North South University

CSE311L Database System Lab

Department of Electrical & Computer Engineering

Project Report

Section: 01

Project Title: NSU LIBRARY MANAGEMENT SYSTEM

Group members:

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NSU Library Management System

Introduction:

NSU Library Management System is a web-based project that can manage information of books in the NSU Library. Students of NSU can use this website to access book's information.

This website can manage the number of books and their information according to their availability. From user's point of view, user can create a unique profile by signing up. Process of registering a new profile is very simple and user friendly. This website will store user's data in its database. After signing up, user can log in his profile. After the login, the website will directly take the user to the 'List of Books' page and show user the names and quantities of the books available in the stock. Book-Name, Author's Name, Edition of the book, availability status, number of books available as well as the department name details will be in details.

NSU Library Management System can help the institution to manage the books in a handy and structured way. Also, the students can access the book's information and availability without physical appearance.

Features:

- **Home Page:** At first the website opens with a home page where the library timing is given and other miscellaneous information.
- **Account Register:** This feature allows to create a new profile which anyone can use to log in later and access the Book List. Registration form ask for some information about the user such as name, email, contact number, password etc. to complete the registration.
- **Account Log in:** After registration, user can simply log in by providing the correct username and password. If the given username/password doesn't match with any of the users in database, user can't log in and shows a not valid message.
- **List of Books:** A user can see the list of available books only after log in. They can also see the number of copies available in Library and many other information's about the book.

Technologies:

Tech stack that has been used in the project:

- **HTML:** Used in creating the basic structure of the website.

- **CSS:** Used in front-end design.

- **PHP:** We have used PHP to connect HTML with the database.

- **XAMPP:** Is used in doing the SQL part and creating database.

- **Visual Studio Code:** The whole HTML, CSS and PHP part are done using Visual Studio Code.

Gnatt Chart:

Week 01: Primary research, collecting data, beginning of Frontend high level designing, completing Frontend.

Week 02: Reviewing Frontend, assembling data, implementing database.

Week 03: Analyzing database, beginning of Backend, Backend coding.

Week 04: Testing/ debugging source code, linking backend & frontend, testing project performance, Writing Report.

Methodology:

- First created basic structure of the website using HTML and designed it with CSS
- Then we created a database in myphp using XAMPP
- After that we converted the HTML files to PHP files to connect with the database.
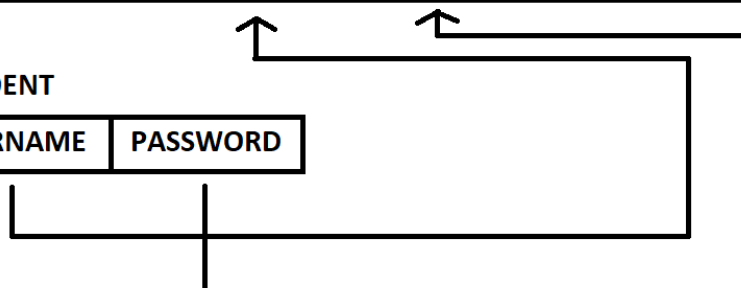
ER Diagram:
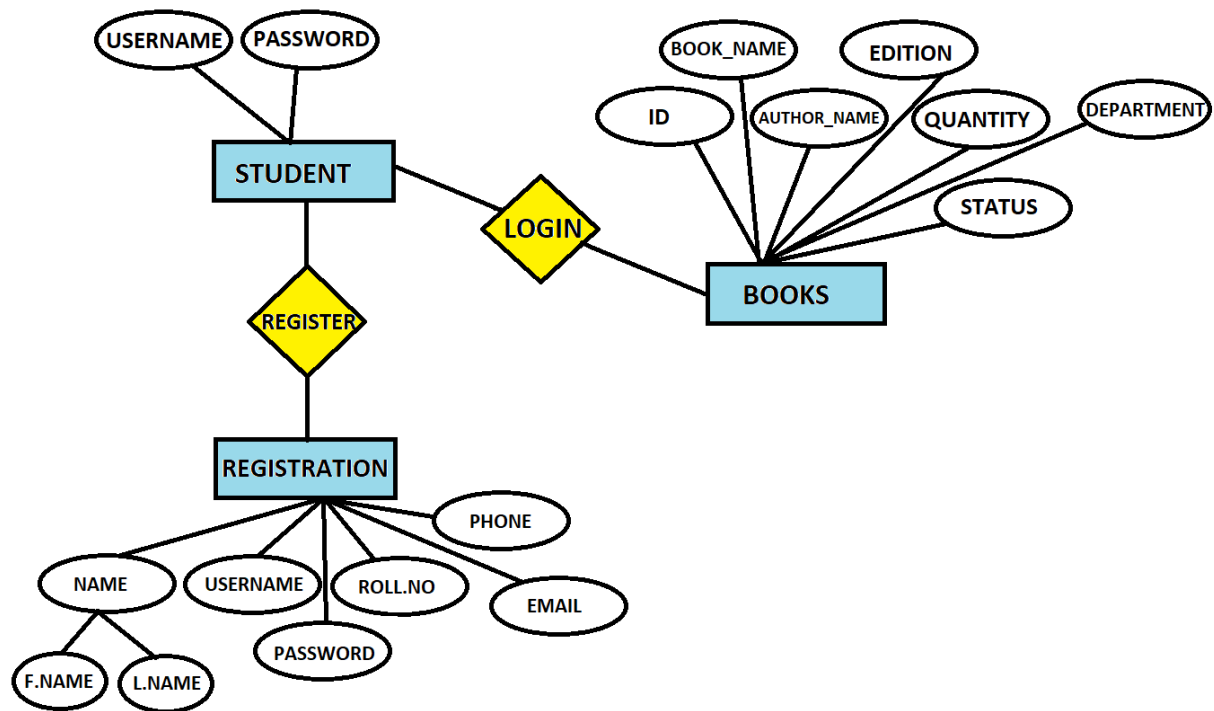
DB SCHEMA

