

LIBRARY INFORMATION SYSTEM

Developed by *Coding Connoisseurs*

ABOUT

With the increase in the number of readers and in the number of books, better management systems of libraries are required. The **Library Information System** focuses on improving the management of a Library, particularly in a university.

The integrated Library Information System provides you the ease of *issuing, returning, or reserving* a book from a Library within your campus through a simple application. The Library Information System focuses on the most fundamental tasks concerning a Library, alongside several other features that come in very handy in managing hundreds of thousands of books in a typical Library.

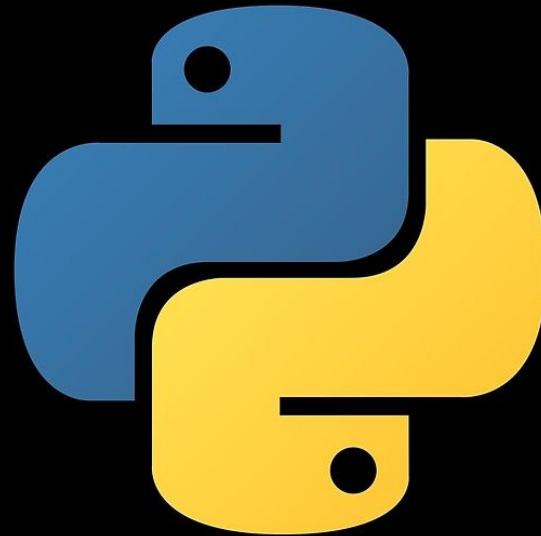
SDLC & IMPLEMENTATION

PRACTICES, TOOLS & TECHNIQUES

- ITERATIVE SDLC MODEL
- CRYPTOGRAPHY & HASHING
- THREADING
- MySQL DATABASE DRIVERS
- GRAPHICAL USER INTERFACE

WHY PYTHON?

```
def test_three_should_return_Fizz(result = fizzBuzz.fizzBuzz(3)):  
    assert result == 'Fizz'  
  
def test_five_should_return_Buzz(result = fizzBuzz.fizzBuzz(5)):  
    assert result == 'Buzz'  
  
def test_fifteen_should_return_FizzBuzz(result = fizzBuzz.fizzBuzz(15)):  
    assert result == 'FizzBuzz'
```



CHALLENGES

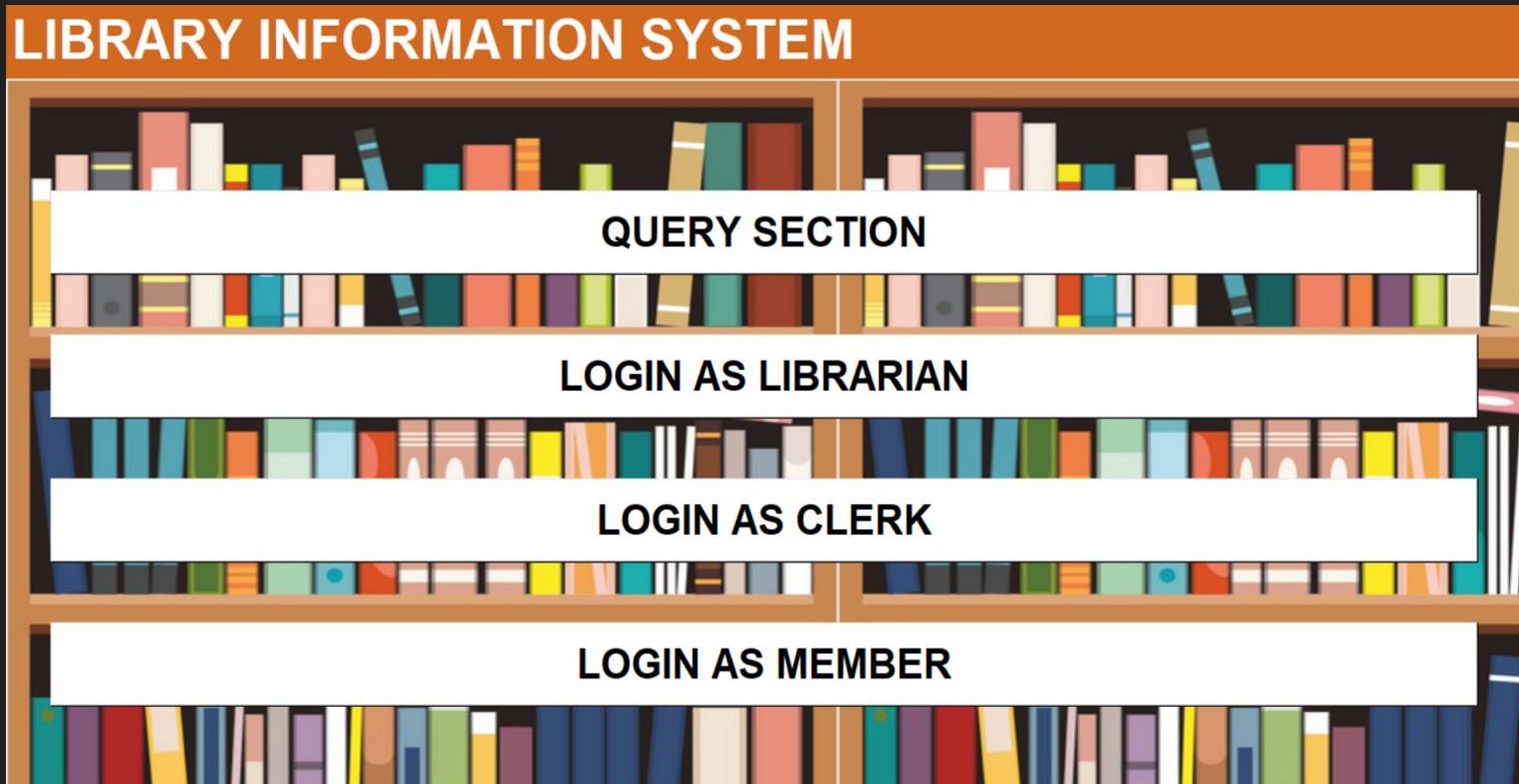
- COORDINATION
- KNOWLEDGE TRANSFER
- CONSISTENCY AND UNIFORMITY
- DECLINING PRODUCTIVITY

