| Ex. No: 5 | - React App Development |
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| 22.08.2023 | |

Aim:

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

Program:

App.jsx

```
import { useEffect, useState } from "react"
import { NewTodoForm } from "./NewTodoForm"
import "./styles.css"
import { TodoList } from "./TodoList"
export default function App() {
 const [todos, setTodos] = useState(() => {
   const localValue = localStorage.getItem("ITEMS")
   if(localValue == null) return []
    return JSON.parse(localValue)
  useEffect(() => {
   localStorage.setItem("ITEMS", JSON.stringify(todos))
  }, [todos])
  function addTodo(title) {
    setTodos(currentTodos => {
        ...currentTodos,
        { id: crypto.randomUUID(), title, completed: false },
  function toggleTodo(id, completed) {
    setTodos(currentTodos => {
      return currentTodos.map(todo => {
        if (todo.id === id) {
          return { ...todo, completed }
        return todo
    })
```

NewTodoForm.jsx

```
import { useState } from "react"
export function NewTodoForm({onSubmit}) {
    const [newItem, setNewItem] = useState("")
    function handleSubmit(e){
        e.preventDefault()
        if (newItem === "") return
        onSubmit(newItem)
        setNewItem("")
        <form onSubmit={handleSubmit} className="new-item-form">
            <div className="form-row">
              <label htmlFor="item">New Item</label>
                value={newItem}
                onChange={e => setNewItem(e.target.value)}
                type="text"
                id="item"
            <button className="btn">Add</button>
        </form>
```

TodoItem.jsx

Styles.css

```
* {
    font-family: Arial, Helvetica, sans-serif;
    box-sizing: border-box;
}

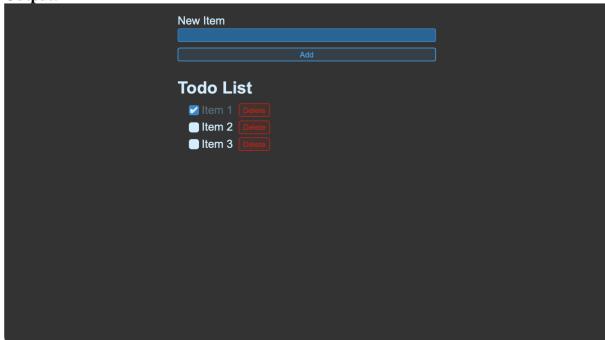
body {
    background: #333;
```

```
color: hsl(200, 100%, 90%);
 max-width: 400px;
  padding: 1rem;
 margin: 0 auto;
.new-item-form {
 display: flex;
 flex-direction: column;
 gap: 0.5rem;
.form-row {
 display: flex;
 flex-direction: column;
gap: 0.1rem;
.btn {
  background: hsl(200, 100%, 50%, 0.1);
 border: 1px solid hsl(200, 100%, 50%);
 color: hsl(200, 100%, 50%);
 padding: 0.25em 0.5em;
 border-radius: 0.25em;
 cursor: pointer;
 outline: none;
.btn:hover,
.btn:focus-visible {
 background: hsl(200, 100%, 50%, 0.2);
.btn.btn-danger {
  background: hsl(0, 100%, 40%, 0.1);
 border: 1px solid hsl(0, 100%, 40%);
  color: hsl(0, 100%, 40%);
.btn.btn-danger:hover,
.btn.btn-danger:focus-visible {
 background: hsl(0, 100%, 40%, 0.2);
.new-item-form input {
 outline: none;
  border: 1px solid hsl(200, 100%, 40%);
 background: hsl(200, 100%, 30%);
 border-radius: 0.25em;
  padding: 0.25em 0.5em;
 color: hsl(200, 100%, 90%);
```

```
.new-item-form input:focus {
 border: 1px solid hsl(200, 100%, 70%);
.header {
 font-size: 1.5rem;
margin-top: 1.5rem;
 margin-bottom: 0.5rem;
margin: 0;
padding: 0;
margin-left: 1rem;
 list-style: none;
.list li:has(input:checked) label {
 color: hsl(200, 20%, 40%);
.list {
 display: flex;
 flex-direction: column;
 gap: 0.3rem;
 display: flex;
 gap: 0.5rem;
 align-items: center;
.list li label {
 display: flex;
gap: 0.25rem;
cursor: pointer;
 align-items: center;
.list li:has(input:focus-visible) label {
 outline: 1px solid hsl(200, 100%, 50%);
.list li input {
 outline: none;
 width: 0;
 height:
                0;
 appearance: none;
```

```
pointer-events: none;
 position: absolute;
.list li label::before {
 content: "";
 display: block;
 width: 0.9rem;
 height: 0.9rem;
 background: hsl(200, 100%, 90%);
 border-radius: 0.25em;
 display: flex;
 justify-content: center;
 align-items: center;
.list li label:hover::before {
 background: hsl(200, 100%, 80%);
.list li:has(input:checked) label::before {
 content: "√";
 background: hsl(200, 100%, 40%);
 color: hsl(200, 100%, 90%);
 font-size: 0.75rem;
 font-weight: bold;
.list li:has(input:checked) label:hover::before {
 background: hsl(200, 100%, 30%);
```

Output:



Result:

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