BOOKS

ID	BOOK_NAME	AUTHOR_NAME	EDITION	QUANTITY	STATUS	DEPARTMENT

REGISTRATION

F.NAME	L.NAME	USERNAME	PASSWORD	ROLL.NO	PHONE	EMAIL

STUDENT

USERNAME	PASSWORD

Snapshots:

Home Page(index.php):
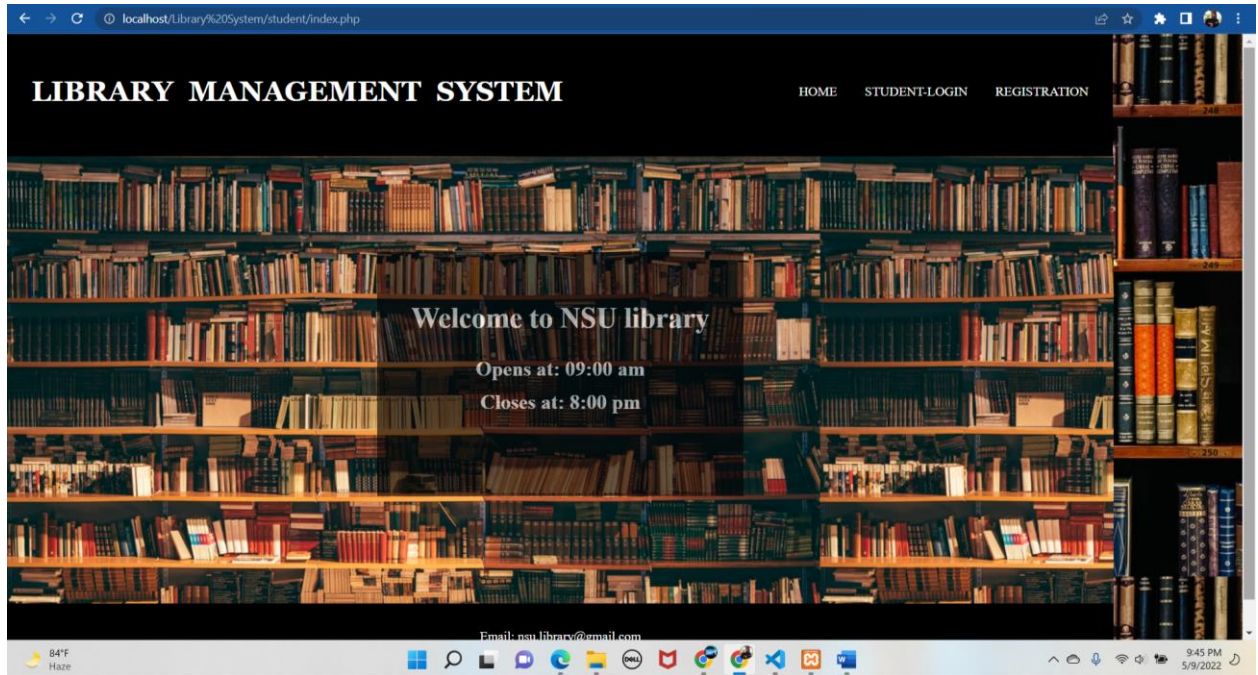
Account Registration Page(registration.php):
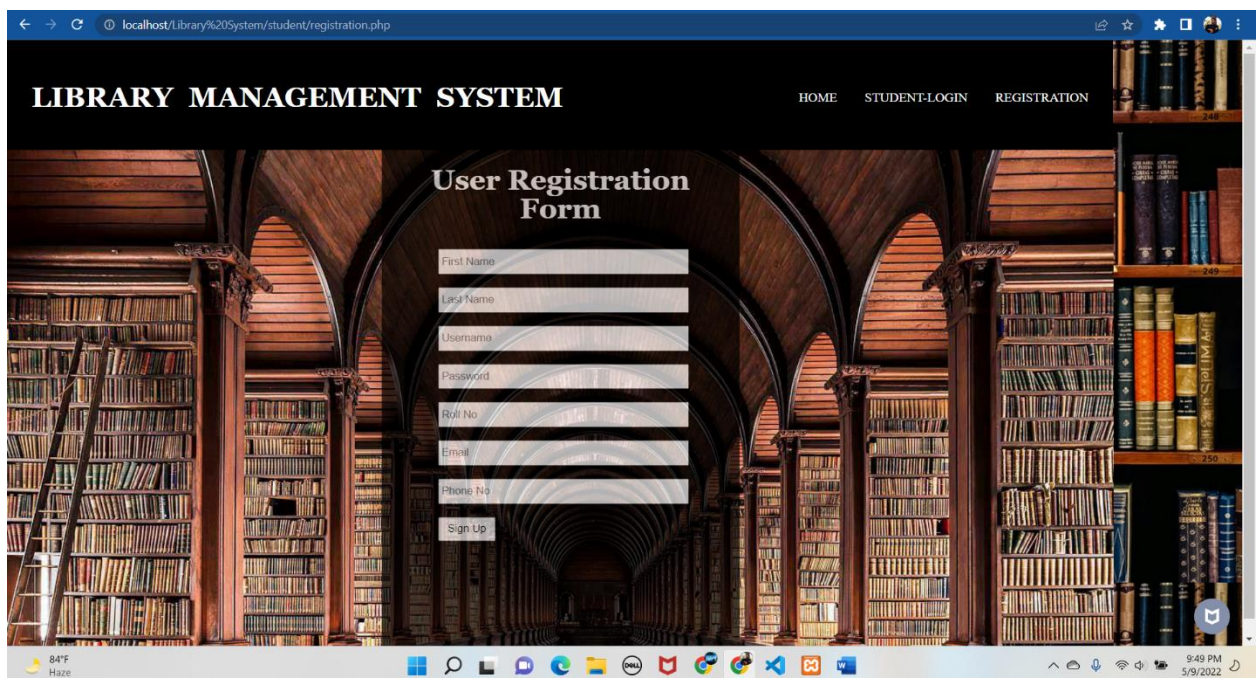
Log in Page:(student_login.php)

List of Books:(books.php)

Discussion:

Users will be benefited from using this online based platform. Here we have used all necessary tools such as HTML, CSS, PHP, SQL to develop the application. This is a web-based application which focused in storing book's information, user account's information. The student is used as a user. This website can be accessed by anyone. Anyone can create an account, log in, get access of the books. At first, we did the primary research, planning and created an ER diagram.

In Front-end, we used HTML and CSS. Using Visual Studio Code we did the entire project, at first, we made a basic structure of the project using HTML. We made separate html files for the different pages in our website. First the index.html where we have built our home page, second the registration.html and then student_login.html and lastly, book.html. Then using CSS, we designed all the pages with different backgrounds and designs.

After creating the HTML files, we created our database using SQL in XAMPP, we made a books table to store the information's of the books and also later add books in the website using the database. Then the students table to store the user's information.

To connect the database with our website, we converted our HTML files to PHP files and used connection.php to connect them together. Now when any student registers a new account using our website, the student's information is stored directly in the database so that he/she can login to get access to the Book List page.

NSU Library Management System can help the institution to manage the books in a handy and structured way. Also, the students can access the book's information and availability without physical appearance.