DESIGN & FEATURES

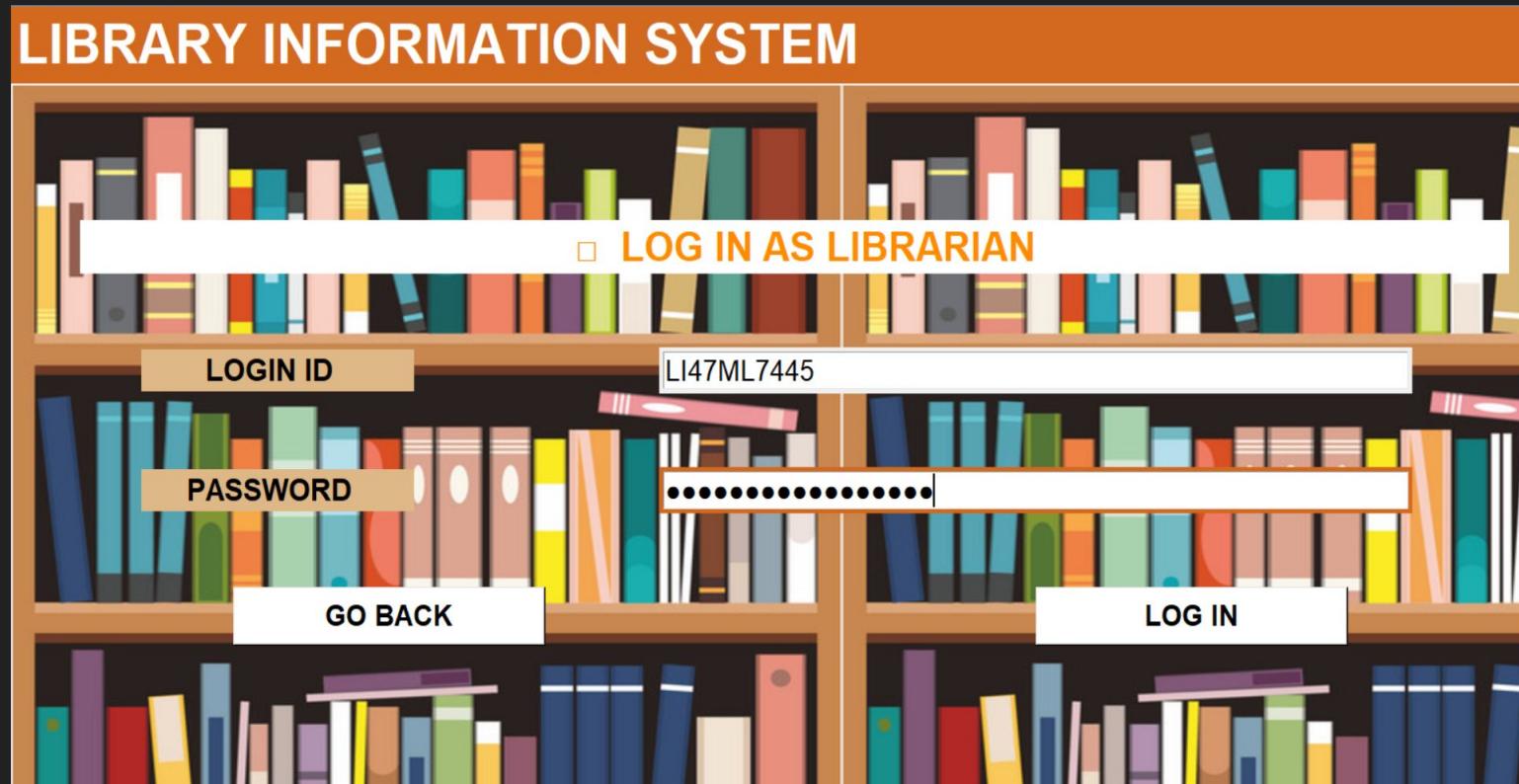
KEY FEATURES

- LOGIN LOGOUT MONITORING SYSTEM
- LIBRARIAN'S CONTROL PANEL
- CLERK'S CONTROL PANEL
- MEMBER'S CONTROL PANEL
- MESSAGING & REMINDER SYSTEM

