

Book Donation Platform

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ABSTRACT

There is a large section of society who is from a humble background and faces financial difficulties in purchasing textbooks for their regular school/college or some competitive exams. According to The Hindu, "About 20% of rural children have no textbooks at home, according to the Annual State of Education Report (ASER) survey conducted in September." According to research, nearly 4 billion trees or 35 percent of the total trees cut around the world are used in paper industries on every continent. That equates to about 2.47 million trees cut down every day.

I have proposed a web-portal based solution for the above problems. Which aims to bring book donor and book needers to the same platform to promote reuse of old books and develops a culture of reading and share.

I. INTRODUCTION

Books play a vital role in a student's life, many say "Books are our best friends" but unfortunately there are many underprivileged students who do not have access to basic books. For every academic term or semester, thousands of new textbooks are being printed, bought, and used. On the other hand, almost the same number of textbooks and course material are being discarded after its use and find its way to the garbage bins ultimately landing at the landfill site where they are being buried, compacted, and disposed of occupying the precious land area. Usually, these textbooks are not being reused or recycled generating huge quantities of paper waste. To overcome these social and environmental problems, I have proposed a platform to connect book donator with book requestors and vice versa. Book donator refers to people or organizations who want to donate their old books. Book requestor refers to people or organizations who want to

get books for their academic and reading purpose. In this paper, I have discussed a platform that will enable everyone to have a hassle-free exchange of books between book readers from their own neighborhoods. This way, paper consumption would be much lesser than otherwise, and Economically backward people can also be benefited from this platform.

II. METHODOLOGY

Existing Portals:

There are many online portals for book donations. Most of them have a similar concept which is discussed below:-

1. **www.katha.org** :
Katha helps old or gently used books to reach the hands of people who need them by donating your used books to Community Owned and Operated Libraries in Delhi.
2. **www.myPustak.com** :

MyPustak was established a few years back in Kolkata with a vision to bridge the gap between those having books and those who need books. They ask donors to pack their books on a given date and then they send their representative to collect the books from the donor's location, then they enlist books on their portal and charge transportation costs from needy people.

3. **www.bhumi.ngo :**

Bhumi is one of India's largest independent and youth volunteer nonprofit organizations. Bhumi volunteers collect books from your location and collected books used to set up the library at shelter homes.

4. **www.udayfoundation.org :**

Uday Foundation is committed to positively impacting the communities it serves by providing assistance to underprivileged children, children in hospitals, government schools, various other grass-root organizations and charities. They have a center in south Delhi, a donor needs to visit their center to donate books.

5. **www.10000books.in :**

10000books ask donors to fill a form then they send their volunteer to collect donated books at donor's location and distribute donated books with help of various Non-government organizations.

Proposed Portal:

All of the above existing portals mainly do the following points:

1. Take details of the donors.
2. Collect their donated books and store them in their centers.
3. Distribute donated books.

Executing these things on a large scale is very cumbersome and requires a lot of capital investment. To tackle this problem, I have proposed a web portal based solution in which donor just need to fill details of books which he/she wants to donate. Portal will generate an advertisement in a particular category, which contains all the valid details of the donated book filled by the donor with his contact number. If a needy person goes to a particular

category of donated books, he/she will see a list of donated books of that category in a sorted order according to the geographical distance between his location and the donor's location.

After getting an advertisement for the needed book, a needy person can contact the donor through the donor's contact number and can set a meeting according to their mutual understandings. Also a needy can generate a request for a particular book of his/her wish so that if a potential donor watches that advertisement and realizes that he has that particular book and willing to donate can contact the needy and set a meeting according to their mutual understandings.

The technology stack used to prepare the portal:

Python:

Python is an interpreted, high-level, and general-purpose programming language. Python's design philosophy emphasizes code readability with its notable use of significant whitespace.

Django:

Django is a Python-based free and open-source web framework that follows the model-template-views architectural pattern. It is maintained by the Django Software Foundation, an American independent organization established as a 501 non-profit.

HTML:

Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser.

CSS:

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.

Bootstrap:

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components

Javascript:

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm.

SQLite:

SQLite is a relational database management system contained in a C library. In contrast to many other database management systems, SQLite is not a client-server database engine. Rather, it is embedded into the end program.

III. RESULTS

The main purpose of the portal is to make books available for underprivileged students and to protect the environment by reusing old books. This portal will make a large impact on a global level and develop the culture of reading & share.

