

Python & SQL Portfolio

# SAT

## LYBRARY MANAGEMENT SYSTEM

Stefanus Yudi Irwan – July, 24th 2022



# SAT

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## LYBRARY MANAGEMENT SYSTEM

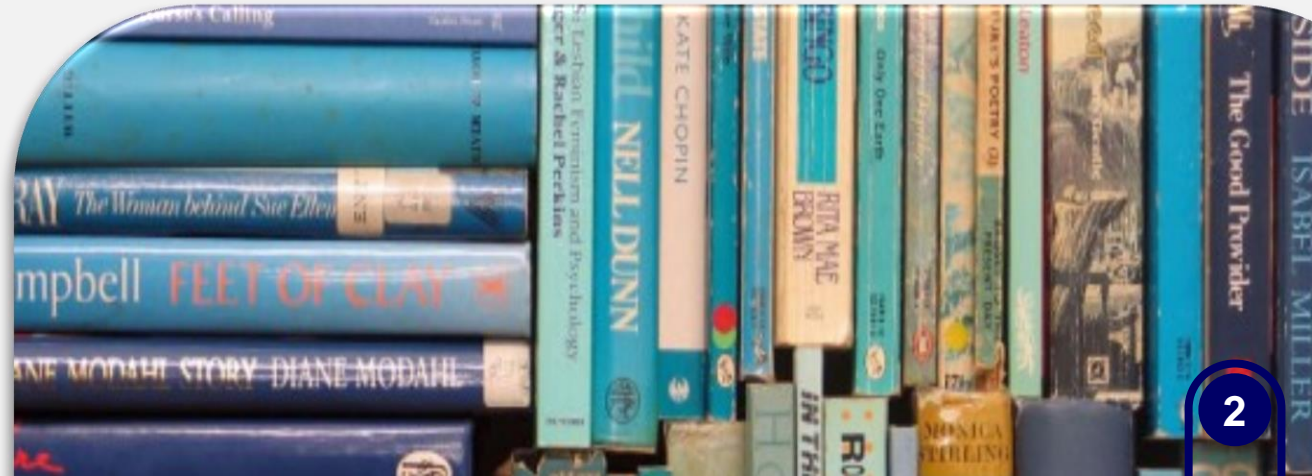


SAT Library Management System is an application for helping librarians **manage the library**. This app was designed using **Python** and **MySQL**.

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# OUTLINE

- **Goals**
- **Project Steps**
- **Application Architecture**
- **Application Menu**
- **Source Code**



