

EXPERIMENT – 5

Create a simple cloud software application for Library book reservation system for SIMATS library using any Cloud Service Provider to demonstrate SaaS.

AIM:

The aim of this project is to design and deploy a **Library Book Reservation System** for the **SIMATS Library** as a **Software as a Service (SaaS)** application using a cloud service provider. The system allows students and staff to search books, reserve them online, and manage library records through a web-based platform.

ALGORITHM:

1. Create an account and log in to the cloud service provider.
2. Create a new application named **SIMATS Library Book Reservation System**.
3. Design forms for book details, user information, and reservation details.
4. Store book information such as title, author, category, and availability status.
5. Allow users to search books using title or author name.
6. Enable online book reservation and update availability status.
7. Validate user details and confirm reservations.
8. Store all data securely in the cloud database.
9. Deploy the application on the cloud platform.
10. Provide access to users through a web browser as a SaaS application.

INPUT:

1.Book

Details

The screenshot shows a web browser with the URL `creatorapp.zoho.in/siddarta/library-book-reservation-system/Form:Book_Details`. The page title is "Library Book Reservation System". The left sidebar has a dark blue background with white text and icons. The main content area is titled "Book Details" and contains a form with the following fields:

Field	Value
Book ID	19231111
Book Title	How To Manifest Anything
Author	Siddu
Genre	Reference
ISBN	1234
Total Copies	2
Available Copies	5
Status	Available

At the bottom of the form is a blue "Submit" button. The bottom of the sidebar shows a user profile for "Macherla Sidd..." with a star icon and a bell icon.

2.Member Details

The screenshot shows the same web browser with the URL `creatorapp.zoho.in/siddarta/library-book-reservation-system/Form:Member_Details`. The page title is "Library Book Reservation System". The left sidebar is the same as in the previous screenshot. The main content area is titled "Member Details" and contains a form with the following fields:

Field	Value
Member ID	192311378
Name	Macherla Siddarta
Email	siiddarta@gmail.com
Phone Number	+91 08555020921
Department/Course	CSE
MemberShip Status	Active

At the bottom of the form is a blue "Submit" button. The bottom of the sidebar shows the same user profile for "Macherla Sidd...".

3.Book Reservation Details

Library Book Reservation System

Book Reservation

Reservation ID: 19231111

Book Details: 19231111

Member Details: Macherla Siddarta

Reservation Date: 19-Dec-2025 14:15:42

Return Date: 22-Dec-2025 14:47:24

Status: Reserved

Submit

Output:

1.Book Details

Library Book Reservation System

All Book Details

Book ID	Book Title	Author
19231111	How To Manifest Anything	Siddu

Showing 1 of 1

Book ID: 19231111

Book Title: How To Manifest Anything

Author: Siddu

Genre: Reference

Available Copies: 5

Status: Available

ISBN: 12345

Total Copies: 2

Add a comment

2.Member Details

The screenshot displays the 'All Member Details' report in the Library Book Reservation System. The interface includes a sidebar with navigation options: Book Details, Member Details (selected), and Book Reservations. The main content area shows a table with one member's details. A modal window on the right provides a detailed view of the selected member's information.

Member ID	Name	Email
192311378	Macherla Siddarta	sliddarta@gmail.com

Member ID	192311378
Name	Macherla Siddarta
Email	sliddarta@gmail.com
Phone Number	+918555020921
Department/Course	CSE
Membership Status	Active

Showing 1 of 1

3.Book Reservation Details

The screenshot displays the 'All Book Reservations' report in the Library Book Reservation System. The interface includes a sidebar with navigation options: Book Details, Member Details, and Book Reservations (selected). The main content area shows a table with one reservation's details. A modal window on the right provides a detailed view of the selected reservation's information.

Reservation ID	Book Details	Member Details	Reservation Date
19231111	19231111	Macherla Siddarta	19-Dec-2025

Reservation ID	19231111
Book Details	19231111
Member Details	Macherla Siddarta
Reservation Date	19-Dec-2025 14:15:42
Return Date	22-Dec-2025 14:15:46
Days Reserved	259204000
Status	Reserved

Showing 1 of 1

Result:

The Library Book Reservation System for SIMATS Library was successfully developed and deployed as a SaaS application. Users can search and reserve books online with secure, anytime access through the cloud.

