# Build & Inspect API Requests

## Tool Used

- **Postman** (API testing tool)
  *(Alternative: Hoppscotch – browser-based)*

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## 1️⃣ GET Request – Fetch Data from Public API

**URL:**

https://jsonplaceholder.typicode.com/posts/1

**Method:**

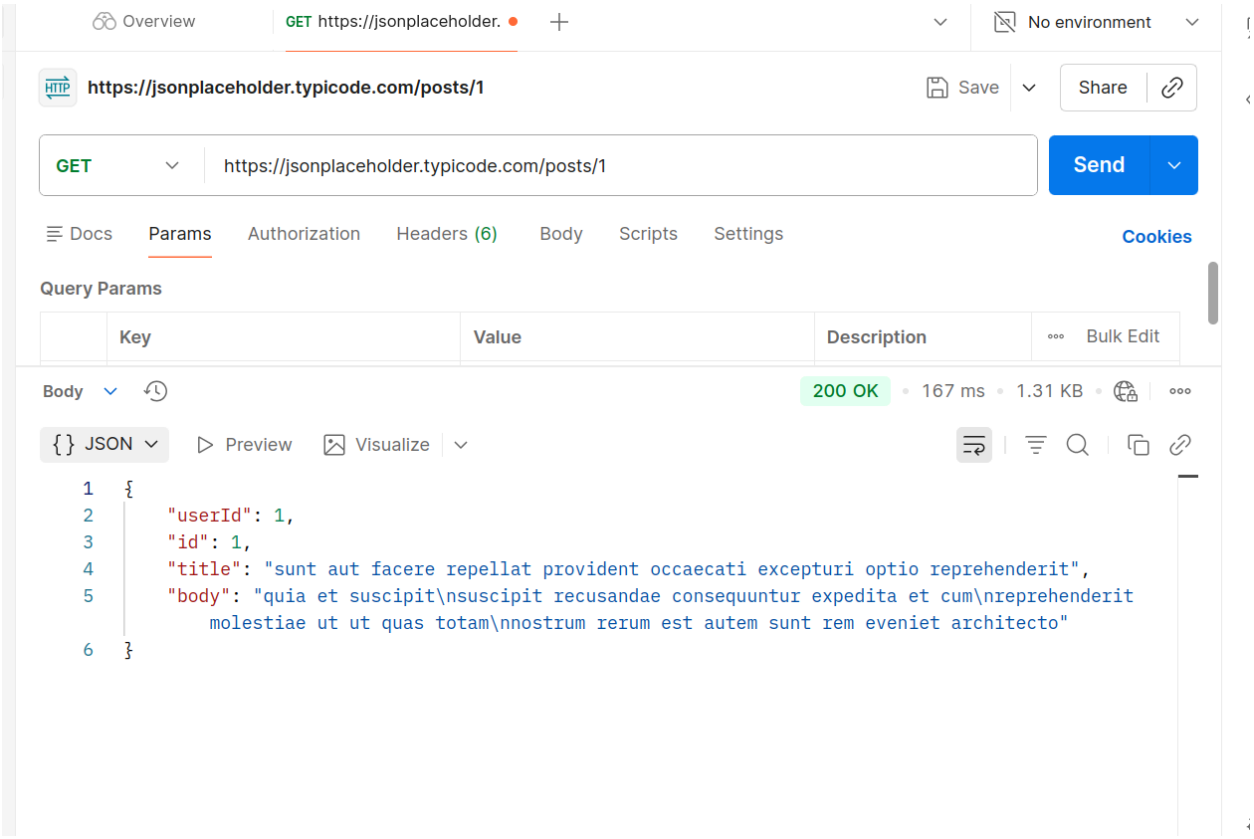
GET

### What I did

- Opened Postman
- Selected **GET** method
- Entered the URL
- Clicked **Send**

### Result

- The server returned a JSON response
- It contained post details like `userId`, `id`, `title`, and `body`
- Status code was **200 OK**, meaning the request was successful

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# 2 POST Request – Send Data to API

**URL:**

https://jsonplaceholder.typicode.com/posts

**Method:**

POST

**Headers:**

Content-Type: application/json

**Body (raw → JSON):**

{
"title": "My First API Post",

```
  "body": "Learning APIs is fun!",
  "userId": 101
}
```