# Goals

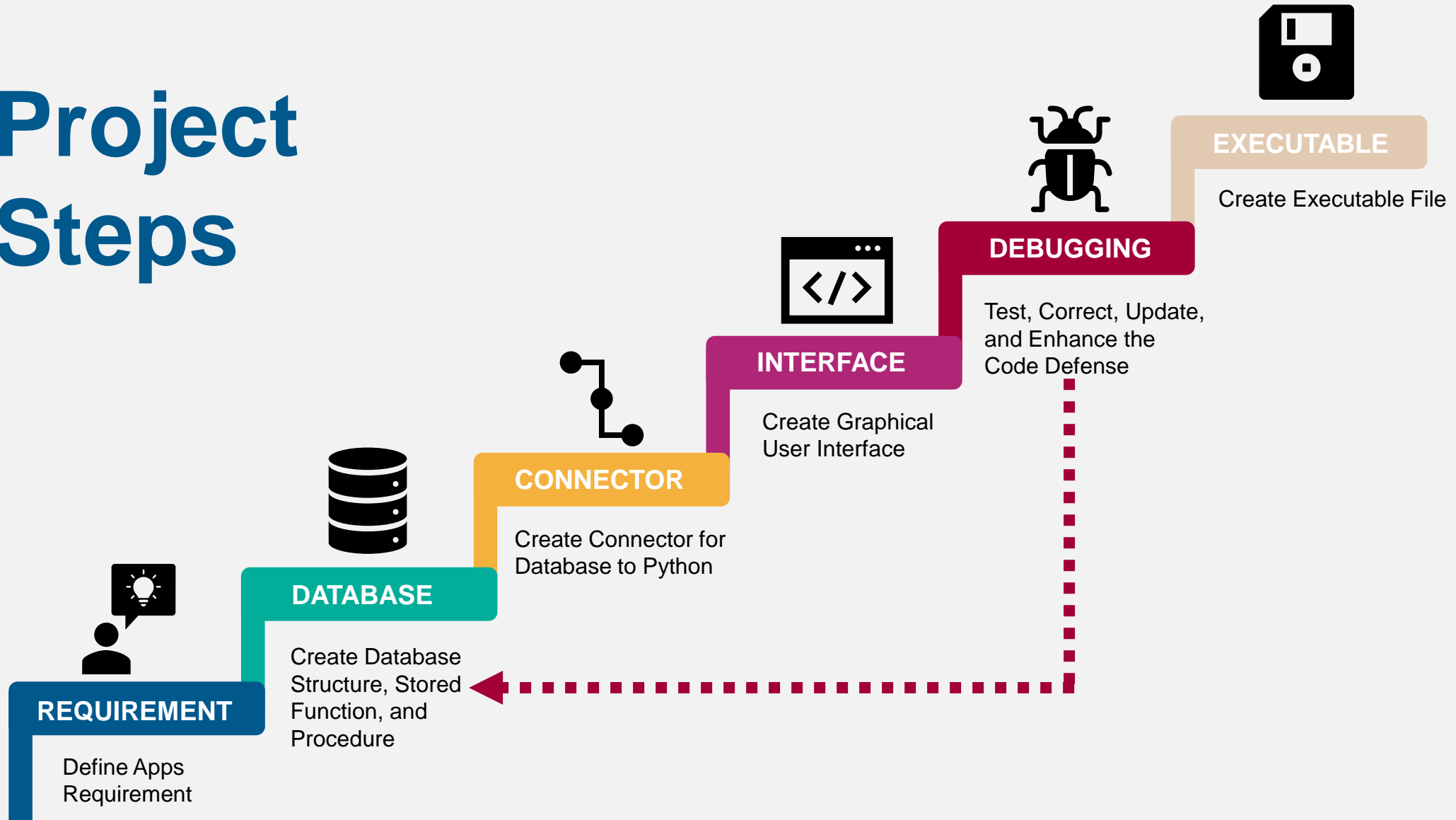


# Project Goals

1. Help Librarian **manage** library **data** through apps
2. Design **database** for managing and storing library data
3. Design **GUI** features to interact with the library database

