Faculty of Engineering and Technology

Department of Computer science

Database (COMP333)

Phase #2

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Summary

The goal of the project is to build a networked virtual library database. In this library, patrons may both contribute and borrow books from one another. Lenders, borrowers, and supervisors make up the library. It may be created by each individual's account. JavaFx and MySQL will be used to build the library.

Introduction

The project we are working on is unique because it is a virtual library that also lends out physical books to its users. However, as we were planning it, we ran into a problem: how would we get the books back if someone didn't return them? We had to inquire about it at the university's law center, and we came up with the idea that every book you borrow would require you to pay insurance and sign a document in addition to paying a monthly subscription to be able to do so.

Database Requirements

Our database well require

Remember from the information your client provides, you must be able to get

a. *We will have a user table it will have date_of_birth, first_name, last_name and user_id ,and the book table will have book_SSN, book_TITLE, book_AUTHER, book_DataOfRelease, Book_TYPE and book_VALUE these are the main entities, a contact info will be connected to each user it will contain the address, email and phone_number, barrower (is a) user, and the employee (is a) user each employee will have a level of prevliges.*

b. *The users table has the (User_ID) as primary key, it will be connected to the login info foreign key (User_ID), table through one to one relation, and one to many to the contact_INFO table (User_ID), in addition to (ISA) relation to the barrower table(User_ID) and the loner table (User_ID) as well as the employee table (User_ID), the book table has the Book_SSN as a primary key and the user_ID as the foreign key, it will also be connected to the barrower table in a many to one, it will be connected as will to the loner table in a many to one relation, the employee will supervise the books and the users in a many to many relation.*

c. 1- *CREATE TABLE User(User_ID INT(16) NOT NULL, User_FNAME VARCHAR(32) NOT NULL,User_LNAME VARCHAR(32) NOT NULL ,User_DOB VARCHAR(12) NOT NULL ,PRIMARY KEY(User_ID);*

2- *CREATE TABLE Contact_INFO(User_ID INT(16), User_EMAIL VARCHAR(32) NOT NULL, User_PHONE INT, User_ADDRESS VARCHAR(72),FORIEGN KEY(User_ID);*

3- *CREATE TABLE Login_INFO(User_ID INT(16), User_NAME VARCHAR(32) NOT NULL, User_PASSWORD VARCHAR(16),FOREIGN KEY(User_ID);*

4- *CREATE TABLE Login_INFO(User_ID INT(16), User_NAME VARCHAR(32) NOT NULL, User_PASSWORD VARCHAR(16),FOREIGN KEY(User_ID);*

5-*INSERT INTO User VALUE (12345, "May", "Shaheen", "8-2-2002");*

6-*INSERT INTO Contact_INFO VALUE (12345, "Maysh@email.com", 0569722299, "Ramallah, Al-birah");*

7-*INSERT INTO Login_INFO VALUE (12345, "May", "112233m@#s");*

d. *Our project base idea was a library with normal loaning system, but we needed to make a few changes to it, so we made the first INTER LOANING system between people of the web so, you make an account on our app and then you will have to pay monthly fee to the library to be able to barrow from us.*

Technology

We are going to use in this project Windows 10, The database System is going to be MySQL, the programming language is JAVA and JAVAFX