend technology. Working with Spring Boot on IntelliJ offered valuable insights into its features and capabilities, enhancing my ability to develop robust and scalable web applications. Additionally, integrating Bootstrap and jQuery into the frontend design further enhanced the website's aesthetics and user experience. The use of PostgreSQL as the database system was crucial in systematically managing data. It provided a structured approach to data management, supported by the use of entity diagrams and use case diagrams. This experience not only strengthened my technical skills but also emphasized the importance of researching and implementing appropriate resources to meet specific project requirements. Overall, the Book Donors Nepal project has been a valuable learning journey, fostering the growth of essential skills in web development and backend technologies.

Features Included in the System

1. User Login for Donors and Seekers:

- **Feature:** Separate login for donors and seekers.
- **Description:** Users can choose to log in as a donor, to list and manage books or PDF files they want to donate, or as a seeker, to browse and request available resources. This dual login system allows tailored access and functionality based on user roles, ensuring a personalized experience for each type of user.

2. Donor Registration and Login Requirement:

- **Feature:** Mandatory registration and login for donors.
- **Description:** Donors must first sign up and log in through a dedicated section before they can list books or PDF files for donation. This process ensures that all donations are associated with valid, registered accounts, helping to maintain the integrity and reliability of the platform.

3. Seeker Registration and Login Requirement:

- **Feature:** Mandatory registration and login for seekers.
- **Description:** Seekers must sign up and log in through a specific section before they can browse and request books or PDF files. This requirement ensures that all seekers are

registered users, allowing the platform to provide a secure and organized system for managing book requests and distributions.

4. Reserve Books for Seekers:

- **Feature:** Book reservation system for seekers.
- **Description:** Seekers can easily reserve available books or PDF files by clicking the "Reserve" button associated with each listing. This feature streamlines the process of acquiring desired materials, allowing seekers to secure items with a simple click, and ensures that the chosen resources are set aside for them.

5. Donor/Seeker Chat Section:

- **Feature:** Direct communication between donors and seekers.
- **Description:** Users can access a dedicated chat section to communicate directly with each other. This feature allows donors and seekers to coordinate the delivery or pickup of physical books, facilitating a seamless and efficient exchange process. It ensures that both parties can discuss details like location and timing, making the transfer of books convenient and secure.

6. Chatbot for Website Usability:

- **Feature:** Chatbot assistance for user navigation and support.

- **Description:** A chatbot is available on the website to assist users with navigating the platform and understanding its features. This AI-powered tool provides instant answers to common questions, guides users through various processes such as registration and book reservation, and offers tips on how to make the most of the platform. It enhances the overall user experience by providing real-time support and reducing the need for human intervention.

7. Suggestion Drop Box:

- **Feature:** User suggestions and query submission.
- **Description:** Users can easily submit their suggestions or queries through a dedicated suggestion drop box on the website. This feature allows users to provide feedback, ask questions, or propose improvements, fostering a more interactive and user-responsive platform. It encourages community engagement and helps the platform continuously improve based on user input.

