



Assignment 6 - Exploring The World

Q1 What is a Microservices ?

⇒ Microservices architecture is a distinctive method of developing software system that tries to focus on building single-function modules with well-defined interfaces and operations.

Netflix, eBay, Amazon, Twitter, PayPal and other tech stars have all evolved from Monolithic to Microservice architecture.

Q2 What is Monolithic Architecture ?

⇒ Unlike Microservices, a Monolith Application is built as a single, autonomous unit. So any changes to the application are slow, as it affects the entire system. A modification made to a small section of code might require building and deploying an entirely new version of software. So to scale a specific function of an application also means you have to scale the entire application.

Q3 What is the difference between Monolithic and Microservice ?

⇒ A monolithic application is built as a single unified unit while a monolithic architecture is a collection of smaller, independently deployable services.

Q4 Why do we need a useEffect Hook ?

⇒ The useEffect Hook allows you to perform side effects in your components. Some examples of this side effects are: fetching data, directly updating the DOM, and timers.

By using this Hook, you tell React that your component needs to do something after render. React will remember the function you passed and call it later after performing the DOM updates.

Q5 What is Optional Chaining ?

⇒ You can use Optional Chaining when attempting to call a method which may not exist. This can be helpful, for eg: when using an API in which a method might be unavailable, either due to the age of the implementation or because of a feature which isn't available on the user's device.

Q6 What is Shimmer UI ?

⇒ A Shimmer UI resembles the page's actual UI, so users will understand how quickly the web or mobile app will load even before the content has shown up. It gives people an idea of what's about to come and what's happening (it's currently loading) when a page full of content / data takes more than 3-5 seconds to load.

Q7 What is the difference between Js Expression and Js Statement ?

⇒ JS Expression

Any line of code that produces some value is expression

Eg

→ $x + 10$

→ $\text{square}(x)$

In short, evaluation of some part of code (it could be block, function call, one/many line of code) should produce value.

JS Statement

Statement is any line of code that performs some action

Eg

→ `console.log ('Hello World')`

→ `let y = if ($n > 10$) { return 25; } else { return false }`

Q8 What is Conditional Rendering, explain with a code example

⇒ Conditional Rendering in React works the same way conditions work in JS. Use JS operators like to create elements representing the current state, and let React updates the UI to match them

Eg

```
if (isloggedIn) {  
    return <UserGreeting />;  
}  
return <GuestGreeting />  
}
```

Q9 What is CORS?

⇒ Cross-Origin Resource Sharing (CORS) is an HTTP - header based mechanism that allows a server to indicate any origins (domains, scheme, or port) other than its own from which a browser should permit loading resources.

Q10 What is async - await?

⇒ Async function return a promise. This promise state can be either resolved or rejected. Await suspends the called function execution until the promise returns a result for that execution.

Q11 What is the use of 'const json = await data.json();' in getRestaurants()

⇒ Converting the data into json form and we have to use await as it is an async function