

BSc (Hons) in Information Technology Specializing IT Lab Assessment

SE3040 - Application Frameworks

Semester 1

Lab Exam: Weekday

Task:

- 1. npm create vite@latest
- 2. Select React JS and JavaScript
- 3. Navigate to the directory and install the dependencies using
 - a. npm install

Challenge

In this one-hour challenge, you are required to create a Library Management System using React with state management using either Context API or Redux. The system should be able to perform basic CRUD operations on books and users.

Here are the requirements for the Library Management System:

- Home page: Display a list of books and users.
- Book page: Show a list of books with an option to add, edit, and delete books.
- User page: Show a list of users with an option to add, edit, and delete users.
- Book Detail page: Display the details of a selected book, including its title, author, publication date, and available copies. Users should be able to borrow and return books.
- User Detail page: Display the details of a selected user, including their name, email, phone number, and borrowed books.
- Navigation: Implement navigation to switch between the pages.
- State Management: Use either Context API or Redux for state management.

Note that there is no need to connect a backend for this assignment. The focus should be on the React implementation and state management. The code should be well-organized and easy to understand.

You have one hour to complete this challenge. At the end of the hour, you should submit your code to the GitHub classroom.

Evaluation Criteria:

Your assignment will be evaluated based on the following criteria:

- Functionality: Does the Library Management System meet the requirements specified above?
- Code quality: Is the code clean, organized, and easy to understand? Are the components reusable?
- State Management: Is the state management implemented using either Context API or Redux?
- Time Management: How well did you manage your time during the challenge?

Total Marks: 10

GitHub link: https://classroom.github.com/a/G2JzB4iN