

# Project: Library Records App

Course: Software Engineering

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## Participance:

- 1- Sherif Gamal Abdelatif (45)
- 2- Abdelrahman Farouk Sayed (52)
- 3- Elsayed Khalid Elsayed Elrefaey (32)
- 4- Attia Sayed Attia (60)
- 5- Fayad Mohamed Fayad (65)

## *Objective:*

Design and build a library database to store the records of (Books, Members, Employees, Branches, Borrowings, Returnings) and an application to interact with that database.

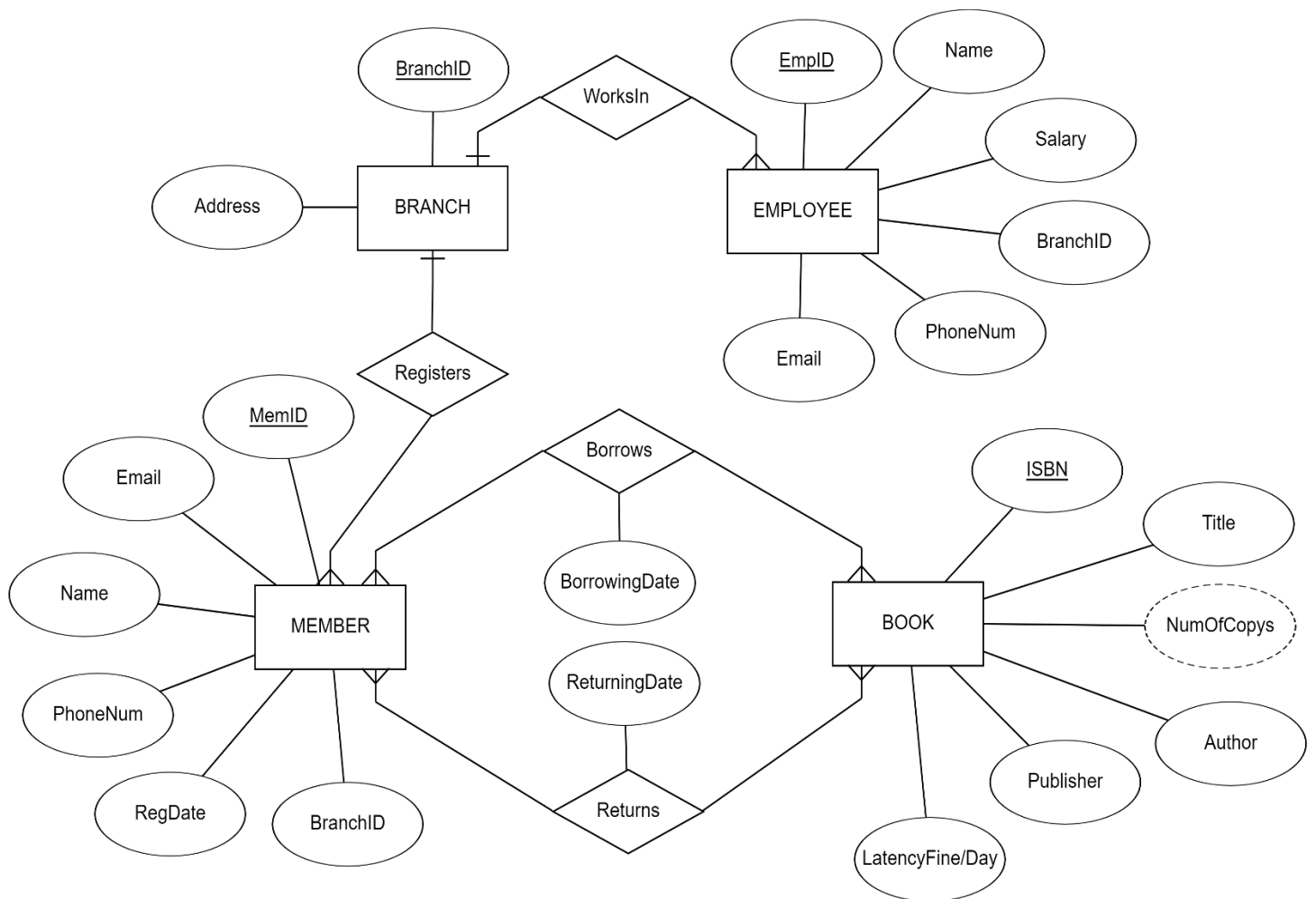
## *Tools:*

- HeidiSQL
- Python 3.8
- Spyder (Anaconda) IDE

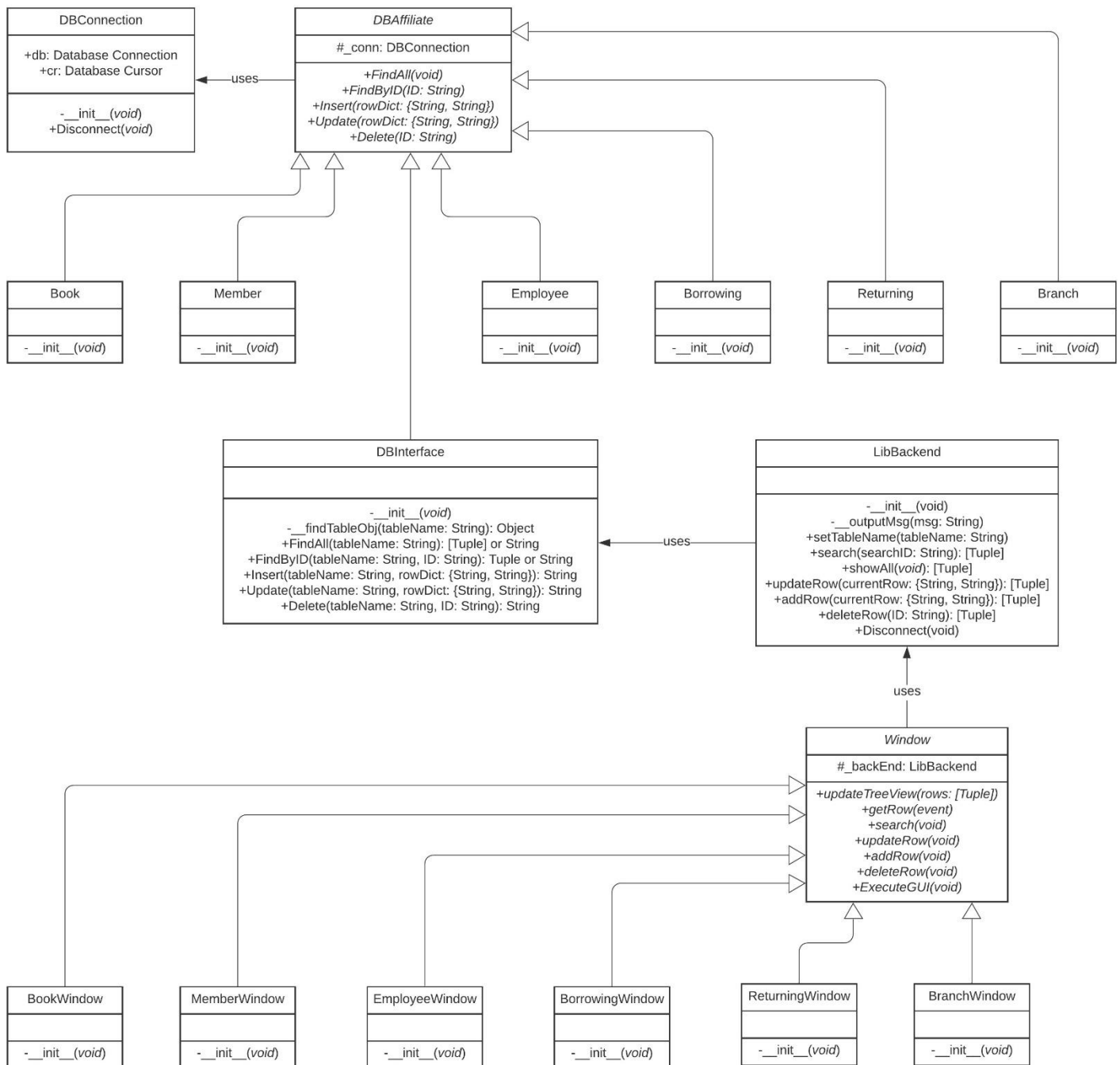
*Design: -*

1 – Database:

ER Diagram



## 2 – Application: UML Diagram



*Code:*

In this link you will find the database SQL code and the Python code of the application.

<https://github.com/Abdelrahman-Abdelgawad/SWE-LibraryProject.git>

*Output:*

For books' table:

Library books' records

ISBN	Title	Author	Publisher	Number of Copies	LatencyFine/Day
978-1-60309-025-4	Alic: The Years Have Tants	Eddie Campbell	House	50	7.000000
978-1-60309-047-6	Harry Potter and the Philosopher's Ston	JK, Rolling	House	20	10.000000
978-1-60309-077-3	Any Empire	Nate Powell		100	5.000000

SEARCH

Search  Search

MODIFY

ISBN:  Title:  add

Author:  Publisher:  update

Number of Copies:  LatencyFinePerDay:  delete

## For employees' table:

Library employees' records

### RECORDS

Employee ID	Name	Salary	Email	Phone Number	Branch ID
1	Sherif Gamal Abdellatif	500.000000	sherifGamal@gmail.com	1140818555	1