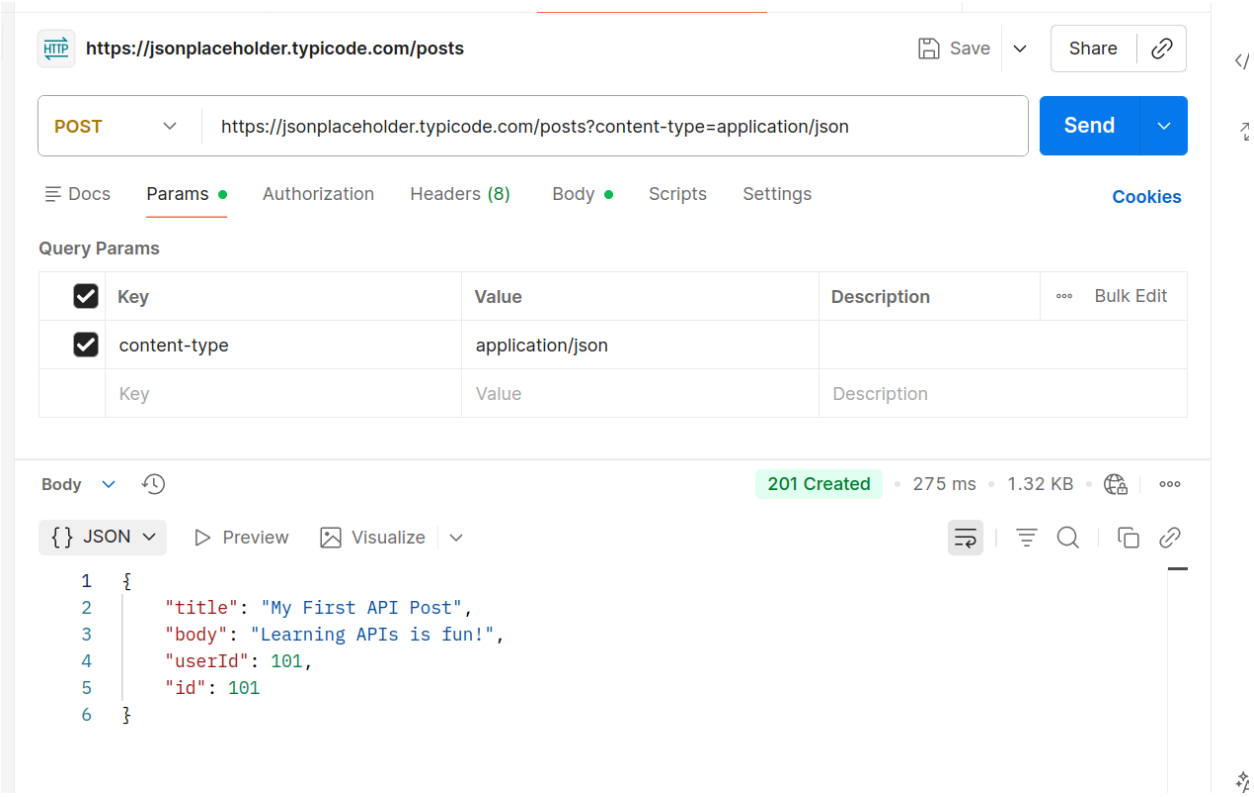
### What I did

- Selected **POST** method in Postman
- Added the JSON body
- Clicked **Send**

### Result

- The server accepted the data
- It returned the same data along with a new `id`
- Status code was **201 Created**

Note: This API is a fake test API, so data is not actually saved on the server.

