

# 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 Power Equipment Renting System using React with state management using either Context API or Redux. The system should be able to perform basic CRUD operations on equipment and customers.

Here are the requirements for the Power Equipment Renting System:

- Home page: Display a list of equipment and customers.
- Equipment page: Show a list of equipment with an option to add, edit, and delete equipment.
- Customer page: Show a list of customers with an option to add, edit, and delete customers.
- Equipment Detail page: Display the details of a selected equipment, including its name, description, rental price, and availability. Customers should be able to rent and return equipment.
- Customer Detail page: Display the details of a selected customer, including their name, address, phone number, and rented equipment.
- 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/4OVgqYCt