

WIPRO NGA Program – Python

Capstone Project Presentation –4th and 5th Sept

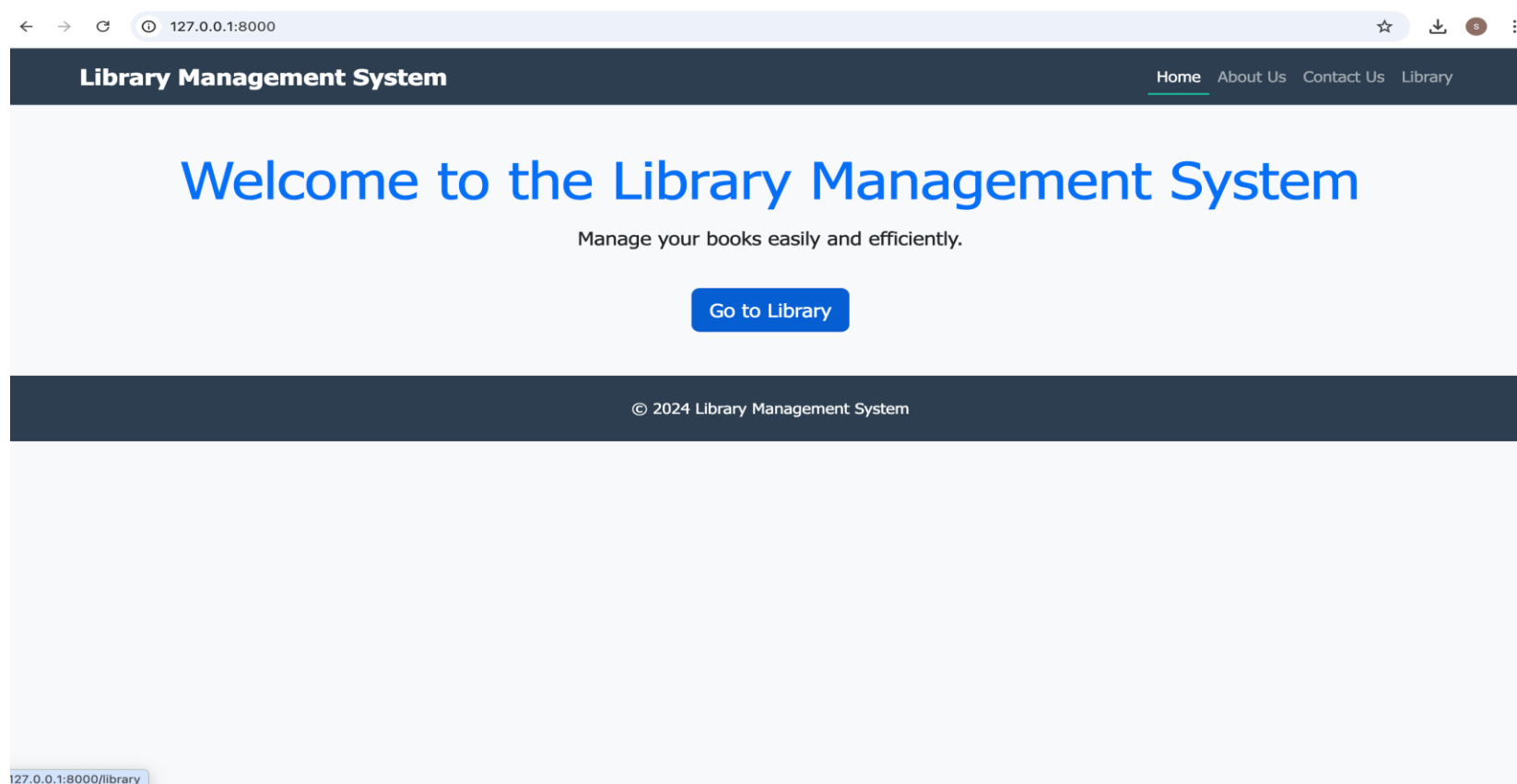
Project Title Here – Library Management System

Presented by – Sayan Sarkar

Library Management System

Built with Flask & Fast API, using SQLite3

Welcome to our Library Management System project. This project aims to create a web-based application for managing books in a library.



Project Overview

- **Web-based Library Management System**

- Features:

- Add New Books
 - Display All Books in Table

Tech Stack:

- **Backend:** Flask & Fast API
- **Database:** SQLite3
- **Frontend:** HTML + CSS

The screenshot displays the 'Library Management System' web application. The top navigation bar includes links for Home, About Us, Contact Us, and Library. The main heading is 'Welcome to the Library Management System' with the tagline 'Manage your books easily and efficiently.' and a 'Go to Library' button.

The 'Library Management' section contains an 'Add New Book' form with fields for Title, Author, and ISBN (optional, unique), and an 'Add Book' button. Below the form is a 'Books List' table.

#	Title	Author	ISBN	Actions
7	Secret 7	RS stevenson	007	Delete
6	Treasure Islands	RS stevenson	006	Delete
5	Guliver Travels	RS stevenson	005	Delete
4	Harry Potter and the Philosopher's Stone	JK rowling	004	Delete
3	Harry Potter and the Chamber of Secrets	JK rowling	003	Delete
2	Harry Potter and the Prisoner of Azkaban	JK rowling	002	Delete
1	Harry Potter and the Goblet of Fire	JK rowling	001	Delete

Using Flask

- Simple & beginner-friendly
- Good for small-scale projects
- Traditional synchronous request handling
- Well-documented & widely used

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#	Title	Author	ISBN	Actions
No books found.				

The bottom section of the screenshot shows the same "Library Management" section, but the "Books List" table is populated with data:

#	Title	Author	ISBN	Actions
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Using Fast API

- Modern & high-performance
- Built-in async support (faster I/O operations)
- Auto API docs with Swagger & Re Doc
- Suitable for scalable applications

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Library Management System

Home About Us Contact Us Library

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Performance Comparison: Flask vs Fast API

- Fast API: Faster, async, scalable
- Flask: Slower, but simpler for beginners
- Both work well with SQLite3

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Conclusion

- Both frameworks can implement the project
- Flask: easy for rapid prototyping
- Fast API: better long-term for performance

