Inventory System for UCC – College of Engineering Library	
Progress Report No. 1	
Course Code: CpE 201L	**Program:** BSCpE
Course Title: Data Structure and Algorithm	**Date Performed:** 09/13/2025
Section: 2A	**Date Submitted:** 09/13/2025
Team leader: Bron, Jhustine A. **Members:** Acebedo, Sebastian C. Ampong, J-Kevin L. Manongsong, Ken R.	**Instructor:** Engr. Maria Rizette H. Sayo

Discussion

Our project is a Library Inventory System designed to simplify the process of converting Excel files (containing book information) into a database and managing them efficiently. It uses SQLite as the main database, HTML and CSS for the front end, and Python (Flask and Pandas) for the back end.

The primary goal of this system is to handle large volumes of library data, particularly for the University of Caloocan City – College of Engineering. Key features include:

- A Home Page where users can easily import Excel files.
- A View Data Page that displays the imported information in an organized format.
- Built-in options to insert, delete, search, and edit records, ensuring smooth and efficient data management.

Methodology

We plan to implement a **history log function** using **queues**. The idea is to maintain a cap of **five recent actions** in the active history, while older entries are not permanently deleted. Instead, they will be stored in a queue, allowing users to review the complete history later on.

Materials and Equipment

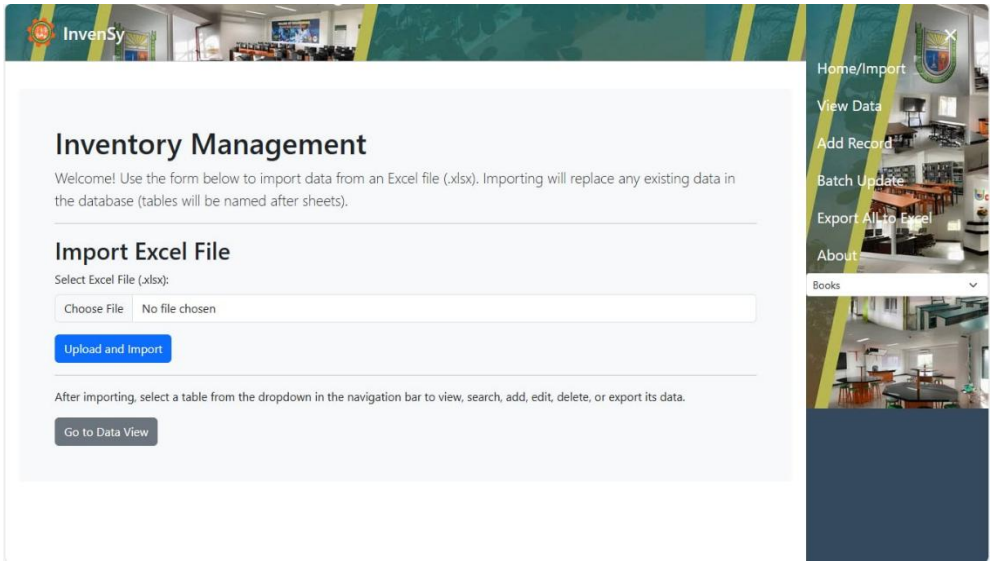
- Neobeam
- Github
- Pycharm
- Git
- Browser

