



# Vidyavardhini's College of Engineering and Technology

Department of Artificial Intelligence & Data Science

AY: 2025-26

Class:	TE	Semester:	V
Course Code:	C8C502	Course Name:	Web Computing

Name of Student:	Yash Nilesh Kasare
Roll No. :	27
Assignment No.:	03
Title of Assignment:	Concepts of React Fundamentals.
Date of Submission:	22/08/25
Date of Correction:	04/09/25

## Evaluation

Performance Indicator	Max. Marks	Marks Obtained
Completeness	5	5
Demonstrated Knowledge	3	3
Legibility	2	1
Total	10	9

Performance Indicator	Exceed Expectations (EE)	Meet Expectations (ME)	Below Expectations (BE)
Completeness	5	3-4	1-2
Demonstrated Knowledge	3	2	1
Legibility	2	1	0

## Checked by

Name of Faculty : Ms. Kshitija Gharat

Signature : Kshitija

Date : 4/9/25

Nilesh Kagarc  
TE (AI/DS) - 26  
Web Computing : Assignment No.03.

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

export default function ContactManager() {
  const [form, setForm] = useState({ name: "",
    phone: "", email: "" });
  const [contacts, setContacts] = useState([]);
  const [search, setSearch] = useState("");

  const onChange = (e) => {
    const {name, value} = e.target;
    setForm((f) => ({...f, [name]: value}));
  };

  const addContact = (e) => {
    e.preventDefault();
    if (!form.name || !form.phone || !form.email) {
      alert("Please enter all fields");
      return;
    }
    setContacts((prev) => [...prev, {id: Date.now(),
      ...form}]);
    setForm({name: "", phone: "", email: ""});
  };

  const removeContact = (id) => {
    setContacts((prev) => prev.filter((c) => c.id !== id));
  };
}
```

```
const filtered = useMemo(() => {  
  const q = search.toLowerCase();  
  return contacts.filter(  
    (c) =>  
    c.name.toLowerCase().includes(q) ||  
    c.phone.toLowerCase().includes(q) ||  
    c.email.toLowerCase().includes(q)  
  );  
}, [contacts, search]);
```

```
return (  
  <div style = {{ padding: 20 }} >  
    <h2> Q1. Contact List Manager </h2>  
    <form onSubmit = {addContact} style = {{ display: "flex",  
      gap: 8 }} >  
      <input  
        name = "name"  
        placeholder = "Name"  
        value = {form.name}  
        onChange = {onChange}  
      />  
      <input  
        name = "phone"  
        placeholder = "Phone"  
        value = {form.phone}  
        onChange = {onChange}  
      />  
    </form>  
  </div>  
)
```



```
<input  
  name = "email"  
  placeholder = "Email"  
  value = {form.email}  
  onChange = {onChange}  
>
```

```
<button type = "submit"> Add </button>
```

```
</form>
```

```
<input >
```

```
  style = {{ marginTop: 12, padding: 6, width: "100%" }}
```

```
  placeholder = "Search ..."
```

```
  value = {search}
```

```
  onChange = {e => setSearch(e.target.value)}
```

```
>
```

```
<ul style = {{ marginTop: 12 }} >
```

```
  {filtered.map(c => (
```

```
    <li key = {c.id} style = {{ margin: "6px 0" }} >
```

```
      <b> {c.name} </b> - {c.phone} - {c.email} { " " }
```

```
      <button onClick = {() => removeContact(c.id)} > Remove
```

```
    </button>
```

```
  </li>
```

```
)})
```

```
</ul>
```

```
</div>
```

```
)
```

```
}
```

```

Q.2 import React, {useState} from "react" ;

export default function ColorSelector() {
  const [selected, setSelected] = useState("");
  const colors = ["Red", "Blue", "Green", "Yellow"];

  return (
    <div style = {{ padding : 20 }} >
      <h2> Q2. Color Selector </h2>
      <div style = {{ display : "flex", gap : 10 }} >
        { colors.map(c) => (
          <button key = {c} onClick = {(c) => setSelected(c)} >
            {c}
          </button>
        ) ) }
      </div>
      <p style = {{ marginTop : 10 }} >
        { selected
          ? "You have selected ${selected}."
          : "Please select a color." }
      </p>
    </div>
  );
}

```

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

```
export default function ClickCounter() {  
  const [count, setCount] = useState(0);
```

```
  return (
```

```
    <div style={{ padding: 20 }}>
```

```
    <h2> Q3. Click Counter </h2>
```

```
    <button onClick={() => setCount((n) => n + 1)}>
```

```
      > CLICK </button>
```

```
    <p style={{ marginTop: 10 }}>
```

```
      Number of times clicked : <b> {count} </b>
```

```
    </p>
```

```
  </div>
```

```
);
```

```
}
```