IV. DISCUSSION AND FUTURE SCOPE

This web-based portal has a significant advantage over other portals as in this working model there is no need for volunteers to provide pick and drop facility for books. Also in this proposed model, there is no need of having large stores/libraries which reduces expenses drastically. One more advantage is that the portal is not made for a particular country, in fact, it can work for all countries as we show advertisements in sorted order of user's geographical locations.

In the future, the proposed portal can have many more features such as "Exchange" which can be useful for novels and other books in which after reading a book a user can generate his advertisement for exchanging his book with any desired book and will be contacted if some other user is interested in that deal. This will promote the culture of reading and share.

REFERENCES

- [1] https://www.researchgate.net/publication/226030244_The_environmental_potential_of_reuse_Application_to_used_books
- [2] <https://www.booksarewings.org/green-literacy/>
- [3] <https://link.springer.com/article/10.1007/s11625-010-0115-z>
- [4] http://web.mit.edu/ebm/Publications/reuse_paper.pdf
- [5] <https://www.intechopen.com/books/environmental-management-in-practice/the-effects-of-paper-recycling-and-its-environmental-impact>
- [6] <https://blog.blueland.com/the-environmental-impacts-of-paper-books-vs-e-readers/>
- [7] <https://www.nwf.org/~media/PDFs/Eco-schools/McGraw%20Hill/12-4-12%20A%20Research%20Study%20on%20Textbook%20Recycling.ashx>
- [8] <https://theconversation.com/weighing-the-environmental-costs-buy-an-e-reader-or-a-shelf-of-books-8331>
- [9] <https://www.brodartbooks.com/environmental-commitment>
- [10] <https://www.conserve-energy-future.com/are-books-recyclable.php>
- [11] https://en.wikipedia.org/wiki/Environmental_impact_of_paper
- [12] <https://perfectdaytoplay.com/childrens-books-environment/>
- [13] <https://www.upcyclestudio.com.au/blogs/sustainable-living/the-environmental-social-and-personal-benefits-of-upcycling>
- [14] <https://www.epa.gov/recycle/reducing-and-reusing-basics>
- [15] <https://www.sciencedirect.com/science/article/pii/S0959652618305985>
- [16] <http://livingzerowaste.org/en/whats-more-sustainable-ebook-or-book/>
- [17] <http://livingzerowaste.org/en/whats-more-sustainable-ebook-or-book/>
- [18] <https://www.thebetterindia.com/179656/tamil-nadu-government-green-initiative-school-book-banks-india/>
- [19] <https://blog.billeasy.in/the-environmental-impact-of-paper-41d36c055ffd>
- [20] https://www.bc.edu/content/dam/files/schools/cas_sites/envstudies/pdf/Student%20Research/2015%20project%20paper/paper-2.pdf
- [21] <https://www.ecomena.org/reuse-recycling-textbooks/>
- [22] <https://recyclenation.com/2015/09/how-to-recycle-e-books/>
- [23] <https://bookscouter.com/tips/where-to-recycle-textbooks>
- [24] <https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=9041&context=theses>
- [25] <https://www.amazon.in/Environmental-Impacts-Waste-Paper-Recycling/dp/1138422967>
- [26] https://www.bookfinder.com/books/green_used_books/
- [27] <https://www.scientificamerican.com/article/environmental-problem-phone-books/>
- [28] <https://wasteadvantagemag.com/the-best-9-books-on-recycling/>
- [29] https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3739
- [30] https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3739

- [31] <https://www.nytimes.com/2006/07/09/books/review/09donadio.html>
- [32] <https://www.greenmatters.com/news/2017/09/15/1vvQRq/publishing-sustainable>
- [33] <https://www.elsevier.com/books/plastic-waste-and-recycling/letcher/978-0-12-817880-5>
- [34] <https://www.explainthatstuff.com/recycling.html>
- [35] https://www.theworldcounts.com/stories/Environmental_Impact_of_Paper_Production
- [36] <https://duesllc.wordpress.com/2017/10/05/10-ways-to-keep-books-out-of-landfills/>
- [37] <https://www.chroniclebooks.com/pages/environmental-policy>
- [38] <https://www.booksellers.org.uk/BookSellers/BizFormFiles/ff8cc188-ff92-4c1b-906c-4b60f04712bf.pdf>
- [39] <https://www.ingramspark.com/environmental-responsibilitym%20today>.

