Ex. No: 5	React App Development
22.08.2023	

Aim:

To create an app using React with Components, Rendering, and Data Sharing.

Program:

App.js
```js
import React, { useState, useEffect } from "react";
import { v4 as uuid } from "uuid";
import "./App.css";
import Header from "./Header";
import AddContact from "./AddContact";
import ContactList from "./ContactList";

function App() {
  const LOCAL_STORAGE_KEY = "contacts";
  const [contacts, setContacts] = useState(
    JSON.parse(localStorage.getItem(LOCAL_STORAGE_KEY)) ?? []
  );

  const addContactHandler = (contact) => {
    console.log(contact);
    setContacts([...contacts, { id: uuid(), ...contact }]);
  };

  const removeContactHandler = (id) => {
    const newContactList = contacts.filter((contact) => {
      return contact.id !== id;
    });

    setContacts(newContactList);
  };

  // useEffect(() => {
  //   const retriveContacts =
  JSON.parse(localStorage.getItem(LOCAL_STORAGE_KEY));
  //   if (retriveContacts) setContacts(retriveContacts);
  // }, []);

  useEffect(() => {
    localStorage.setItem(LOCAL_STORAGE_KEY, JSON.stringify(contacts));
  }, [contacts]);

  return (
```

```
    <div className="ui container">
      <Header />
      <AddContact addContactHandler={addContactHandler} />
      <ContactList contacts={contacts} getContactId={removeContactHandler} />
    </div>
  );
}

export default App;
```

App.css

```css
.main {
  margin-top: 5em;
}

.center {
  justify-content: center;
  padding: 10px;
}

.ui.search input {
  width: 100%;
  border-radius: 0 !important;
}

.item {
  padding: 15px 0px !important;
}

i.icon {
  float: right;
  font-size: 20px;
  cursor: pointer;
}
```

AddContact.js

```javascript
import React from "react";

class AddContact extends React.Component {
  state = {
    name: "",
    email: "",
  };

  add = (e) => {
    e.preventDefault();
    if (this.state.name === "" || this.state.email === "") {
      alert("ALl the fields are mandatory!");
      return;
```

```
      }
      this.props.addContactHandler(this.state);
      this.setState({ name: "", email: "" });
    };
    render() {
      return (
        <div className="ui main">
          <h2>Add Contact</h2>
          <form className="ui form" onSubmit={this.add}>
            <div className="field">
              <label>Name</label>
              <input
                type="text"
                name="name"
                placeholder="Name"
                value={this.state.name}
                onChange={(e) => this.setState({ name: e.target.value })}
              />
            </div>
            <div className="field">
              <label>Email</label>
              <input
                type="text"
                name="email"
                placeholder="Email"
                value={this.state.email}
                onChange={(e) => this.setState({ email: e.target.value })}
              />
            </div>
            <button className="ui button blue">Add</button>
          </form>
        </div>
      );
    }
}

export default AddContact;
```

ContactCard.js

```
import React from "react";
import user from "../images/user.png";

const ContactCard = (props) => {
  const { id, name, email } = props.contact;
  return (
    <div className="item">
      <img className="ui avatar image" src={user} alt="user" />
      <div className="content">
        <div className="header">{name}</div>
```

```
          <div>{email}</div>
        </div>
        <i
          className="trash alternate outline icon"
          style={{ color: "red", marginTop: "7px" }}
          onClick={() => props.clickHander(id)}
        ></i>
      </div>
    );
};

export default ContactCard;
```

ContactList.js
```
import React from "react";
import ContactCard from "./ContactCard";

const ContactList = (props) => {
  console.log(props);

  const deleteConactHandler = (id) => {
    props.getContactId(id);
  };
  const renderContactList = props.contacts.map((contact) => {
    return (
      <ContactCard
        contact={contact}
        clickHander={deleteConactHandler}
        key={contact.id}
      />
    );
  });
  return <div className="ui celled list">{renderContactList}</div>;
};

export default ContactList;
```

Header.js
```
import React from "react";

const Header = () => {
  return (
    <div className="ui fixed menu">
      <div className="ui container center">
        <h2>Contact Manager</h2>
      </div>
    </div>
  );
};
```

```
export default Header;
```

Output:

Due to some errors in code, output isn't available.

Result:

Therefore, we've successfully an app using React with Components, Rendering, and Data Sharing.