LOGIN MONITORING SYSTEM



LOGIN MONITORING SYSTEM



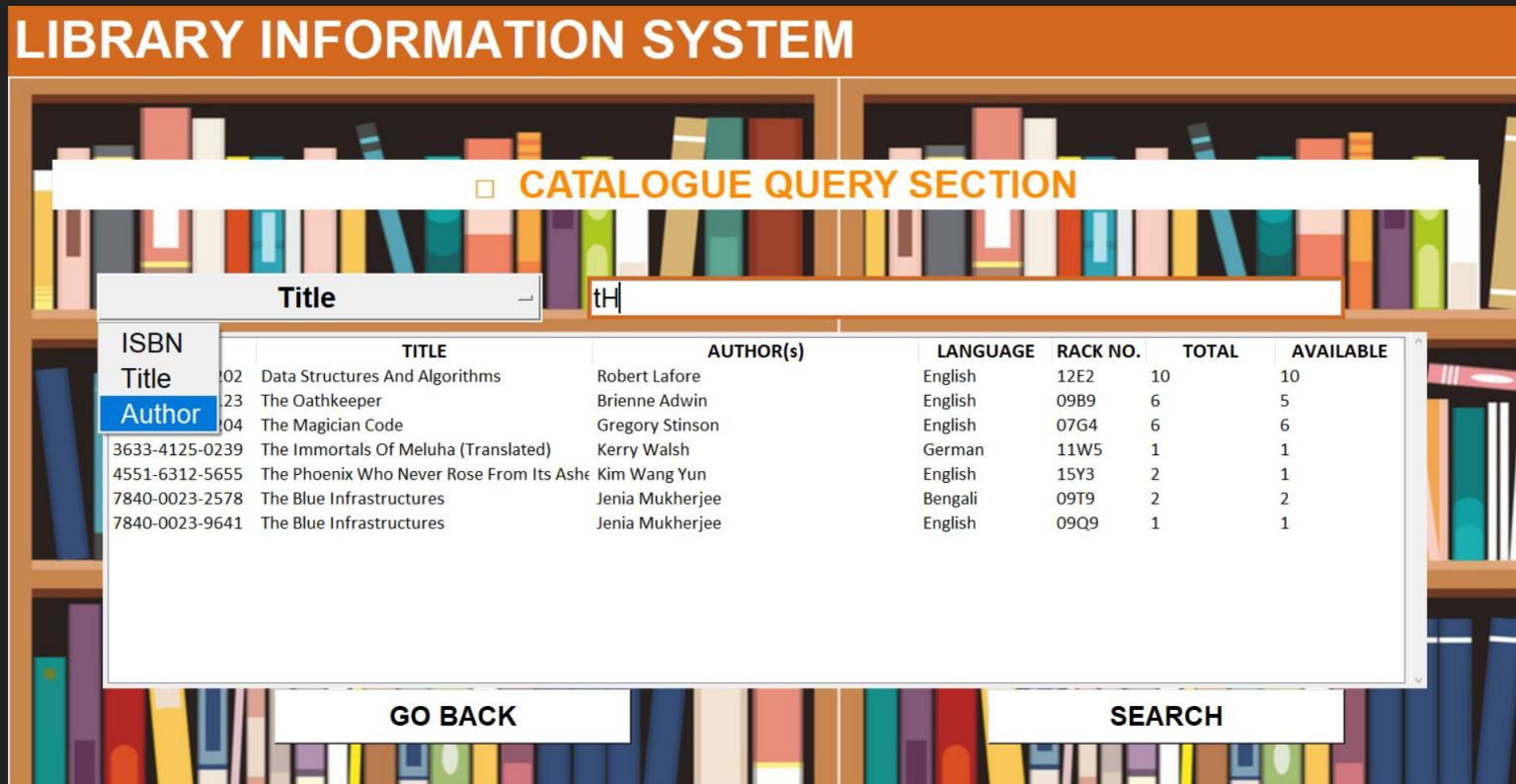
CATALOGUE QUERY SECTION

LIBRARY INFORMATION SYSTEM

□ CATALOGUE QUERY SECTION

ISBN	TITLE	AUTHOR(s)	LANGUAGE	RACK NO.	TOTAL	AVAILABLE
978-0202-00002-1	Data Structures And Algorithms	Robert Lafore	English	12E2	10	10
978-0202-00023-1	The Oathkeeper	Brienne Adwin	English	09B9	6	5
978-0202-00044-1	The Magician Code	Gregory Stinson	English	07G4	6	6
978-0202-00033-1	The Immortals Of Meluha (Translated)	Kerry Walsh	German	11W5	1	1
978-0202-00055-1	The Phoenix Who Never Rose From Its Ashes	Kim Wang Yun	English	15Y3	2	1
978-0202-00078-1	The Blue Infrastructures	Jenia Mukherjee	Bengali	09T9	2	2
978-0202-00041-1	The Blue Infrastructures	Jenia Mukherjee	English	09Q9	1	1

GO BACK SEARCH



LIBRARIAN'S CONTROL PANEL

LIBRARY INFORMATION SYSTEM

The interface is divided into two main sections, each featuring a bookshelf background. The left section contains four buttons: 'REGISTER NEW MEMBER', 'SHOW ALL MEMBERS', 'SHOW CURRENTLY ISSUED BOOKS', and 'SHOW BOOKS ISSUED IN PAST'. The right section contains four buttons: 'DE-REGISTER MEMBER', 'SHOW CATALOGUE', 'SHOW OVER-DUE BOOKS', and 'ANALYZE POPULARITY OF BOOKS'. At the bottom center is a 'RESET PASSWORD' button, and at the very bottom center is a 'LOG OUT' button.

REGISTER NEW MEMBER

SHOW ALL MEMBERS

SHOW CURRENTLY ISSUED BOOKS

SHOW BOOKS ISSUED IN PAST

DE-REGISTER MEMBER

SHOW CATALOGUE

SHOW OVER-DUE BOOKS

ANALYZE POPULARITY OF BOOKS

RESET PASSWORD

LOG OUT

REGISTRATION

LIBRARY INFORMATION SYSTEM

REGISTER NEW MEMBER

Under-Graduate

INSTITUTE ID
19CS10044

NAME
Nakul Aggarwal

DATE OF BIRTH

November 2001

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
44	29	30	31	1	2	3	4
45	5	6	7	8	9	10	11
46	12	13	14	15	16	17	18
47	19	20	21	22	23	24	25
48	26	27	28	29	30	1	2
49	3	4	5	6	7	8	9

CREATE ACCOUNT

GO BACK



LIBRARY MEMBERS

LIBRARY INFORMATION SYSTEM

LIBRARY MEMBERS

LMCN	INSTITUTE ID	NAME	DATE OF BIRTH	DATE OF REGISTRATION	ISSUE COUNT
PG16SM4533	16GV39012	Scott Meyers	08/05/1997	15/03/2021	0
PG18BM2311	18ER67712	Bradley Mosh	01/11/1997	14/02/2020	0
PG18CM8057	18UI23014	Cersei MacQuire	15/01/2004	26/03/2021	4
RS17JC3259	17EQ56123	Jaimie Curie	30/01/1998	28/03/2021	6
RS20CW8902	20YE30012	Chris Walsh	01/05/1998	14/02/2020	0
RS20LB1189	20UJ49012	Lilly Brown	13/09/1996	15/03/2021	0
UG17JF3751	17RT64301	Jackson Falahue	12/01/1995	15/03/2021	2
UG17SF8625	17ER45236	Shawn Flynn	09/09/1998	26/03/2021	0
UG19SA1823	19CS23112	Shannon Aldrin	12/12/2000	14/02/2020	0
FC01ML4125	17ER7890F	Marshall Langford	17/08/1979	14/02/2020	0
FC05SL4336	19CS1004F	Samwell Lingharden	18/08/1993	28/03/2021	0
FC28MW3163	14TT1324F	Marie Winterbottom	09/11/1993	28/03/2021	0
FC40VA6981	15TH1344F	Vikaas Ahmad	12/08/1995	04/04/2021	0

