About npm / cdn to Get Axios

What is Node.js?

Node.js utilizes Chrome's V8 JavaScript engine, enabling developers to run JavaScript on the server side and allowing them to create scalable and high-performance applications. One of its key features is its non-blocking, event-driven design, making it efficient for building real-time applications.

How to Install Node.js:

- **Download Node.js:** Visit the official Node.js website and download the installer for your operating system from https://nodejs.org/en.
- **Install Node.js:** Follow the installation instructions to run the installer.
- **Verify Installation:** Open a terminal or command prompt and type node -v to verify the installation of Node.js. You should see the installed version number.

What is npm?

npm stands for Node Package Manager. It serves as a package manager for Node.js modules and packages. Npm installs manages, and shares packages of code from the registry (which is a collection of packages hosted on servers).

How to Use npm:

- **Installing Packages:** To install a package, use npm install `<package-name>` in the terminal of any code editor of your choice. For example, npm install express installs the Express framework.
- **Using Packages:** After installation, you can include these packages in your Node.js application using `require()`. For instance, `const express = require(\'express\')`.
- **Managing Packages:** Use npm commands like npm uninstall `<package-name>` to remove packages, npm update `<package-name>` to update packages, and npm search `<keyword>` to search for packages in the npm registry.
- **Package.json:** This file contains metadata about the project and the list of dependencies. You can create it manually or by using npm in it to create a new project.

Node.js and npm have become integral parts of modern web development, empowering developers to create robust and scalable applications using JavaScript.

Axios

Axios is a JavaScript library used primarily for making HTTP requests from both Node.js environments and web browsers. It provides a simple and intuitive API for handling asynchronous HTTP requests. Axios supports various features such as interceptors, the ability to cancel requests, automatic JSON data transformation, and much more.

Installing Axios

Firstly, ensure you have Node.js and npm installed. Then, you can install Axios using npm:

```
npm install axios
```

Using Axios in Node.js

Here's an example of how you can make a simple GET request using Axios in a Node.js script:

```
// Import Axios
const axios = require('axios');
// Make a GET request
axios.get('https://jsonplaceholder.typicode.com/posts')
  .then(response => {
    // Handle successful response
    console.log('Response:', response.data);
  })
  .catch(error => {
    // Handle error
    console.error('Error:', error);
  });
```

In this example:

- We import Axios using require('axios').
- Use `axios.get` to make a GET request to a sample API endpoint (https://jsonplaceholder.typicode.com/posts).

- The `.then` block handles the successful response, and the data is logged to the console.
- The `.catch` block catches any errors that may occur during the request and logs them to the console.
- You can perform various HTTP methods (GET, POST, PUT, DELETE, etc.) using Axios by calling `axios.<method>` (e.g., axios.post, axios.put, axios.delete) and handling their respective responses and errors with .then and .catch blocks.

Remember, Axios returns Promises, allowing you to use async/await to handle asynchronous requests in a more synchronous style. For instance:

```
async function fetchData() {
  try {
    const response = await axios.get('https://jsonplaceholder.typicode.com/posts');
    console.log('Response:', response.data);
  } catch (error) {
    console.error('Error:', error);
  }
}
fetchData();
```

This async/await example achieves the same result as the previous example but using a more synchronous-looking code structure.