# FETCH / AXIOS

## get

**INTERVIEW QUESTIONS**

# Requirments

fetching data from external APIs and displaying it in React components

# fetch API:

The fetch API is a modern interface for fetching resources asynchronously across the network. Let's see how we can use it to fetch data from the JSONPlaceholder API and render it in our React component.

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

function FetchData() {
  const [posts, setPosts] = useState([]);

  useEffect(() => {
    fetch("https://jsonplaceholder.typicode.com/posts")
      .then((response) => response.json())
      .then((data) => setPosts(data));
  }, []);

  return (
    <div>
      <h2>Posts</h2>
      <ul>
        {posts.map((post) => (
          <li key={post.id}>{post.title}</li>
        ))}
      </ul>
    </div>
  );
}

export default FetchData;
```

# Explanation

- We import React and its necessary hooks (`useState and useEffect`).
- Inside the `FetchData` component, we declare a state variable `posts` to store the fetched data.
- We use the `useEffect` hook to fetch data from the JSONPlaceholder API when the component mounts.
- Once the data is fetched, we update the state with the received data.
- In the JSX, we map through the `posts` array and render each post's title inside `<li>` elements.

# Axios

Axios is a promise-based HTTP client for the browser and Node.js. It makes it easy to send asynchronous HTTP requests to REST endpoints and perform CRUD operations. Let's see how we can use Axios to fetch data from the JSONPlaceholder API and display it in our React component.

```jsx
import React, { useState, useEffect } from "react";
import axios from "axios";

function AxiosData() {
  const [posts, setPosts] = useState([]);

  useEffect(() => {
    axios
      .get("https://jsonplaceholder.typicode.com/posts")
      .then((response) => setPosts(response.data))
      .catch((error) => console.error("Error fetching data:", error));
  }, []);

  return (
    <div>
      <h2>Posts</h2>
      <ul>
        {posts.map((post) => (
          <li key={post.id}>{post.title}</li>
        ))}
      </ul>
    </div>
  );
}

export default AxiosData;
```

# Explanation

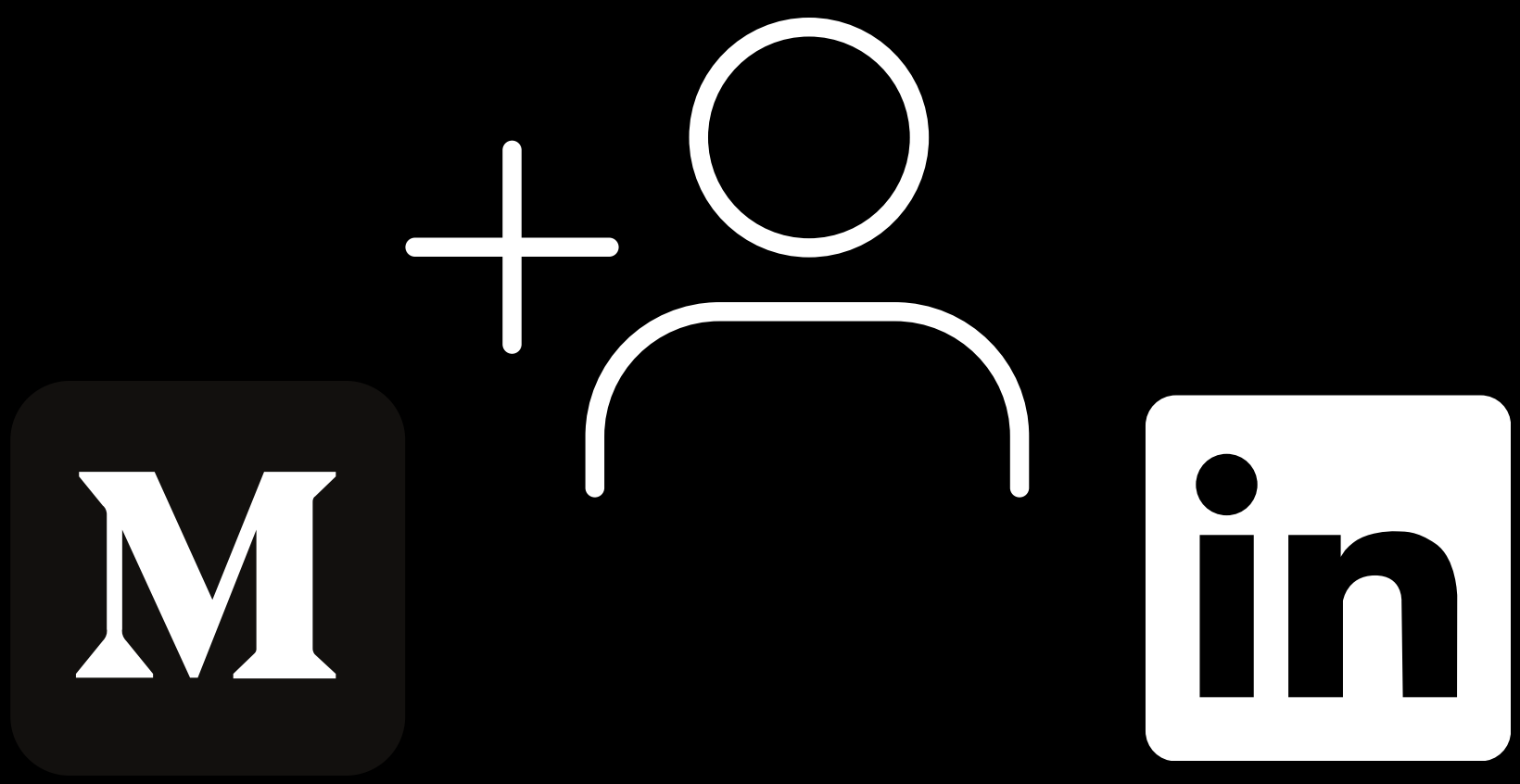
- Similar to the fetch example, we import React, useState, and useEffect.
- We also import Axios to make HTTP requests.
- Inside the AxiosData component, we declare a state variable posts.
- In the useEffect hook, we use Axios to send a GET request to the JSONPlaceholder API.
- Upon receiving the response, we update the state with the fetched data.
- Finally, we render the posts' titles in the JSX.

# Browser output

## Posts

- sunt aut facere repellat provident occaecati excepturi optio reprehenderit
- qui est esse
- ea molestias quasi exercitationem repellat qui ipsa sit aut
- eum et est occaecati
- nesciunt quas odio
- dolorem eum magni eos aperiam quia
- magnam facilis autem
- dolorem dolore est ipsam
- nesciunt iure omnis dolorem tempora et accusantium
- optio molestias id quia eum
- et ea vero quia laudantium autem

- we've learned how to fetch data from an external API using both the fetch API and Axios library in a React application.
- Both methods are effective in making asynchronous HTTP requests and can be used based on personal preference or project requirements.



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