

# HTTP STATUS CODES — ENGINEER VERSION (HINGLISH)

## Core Idea (1 line)

**HTTP status code = server ka short reply**

“Request samajh aayi, kaam hua ya nahi — aur kyun?”

Socho tum Swiggy order kar rahe ho 

Status code = delivery app ka reply.

## 2xx — SUCCESS (Kaam ho gaya)

### 200 OK

- Matlab: “Request sahi, data mil gaya”
- Scraping me: **HTML mil gaya**

 Analogy:

Order diya → food mil gaya

 Engineer Note:

- 200 aane ka matlab **data correct hai** — ye assume mat karo
- Kabhi 200 ke saath **fake / empty HTML** bhi hota hai (advanced topic later)

### 201 Created

- Mostly APIs me
- Matlab: “Naya data create ho gaya”

 Example:

- POST request → naya user ban gaya

Scraping me rare hai, but backend me common.

## ● 3xx — REDIRECTION (Rasta badal diya)

### 301 / 302

- Matlab: “Page yahan nahi, wahan jao”

📦 Analogy:

| Restaurant band → next branch pe bhej diya

Scraping me:

- Old URL → new URL
- `requests` default handle kar leta hai

⚠ Engineer Question:

- Agar redirect loop ho gaya toh?

## ● 4xx — CLIENT ERROR (Tumhari galti)

### 404 Not Found

- Matlab: “Yeh page exist hi nahi karta”

📦 Analogy:

| Ghar ka address galat

Scraping cause:

- Pagination URL wrong
- Category removed

### ✖ Action:

- Stop scraping that URL
- Log error

## 403 Forbidden

- Matlab: “Samajh gaya, par allow nahi”

### 📦 Analogy:

Guard bolta: “Entry nahi milegi”

### Scraping cause:

- Bot detect ho gaya
- Missing / bad headers

### ✖ Engineer response:

- Headers improve
- Slow down
- Accept you’re blocked

### ✗ Galti beginners ki:

“Code galat hai”

No. **System ne mana kiya.**

## 429 Too Many Requests

- Matlab: “Bohot fast aa rahe ho”

### 📦 Analogy:

Ek hi aadmi 100 baar gate knock kare

### Scraping cause:

- No rate limiting

- Too many requests

✖ Engineer fix:

- Sleep
- Retry later
- Async me semaphore (later)

## ● 5xx — SERVER ERROR (Unki galti)

### 500 Internal Server Error

- Matlab: “Server toot gaya”

📦 Analogy:

| Kitchen me gas khatam

Scraping mindset:

- Tum kuch nahi kar sakte
- Retry later
- Log and skip

### 502 / 503

- Server overload / maintenance

👉 Engineer rule:

| 5xx = retry + patience



# SUMMARY TABLE (MEMORY ANCHOR)

Code	Meaning	Scraper Action
200	OK	Parse data
301/302	Redirect	Follow URL
403	Blocked	Headers / slow
404	Not found	Skip URL
429	Too fast	Rate limit
500+	Server down	Retry later