SP23: DSCI-D532 | Website Project

Online Library Management System (OLMS)

**Team Names: Team 20** - Mustafa Alsaegh – Hemraj Yadav

# Project Summary

Our project is an online library management system that simplifies the process of managing books in a library. The system allows administrators to add new books to the library and view the available books. Additionally, administrators can delete books from the library if needed. The system makes use of a pre-existing books.csv dataset from Kaggle or manual addition of books by administrators.

## Project Description

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**Objectives:** Our aim is to create a website that will help faculty members at IU to manage existing books efficiently. The problem that we are aiming to solve is the difficulty that faculty members face in managing library books. This can be due to various reasons such as having a large number of books to manage, difficulty in keeping track of book availability, and time-consuming processes to add or remove books in their websites. Thus, our website will provide an intuitive platform for faculty members to manage their books and issue new books to students. Members can easily add new books to their library, view available books, and remove books that are no longer required. The website will also provide additional features such as search functionality and deleted books.

**Usefulness:** This project is to provide a centralized platform for managing different aspects of a library's operations. While there are several similar web sites and applications available, each with their own strengths and weaknesses, our online library management system application is designed to be user-friendly, customizable, and scalable. Our website will offer a variety of features such as indexing, easy-to-use interfaces, advanced search capabilities, real-time reporting and analytics, inventory management like additions, updates and deletions.

The target audience of our website is faculty and students. It is designed to streamline library management processes and improve user experience. By offering a user-friendly interface and automated features, we aim to simplify the day-to-day tasks of faculty and students, freeing up their time to focus on other important aspects of their work.

**Dataset:** The book.csv dataset from Kaggle consists of 45641 records (rows) and 12 attributes (columns) with different data types. The data set is shown as below

|  |  |
| --- | --- |
| Attributes (Columns) | Description |
| **bookID\*** | A distinct id number for each book (**Primary Key)** |
| title | The name under which the book was published. |
| authors | Names of the authors of the book. Multiple authors are delimited with |
| average\_rating | The average rating of the book received in total |
| isbn | The International Standard Book Number. Another distinct num to identify the book |
| isbn13 | A 13-digit ISBN, instead of the standard 11-digit ISBN, to identify the book |
| language\_code | Primary language of the book. For example, spa for Spanish and eng for English. |
| num\_pages | Total number of pages in book |
| ratings\_count | Total number of ratings the book received. |
| text\_reviews\_count | Total number of written text reviews the book received. |
| publication\_date | Date of book published |
| publisher | Name of the publisher of the book. |

This dataset is from [Goodreads API](https://www.goodreads.com/api/terms) created on May 25, 2019, and available at Kaggle. The objective of this dataset was in good faith to help bibliophiles by having a good clean dataset of books.

**Communication and Sharing:**  Project Team 20 preferred communication methods are as below

Working Sessions – Zoom (as needed)

Code Repository (GitHub) - <https://github.com/hyadav3/olms.git>

Document Sharing (One drive) - [OLMS project.docx](https://indiana-my.sharepoint.com/:w:/r/personal/malsaegh_iu_edu/Documents/OLMIS/OLMS%20project.docx?d=wb6524886e7fd4648b398965705c8e9cf&csf=1&web=1&e=CIpKN5)