Welcome to **Day 5 of Week 1** — today we enter the **Real World of the Internet** 🌐

We're going to learn how to **talk to APIs**, fetch real-time data, and build web apps that **connect to real backend servers** (just like AI agents, weather apps, search, chat, etc.).

**🧠 What You’ll Learn Today:**

| **Concept** | **What It Means** | **Real-World Use** |
| --- | --- | --- |
| fetch() | Get data from the internet | ChatGPT APIs, weather, news |
| async/await | Wait for response | Smooth, readable code |
| JSON | Data format from API | Like { name: "Riya", age: 22 } |
| Displaying data | Show results in console | Later in UI like cards/tables |

**⚙️ 1. What is an API?**

💬 API = "Data dukaan" → You ask, it gives you back JSON data.

Examples:

* Weather API → "What's today’s temperature in Mumbai?"
* AI API → "Give me a summary of this paragraph"
* GitHub API → "List all repos of a user"

**🌐 2. Making Your First API Call using fetch()**

js

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fetch("https://jsonplaceholder.typicode.com/users")

.then(response => response.json())

.then(data => console.log(data));

🧠 This hits a fake API that returns a list of users.

**🧪 But Let’s Use async/await (cleaner, modern way):**

js

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async function getUsers() {

const response = await fetch("https://jsonplaceholder.typicode.com/users");

const data = await response.json();

console.log(data);

}

getUsers();

🟢 Output:

json

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[

{ "id": 1, "name": "Leanne Graham", "email": "leanne@example.com" },

{ "id": 2, "name": "Ervin Howell", ... }

]

✅ Real API gives us **array of user objects** — we can map() over it, like earlier!

**👨‍💻 Let’s Do a Mini Project:**

**🎯 Goal:**

Fetch a list of fake users, and print:

sql

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User: Leanne Graham - Email: leanne@example.com

User: Ervin Howell - Email: ervin@example.com

**🔧 Code Starter:**

js

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async function showUsers() {

const response = await fetch("https://jsonplaceholder.typicode.com/users");

const users = await response.json();

for (let user of users) {

console.log(`User: ${user.name} - Email: ${user.email}`);

}

}

showUsers();

**📥 Mini Challenge (Your Turn!)**

🔹 Use this API:

txt

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https://jsonplaceholder.typicode.com/posts

It returns a list of posts.

**✅ Do the following:**

1. Fetch the data using async/await
2. Print the first 5 post titles like:

makefile

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Post: sunt aut facere repellat provident occaecati excepturi optio reprehenderit

1. (Optional) Print userId along with title

**💥 Summary of Day 5 (So Far)**

| **Term** | **Meaning** |
| --- | --- |
| fetch() | Makes HTTP requests |
| async/await | Handles asynchronous code |
| JSON | Data format used by APIs |
| Loop over results | Use map() or for...of |