2	Sherif Ehab	5000.000000	sherif@gmail.com	1234657989	2
3	Abdelrahman	60.000000	Abdelrahman@gmail.com	1265468798	1
5	Fayad	5000.000000	Fayad@gmail.com	4688986546	2

### SEARCH

Search

### MODIFY

**Employee ID:**  **Name:**

**Salary:**  **Email:**

**Phone Number:**  **Branch ID:**

## For members' table:

Library members' records

### RECORDS

Member ID	Name	Phone Number	Email	Registration Date	Branch ID
1	Abdelrahman	1129992396	abdelrahman@gmail.com	2021-05-20	1
2	Sherif	1234567891	Sherif@gmail.com	2021-04-25	1

### SEARCH

Search

### MODIFY

**Member ID:**  **Name:**

**Phone Number:**  **Email:**

**Registration Date:**  **Branch ID:**

## For borrowings' table:

Library borrowing's records

### RECORDS

Borrowing ID	Book ISBN	Member ID	Borrowing Date
1	978-1-60309-077-3	1	2021-05-25
2	978-1-60309-025-4	1	2021-05-04
3	978-1-60309-047-6	2	2021-05-29

### SEARCH

Search

### MODIFY

**Borrowing ID:**

**Book ISBN:**

**Member ID:**

**Borrowing Date:**

## For returnings' table:

Library returning's records

### RECORDS

Returning ID	Book ISBN	Member ID	Returning Date
1	978-1-60309-077-3	1	2021-05-25
2	978-1-60309-047-6	2	2021-05-14

### SEARCH

Search

### MODIFY

**Return ID:**

**Book ISBN:**

**Member ID:**

**Return Date:**

# For branches' table:

Library branches' records

RECORDS

	Branch ID	Address
1		Building 30, North 90 Road, 5th Settlement, New Cairo, Egypt
2		12 Al-Amir Mahmoud, Nasr City, Cairo

SEARCH

Search

Search

MODIFY

Branch ID:

Address:

add

update

delete