INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

Garden of Knowledge and Virtue

(Company No. 101067-P)

PREMIER INTERNATIONAL ISLAMIC RESEARCH UNIVERSITY

INFO 3305

<u>WEB APPLICATION DEVELOPMENT</u>

SECTION 2

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Proposal: <u>Library Management System</u>

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1. Introduction of the web application

Our web application project is a library management system. The project which aims in developing a computerized system to maintain all the daily work of library. Our system has many features like facility of user login and a facility of admin login through which the admin can monitor the whole system. It has also a facility where student after logging in their accounts can see list of books issued and its issue date and return date and also the students can request the librarian to add new books by filling the book request form. Overall, this project of ours is being developed to help the students as well as staff of library to maintain the library in the best way possible and also reduce the human efforts.

2. Objectives of the web application

- Online book issue
- Request column for librarian for providing new books
- A separate column for digital library
- Student login page where student can find books issued by him/her and date of return.
- A search column to search availability of books

3. Features and functionalities of the web application

- **Create Account:** It allows the new user to create a new account in our library system. Users need to fill personal information such as name, phone number, username, matric-no, etc.

- **Password recovering:** Registered members can recover their password in case they forgot or they want to update it.

- **Login**: after the user has keyed in their username and password, they need to click the login button. If the password matches the username, then it will go to the main menu.

- **User Sign Up:** When the user is new to the system and wants to become a part, that wants to create a new account and sign up to the system.

- **Search Book:** The admin can search for a book by book id, author name, or book name.

- **Display account**: Display the user's personal details and information.

- **Logout:** the system logs the user or the admin out of the system and takes to the login page again.

- **Wrong Password/ Username:** Showing an error message if the password or the username are incorrect so the user name and password should be matched.

