



DEVELOPING A LIBRARY MANAGEMENT SYSTEM

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RESEARCH PROBLEM

Research problem The problem of searching using the traditional methods of managing and organizing the titles of books in the library in addition to the lack of reliable database can be relied upon in the case of borrowing a book in addition to the possibility of loss and non-return of books to their places, besides the absence of having a complete electronic record of all book's information, the research problem can be summarized in the following research questions:


- A) does the library have an electronic system for book issuing?
- B) does the library have enough infrastructure to execute the suggested model?
- C) does the way of working in the current system prevents book loss, misplace, ruining and ripping the pages of the book?

RESEARCH OBJECTIVES

- 1 - Design a system that collects all borrowed data and returned and rejection of the Central Library of the University of Cihan.
- 2 - Designing an electronic library identity includes all of the data and dates of borrowing and return and the amount of the fine in case of delay or loss of the book.
- 3 - Provide electronic records of all of the borrowed books data, and the returned and borrowed books data which ensures the organization of the work of the library in an electronic manner in order to abandon the traditional method that is full of errors and defects.

RESEARCH IMPORTANCE

- 1- the absence of a system that regulates the process of borrowing and return.
- 2 - The importance of research is in its ability to provide a system that is designed for the electronic identity of the borrower which includes all the information of the borrowers and the available books in the library and books that can be reserved by the borrowers if borrowed by other people.
- 3 - Solving the problem of wasting books or not returning them through the designed system which includes delaying fines or losing fine which includes the whole price of the book in case the book is lost.

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- In order to solve the problems of the central library of Cihan University-Erbil, a library management system was designed as a suggested model. The system was programmed by using Visual basic.net programming language and it was considered cost effective and easy to use by the librarians who were working in the library.
 - In the Administrator level of authority : the administrator can do his activities through the system, as followed:

ADD LIBRARIAN INTERFACE

Library manager Librarians

Name

Phone

Address

E-mail

Job title

Birth date



Date of employment

Shift Morning Evening

Username

Password

Photo


#	Name	Phone	Address	E-mail
1	ahmed hassan ali	07709998545	Erbil	bushbushalsafar@gmail.
2	ahmed	07704102024	Mosul- Iraq	ahmed.ali@yahoo.com


Windows taskbar: I'm Cortana. Ask me anything. 3:55 PM 8/3/2018


THE BOOK INTERFACE


Library manager

Books

Reload  Name Accession No. ISBN Category Language

Add 

Full info. 

Delete 

#	Name	Accession No.	ISBN	Classification	Category
1	network and database	12345	2345ba	network	computer
2	basics of transeletion	12345ba	2343251b	english	english
3	basics of kurdhish language	12345cv	123454sa	languages	languages
4	law basics	123	345b1	34law1	computer

ADD NEW BOOK INTERFACE

Library management system - Librarians

Add View

09:04 PM

Add book

Name	<input type="text"/>	New category	<input type="text"/>	+	Edition	<input type="text"/>
Accession No.	<input type="text"/>	Category	<input type="text" value="computer"/> <input type="text" value="english"/> <input type="text" value="languages"/>	-	Year	<input type="text" value="2018"/>
ISBN	<input type="text"/>				Column	<input type="text"/>
Classification	<input type="text"/>				Row	<input type="text"/>
Writer 1	<input type="text"/>	New language	<input type="text"/>	+	Copies	<input type="text" value="1"/>
Writer 2	<input type="text"/>	Language	<input type="text" value="english"/>	-	Available Copies	<input type="text" value="1"/>
Writer 3	<input type="text"/>				Price	<input type="text" value="0"/>
Writer 4	<input type="text"/>					
Publishing house	<input type="text"/>					

Add +

BORROWERS INTERFACE

Library management Borrowers

Reload Name

Add # 1

Full info

Delete

Borrowers type **Students**

Department business admin.

Add new Borrowers

Student **Staff** Others

Name Phone

Address

Gender Male Female University id

Collage Year **First year**

Department Group **A**

Fine Birth Date **2018/08/03**

Max. book Max. days

Username Photo

Password

Issue Date **2018/08/03**

Expire Date **2022/08/03**

Add

ADD NEW BORROWING INTERFACE

Library manager

New borrowing


Name Name Accession No. Category Lang.

Id

Uni. id

Eman
Bushra Ali Zainal
hussien
Hala
Hala Ameer Yaseen

Name	Accession No.	Category	Edition	Year	Language
------	---------------	----------	---------	------	----------

 Name Max. Books
Id Max. Days
Uni. id Current no. Of books
Guarantee

Fine

Borrowing date

Return date

Selected books

Name

ADD NEW BORROWING INTERFACE

Library manager

New borrowing


Name Name Accession No. Category Lang.

Id

Uni. id

Eman
Bushra Ali Zainal
hussien
Hala
Hala Ameer Yaseen

Name	Accession No.	Category	Edition	Year	Language
------	---------------	----------	---------	------	----------

 Name Max. Books

Id Max. Days

Uni. id Current no. Of books

Guarantee

Fine

Borrowing date

Return date

Selected books

Name

RETURNING A BOOK INTERFACE

Library management system interface for returning books.

