

Practice 1 - Authentication System

Instruction:

Perform the following tasks in the Nimbus.

Title: Create Login Form with React State Management

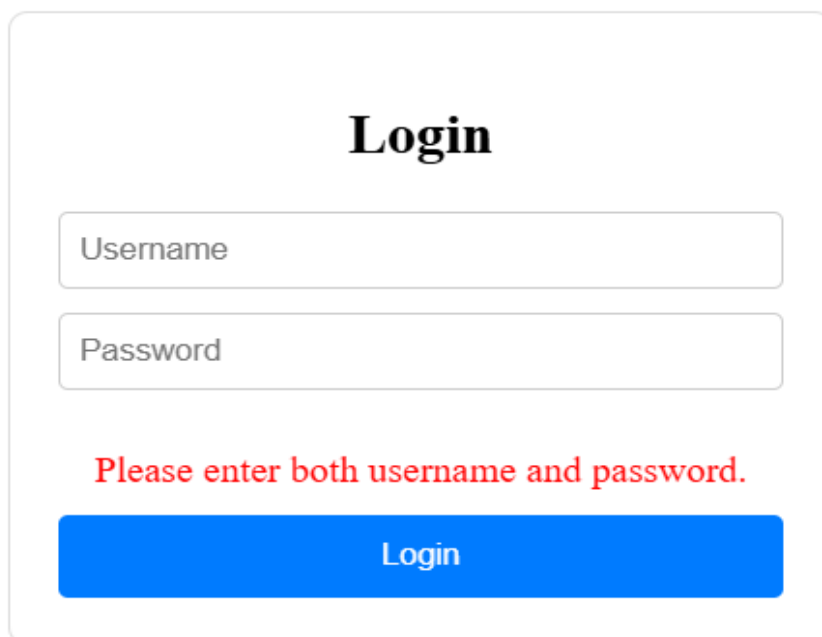
Objective:

Learn how to build a login form in React using basic state management with the useState hook. This task helps you understand how to capture and handle form input data, manage local component state, and respond to user actions in a React application.

Task Description:

Create a simple login form component in React that includes fields for username and password. Use the useState hook to manage form data locally. When the user types in the input fields, update the state in real time. Implement a submit button that, when clicked, logs the entered username and password to the console. Display a basic validation message if either field is left empty when the user tries to submit. Test your form by entering different values and observing the console outputs to ensure that state updates correctly and validation works as expected.

Expected Output:



Login

Username

Password

Please enter both username and password.

Login

React Code:

```
import React, { useState } from 'react';

function LoginForm() {
  const [username, setUsername] = useState('');
  const [password, setPassword] = useState('');
```

```

const [error, setError] = useState('');

const handleSubmit = (e) => {
  e.preventDefault();
  if (!username || !password) {
    setError('Please enter both username and password.');
```

Login

{error}

```

  } else {
    console.log('Username:', username);
    console.log('Password:', password);
    setError('');
  }
};

return (
  <div style={{
    display: 'flex', justifyContent: 'center', alignItems: 'center', height: '100vh'
  }}>
    <div style={{
      border: '1px solid #ccc', borderRadius: '10px', padding: '30px', width: '300px', textAlign:
    >
      <h2>Login</h2>
      <form onSubmit={handleSubmit}>
        <input
          type="text"
          placeholder="Username"
          value={username}
          onChange={(e) => setUsername(e.target.value)}
          style={{ display: 'block', margin: '10px auto', padding: '8px', width: '90%' }}
        />
        <input
          type="password"
          placeholder="Password"
          value={password}
          onChange={(e) => setPassword(e.target.value)}
          style={{ display: 'block', margin: '10px auto', padding: '8px', width: '90%' }}
        />
        {error && <p style={{ color: 'red' }}>{error}</p>}
        <button type="submit" style={{
          width: '100%', padding: '10px', backgroundColor: '#007bff',
          color: 'white', border: 'none', borderRadius: '5px', cursor: 'pointer'
        }}>Login</button>
      </form>
    </div>
  </div>
);
}

export default LoginForm;

```