- **Students Can Request the Librarian to Add New Books:** Students can request the Liberian to add new books by filling the book request form.
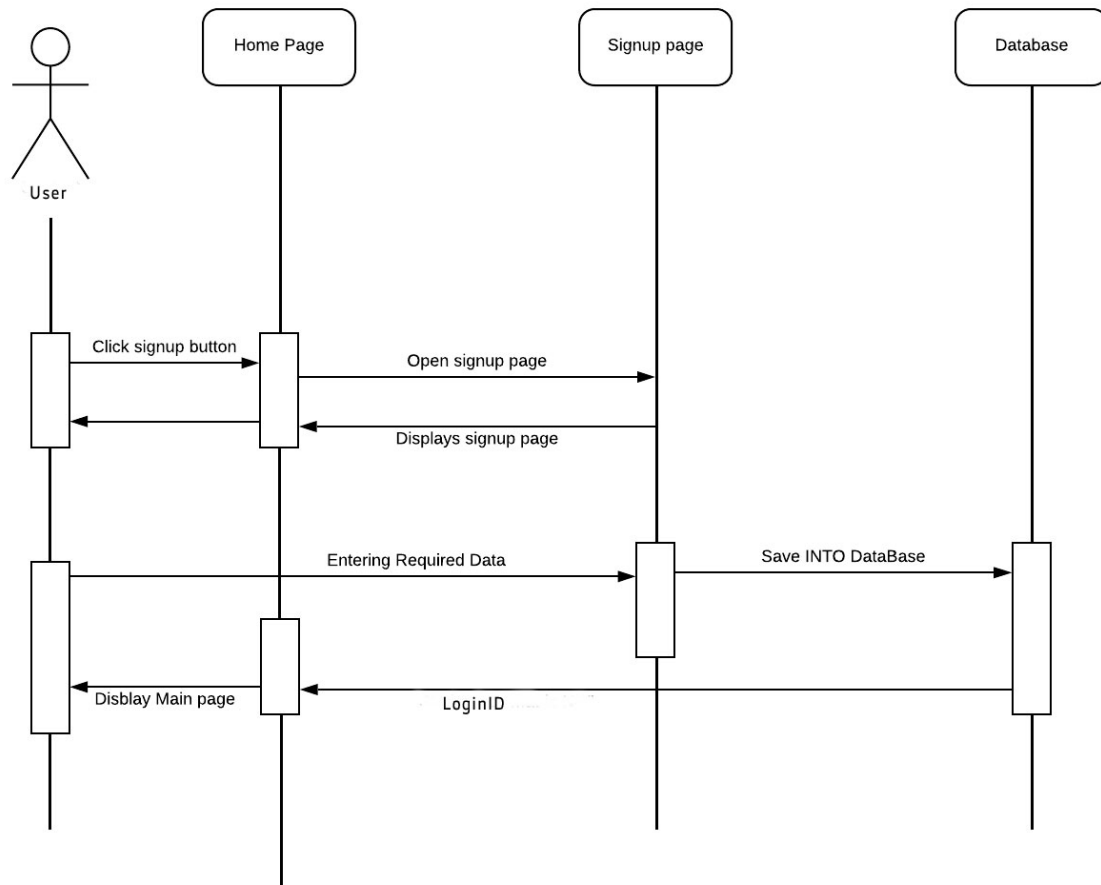
