

React – JSON-server and Firebase Real Time Database

Question 1: What do you mean by RESTful web services?

A-1 : Representational State Transfer is an architectural style that can be applied to web services to create and enhance properties like performance, scalability, and modifiability.

These services typically use HTTP methods like:

- GET → Retrieve data
- POST → Send new data
- PUT/PATCH → Update existing data
- DELETE → Remove data

Question 2: What is Json-Server? How we use in React ?

A-2 : Json-server is a simple, lightweight, and quick way to create a mock REST API using a JSON file. It allows you to simulate a backend without writing actual server-side code, making it great for testing and prototyping React applications.

How to use in react :

Step 1: Install JSON-Server.

Step 2: Create a db.json File Inside your project directory and add some mock data.

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Step 3: Start the JSON-Server

Question 3: How do you fetch data from a Json-server API in React? Explain the role of fetch() or axios() in making API requests.

A-3 : You can fetch data from a Json-server API using either the Fetch API or Axios in a React application.

1.Fetching Data Using the Fetch API :

- The fetch function is built into JavaScript and allows making HTTP requests easily.

2. Fetching Data Using Axios :

- Axios is a popular library for making API requests, and it simplifies working with REST APIs.

→ Both fetch() and axios() are used in JavaScript to make HTTP requests to APIs, but they have some key differences in functionality and ease of use.

- fetch() : The fetch() function is built into JavaScript and provides a way to make network requests.

Syntax : `fetch(url, options)`

```
.then(response => response.json()) // Convert response to JSON
```

```
.then(data => console.log(data)) // Handle the data
```

```
.catch(error => console.error("Error:", error)); // Handle errors
```

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- axios : Axios is an external library that simplifies HTTP requests with automatic JSON handling, better error handling, and request cancellation.

Syntax : `axios.get(url)`

`.then(response => console.log(response.data)) // Axios automatically parses JSON`

`.catch(error => console.error("Error:", error));`

Question 4: What is Firebase? What features does Firebase offer?

A-4 : Firebase is a Backend-as-a-Service platform developed by Google that helps developers build web and mobile applications without managing backend infrastructure.

→ Features that Firebase offer :

1. Authentication
2. Realtime Database
3. Firestore (Cloud Firestore)
4. Cloud Storage
5. Firebase Hosting