# Project Steps

# Project Steps





# Application Architecture



# Building Block

Goals

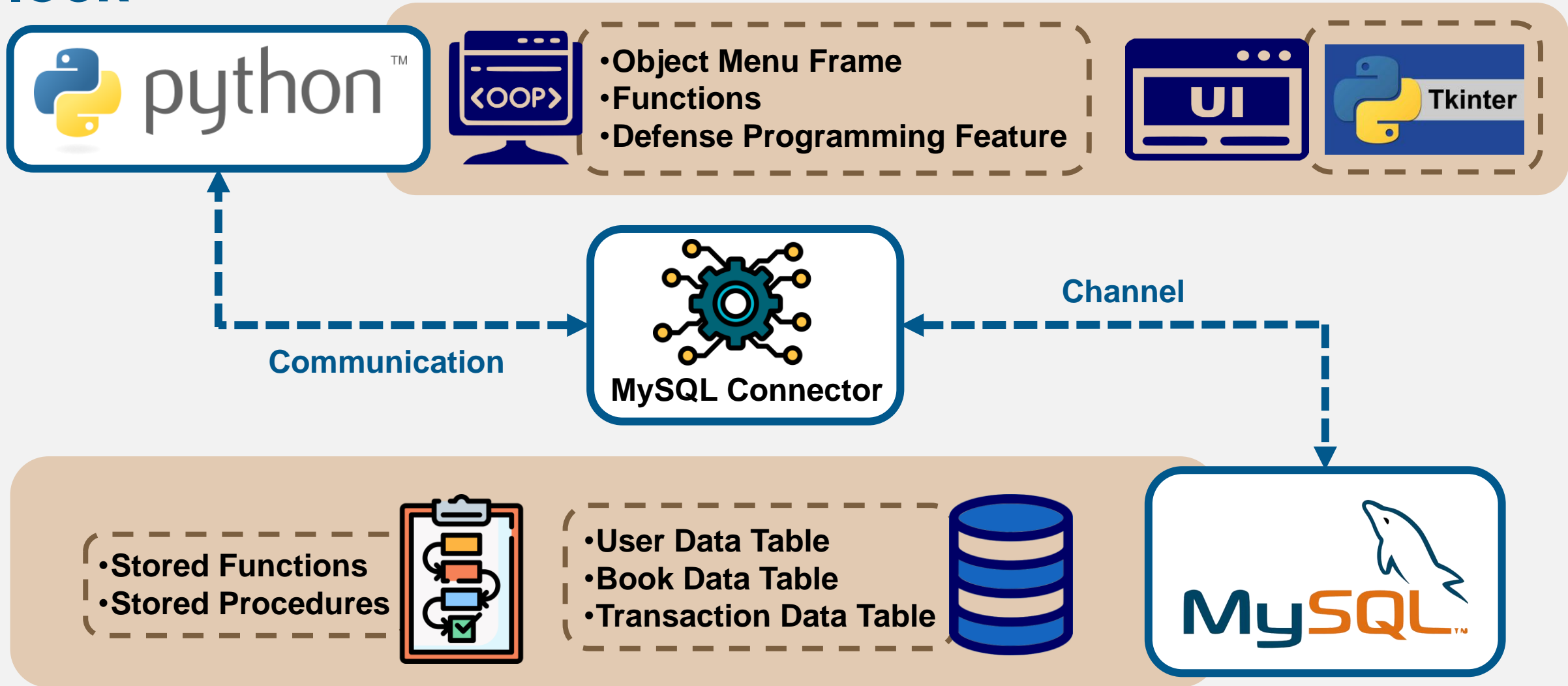
Project Steps

Application Architecture

Application Menu

Source Code

Pacmann



# Application Menu



The screenshot shows a window titled "Library Management System" with a close button. Inside, the "SAT LYBRARY MANAGEMENT SYSTEM" logo is at the top. Below it, there are two input fields: "Database User Name :" with the text "root" and "Database User Password :" with masked characters "\*\*\*\*\*". A "Log In" button is located at the bottom right of the form area.

## Login Page

Require local database username and password

## Main Page

Contain all menus for the application



The screenshot shows a window titled "Library Management System" with a close button. Inside, the "SAT LYBRARY MANAGEMENT SYSTEM" logo is at the top. Below the logo is a grid of buttons for application functions:

New User Registration		New Book Registration	
Show List of User	Show List of Book	Show List of Loan	Show List of Return
Search User		Search Book	
Loan Book	Return Book	Clear User	Log Off