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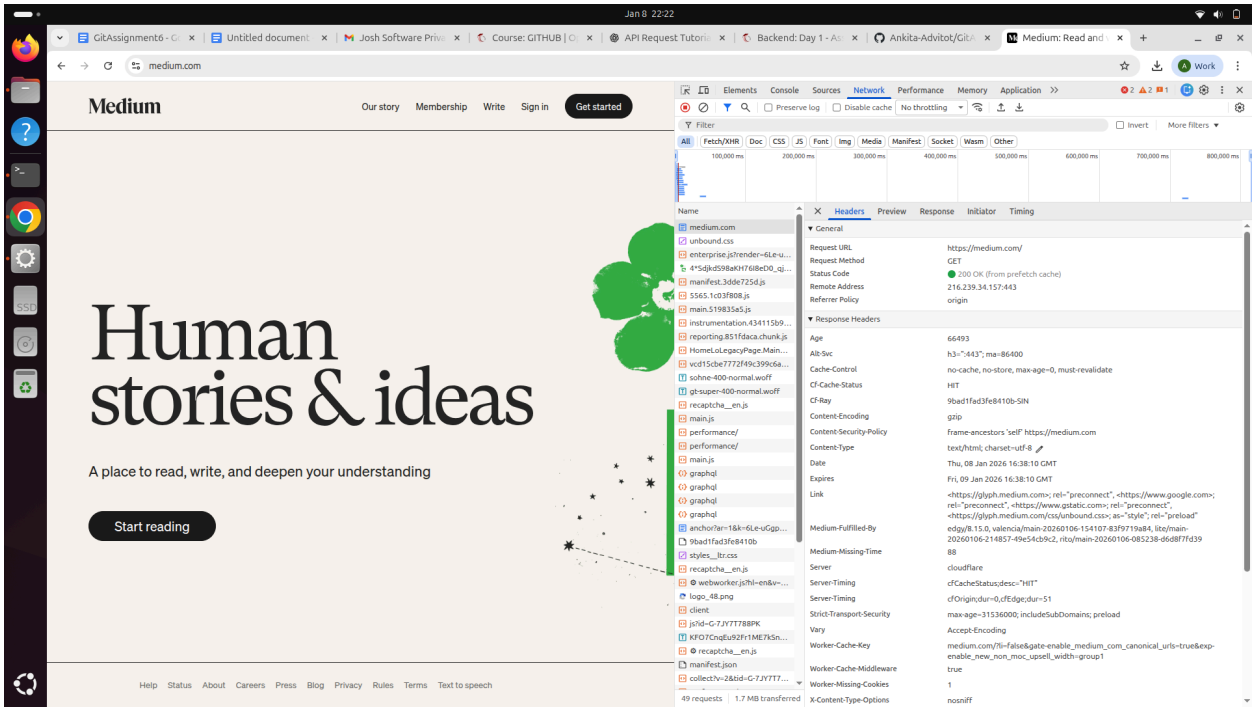
# 3️⃣ Inspecting Network Requests in Browser DevTools

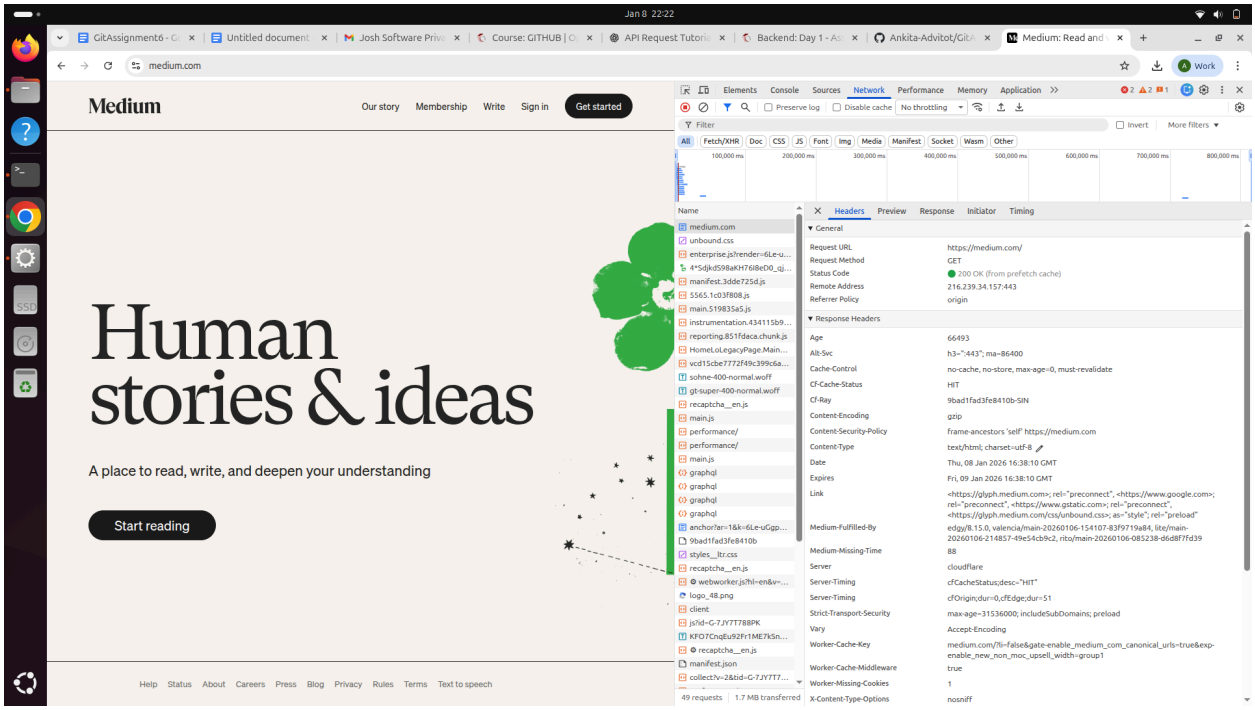
## Steps

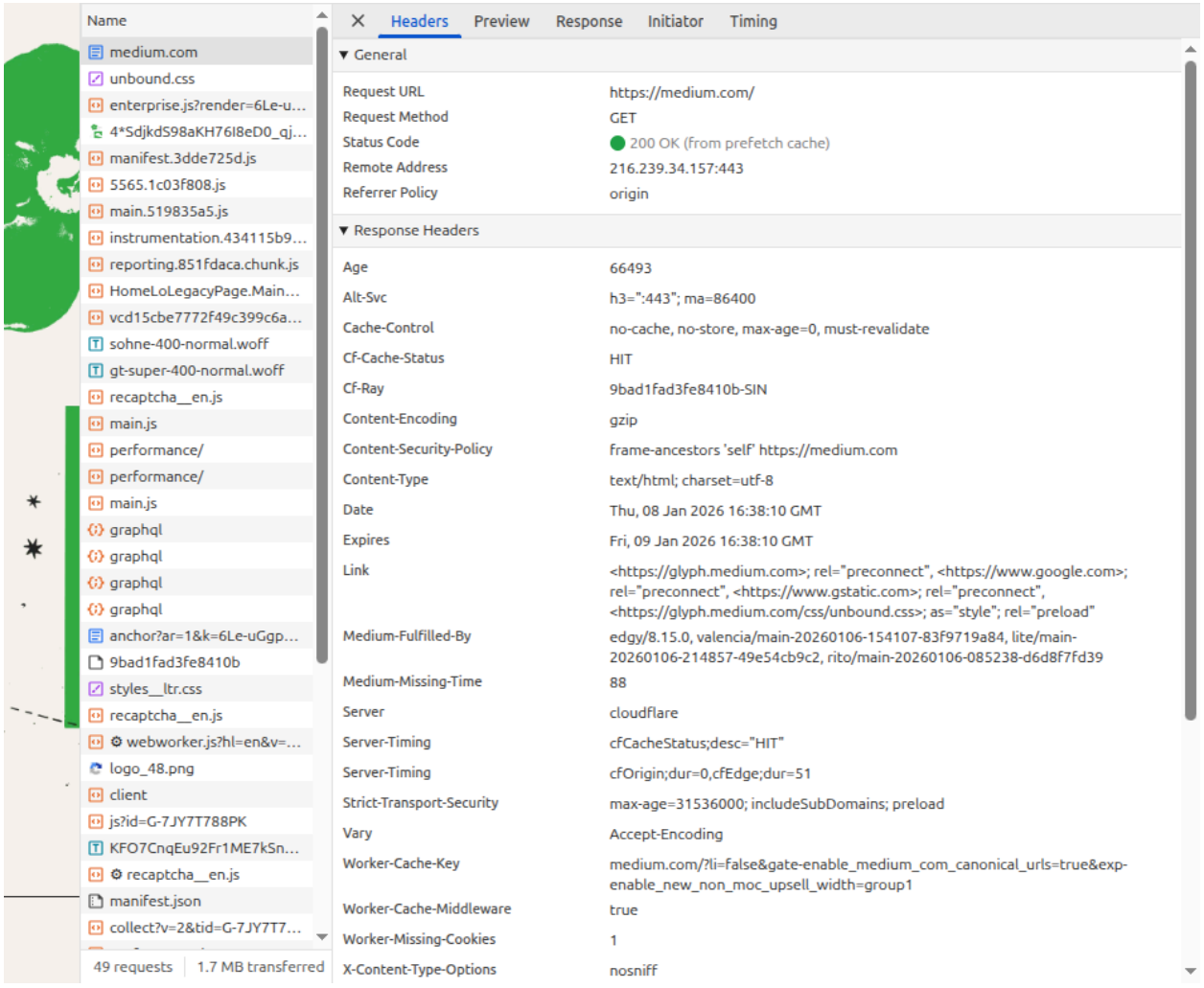
1. Open **Chrome Browser**
2. Press **F12** or **Right-click → Inspect**
3. Go to the **Network** tab
4. Open any website (e.g., `google.com`)
5. Click on any request from the list

