Assignment: React Application with Multiple Features

Introduction:

In this assignment, you will build a React application that incorporates various features, including to-do lists, user registration, temperature conversion, and a theme switcher. You will utilise React hooks and conditional rendering to achieve this.

Task 1: To-Do List

- Create a to-do list section with the following features:
- Display a list of to-do items.
- Implement a search functionality that allows users to filter to-do items based on a search query.
- Provide the ability to create new to-do items.
- Allow users to delete to-do items.

Task 2: User Registration

Design and implement a user registration form with the following fields:

- Name
- ❖ Email
- Phone Number
- Color Choice

After registering, users should see their data displayed side by side with a background color of their choice.

Task 3: Temperature Converter

Create a temperature converter section that can convert temperatures between Celsius and Fahrenheit. Temperature convertor that allows users to convert temperatures from degrees Celsius to degrees Fahrenheit and vice versa.

Task 4: Theme Switcher

Add a theme switcher at the top right of the page. Users should be able to

switch between light and dark themes. Implement this feature using React context

and state.

Requirements:

• Use React and React Hooks for state management.

Organize your code into components for reusability.

• All of the components should be displayed on a single page.

Apply CSS styles to make your application visually appealing.

• Ensure responsive design that works on both desktop and mobile devices.

• The user should be able to switch between the different components by clicking on

tabs.

Submission:

Please submit your assignment as a zipped archive containing your project files.

Notice: delete node_modules folder before you submit

This assignment will challenge you to combine different aspects of React

development, including state management, conditional rendering, and user interface

design. It's designed to encourage creative problem-solving and provide practical

experience with real-world React applications.