## New User Registration

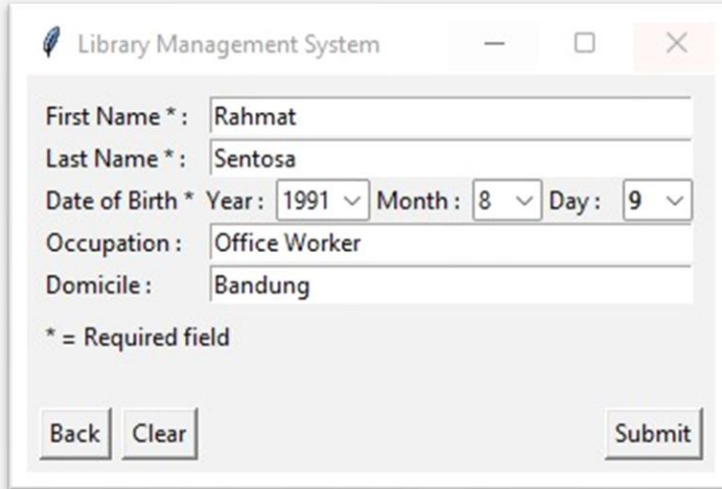
Input data for library new member

## New Book Registration

Input data for library new book

## Clear Member

Clear a member from the library



Library Management System

First Name \* : Rahmat

Last Name \* : Sentosa

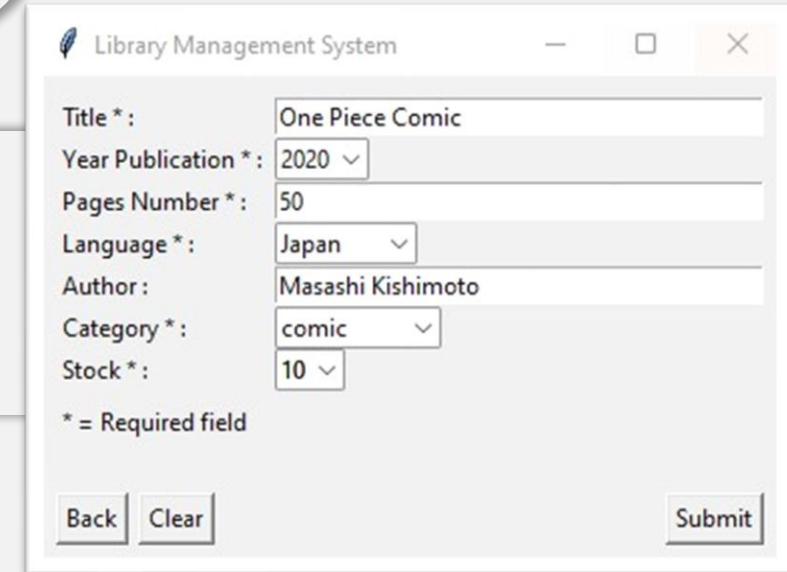
Date of Birth \* Year : 1991 Month : 8 Day : 9

Occupation : Office Worker

Domicile : Bandung

\* = Required field

Back Clear Submit



Library Management System

Title \* : One Piece Comic

Year Publication \* : 2020

Pages Number \* : 50

Language \* : Japan

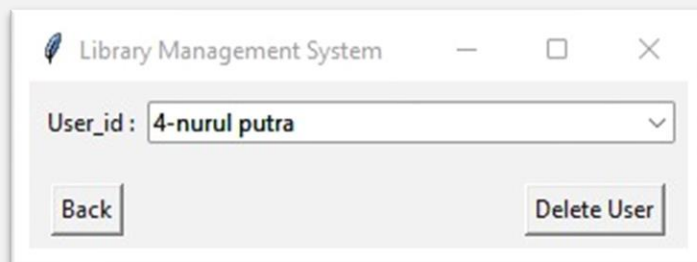
Author : Masashi Kishimoto

Category \* : comic

Stock \* : 10

\* = Required field

Back Clear Submit



Library Management System

User\_id : 4-nurul putra

Back Delete User



Library Management System

id_user	first_name	last_name	date_of_birth	occupation	domicile	registration_date
1	ahmad	hussain	1996-05-16	office worker	bandung	2022-07-24 08:38:41
2	ilham	budi	1992-04-22	mine workter	tebet	2022-07-24 08:38:41
3	ratih	pratiwi	1988-07-24	house wife	depek	2022-07-24 08:38:41
4	nurul	putra	1997-11-21	student	semarang	2022-07-24 08:38:41
5	wulandari	kartika	1967-09-12	banker	cimahi	2022-07-24 08:38:41
6	anita	handayani	2008-11-01	sales	soreang	2022-07-24 08:38:41
7	retno	kurnia	2005-12-25	teacher	andir	2022-07-24 08:38:41
8	agustina	amalia	2000-05-24	mechanic	sleman	2022-07-24 08:38:41
9	intan	maya	1999-01-06	programmer	karanganyar	2022-07-24 08:38:41
10	widya	ade	1989-08-13	service cleaner	BSD	2022-07-24 08:38:41
11	surya	hidayat	1966-07-15	athlete	surabaya	2022-07-24 08:38:41
12	diana	nur	2010-09-15	marketer	gunung kidul	2022-07-24 08:38:41
13	novi	anggraini	2007-04-23	researcher	cimindi	2022-07-24 08:38:41
14	irma	astuti	1987-12-01	farmer	lembang	2022-07-24 08:38:41
15	aulia	saputra	1999-09-11	office worker	purwakarta	2022-07-24 08:38:41
16	eva	amelia	2003-02-09	stident	cirebon	2022-07-24 08:38:41
17	hidayat	saputra	2005-04-16	mechanic	kuningan	2022-07-24 08:38:41
18	setiawan	arief	1997-06-28	office worker	jakarta selatan	2022-07-24 08:38:41
19	wahyuni	munaroh	1976-06-22	constructor	serpong	2022-07-24 08:38:41
20	bagus	eko	2009-06-07	architec	rangkasbitung	2022-07-24 08:38:41

Back

## Show Member List

Show member data : member id, name, birth, occupation, domicile, and registration date