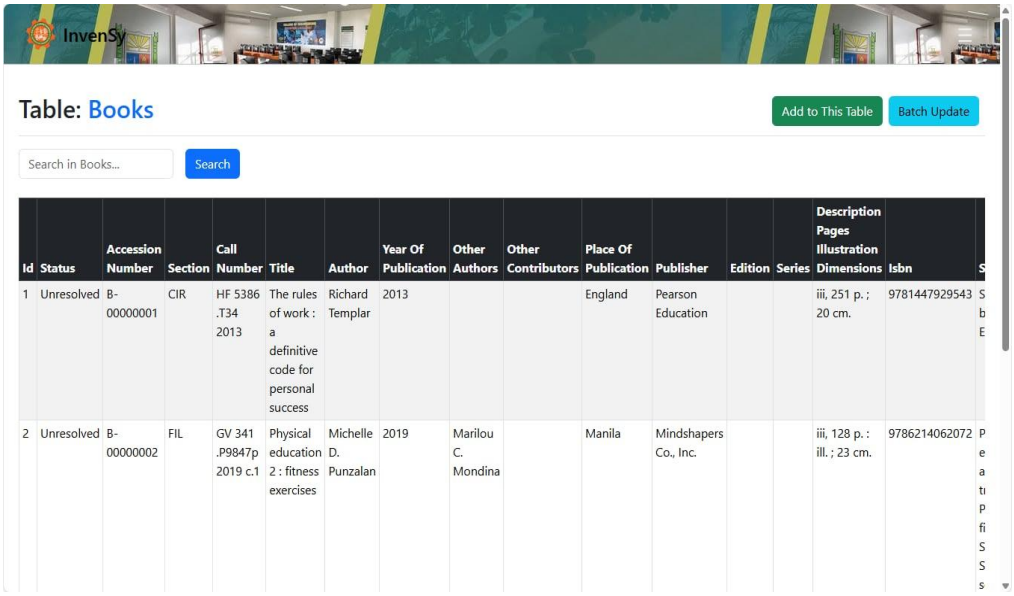
Procedure

For the implementation of the history log, we will integrate a queue structure into the system to track user actions such as insert, delete, update, and search. The queue will be designed to keep only the five

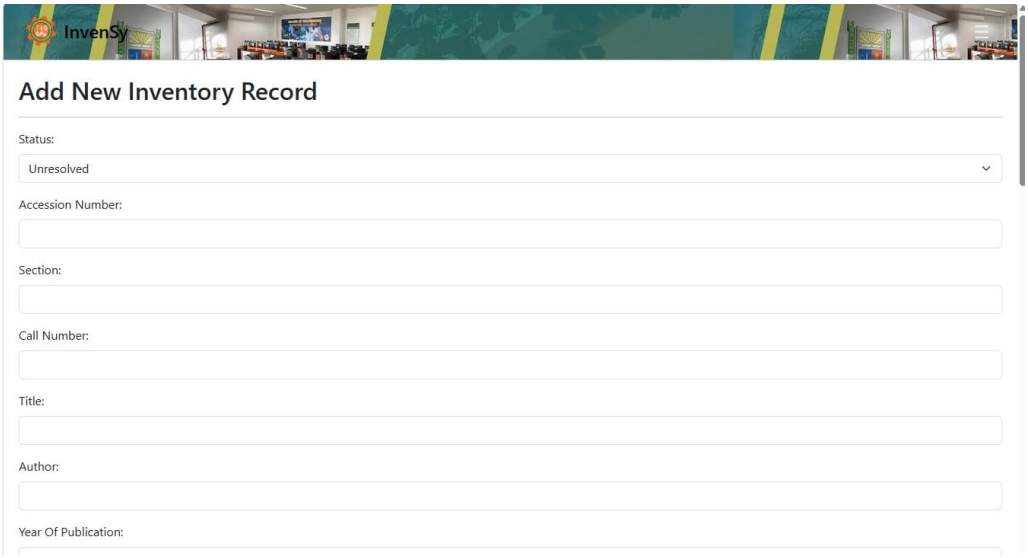
most recent actions in the active history, ensuring quick access to recent activities. Once the limit is reached, older actions will not be deleted but instead moved into another queue for long-term storage. This allows users to view both the recent and complete history of actions without overloading the main interface. The feature will be tested alongside existing functions to confirm that it records activities accurately and maintains efficiency even with continuous operations.

Final Project (Work in Progress)





Id	Status	Accession Number	Section	Call Number	Title	Author	Year Of Publication	Other Authors	Other Contributors	Place Of Publication	Publisher	Edition	Series	Description Pages Illustration Dimensions	Isbn	S
1	Unresolved	B-00000001	CIR	HF 5386 .T34 2013	The rules of work : a definitive code for personal success	Richard Templar	2013			England	Pearson Education			iii, 251 p. ; 20 cm.	9781447929543	S b E
2	Unresolved	B-00000002	FIL	GV 341 .P9847p 2019 c.1	Physical education 2 : fitness exercises	Michelle D. Punzalan	2019	Marilou C. Mondina		Manila	Mindshapers Co., Inc.			iii, 128 p. : ill. ; 23 cm.	9786214062072	P e a t P fi S S s


InvenSy
Add New Inventory Record
Status:
Unresolved
Accession Number:
Section:
Call Number:
Title:
Author:
Year Of Publication: