

Q1. Catalog

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

```
function Catalog() {
```

```
  const [cart, setCart] = useState([]);
```

```
  const [Items] = useState([
```

```
    {
```

```
      id: 1,
```

```
      name: "Watch",
```

```
      price: 1222,
```

```
      image:
```

```
        "https://encrypted-  
tbn3.gstatic.com/shopping?q=tbn:ANd9GcRo5ekdAgvCTfOpQsgRPz1Yq2xv7pKAg_W7RxH6UxGSWHBxnUhYrIAVOGir  
VT9tNbAaCG5aQ6HoHw9ffimUJBZcyjH69i4Jc5vlcc1g14m8NGr6Vqd3j8FZ1g",
```

```
    },
```

```
    {
```

```
      id: 2,
```

```
      name: "Pen",
```

```
      price: 5,
```

```
      image: "https://m.media-amazon.com/images/I/41utRptbmvL.jpg",
```

```
    },
```

```
    {
```

```
      id: 3,
```

```
      name: "Foot ball",
```

```
      price: 550,
```

```
      image: "https://mycareersview.com/afile/mcv10920_Sporting%20Football%20Club.jpg",
```

```
    },
```

```
    {
```

```
      id: 4,
```

```
      name: "Cricket Bat",
```

```
      price: 152,
```

```
      image:
```

```
"https://rukminim2.flixcart.com/image/850/1000/krce64w0/bat/r/9/g/1-1-2-virat-kohli-grand-edition-tennis-cricket-bat-short-handle-original-imag55zexgqmtznz.jpeg?q=20&crop=false",
```

```
},  
{  
  id: 5,  
  name: "Laptop",  
  price: 44222,  
  image: "https://m.media-amazon.com/images/I/71DozMyPCBL.jpg",  
},  
{  
  id: 6,  
  name: "Moniter",  
  price: 8000,  
  image:  
    "https://image.made-in-china.com/2f0j00fsAUznRPbpqC/PC-Monitor-Computer-Moniter-Desltop-Monitor.jpg",  
},  
]);
```

```
const AddToCart = (item) => {  
  setCart([...cart, item]);  
};
```

```
const getTotalPrice = () => {  
  return cart.reduce((total, item) => total + item.price, 0).toFixed(2);  
};
```

```
return (  
  <>  
  <div className="App">  
    <h1>  
      <center>Shopping Cart</center>  
    </h1>  
  
    <div className="Items">
```

```

{" "}
<p>Items</p>
{Items.map((item) => (
  <div className="items" key={item.id}>
    <img src={item.image} alt={item.name} className=" h-40 w-40" />
    <h2>{item.name}</h2>
    <p>{item.price.toFixed(2)}</p>
    <button onClick={() => AddToCart(item)}>AddToCart</button>
  </div>
)}}
</div>

<div className="Cart">
  <p>Cart</p>
  {cart.length === 0 ? (
    <div>Empty Cart</div>
  ) : (
    <ul>
      {cart.map((item, index) => (
        <li key={index}>
          <img src={item.image} alt={item.name} className=" h-40 w-40" />
          <h2>{item.name}</h2>
          <p>{item.price.toFixed(2)}</p>
        </li>
      ))}
    </ul>
  )}
  <p>Total: ${getTotalPrice()}</p>
</div>
</div>
</>
);
}
export default Catalog;

```

Q2. Registration Form

```
<html>

<head>

  <title> Registration Form</title>

</head>


<body>

  <h1>Registrtion Form</h1>

  <form action="Details.html">

    <fieldset>

      <legend>Registration</legend>

      <label> Name </label>

      <input type="text" id="name" /><br><br>

      <label> Email ID </label>

      <input type="email" id="email" /><br><br>

      <label> Address </label>

      <input type="address" id="address" /><br><br>

      <input type="submit" value="submit" onclick="passvalues()" />

    </fieldset>

  </form>

</body>

<script> function

  passvalues()

  {

    var name = document.getElementById("name").value;

    var email = document.getElementById("email").value;

    var address = document.getElementById("address").value;

    localStorage.setItem("name",name);

    localStorage.setItem("email",email);

    localStorage.setItem("address",address);

    return;

  }

</script>

</html>
```

Details.html

```
<html>

<head>
  <title> Details</title>
</head>

<body>
  <form>
    Your Name is:<p id="name"></p><br>
    Your email is:<p id="email"></p><br>
    Your address is:<p id="address"></p>
    <script>
      document.getElementById("name").innerHTML = localStorage.getItem("name");
      document.getElementById("email").innerHTML = localStorage.getItem("email");
      document.getElementById("address").innerHTML = localStorage.getItem("address");
    </script>
  </form>
</body>
</html>
```

Q3. Registration Page Using React

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

const Form = () => {
  const [name, setName] = useState();
  const [email, setEmail] = useState();
  const [password, setPassword] = useState();
  const [submit, setSubmit] = useState(false);

  const handleName = (e) => {
    setName(e.target.value);
  };
};
```

```
const handleEmail = (e) => {  
  setEmail(e.target.value);  
};
```

```
const handlePassword = (e) => {  
  setPassword(e.target.value);  
};
```

```
const handleSubmit = (e) => {  
  e.preventDefault();  
  if (name === "" || email === "" || password === "") {  
    alert("Please fill all the fields");  
  } else {  
    setSubmit(true);  
    {localStorage.setItem("name",name)}  
    setName("");  
    setEmail("");  
    setPassword("");  
  }  
};
```