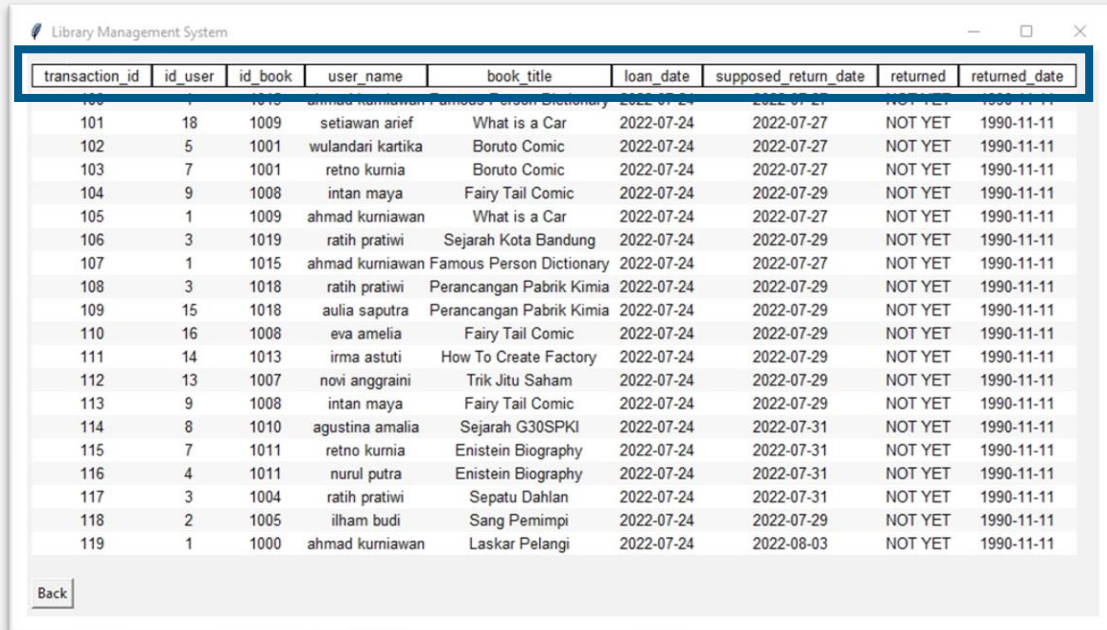
## Show Book List

Show book data : book id, title, year published, pages, language, author, category, and stock inside the library

Library Management System

id_book	title	year_published	pages	language	author	category	stock
1001	Boruto Comic	2021	50	Japan	Masashi Kishimoto	comic	13
1002	One Piece Comic	2021	59	Japan	Oda Sensei	comic	15
1003	Harry Potter and The Order Of The Phoenix	2003	1000	English	JK Rowling	novel	1
1004	Sepatu Dahlan	2015	369	Bahasa	Tiar Yuniar	novel	2
1005	Sang Pemimpi	2003	248	Bahasa	Nurul Padmasari	novel	1
1006	Ensiklopedia Luar Angkasa	2010	258	English	Space Station	encyclopedia	10
1007	Trik Jitu Saham	2019	100	Bahasa	Vanya Farida	magazine	8
1008	Fairy Tail Comic	1986	255	Japan	Yulia Purwanti	comic	9
1009	What is a Car	1989	59	Deutch	Karimah Wijayanti	scientific	23
1010	Sejarah G30SPKI	2006	309	Bahasa	Uchita Wulandari	history	9
1011	Enistein Biography	2008	485	English	Padmi Hariyah	biography	3
1012	Hari itu Kelam	2009	256	English	Lurhur Waluyo	novel	1
1013	How To Create Factory	2017	126	Japan	Vicky Yuniar	thesis	1
1014	Tesla Biography	2015	453	Deutch	Nilam Puspita	biography	5
1015	Famous Person Dictionary	1989	55	English	Legawa Utama	dictionary	14
1016	Marvel Comic	1996	259	English	Indah Prastuti	comic	30
1017	Biografi Dahlan Iskan	2009	357	Bahasa	Lukita Tamba	biography	9
1018	Perancangan Pabrik Kimia	2021	155	Bahasa	Siti Kuswandari	thesis	23
1019	Sejarah Kota Bandung	2018	173	Bahasa	Faizah Yulianti	history	12