Return Books

Name: Borrowing id: Borrowers type:

#	Name	Phone	Collage	Department	No. Of books	Guarantee	Borrowing date	Return
1	Eman	07706667732	administrative and finan...	business admin.	1	0	03/08/2018	12/08/2018
2	Hala Ameer Yaseen	07706562343	Collage of engineering	Civil Engineering	1	0	03/08/2018	12/08/2018

Book Details:

Name: Id: No. Of books: Borrowing date: Return date: Delaying days: Fine: Remained fine: Guarantee:

The borrowed books

Name
network and database

Windows taskbar: I'm Cortana. Ask me anything. 11:01 PM 8/3/2018

ADD NEW RESERVATION INTERFACE

Library manager Add new reservation

Name Name Accession No. ISBN Category Available Unavailable

Id

Uni. id

Eman
Bushra Ali Zainal
hussien
Hala
Hala Ameer Yaseen

#	Name	Accession No.	ISBN	Classification	Ca
1	network and database	12345	2345ba	network	co
2	basics of transeletion	12345ba	2343251b	english	e
3	basics of kurdhish language	12345cv	123454sa	languages	la

Id

Uni. id


Name Current reservations no. Of book Availability date Reservation


OUT PUT OF THE SYSTEM


THE BOOKS INTERFACE


Library management

Books

Reload  Name Accession No. ISBN Category Language

Add 

Full info. 

Delete 

#	Name	Accession No.	ISBN	Classification	Category
1	network and database	12345	2345ba	network	computer
2	basics of translation	12345ba	2343251b	english	english
3	basics of kurdhish language	12345cv	123454sa	languages	languages

THE BORROWER'S INTERFACE

Library manager

Borrowers

Reload Borrowers type

#	Name	Phone	Birthdate	Gender	University id	Collage	Departme
1	Bushra Ali Zainal	07704441212	01/09/2000	Famale	1234b1	adminstrative and financ...	accounting
2	Eman	07706667732	09/01/1996	Famale	12345a	administrative and finan...	business admin.
3	Hala		02/01/1995	Famale	3456ba	arts and letters	transelation
4	Hala Ameer Yaseen	07706562343	02/01/1995	Famale	123nc6	Collage of engineering	Civil Engineering
5	hussien		09/01/2000	Male		engineering	civil engineering

Left sidebar: Add, Full info, Delete

LIBRARY'S ID OF THE BORROWER



Kurdistan Region- Iraq
Presidency of Cihan
Central Library

Library ID
5

Name : **Hala Ameer Yaseen**
College : **Collage of engineering**
Department : **Civil Engineering**
Year : **First year**



Gender : **Famale**
Phone Number : **07706562343**
Job Title :
Username : **hala1**

Issue Date : **03/08/2018**... Expire Date : **01/08/2022**

THE BORROWING RECEIPT



Kurdistan Region- Iraq
Presidency of Cihan
Central Library

Borrowing receipt 3

Id :5..... Date : ..03/08/2018..
Name : Hala.Ameer.Yaseen..... Time : ..10:22.pm....

#	Book name	Accession No.	Price
1	network and database	12345	10,000

No. Of books :1..... Guarantee :0..... IQD
Max. Days :7..... Borrowing date : ..03/08/2018..
Return date :12/08/2018..

* If the returning of the books is delayed from the date of returning , A total fine will be calculated for each day which is500..... IQD.

* If the book is lost, You will be responsible to pay the triple price of the book.

THE BORROWING ARCHIVE INTERFACE

Library manage

Borrows [Close]

Name Id Borrowing id Borrowers type From 2018/08/06 To 2018/08/06

All Done
 Still Fined

View data of
 This month
 Last month
 Last 6 month
 This year
 All

New borrow
Return book
Delete

#	Name	Phone	Collage	No. Of books	Guarantee	Borrowing date	Return date	Delayin days
1	hussien		engineering	1	0	06/08/2018	13/08/2018	0
2	hussien		engineering	1	0	06/08/2018	13/08/2018	0
3	Eman	07706667732	administrative and finan...	1	0	06/08/2018	13/08/2018	0
4	Bushra Ali Zainal	07704441212	adminstrative and financ...	1	0	06/08/2018	08/06/2018	0
5	Hala Ameer Yaseen	07706562343	Collage of engineering	1	0	04/08/2018	08/05/2018	0
6	Hala Ameer Yaseen	07706562343	Collage of engineering	1	0	03/08/2018	08/04/2018	0
7	Eman	07706667732	administrative and finan...	1	0	03/08/2018	08/04/2018	0
8	Eman	07706667732	administrative and finan...	1	0	03/08/2018	08/03/2018	0

All 8 Done 5 Still 3 Fined 0 Total fines 0

THE BOOKS STATISTICS INTERFACE.

Library manager Books statistics

View data of

- This month
- Last month
- Last 6 month
- This year
- All


From 2018/08/09 To 2018/08/09


#	Name	Accession No.	Classification	Category	Language	Count of borrowing
1	network and database	12345	network	computer	english	6
2	basics of transeletion	12345ba	english	english	english	1
3	basics of kurdhish language	12345cv	languages	lanquges	english	1


RESERVATION INTERFACE (ACCEPT REJECT, WAIT)

Library management System Reservations

Borrower name Borrower id View

Accept 

Reject 

Wait 

Borrow

Borrower full info.

Book full info.

#	Borrower name	Book name	Book category	Date	Status
1	Hala	basics of translation	english	06/08/2018	Waiting
2	Hala	network and database	computer	06/08/2018	Accepted

Library management system - Borrowers

Cihan university - Central library

05:35 PM
2018/08/07
Tuesday

Reservations

#	Book name	Category	Date	Status	Date of review
1	basics of kurdhish lanqu...	languages	06/08/2018	Accepted	06/08/2018
2	basics of translation	english	06/08/2018	Wait	
3	network and database	computer	06/08/2018	Rejected	06/08/2018

Browse & Reservation

Delete reservation

New password

Rewrite the Password

Update password

Log Out