

SIMATS LIBRARY RESERVATION SYSTEM

EXPERIMENT -5

AIM:

To create a simple cloud software application for the Library Book Reservation System for SIMATS Library using a Cloud Service Provider to demonstrate Software as a Service (SaaS).

PROCEDURE:

1. Go to <https://creator.zoho.com> on your browser.
 - If you already have a Zoho account, click Sign In.
 - If not, click Sign Up Now and register for a new account.
2. Once logged in, you'll be redirected to your Zoho Creator dashboard. Click on “Create New App” to begin.
3. Select “Create from Scratch”, then give your application a name like SIMATS Library Reservation System and click Create.
4. In the app workspace, click Create New Form. You'll need to build three main forms:
 - **Book Catalog Form** – to add and manage book listings.
 - Student Reservation Form – for students to request/reserve books.
 - **Reservation Status Form** – to track the approval or rejection of reservations.
5. Use the form builder to add the required fields by dragging and dropping:
 - **Book Catalog Form:**
Book ID, Book Title, Author, Category, ISBN, Number of Copies, Availability Status.

- **Student Reservation Form:**
Reservation ID, Student Name, Register Number, Book (lookup from Book Catalog), Reservation Date.
 - **Reservation Status Form:**
Reservation ID (lookup), Status (Reserved / Issued / Cancelled), Issue Date, Return Date, Remarks.
6. Click Done to save each form once fields are added and arranged properly.
 7. Zoho Creator automatically generates Reports for each form. These reports provide tabular views to manage data.
 8. Configure Workflows and Automation (optional):
 - Use Deluge script to reduce book count after issuing.
 - Trigger alerts for return reminders.
 - Auto-update book availability.
 9. Set User Roles and Permissions:
 - Librarian/Admin: Full access to book records and reservations.
 - Student: Can reserve books and view their reservation status.
 10. Click on Access this Application to preview the system.
Test it by entering sample books, student reservations, and status updates.
 11. To demonstrate SaaS, share the app via public URL or email. This allows multi-user access from any device with internet access, without software installation.

FORM 1:

Reservation

User

-Select-

Book

-Select-

Reservation Date

dd-MMM-yyyy HH:mm:ss

Return Date

dd-MMM-yyyy HH:mm:ss

Status

Available

Reserved

Other

Submit

Reset

All Reservations

		User	Book	Reservation Date	Return Date	Status
			Pride and Prejudice	30-Jul-2025 13:00:00	30-Jul-2025 21:00:00	Reserved
			Harry Potter and the Philosopher's Stone	30-Jul-2025 12:00:00	30-Jul-2025 20:00:00	Available
			The Catcher in the Rye	30-Jul-2025 11:00:00	30-Jul-2025 19:00:00	Available
			The Great Gatsby	30-Jul-2025 10:00:00	30-Jul-2025 18:00:00	Reserved
			The Catcher in the Rye	30-Jul-2025 09:00:00	30-Jul-2025 17:00:00	Available

FORM 2:

Book

Title

Author

Subject

-Select-

Publication Date

dd-MMM-yyyy HH:mm:ss

Publisher

Isbn

#####

Edition

#####

Price

#####.##

☐ Available

☐ Reserved

Submit

Reset

All Books

Q

+

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<div><div><div></div></div></div>	Title	Author	Subject	Publication Da...	Publisher	Isbn	Edition	Price	Av
<input type="checkbox"/>	Pride and Prejudice	Jane Austen	ComputerScience	30-Jul-2025 14:00:00	T. Egerton	3333333333333	5	\$ 10.99	tru
<input type="checkbox"/>	The Catcher in the Rye	J.D. Salinger	Chemistry	30-Jul-2025 13:00:00	Little, Brown and Company	2222222222222	4	\$ 16.99	tru
<input type="checkbox"/>	To Kill a Mockingbird	Harper Lee	Physics	30-Jul-2025 12:00:00	J.B. Lippincott & Co.	1111111111111	3	\$ 12.99	tru
<input type="checkbox"/>	The Great Gatsby	F. Scott Fitzgerald	Chemistry	30-Jul-2025 11:00:00	Charles Scribner's Sons	9876543210987	2	\$ 14.99	tru
<input type="checkbox"/>	Harry Potter and the Philosopher's Stone	J.K. Rowling	Physics	30-Jul-2025 10:00:00	Bloomsbury Publishing	1234567890123	1	\$ 19.99	tru

FORM 3:

User

Name

First Name

Email

Phone Number

+91

81234 56789

Address

Address Line 1

Password

Role

-Select-

Submit

Reset

All Users

<div><div></div></div>	Name	Email	Phone Number	Address	Password	Role
<input type="checkbox"/>	Benjamin White	benjaminwhite@gmail.com	+18435773185	654 Elm St	ReadAllDay	Admin
<input type="checkbox"/>	Isabella Hall	isabellahall@gmail.com	+17855588293	123 Main St	Password123	Admin
<input type="checkbox"/>	Alexander Kim	alexanderkim@gmail.com	+19489513204	321 Pine St	Bookworm123	Admin
<input type="checkbox"/>	Olivia Lee	olivialeee@gmail.com	+17312506214	789 Oak St	ILoveReading	Admin
<input type="checkbox"/>	Emily Wilson	emilywilson@gmail.com	+19894454044	456 Maple St	MySecret123	Member

RESULT:

Thus, the Library Book Reservation System cloud software application for SIMATS Library was successfully developed and deployed using Zoho Creator. The application was tested and verified for proper functionality. It demonstrated the key features of Software as a Service (SaaS), allowing users to access and manage book reservations over the internet in real-time.