4. Properly define the views, controllers, and models with a diagram.
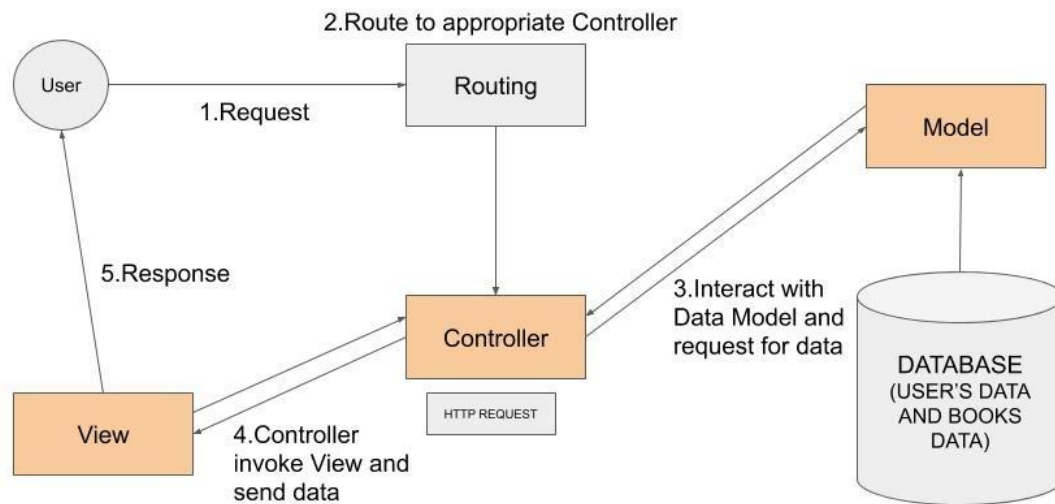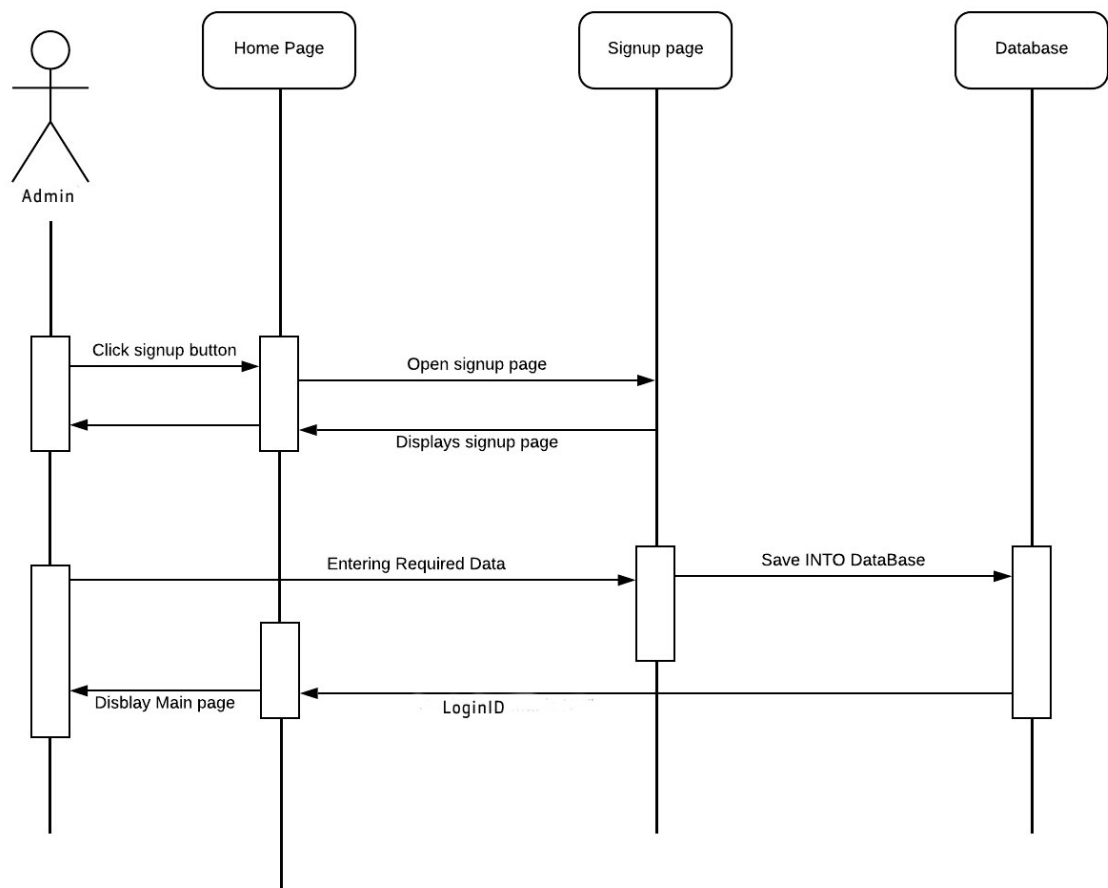

