

## Lesson 03 Demo 02

### Create a Form with Three Input Fields: Name, Email, and Message

**Objective:** To develop a form with three input fields: Name, Email and Message

**Tools Required:** Node terminal, React app, Visual Studio Code

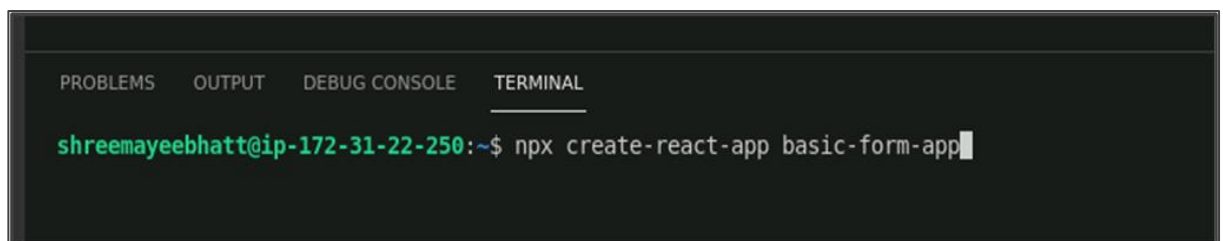
**Prerequisites:** Knowledge of creating a React app and understanding of the folder structure

#### Steps to be followed:

1. Create a new **React** app
2. Configure the **App.js** file
3. Create a new file called **BasicFormHandling.js**
4. Run the app and verify the functionality

#### Step 1: Create a new React app

- 1.1 Open the terminal and run the following command to create a new **React** app:  
**npx create-react-app basic-form-app**

A screenshot of a terminal window with a dark background. At the top, there are tabs labeled 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', and 'TERMINAL'. The 'TERMINAL' tab is active. The prompt shows the user 'shreemayeebhatt' at IP '172-31-22-250' with a tilde symbol. The command 'npx create-react-app basic-form-app' is entered, followed by a cursor.

This will create a new **React** app in a directory named **basic-form-app**.

1.2 Move to the newly created project directory by running the following command:

```
cd basic-form-app
```

## Step 2: Configure the App.js file

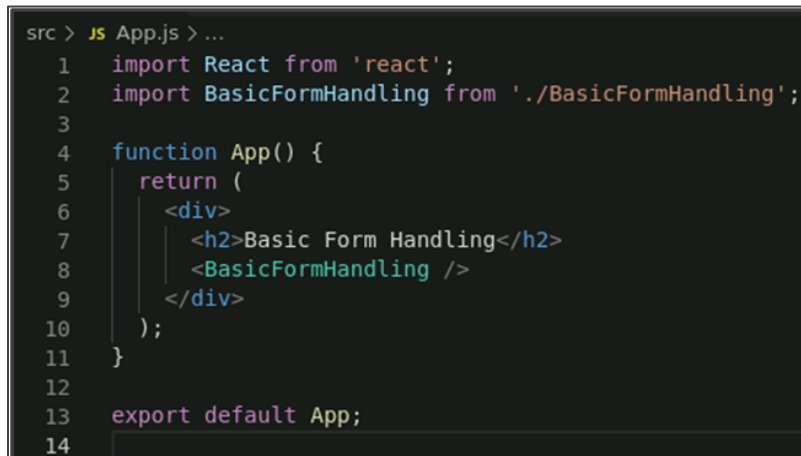
2.1 Open the React project in the Visual Studio code and navigate through the project directory of **basic-form-app** to open the **src/App.js** file. and replace the code in **App.js** with the following code:

```
import React from 'react';
import BasicFormHandling from './BasicFormHandling';
```

```
function App() {
  return (
    <div>
      <h2>Basic Form Handling</h2>

      <BasicFormHandling />
    </div>
  );
}
```

```
export default App;
```

A screenshot of a code editor with a dark theme. The file path 'src > JS App.js > ...' is visible at the top. The code is as follows:

```
1  import React from 'react';
2  import BasicFormHandling from './BasicFormHandling';
3
4  function App() {
5    return (
6      <div>
7        <h2>Basic Form Handling</h2>
8        <BasicFormHandling />
9      </div>
10   );
11 }
12
13 export default App;
14
```

This code defines the **App** component that renders the **BasicFormHandling** component.

### Step 3: Create a new file called BasicFormHandling.js

3.1 In your code editor, create a new file called **BasicFormHandling.js** inside the **src** directory

3.2 Copy and paste the provided code into the **BasicFormHandling.js** file

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

function BasicFormHandling() {
  const [formValues, setFormValues] = useState({
    name: "",
    email: "",
    message: "",
  });
  const [errors, setErrors] = useState({
    name: false,
    email: false,
    message: false,
  });
  const handleChange = (event) => {
    const { name, value } = event.target;
    setFormValues({ ...formValues, [name]: value });
    setErrors({ ...errors, [name]: false });
  };
  const handleSubmit = (event) => {
    event.preventDefault();
    // Check if any input fields are empty
    let formValid = true;
    const errorsCopy = { ...errors };
    for (const field in formValues) {
      if (!formValues[field]) {
        formValid = false;
        errorsCopy[field] = true;
      }
    }
    setErrors(errorsCopy);
  };
}
```