```
const message = () => {  
  if (submit) {  
    return (  
      <div>User {localStorage.getItem("name")} submitted successfully</div>  
    );  
  }  
};
```

```
return (  
  <>  
    <div className="App">  
      <h1>  
        <center>Registration Page</center>
```

</h1>

<div className="msg">{message()}</div>

<form onSubmit={handleSubmit}>

<fieldset>

<label htmlFor="name">Enter your name:</label>

<input

type="text"

id="name"

value={name}

onChange={handleName}

className=" border"

/>

<label htmlFor="email">Email</label>

<input

type="email"

id="email"

value={email}

onChange={handleEmail}

className="border"

/>

<label htmlFor="password">Password</label>

<input

type="text"

id="password"

```

        value={password}

        onChange={handlePassword}

        className="border"
    />
    <br />

    <button className="submit">Submit</button>
  </fieldset>
</form>
</div>
</>

);
};

export default Form;

App.js
import React from 'react';
import './App.css';
import Form from './Form'; // Import the Form component

function App() {
  return (
    <div className="App">
      <Form />
    </div>
  );
}

export default App

```

Q4. React Router

```

Home.js
const Home = () => {
  return <h1>Home</h1>;
};
export default Home;

Contact.js
const Contact = () => {
  return <h1>Contact Me</h1>;
};
export default Contact;

```


Layout.js

```
import { Outlet, Link } from "react-router-dom";
```

```
const Layout = () => {  
  return (<  
    <nav>  
      <ul>  
        <li>  
          <Link to="/">Home</Link>  
        </li>  
        <li>  
          <Link to="/blogs">Blogs</Link>  
        </li>  
        <li>  
          <Link to="/contact">Contact</Link>  
        </li>  
      </ul>  
    </nav>  
    <Outlet />  
  </>  
);  
}; export default Layout;
```

Nopage.js

```
const NoPage = () => {  
  return <h1>404</h1>;  
};  
export default NoPage;
```

App.js

```
import React from 'react';  
import './App.css';  
import { BrowserRouter as Router, Routes, Route } from "react-router-dom";  
import Layout from './Layout';  
import Home from './Home';  
import Blogs from './Blogs';  
import Contact from './Contact';  
import NoPage from './Nopage';
```

```
function App() {  
  return (  
    <Router>  
      <Routes>  
        <Route path="/" element={<Layout />}>  
        <Route index element={<Home />} />  
        <Route path="blogs" element={<Blogs />} />  
        <Route path="contact" element={<Contact />} />  
        { /* Catch-all route for 404 */ }  
        <Route path="*" element={<NoPage />} />  
      </Route>  
    </Routes>  
  </Router>  
);}
```

```
export default App;
```

```
Blogs.js
const Blogs = () => {
  return <h1>Blog Articles</h1>;
};
export default Blogs;
```

Q5. IOC Container Using Spring

Employee.java

```
package com.spring.Internal3;
```

```
public class Employee {
    private String ename;
    private String eage;
    private String eaddress;
    public String getEname() {
        return ename;
    }
    public void setName(String ename) {
        this.ename = ename;
        System.out.println(ename);
    }
    public String getEage() {
        return eage;
    }
    public void setEage(String eage) {
        this.eage = eage;
        System.out.println(eage);
    }
    public String getEaddress() {
        return eaddress;
    }
    public void setEaddress(String eaddress) {
        this.eaddress = eaddress;
        System.out.println(eaddress);
        System.out.println("-----");
    }
    public Employee(String ename, String eage, String eaddress) {
```

```

        super();
        this.ename = ename;
        this.eage = eage;
        this.eaddress = eaddress;
    }
    public Employee() {
        super();
        // TODO Auto-generated constructor stub
    }
    @Override
    public String toString() {
        return "Employee [ename=" + ename + ", eage=" + eage + ", eaddress=" + eaddress + "]";
    }
}

```

App.java

```

package com.spring.Internal3;

import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;

/**
 * Hello world!
 *
 */
public class App
{
    public static void main( String[] args )
    {

```

```

        ApplicationContext context = new ClassPathXmlApplicationContext("com/spring/Internal3/config.xml");
        Employee emp1 = (Employee) context.getBean("Emp1");
        Employee emp2 = (Employee) context.getBean("Emp2");
        Employee emp3 = (Employee) context.getBean("Emp3");

```

```

System.out.println(emp1);
System.out.println(emp2);
System.out.println(emp3);

System.out.println("-----");
emp1.getName();
emp1.getEage();
emp1.getEaddress();

System.out.println("-----");
emp2.getName();
emp2.getEage();
emp2.getEaddress();

System.out.println("-----");
emp3.getName();
emp3.getEage();
emp3.getEaddress();
}
}

```

Config.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:context="http://www.springframework.org/schema/context"
       xmlns:p="http://www.springframework.org/schema/p"
       xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans.xsd
http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context.xsd">

    <bean id="Emp1" name="Emp1" class="com.spring.Internal3.Employee">
        <property name="ename" value="Spoorthi" />
        <property name="eage" value="18" />
        <property name="eaddress" value="Banglore" />
    
```

</bean>

<bean id="Emp2" name="Emp2" class="com.spring.Internal3.Employee">

<property name="ename" value="Sneha" />

<property name="eage" value="20" />

<property name="eaddress" value="Davanagere"/>

</bean>

<bean id="Emp3" name="Emp3" class="com.spring.Internal3.Employee">

<property name="ename" value="Sahana" />

<property name="eage" value="22" />

<property name="eaddress" value="Mysore"/>

</bean>

</beans>