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LIBRARY'S ACTIVITY

LIBRARY INFORMATION SYSTEM

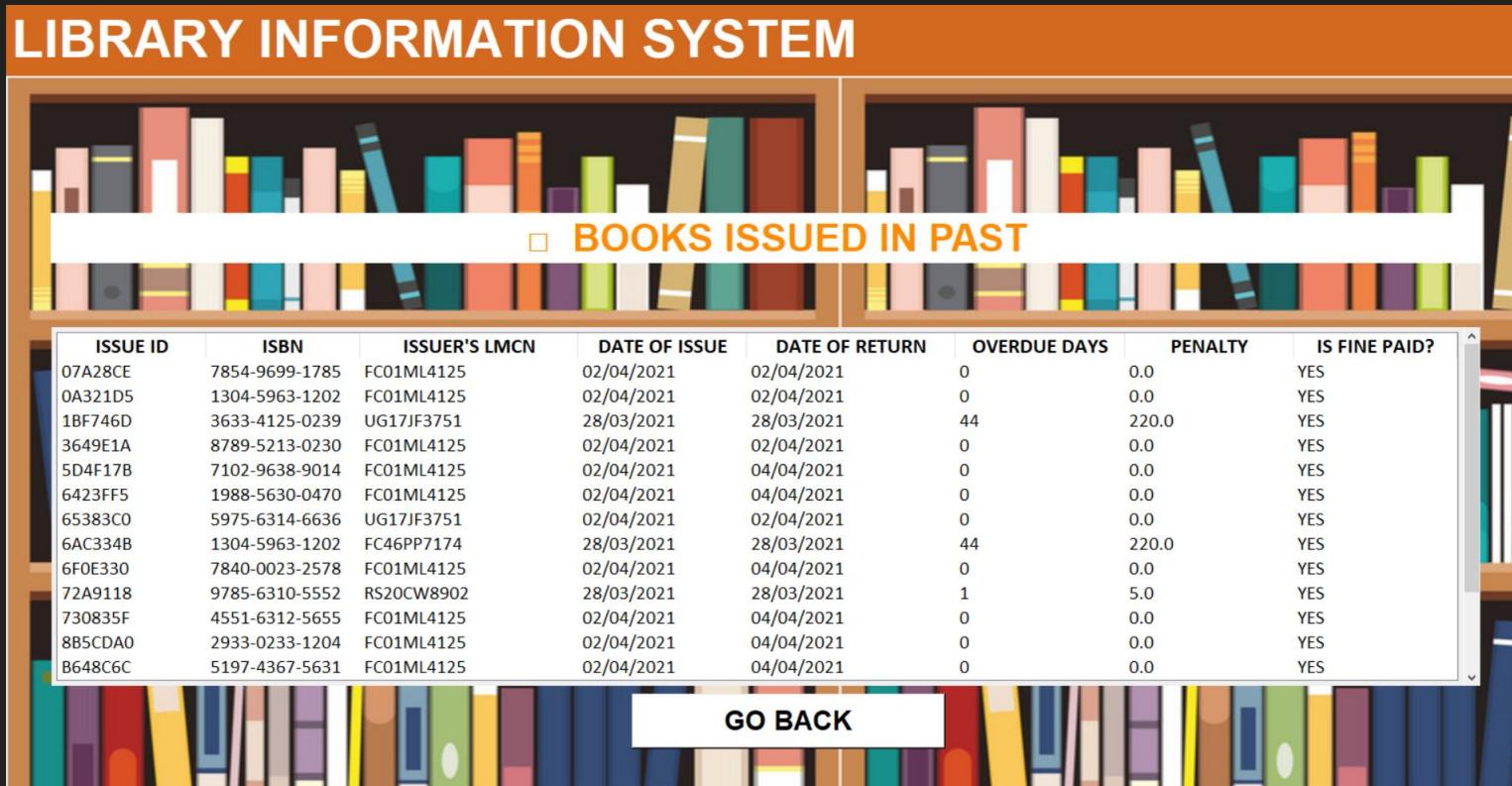
□ CURRENTLY ISSUED BOOKS

ISSUE ID	ISBN	ISSUER'S LMCN	DATE OF ISSUE	DU DATE OF RETURN	IS RESERVED?
0F22079	0616-9630-0159	RS17JC3259	04/04/2021	03/07/2021	YES
1D8ECEB	9785-6310-5552	RS17JC3259	04/04/2021	03/07/2021	YES
2D41D1D	5975-6314-6636	RS17JC3259	04/04/2021	03/07/2021	NO
37AF0BC	3000-6752-0963	PG18CM8057	01/01/2021	29/03/2021	YES
469CCA4	4551-6312-5655	PG18CM8057	01/01/2021	29/03/2021	NO
4D17394	1475-6925-0123	RS17JC3259	04/04/2021	03/07/2021	NO
6F48148	0616-9630-0159	UG17JF3751	01/01/2021	29/03/2021	NO
A0A2B30	9785-6310-5552	PG18CM8057	01/01/2021	03/04/2021	NO
A0B96CE	2622-3695-4123	RS17JC3259	04/04/2021	03/07/2021	NO
B12F035	1475-6925-0123	PG18CM8057	01/01/2021	03/04/2021	NO
D9AB1A6	9642-0230-0006	RS17JC3259	04/04/2021	03/07/2021	NO
F9F48D5	9785-6310-5552	UG17JF3751	04/04/2021	04/05/2021	NO

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LIBRARY'S ACTIVITY

LIBRARY INFORMATION SYSTEM



□ BOOKS ISSUED IN PAST

ISSUE ID	ISBN	ISSUER'S LMCN	DATE OF ISSUE	DATE OF RETURN	OVERDUE DAYS	PENALTY	IS FINE PAID?
07A28CE	7854-9699-1785	FC01ML4125	02/04/2021	02/04/2021	0	0.0	YES
0A321D5	1304-5963-1202	FC01ML4125	02/04/2021	02/04/2021	0	0.0	YES
1BF746D	3633-4125-0239	UG17JF3751	28/03/2021	28/03/2021	44	220.0	YES
3649E1A	8789-5213-0230	FC01ML4125	02/04/2021	02/04/2021	0	0.0	YES
5D4F17B	7102-9638-9014	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES
6423FF5	1988-5630-0470	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES
65383C0	5975-6314-6636	UG17JF3751	02/04/2021	02/04/2021	0	0.0	YES
6AC334B	1304-5963-1202	FC46PP7174	28/03/2021	28/03/2021	44	220.0	YES
6FOE330	7840-0023-2578	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES
72A9118	9785-6310-5552	RS20CW8902	28/03/2021	28/03/2021	1	5.0	YES
730835F	4551-6312-5655	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES
8B5CDAO	2933-0233-1204	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES
B648C6C	5197-4367-5631	FC01ML4125	02/04/2021	04/04/2021	0	0.0	YES

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POPULARITY OF BOOKS

LIBRARY INFORMATION SYSTEM

□ BOOKS NOT ISSUED IN THE PAST YEARS

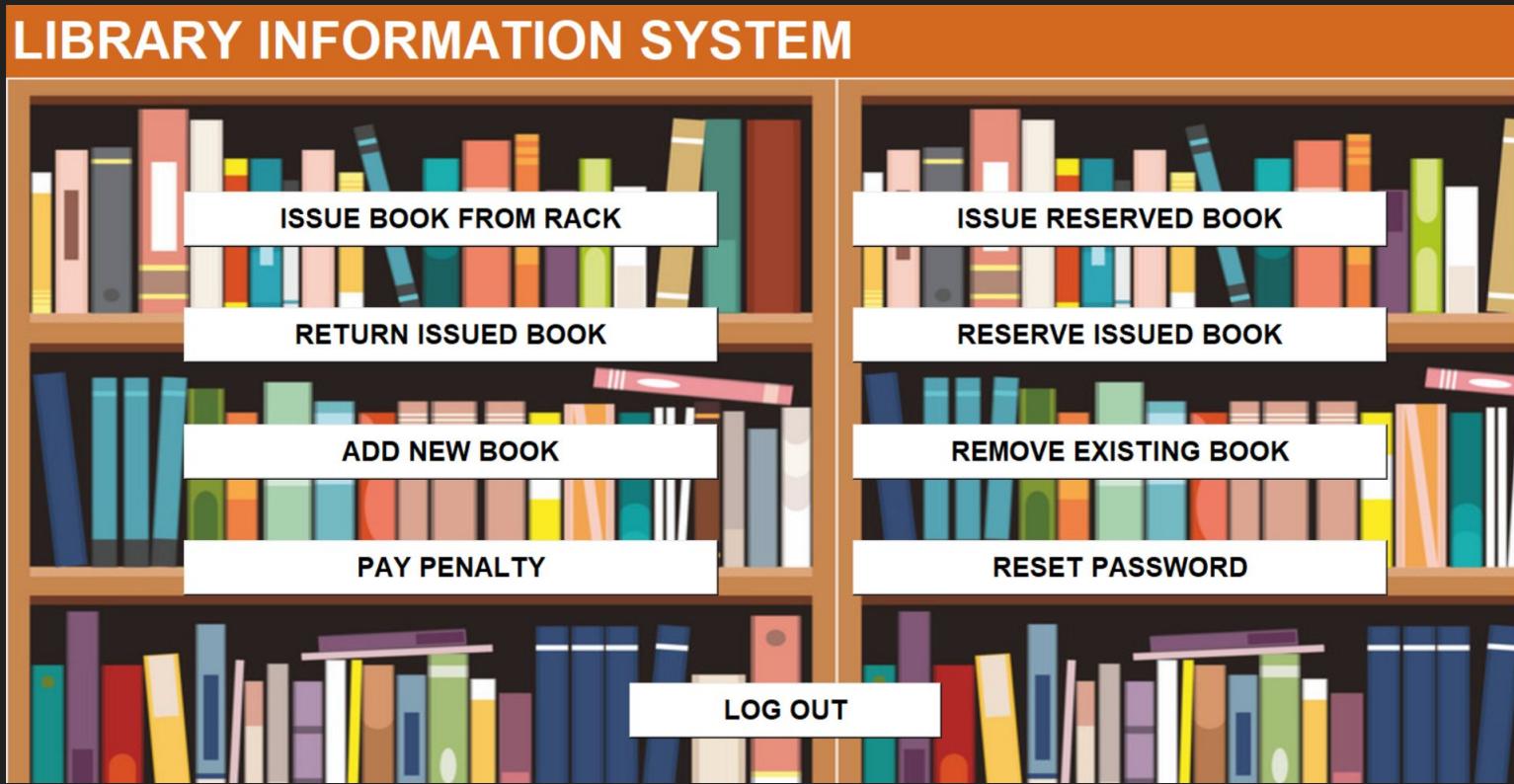
1 Year

ISBN	TITLE	AUTHOR(s)	LANGUAGE	RACK NO.	TOTAL	LAST ISSUED ON	DATE OF ENTRY
4123-9630-0002	Electrical Circuits And Technology	Jerry McQuire, David Linhargan	English	54I3	7	N.A.	09/04/2017
6310-0020-9630	Basics Of Web Development	Witri Wentaniyo	English	03B5	15	N.A.	12/11/2010
7840-0023-9641	The Blue Infrastructures	Jenia Mukherjee	English	09Q9	1	N.A.	09/04/2019
7854-9699-1023	Computer Architecture Basics	Finyan Honyang	English	74P0	12	N.A.	12/11/2010