- **User:** the users will see our web application and send their request (registration data, login data or borrow/return the book) through the controller.

- **Controllers:** the controller will get the user's request and send it to the model. Then will take the data comes from model to send it to the view.

- **Models:** will take the requested data from the controller and request needed data from the database, and then send back the needed data to the controller.

- **Views:** will take the data from the controller and display it to the user.
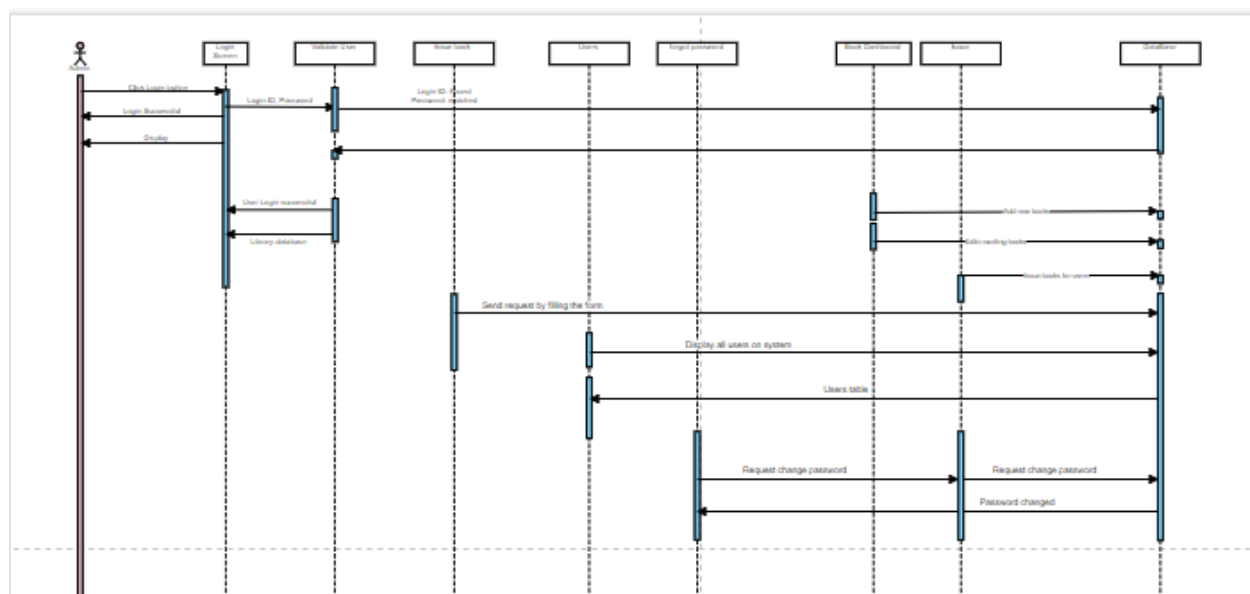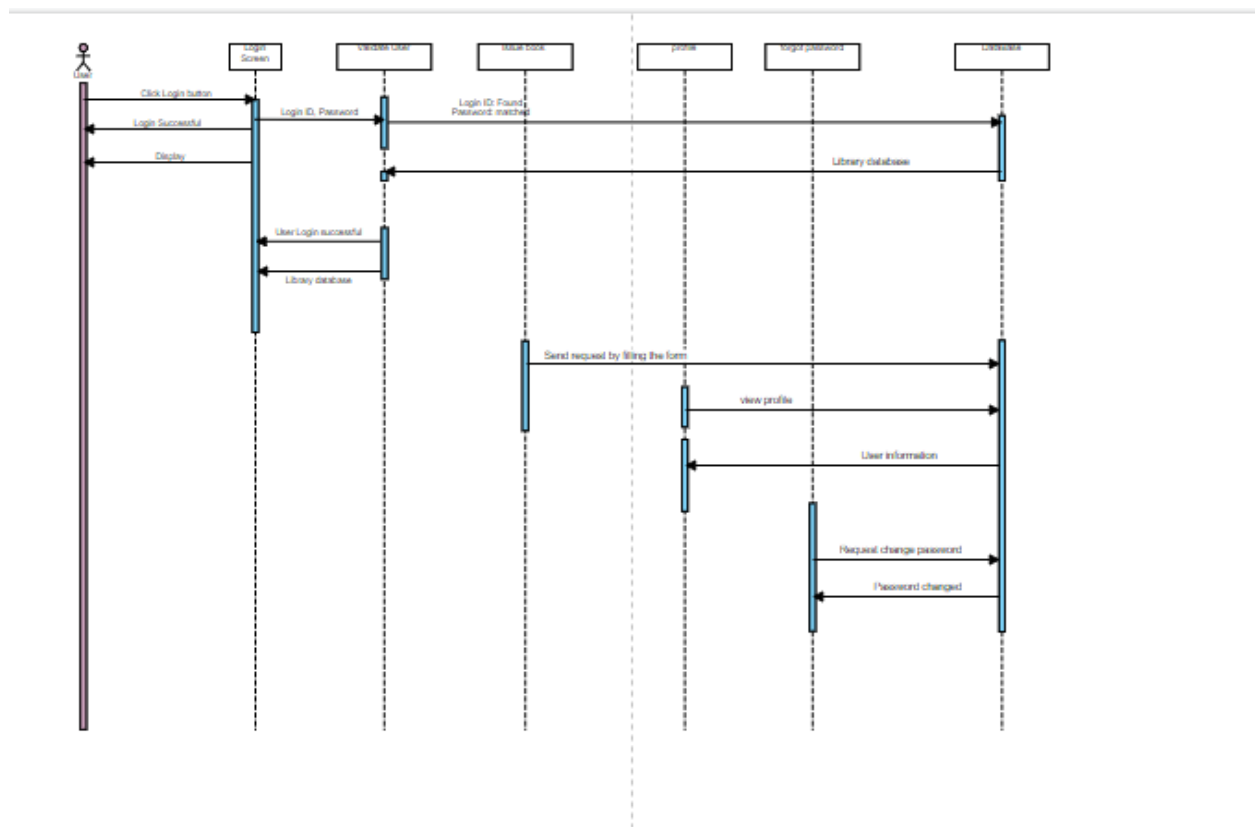
5. A sequence diagram to represent the interaction of the web application.

- **Sign up for user and admin**

	Home Page		Signup page		Database
User					

Click signup button → Home Page

Open signup page → Signup page

Displays signup page ←

Entering Required Data → Signup page

Save INTO DataBase → Database

LoginID ←

Disblay Main page ←

Admin

Home Page

Signup page

Database

Click signup button

Open signup page

Displays signup page

Entering Required Data

Save INTO DataBase

Disblay Main page

LoginID

- **User and admin user interface**

- **Logout interface:**

6.   References

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- https://app.lucidchart.com/documents
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