

Task 10: Consume a Public API Using Fetch API

Tools:

- Primary: VS Code, Browser, Fetch API
- Alternatives: Axios (CDN), CodePen

Hints / Mini Guide:

1. Choose a free public API such as weather, quotes, or country data that does not require authentication.
2. Create a simple UI with input (if needed), button, and result display section.
3. Write a JavaScript function using the fetch() API to send HTTP requests to the API endpoint.
4. Handle API responses by converting them into JSON format and extracting required fields.
5. Display fetched data dynamically on the web page using DOM manipulation.
6. Implement error handling using .catch() and conditional checks for failed responses.
7. Add loading indicators to inform users while data is being fetched.
8. Test API behavior under network failure scenarios using browser DevTools.
9. Comment the code to explain asynchronous behavior clearly.

Deliverables:

- Working API-driven web page
- Dynamic data rendering from external source

Interview Questions Related To Above Task:

- What is an API?
- How does Fetch API work?
- What is asynchronous JavaScript?
- Difference between then() and async/await?
- What are HTTP status codes?

Task Submission Guidelines

-  **Time Window:**

You can complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10:00 PM

-  **Self-Research Allowed:**

You are free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

-  **Debug Yourself:**

Try to resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

-  **No Paid Tools:**

If the task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

-  **GitHub Submission:**

Create a new GitHub repository for each task.

Add everything you used for the task — code, datasets, screenshots (if any), and a short README.md explaining what you did.

Submit Here:

After completing the task, paste your GitHub repo link and submit it using the link below:

-  [\[Submission Link\]](#)