```

if (formValid) {
  console.log("Form submitted with values: ", formValues);

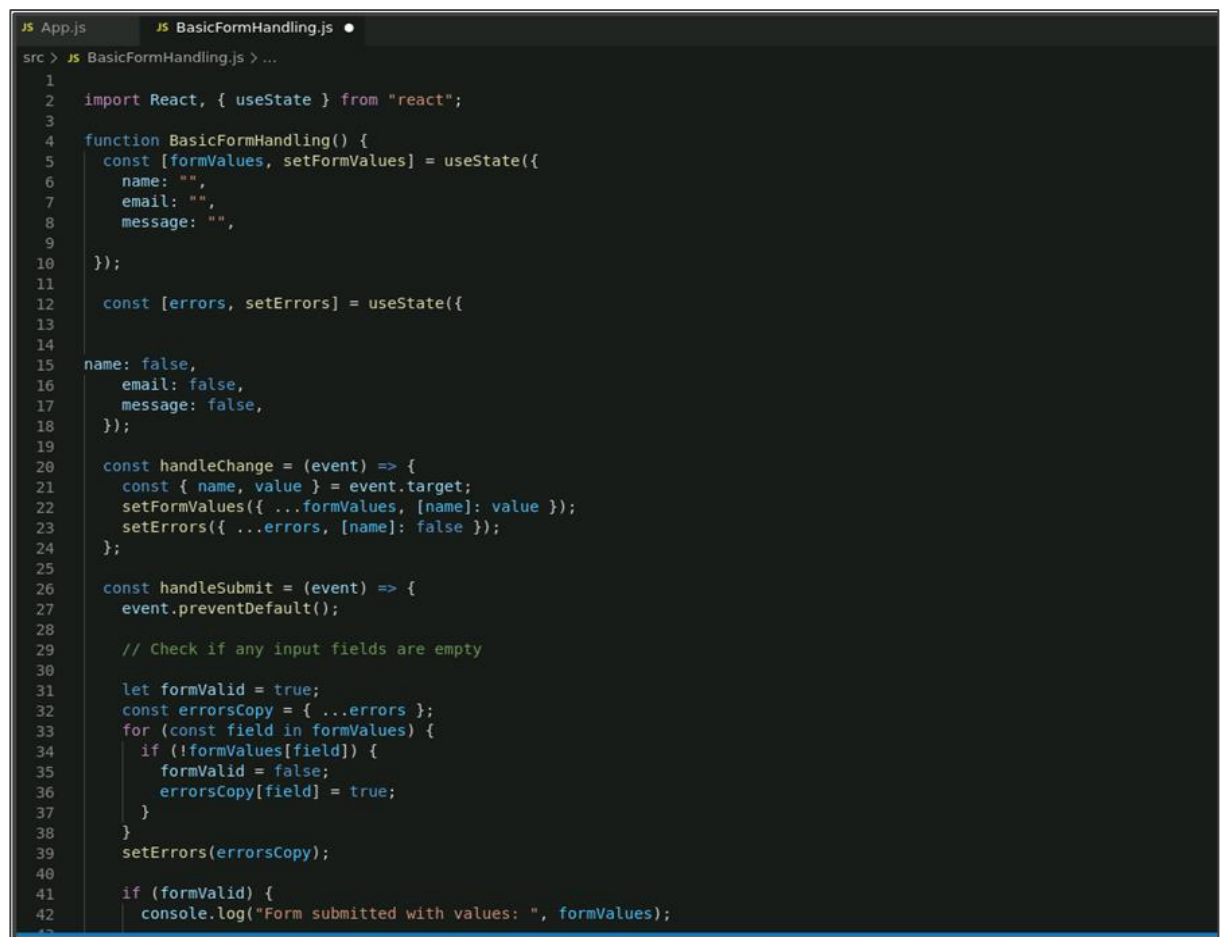
  // Add code to send form data to server or perform the desired action
}
};
return (
  <form onSubmit={handleSubmit}>
    <div>
      <label htmlFor="name">Name:</label>
      <input
        type="text"
        id="name"
        name="name"
        value={formValues.name}
        onChange={handleChange}
      />
      {errors.name && <div className="error">Please enter your name</div>}
    </div>
    <div>
      <label htmlFor="email">Email:</label>
      <input
        type="email"
        id="email"
        name="email"
        value={formValues.email}
        onChange={handleChange}
      />
      {errors.email && <div className="error">Please enter a valid email
address</div>}
    </div>
    <div>
      <label htmlFor="message">Message:</label>
      <textarea
        id="message"
        name="message"
        value={formValues.message}

```