## Observed Details

- **URL:** The address where the request was sent
- **Method:** GET
- **Request Headers:** Information sent by browser (User-Agent, Accept, etc.)
- **Response Headers:** Information sent by server (Status, Content-Type, etc.)
- **Body:** No body for GET request




Jan 8 22:22
medium.com
Medium
Our story
Membership
Write
Sign in
Get started
Human stories & ideas
A place to read, write, and deepen your understanding
Start reading
Help
Status
About
Careers
Press
Blog
Privacy
Rules
Terms
Text to speech
Elements
Console
Sources
Network
Performance
Memory
Application
Headers
Preview
Response
Initiator
Timing
General
Request URL
https://medium.com/
Request Method
GET
Status Code
200 OK (from prefetch cache)
Remote Address
216.239.34.157:443
Referrer Policy
origin
Response Headers
Content-Type
text/html; charset=utf-8
Content-Security-Policy
frame-ancestors 'self' https://medium.com
Cache-Control
no-cache, no-store, max-age=0, must-revalidate
Expires
Fri, 09 Jan 2026 16:38:10 GMT
Date
Thu, 08 Jan 2026 16:38:10 GMT
Server
cloudflare
Vary
Accept-Encoding
Strict-Transport-Security
max-age=31536000; includeSubDomains; preload
49 requests
1.7 MB transferred


Name
medium.com
unbound.css
enterprise.js?render=6Le-u…
4*SdjkdS98aKH76l8eD0_qj…
manifest.3dde725d.js
5565.1c03f808.js
main.519835a5.js
instrumentation.434115b9…
reporting.851fdaca.chunk.js
HomeLoLegacyPage.Main…
vcd15cbe7772f49c399c6a…
sohne-400-normal.woff
gt-super-400-normal.woff
recaptcha__en.js
main.js
performance/
performance/
main.js
graphql
graphql
graphql
graphql
anchor?ar=1&k=6Le-uGgp…
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styles__ltr.css
recaptcha__en.js
webworker.js?hl=en&v=…
logo_48.png
client
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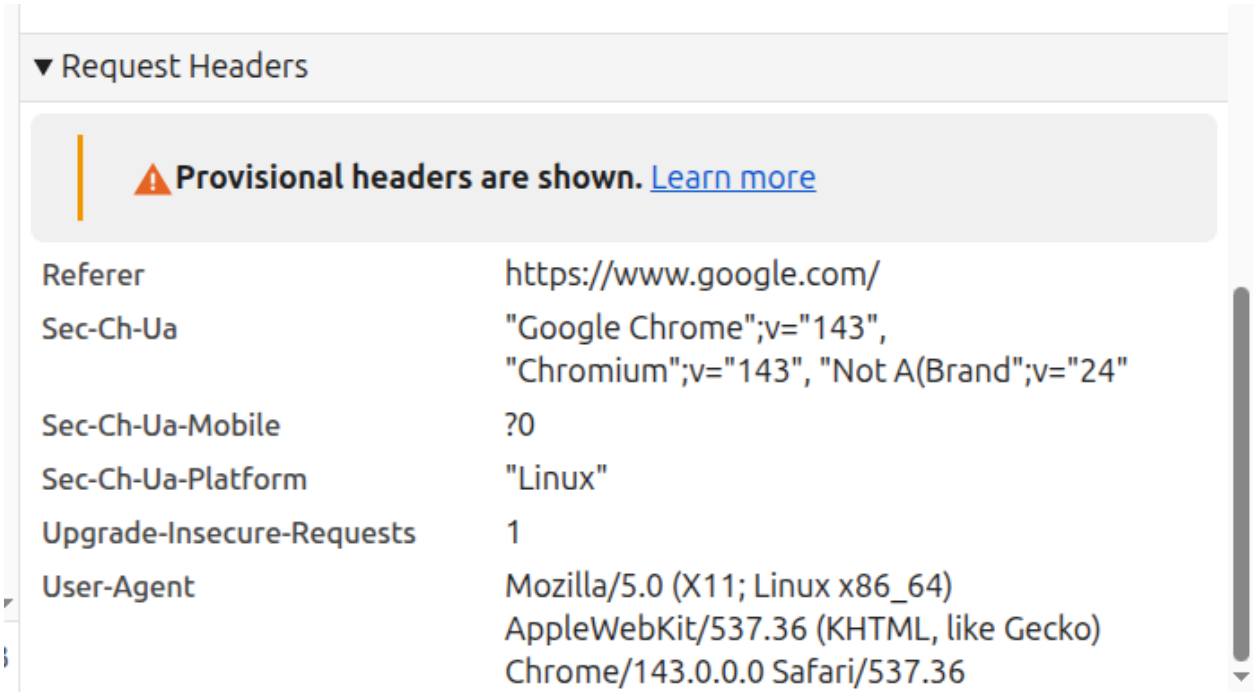
KFO7CnqEu92Fr1ME7kSn…
recaptcha__en.js
manifest.json
collect?v=2&tid=G-7JY7T7…
49 requests
1.7 MB transferred
Headers
Preview
Response
Initiator
Timing
General
Request URL
https://medium.com/
Request Method
GET
Status Code
200 OK (from prefetch cache)
Remote Address
216.239.34.157:443
Referrer Policy
origin
Response Headers
Age
66493
Alt-Svc
h3=":443"; ma=86400
Cache-Control
no-cache, no-store, max-age=0, must-revalidate
Cf-Cache-Status
HIT
Cf-Ray
9bad1fad3fe8410b-SIN
Content-Encoding
gzip
Content-Security-Policy
frame-ancestors 'self' https://medium.com
Content-Type
text/html; charset=utf-8
Date
Thu, 08 Jan 2026 16:38:10 GMT
Expires
Fri, 09 Jan 2026 16:38:10 GMT
Link
<https://glyph.medium.com>; rel="preconnect", <https://www.google.com>; rel="preconnect", <https://www.gstatic.com>; rel="preconnect", <https://glyph.medium.com/css/unbound.css>; as="style"; rel="preload"
Medium-Fulfilled-By
edgy/8.15.0, valencia/main-20260106-154107-83f9719a84, lite/main-20260106-214857-49e54cb9c2, rito/main-20260106-085238-d6d8f7fd39
Medium-Missing-Time
88
Server
cloudflare
Server-Timing
cfCacheStatus;desc="HIT"
Server-Timing
cfOrigin;dur=0,cfEdge;dur=51
Strict-Transport-Security
max-age=31536000; includeSubDomains; preload
Vary
Accept-Encoding
Worker-Cache-Key
medium.com/?li=false&gate-enable_medium_com_canonical_urls=true&exp-enable_new_non_moc_upsell_width=group1
Worker-Cache-Middleware
true
Worker-Missing-Cookies
1
X-Content-Type-Options
nosniff

