

## **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-based application for managing library book reservations. The main title bar reads "siiddarta - Library Book Res..." and "GitHub Dashboard". A trial notice at the top right says "Trial expires in 14 days" with an "Upgrade" button. The left sidebar has a dark theme with white text and icons. It includes sections for "Book Details" (selected), "All Book Details", "Member Details", and "Book Reservations". The main content area is titled "Book Details" and contains the following fields:

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

A blue "Submit" button is located at the bottom of the form.

## 2.Member Details

This screenshot shows the Member Details form within the same application. The sidebar and top navigation are identical to the previous screenshot. The main content area is titled "Member Details" and contains the following fields:

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

A blue "Submit" button is located at the bottom of the form.

## 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

All Book Details

Book ID	Book Title	Author
19231111	How To Manifest Anything	Siddu

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 shows a web-based application titled "Library Book Reservation System". The main content area displays "All Member Details" with one record listed:

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

At the bottom left, there is a profile picture of Macherla Siddarta and the text "Showing 1 of 1".

## 3.Book Reservation Details

The screenshot shows a web-based application titled "Library Book Reservation System". The main content area displays "All Book Reservations" with one record listed:

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

At the bottom left, there is a profile picture of Macherla Siddarta and the text "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.

