

PROJECT ABSTRACT

Second-Hand Book Exchange Marketplace

A campus marketplace for used textbooks: listings with condition grading, price comparison against MRP, in-app chat and meetup-based handover. Delivered built-to-order with the full application, report, PPT and viva kit.

01. Title

02. Introduction / Background

Every semester, juniors pay full MRP for textbooks that seniors will sell to scrap dealers for a tenth of the price — simply because there is no trusted marketplace connecting them. Generic classifieds sites mix students with strangers and add shipping friction for a ₹200 book. This project builds a campus-only book exchange: verified student sellers, condition-graded listings with MRP comparison, in-app chat, and handover by campus meetup — no shipping, no strangers, no advance-payment scams.

03. Problem Statement

The market failure is trust and discovery: buyers cannot verify a book's condition before paying, sellers cannot reach the exact juniors who need their books, and both sides fear fraud. The project addresses this with a closed campus marketplace: college-email-verified accounts, structured listings (edition, condition grade, photos), price transparency against MRP, chat that keeps phone numbers private until a deal is struck, and seller ratings from completed handovers.

04. Objectives

- Provide structured book listings: title, author, edition, ISBN, condition grade, photos.
- Verify sellers via college email; show department and year on profiles.
- Enable private in-app chat between buyer and seller with meetup coordination.
- Show price vs MRP and condition-adjusted price guidance.
- Maintain seller ratings and a wishlist with availability alerts.
- Deliver the complete student kit: application, report, PPT and viva Q&A.;

05. Proposed Methodology

The system is developed in three stages. (1) Catalogue: listing creation with condition grading (like-new/good/fair), photo upload and ISBN-based auto-fill of title/author/edition. (2) Discovery: search by title/author/ISBN plus branch and subject filters, with wishlist alerts when a wanted book is listed. (3) Transaction: in-app chat, offer/accept flow, meetup scheduling, and post-handover rating that builds seller reputation; safety guidance is embedded at every step.

06. System Architecture / Working

A marketplace web application: responsive frontend (browse grid, detail pages, chat, seller dashboard), backend APIs for listings, search, chat and ratings over a relational database, and media storage for book photos. Access is restricted to verified campus emails. The transaction itself stays offline (cash/UPI at meetup) by design — the platform handles discovery and trust, not payments.

07. Hardware / Software Requirements

- Server: shared hosting or small VPS
- Backend: Python (Django/Flask) or Node.js with PostgreSQL/MySQL
- Frontend: HTML5, CSS3, JavaScript (mobile-first for browsing between classes)
- Media storage for listing photos
- Email service for verification and wishlist alerts

08. Expected Outcomes

A working marketplace where books can be listed, searched, discussed and marked sold.

Expected behavior: unverified users cannot list, chats stay private to the two parties, and sold listings leave browse results. Trust and safety expectations are design goals documented with the buyer-run test scenarios, not claimed as measured outcomes.

09. Applications

- Engineering and degree college campuses
- Coaching institutes and exam-prep communities (GATE/GRE guides)
- School parent communities for textbook reuse
- Department-level book banks going digital

10. Future Scope

- Escrow-style payment hold for high-value sets
- Rental model for semester-long book loans
- Price-trend analytics per title
- Donation flow for books to the department library