Back



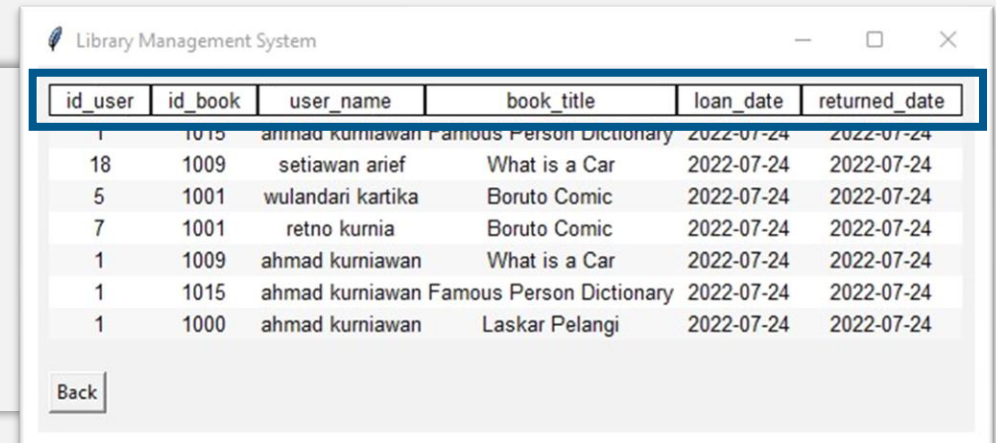
transaction_id	id_user	id_book	user_name	book_title	loan_date	supposed_return_date	returned	returned_date
100	1	1015	ahmad kurniawan	Famous Person Dictionary	2022-07-24	2022-07-27	NOT YET	1990-11-11
101	18	1009	setiawan arief	What is a Car	2022-07-24	2022-07-27	NOT YET	1990-11-11
102	5	1001	wulandari kartika	Boruto Comic	2022-07-24	2022-07-27	NOT YET	1990-11-11
103	7	1001	retno kurnia	Boruto Comic	2022-07-24	2022-07-27	NOT YET	1990-11-11
104	9	1008	intan maya	Fairy Tail Comic	2022-07-24	2022-07-29	NOT YET	1990-11-11
105	1	1009	ahmad kurniawan	What is a Car	2022-07-24	2022-07-27	NOT YET	1990-11-11
106	3	1019	ratih pratiwi	Sejarah Kota Bandung	2022-07-24	2022-07-29	NOT YET	1990-11-11
107	1	1015	ahmad kurniawan	Famous Person Dictionary	2022-07-24	2022-07-27	NOT YET	1990-11-11
108	3	1018	ratih pratiwi	Perancangan Pabrik Kimia	2022-07-24	2022-07-29	NOT YET	1990-11-11
109	15	1018	aulia saputra	Perancangan Pabrik Kimia	2022-07-24	2022-07-29	NOT YET	1990-11-11
110	16	1008	eva amelia	Fairy Tail Comic	2022-07-24	2022-07-29	NOT YET	1990-11-11
111	14	1013	irma astuti	How To Create Factory	2022-07-24	2022-07-29	NOT YET	1990-11-11
112	13	1007	novi anggraini	Trik Jitu Saham	2022-07-24	2022-07-29	NOT YET	1990-11-11
113	9	1008	intan maya	Fairy Tail Comic	2022-07-24	2022-07-29	NOT YET	1990-11-11
114	8	1010	agustina amalia	Sejarah G30SPKI	2022-07-24	2022-07-31	NOT YET	1990-11-11
115	7	1011	retno kurnia	Enistein Biography	2022-07-24	2022-07-31	NOT YET	1990-11-11
116	4	1011	nurul putra	Enistein Biography	2022-07-24	2022-07-31	NOT YET	1990-11-11
117	3	1004	ratih pratiwi	Sepatu Dahlan	2022-07-24	2022-07-31	NOT YET	1990-11-11
118	2	1005	ilham budi	Sang Pemimpi	2022-07-24	2022-07-29	NOT YET	1990-11-11
119	1	1000	ahmad kurniawan	Laskar Pelangi	2022-07-24	2022-08-03	NOT YET	1990-11-11

