



School of Computer Science Engineering and Information Systems

Full Stack Web Development –Lab NodeJS & ReactJS

CourseId : PMCA601P

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1.Assume that the server-side Node.js script maintains the details of various employees in an array. Employee details include EMPLOYEE NAME, DEPARTMENT, and SALARY. Design a form to select various employees and facilitate total salary calculation at the server end upon submitting the form.

2.Design a single Node.js web application with different URLs to manage the session process as follows:

- a. A form to collect the session key and value.
- b. A button to either create a new session variable if it does not exist or update its value if it already exists. Display the corresponding details.
- c. A button to list all active session variables, displaying each session key and its value when clicked.

3.Develop a Node JS application to authenticate the credentials data supplied through HTML form using the JSON array maintained in the script. Ensure JSON array consists of keys named UserID, Password, Username and Failure_Attempt.

During each unsuccessful attempt increment Failure_Attempt by 1 and display the login page.

In case Failure_Attempt reaches 3 , display warning message alone.(Use NodeJS session)

4. Write a Node.js application that allows users to select a file through a user interface and click the 'UPLOAD' button. Validate that the selected file type is 'pdf' before uploading it to the server. Finally, display a message indicating whether the file is a valid PDF and if it was uploaded successfully.

5. Design the React based Controlled form components for capturing the details of the vehicle. Properties of Vehicle include Model, Color, Date of Registration(use Date Control) and Vehicle Type(2/3/4 Wheeler, use Drop Down).

On submission of the form display the details captured as JSON format in an alert box. Ensure the form is displayed with default values.

6. Create a React Class Component named 'Customer' with properties: name, age, gender, designation, and years of experience, all assigned default values. Write a React.js script to receive data from 'index.html', validate the age, and display the message in the following format:

"Data of Mr./Ms. <Name> is valid" if the age is above 25.

"Data of Mr./Ms. <Name> is invalid" if the age is below 25.