```

        onChange={handleChange}
      />
      {errors.message && <div className="error">Please enter a message</div>}
    </div>
    <button type="submit">Submit</button>
  </form>
);
}
export default BasicFormHandling;

```



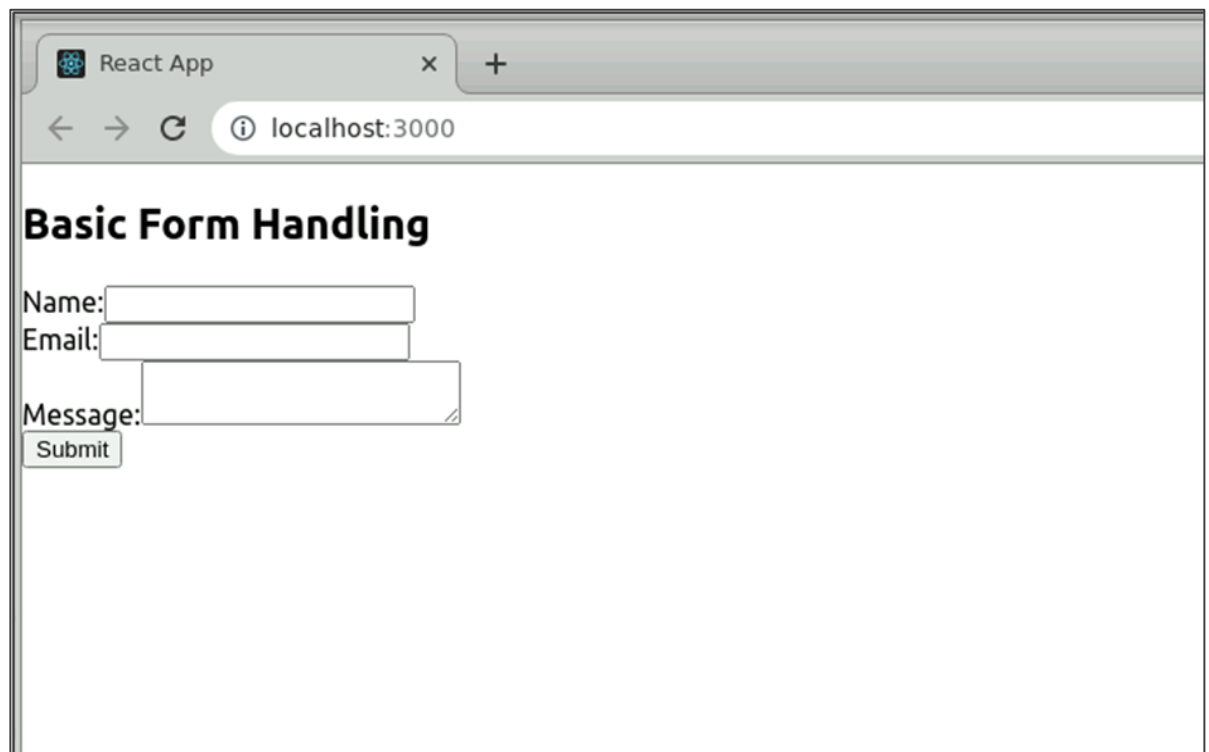
```

JS App.js JS BasicFormHandling.js
src > JS BasicFormHandling.js > ...
1
2 import React, { useState } from "react";
3
4 function BasicFormHandling() {
5   const [formValues, setFormValues] = useState({
6     name: "",
7     email: "",
8     message: "",
9   });
10
11   const [errors, setErrors] = useState({
12     name: false,
13     email: false,
14     message: false,
15   });
16
17   const handleChange = (event) => {
18     const { name, value } = event.target;
19     setFormValues({ ...formValues, [name]: value });
20     setErrors({ ...errors, [name]: false });
21   };
22
23   const handleSubmit = (event) => {
24     event.preventDefault();
25
26     // Check if any input fields are empty
27
28     let formValid = true;
29     const errorsCopy = { ...errors };
30     for (const field in formValues) {
31       if (!formValues[field]) {
32         formValid = false;
33         errorsCopy[field] = true;
34       }
35     }
36     setErrors(errorsCopy);
37
38     if (formValid) {
39       console.log("Form submitted with values: ", formValues);
40     }
41   };
42 }

```

## Step 4: Run the app and verify the functionality

- 4.1 Go to the terminal and execute the command **npm start** within the project directory **basic-form-app** to run the app
- 4.2 Once the server starts successfully, open **http://localhost:3000** in your browser to view the app.



The screenshot shows a web browser window with a single tab titled 'React App'. The address bar displays 'localhost:3000'. The main content area of the browser shows a web application with the heading 'Basic Form Handling'. Below the heading, there is a form with three input fields: 'Name:', 'Email:', and 'Message:'. Each field is followed by a text input box. Below the 'Message' input box is a 'Submit' button.

In the browser, you will see the heading **Basic Form Handling** and a form with input fields for **Name**, **Email**, and **Message**, along with a **Submit** button. Enter the values in the input fields and submit the form. If any required field is left empty or an invalid email address is entered, appropriate error messages will be displayed. If all the required fields are filled correctly and the form is submitted, the form values will be logged into the console.

With this, you've successfully created a form in React to input values from the user and log them into the console.