GO BACK

SHOW RECORDS

CLERK'S CONTROL PANEL



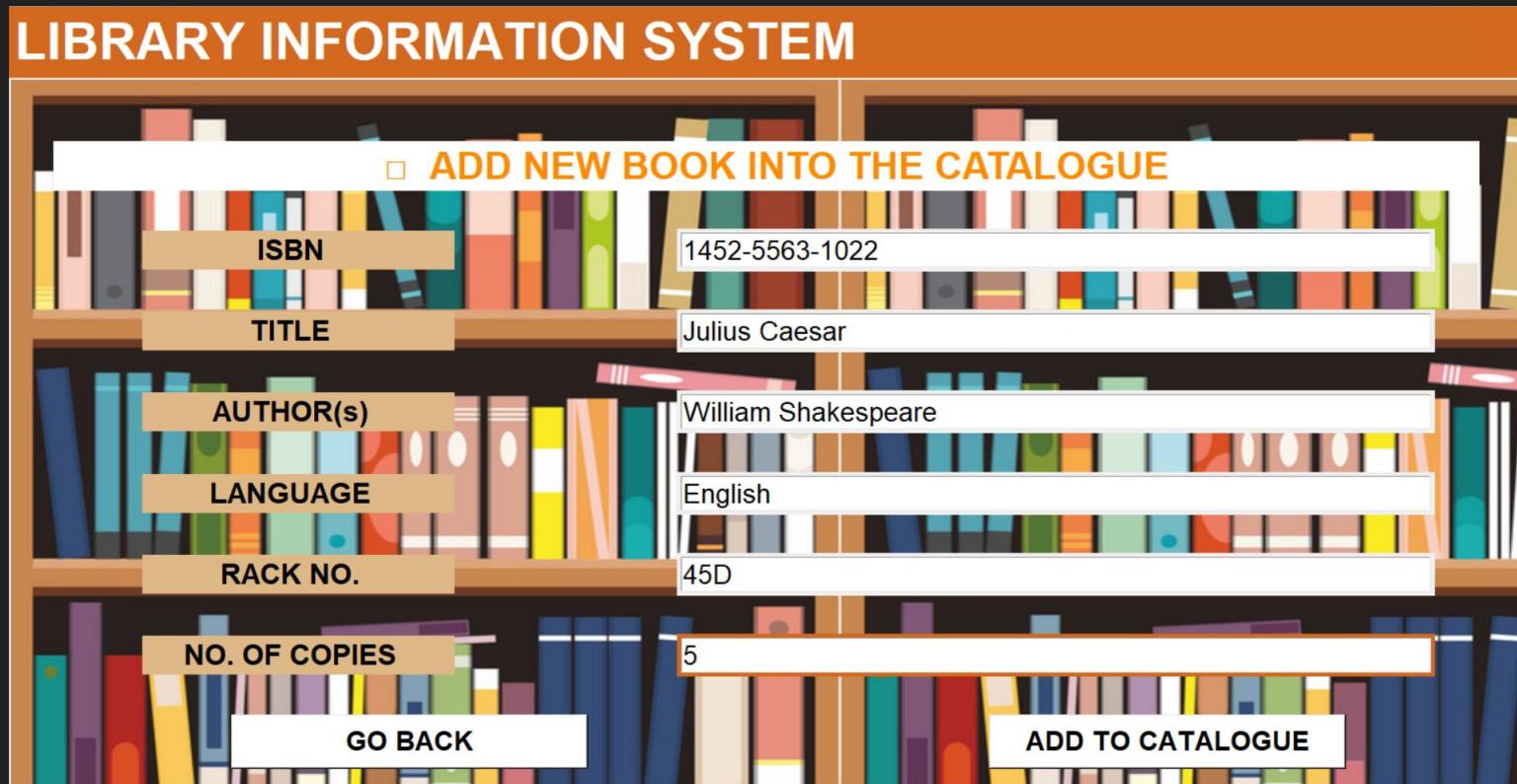
UPDATING CATALOGUE

LIBRARY INFORMATION SYSTEM

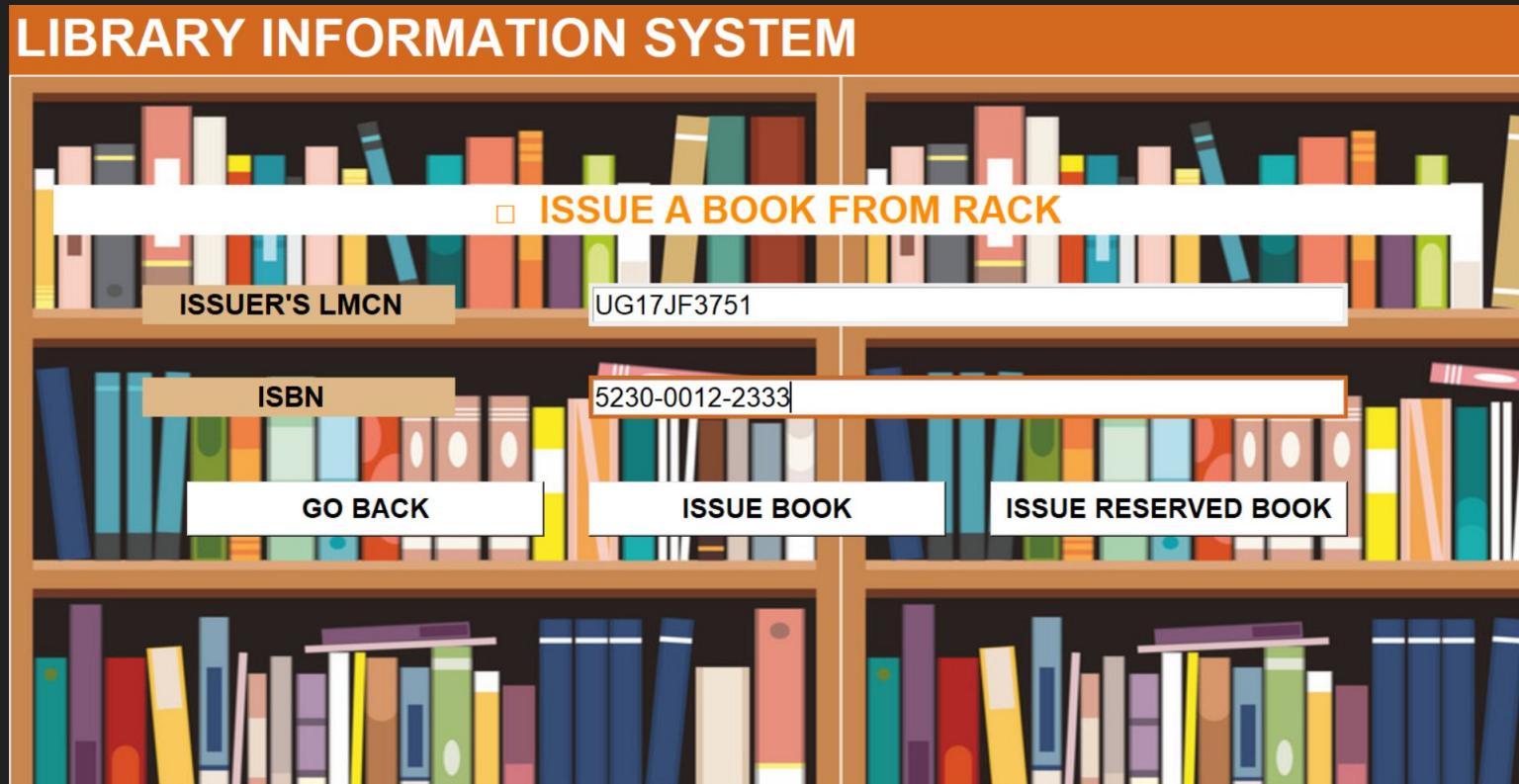
□ ADD NEW BOOK INTO THE CATALOGUE

ISBN	1452-5563-1022
TITLE	Julius Caesar
AUTHOR(s)	William Shakespeare
LANGUAGE	English
RACK NO.	45D
NO. OF COPIES	5