## Show Loan List

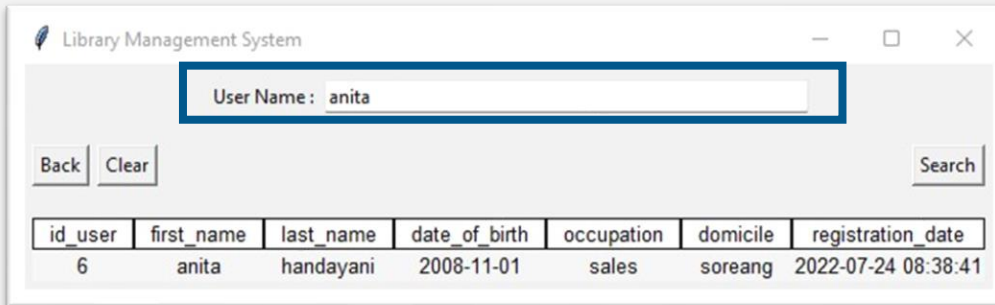
Shows book loan data : transaction id, id user, id book, user name, book title, loan date, supposed return date, and return status

## Show Return List

Shows book return data : user id, id book, user name, book title, loan date, and returned date



id_user	id_book	user_name	book_title	loan_date	returned_date
1	1015	ahmad kurniawan	Famous Person Dictionary	2022-07-24	2022-07-24
18	1009	setiawan arief	What is a Car	2022-07-24	2022-07-24
5	1001	wulandari kartika	Boruto Comic	2022-07-24	2022-07-24
7	1001	retno kurnia	Boruto Comic	2022-07-24	2022-07-24
1	1009	ahmad kurniawan	What is a Car	2022-07-24	2022-07-24
1	1015	ahmad kurniawan	Famous Person Dictionary	2022-07-24	2022-07-24
1	1000	ahmad kurniawan	Laskar Pelangi	2022-07-24	2022-07-24



Library Management System

User Name:

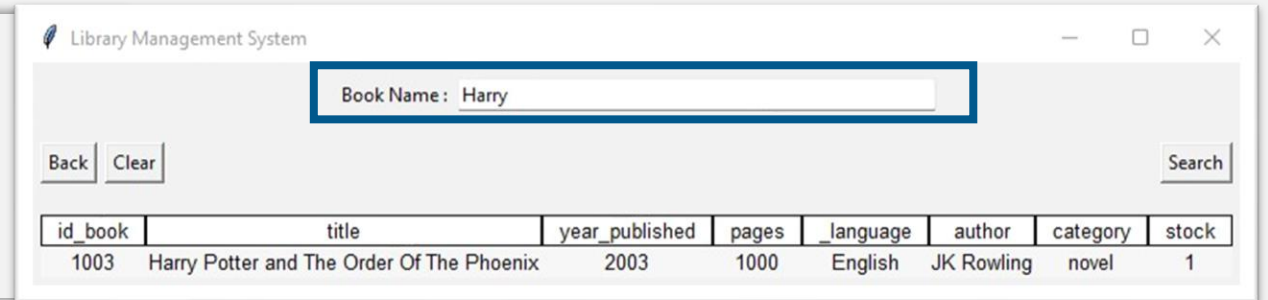
id_user	first_name	last_name	date_of_birth	occupation	domicile	registration_date
6	anita	handayani	2008-11-01	sales	soreang	2022-07-24 08:38:41

## Search User by Name

Input user name, then shows the user data saved in database

## Search Book by Title

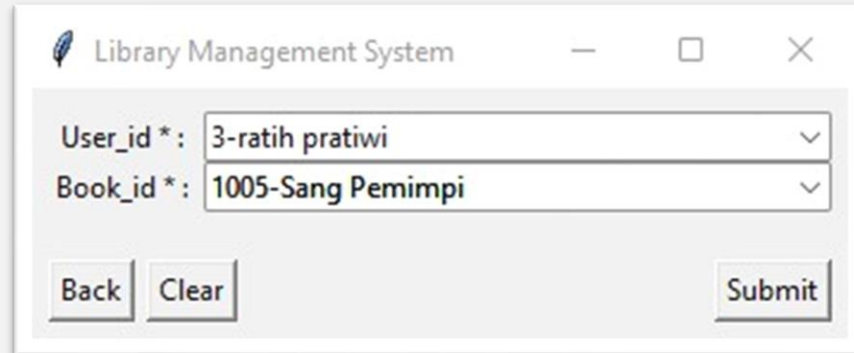
Input book title, then shows the book data saved in database



Library Management System

Book Name:

id_book	title	year_published	pages	_language	author	category	stock
1003	Harry Potter and The Order Of The Phoenix	2003	1000	English	JK Rowling	novel	1