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## 4️⃣ Request → Response Explanation (5–8 lines)

When a request is made, the browser or Postman sends a request to the server with a URL and method (GET or POST).
The server receives this request and processes it.
If the request is valid, the server sends back a response.
The response contains a status code, headers, and sometimes a body.
GET requests fetch data from the server.
POST requests send data to the server.
This process is called the **request–response cycle**.

# Request Headers (Sent by the browser / Postman → Server)

**Meaning:**
Request headers are **extra information** sent **along with the request** to tell the server **who is asking and how**.

Think of it like an **envelope on a letter**.

### Simple example:

When you open a website, your browser tells the server:

- "I am using Chrome"
- "I can understand JSON"
- "I am a desktop browser"

### Common Request Headers (easy meaning)

| Header | What it means |
|---|---|
| `User-Agent` | Which browser or app is making the request |
| `Accept` | What type of response the client wants (JSON, HTML) |
| `Content-Type` | Format of data being sent (mostly JSON in APIs) |
| `Authorization` | Login/token details (if required) |

📌 **Example line you may see in DevTools:**

User-Agent: Mozilla/5.0

➡️ Means: *Request is coming from a browser*

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# Response Headers (Sent by Server → Browser / Postman)

**Meaning:**
Response headers are **extra information** the server sends back to explain **what it is returning**.

Think of it like a **reply note attached to the letter**.

### Simple example:

The server replies:

- “Request was successful”
- “Here is JSON data”
- “The data size is this much”

### Common Response Headers (easy meaning)

| Header | What it means |
|---|---|
| `Status` | Result of request (200 = success) |
| `Content-Type` | Type of response data (JSON / HTML) |
| `Content-Length` | Size of response |
| `Date` | When the response was sent |

📌 **Example line you may see:**

Content-Type: application/json

➡️ Means: *Server is sending JSON data*

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# Very Short One-Line Summary (for exams / docs)

- **Request Headers:** Information sent by the client to the server
- **Response Headers:** Information sent by the server back to the client

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