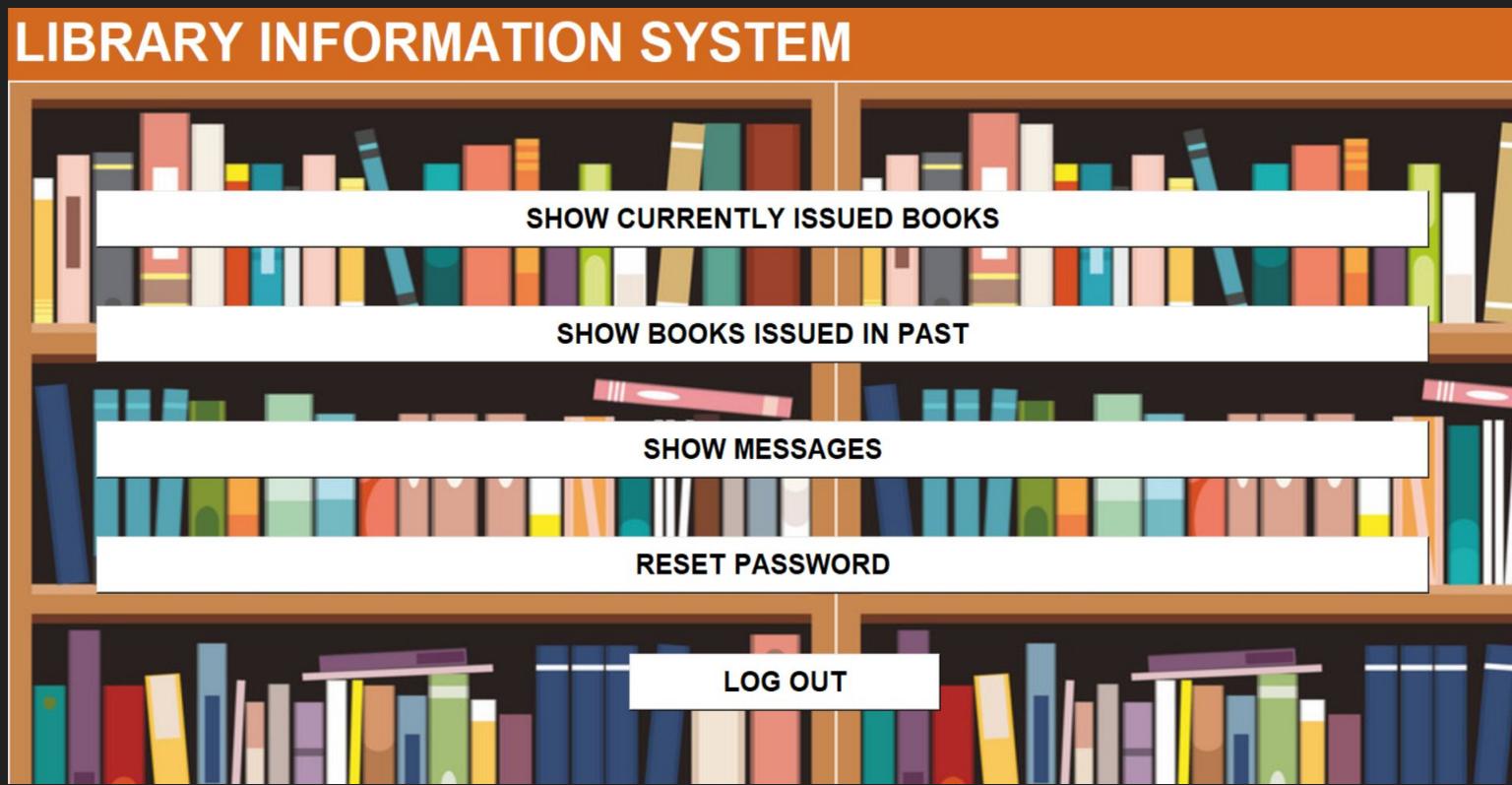
[GO BACK](#) [ADD TO CATALOGUE](#)



ISSUING A BOOK



MEMBER'S CONTROL PANEL



MESSAGES & REMINDERS

LIBRARY INFORMATION SYSTEM

□ NOTIFICATIONS / REMINDERS

[02/04/2021] [2216] RESERVATION EXPIRED
[02/04/2021] [2215] RESERVED BOOK RETURNED
[02/04/2021] [2204] BOOK RESERVED SUCCESSFULLY

02/04/2021 2204

Dear Member,
The following book has been successfully reserved. Please collect the book within 7 days of the return. Reservation will get cancelled if the book is not formally issued in 7 days after the book is returned.

RESERVATION ID : b9709835-53649E1A
RESERVATION KEY : 6a647662-01f8
ISBN : 8789-5213-0230

You are requested to not disclose the Reservation ID and Reservation Key to anyone. These details will have to be provided at the clerk's desk at the time of issuing the reserved book.

Thank you.
Regards.

[GO BACK](#)

SECURITY & PRIVACY

JSYmCqEkere9i6cR_KeYQUduvQ8xMQSBDzw37uMLtzPO1GbIPC05HsOuEcOCntbj8XZdNjmQzPiR6w16L0cw4Yv4z0V_3HkmBrgqF8P2n4_PEHxFfk7n4LpckjFVEs_NVm8y9JZPE9wkJDforOWShec_2g3U8jsW2lnT2wv-Ss170wpN1Sjb60Ltr2PxjZGqh5MkjIXKQtptEkW00MBHQzrrWDCM1RsfrpaTNbLywEm2vR7VgqlhrjhkmidG0p1SC39k3T-7Nv8nTQuusvaD3uymlGuMhHjp6k5AJ1FUZSr6z1m8w0nDnSGFR3S6hYczSzWaL4c-cCq14HNTCL5_H0n6Nx3yjeu_79s2jNVEQEExljWccWmpI1zcDggkkMmo5knfcqAxVJH1C0extx0xiWkY_Ld8glvn0076tjRly5s1_ar5jq5DLfpmZqpHq4tC-ncoLTbN001K510q1ku20QkfZvNjDp71Ks92cLnCVsiass-x8QapDdzdUylkz7k21Bx-EIwvLM2StI_9T9jNmBylMrzwvvy14E7pgY-HmoDizxBNPnjEHcSDCv9CsyqemdTtp5tCF1w2tkycBcxoSYlfefqffrNuZUrD1c1RH8Rx3hZ9ftLxoqzrD5QYCXS3mkLsoknEV66E7FzW38kd1K4rrA6zW8H1-N| 20 | FC46PP7174 | BOOK ISSUED SUCCESSFULLY | gAAAAABgY3cEVHVA88HeRamtMkoazyzEWGFJZ0cXdygjhsp-gxCX8otwib1bw3gFBXH-csR983jsj2hiuvEyIiOgoGJ5bg1-RLgC6sUBB1JHmI0njojwv6RdagEbhp3vJu0jLrbActSIK-LUTg7vpJ5tKfm07amW2sUZCTRXP0eMA5DDiWj3kOfpApXoQ5ue2i2ep94WYpvvWh-mno1Nj-ceMAHJdnigaJ3rVcsjcy_FG0hekf9fJJKQDgSeqwR4-Xetc5jnp73u8w0eN11BgFn5XGdmk3-gy1t8stlm3hsg-nK8t3X_wo4K1lwgvk77xKFOic0-d00g2tzIKVs0FTTC45gvYkh7Y9jqtAy9IzRQDhudRdbh_yLj1Ngmbo4SczDU2F4Ib-xC3q1EvtpSQuemaNiouNqdZTEH2b1l5oG72w-CmgHjp8HK_GYGNYjxwRCqqlpJtb8A03rtEE1f0EbNoOcsfhkjDc_-X