Library Management System

User\_id \*: 3-ratih pratiwi

Book\_id \*: 1005-Sang Pemimpi

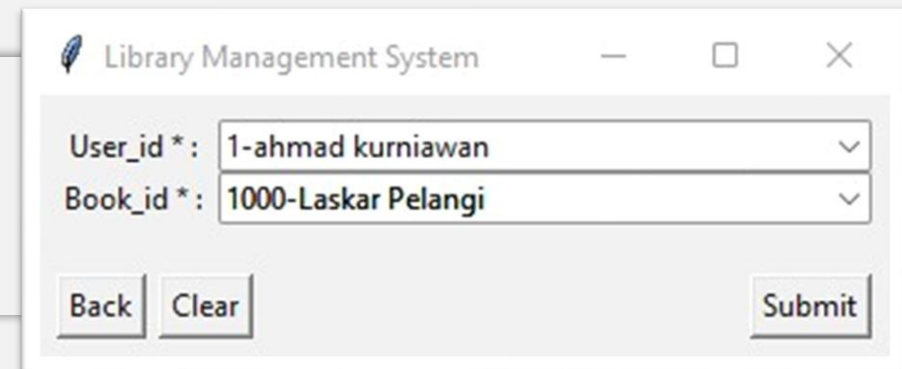
Back Clear Submit

## Loan Book

Input data to loan books from the library

## Return Book

Input data to return books back to the library



Library Management System

User\_id \*: 1-ahmad kurniawan

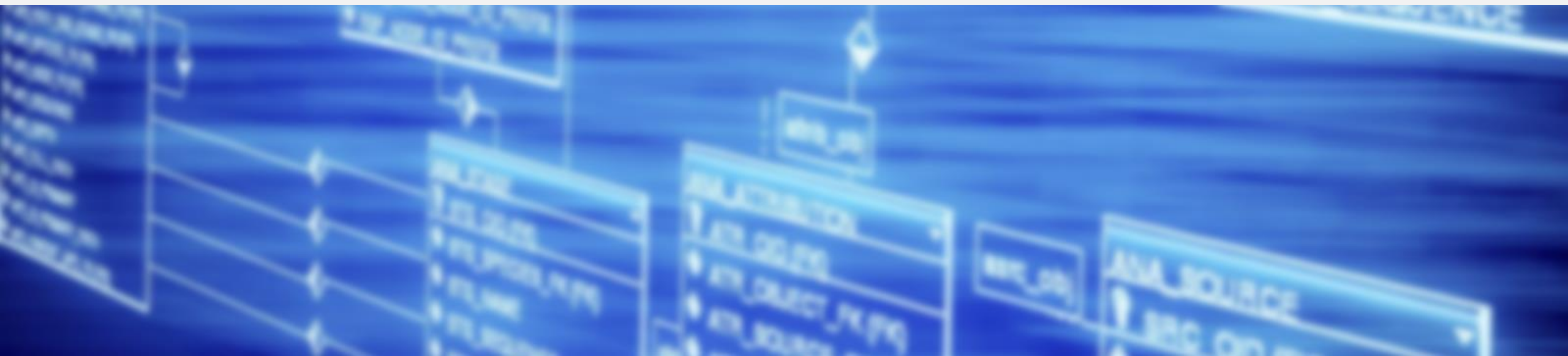
Book\_id \*: 1000-Laskar Pelangi

Back Clear Submit





# Source Code





<https://github.com/StefanusYudi22/Library-Management-System>

## Important Files



[lib-management-gui-app.py](#)



[connect\\_mysql.py](#)



[library-management-db.sql](#)

Thank You





# CERTIFICATE OF COMPLETION

Has Been Awarded To

**Stefanus Yudi Irwan**

for successfully completing  
**Introduction to Python & Python for  
Software Engineering**

*May 16, 2022 - July 17, 2022*



**Adityo Sanjaya**  
CEO Pacmann

SIGNATURE: 10/08/2022



**Verifikasi Sertifikat**

<https://sertifikat.pacmann.ai/innv/VVM2Ambx0z>





# CERTIFICATE OF COMPLETION

Has Been Awarded To

**Stefanus Yudi Irwan**

for successfully completing  
**Shell Tooling & SQL**  
*May 16, 2022 - July 17, 2022*



**Adityo Sanjaya**  
CEO Pacmann

SIGNATURE: 10/08/2022



**Verifikasi Sertifikat**  
<https://sertifikat.pacmann.ai/okpWQLFWleUHgIK>

## Reach me for further discussion



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<https://www.linkedin.com/in/stefanusyudi22>