| 28/03/2021 | 2017 |

| 21 | UG17JF3751 | BOOK RETURNED SUCCESSFULLY | gAAAAABgY3ja_6tPd-Y14A8B80woi1RyfmaH5WZMBzdjkCQarv4W9uXbaU3fArhBqshunfwqM7gp3c7a9ATEdZC0eefAv3Vcge9xpypIIJ18-1u2BdhkSu0UoUty5T1h6wakR2ndmDi_FgtBzj7kP1M1Hqo_gOn8dYAGINzWkfkjPzTeAkZTeaCzZJwhfKwR2tsha2CrozU79owqfb23XwlnNjWv7wAjCal-HRLNClb7jttOaca4tui-y_IaxJZ79guimMdJy_hns0kIXKxvpcAcrzjmfAKCCF03o8jzlgAvkhL0q7kEd1utuN6k47v1y8Lcbftru_PmoH15eBThXzg6iR1fvri1rr_wpdObgF28c1qaRdk0KGm_mn123gSwXKVetDqAc0a0l-jhtciuwGawhKD0glwT813rzsWuASZFsDgDpos4f8mu8n-4Crexun_abz7ZhPUL92bvP2ahWck41hnXB7-SmrddgJ-Ccm1q34hB5egodU3JGMWLW1hs6Q0fw1u2k07v8smj_7xTw1pfdIHXKAbR3hKIMYz5mIamua08erMdh8q3WsT01k198nFxjzVixNbpf0yD71h_s-p0PcxBROAfDpG-rGc4ezSrDCRP0L1mpzXQzgzm183P61Beq7XAa7dQad0tx92yZsuljk_qMu0t5_d8hJrnQk6KhYg1mluna7lk00hB1i1c2DnICD30t0xn1L6in0myGorg31huh0f04DgfgfjxgCer6F| 22 | FC46PP7174 | BOOK RETURNED SUCCESSFULLY | gAAAAABgYjtgorbswns2DfC3K1g_pM55cycGz2XQHfrg1Rd0RjAr0Bm7pwzvHmh-s1zvBqBwElEd-sy-q:HznfjLeCaikSszq2NtekM9h_dCrB2fooW32-QTRLVG-1ku-8BEes-Sn6uzutbm-szofal_OX610ElycpAbuJk038wxc91Kxpa5nk1u1RNSSB1o9fuy1PigQlgjkgj9y91iHSCOUTXzYiaw1K5xZ39zprupKuq11LbZew0tPeB1ExzeadFFaYDm6T7Y3Q4CectTj9pd1_4HrVrady_ObG67CKo8Alr0eOKZepPGOEYik1_JzbAFu440vtPgwmV15aTb0jJESjutJwXdhJ4xJFpusp-DmPrqgyhxtg8AkhhgH7DX2GZSRPKeqB9cneAdn1WtBeu1M0QzInglwBu19gWk0BwZTf1lsG7wQN9XB9yQzqjB-wT22W7zWt00UzLhLe4vqujrkVke1M3p3ICK_Nmxgnays1ka1k1x8KA-6fL1L97yjK4ewTBMyUV_zBC_q3631Tx18RPZzCCKTDR2t1-pjrrdldWCH5as1CjJfJN255N0sCh1ed.uhWlOMKzvsofe6LLXJg7x6GRQS1Me47i1h98oM5at4muhw1VKJ15rgAgkQVr4K59or3wNu308bh6ywul4TovpFY0z4kodh6qfS99LXdpu0l0imVkk6DAxH44t1jwJaaba0r818xc17Q81FRC8Cssez-X-zZqsvx7DCF| 23 | RS20CW8902 | FINE SUCCESSFULLY PAID | gAAAAABgZSF5P3-n18hE7CLRnWJfn_wcmgnz3M6kL8cI-fmVHlPw9s74JSbfnxF-knz2Weuhzg0Zy76w0ltarFEEvuiJgks9P0C6q41w19tUMXNx9YdxMgycgbobxyvu2PVU4eahY7MNbHOB-4DGmjq10abgN62uxexm5KCIsopt5UhDwduk-ajxs3rqap1qFg76w2hice4Uc_2GspexPYalpcDLxQp60Lwkg2gefxx11AbuL2hwJNq5isRgt3ZF45_1sP3Ma==

| 01/04/2021 | 0657 |

| 24 | FC46PP7174 | FINE SUCCESSFULLY PAID | gAAAAABgZSH5pReM1DcK8BMRO3kE2T3Oh4TVuJpV4s0Zet-gfxYhPf62otFMVQvyGCDsI9cySeBeyA30gf1Rn1Rrflx6-Qroo90jyMbgz8wxu282c9N_ze4-YzTn1qXG-S8kMkbrpCY2eUD9uF7-LTGFBh_RYT5oBzRTBz3rCvtSzTrZMxGwoz9KArCqpFrKHRTkk1NhrXIV1C1Fu7kYbKeT39_lSL4HBCv1-Q-U6p1ycqtJXCJUf-TRITFv5tT4p2Jw==

ReserveId	ReservationKey
38fd285b-637AF0BC	1198bb85686429bc13ba387ec6480bc1
4f48e975-d0F22079	80c3e1e60d2100e804b7d2ae00d1fa4e
dee4461c-71D8ECEB	b7fe8d5d6539c3df470e449954b3b4be

WHAT NEXT ?

- CACHE MANAGEMENT SYSTEM
- QUERY COMPLETION / NLP
- QUERY CORRECTION / Word2Vec
- SESSION ACTIVITY & TIMEOUT
- AI CHATBOT FOR MEMBERS

THANK YOU