

## Department of Artificial Intelligence and Data Science

**23ITT204 – Computer Networks**

II B.Tech – AI&DS / IV SEMESTER

### **UNIT I :INTRODUCTION AND APPLICATION LAYER**

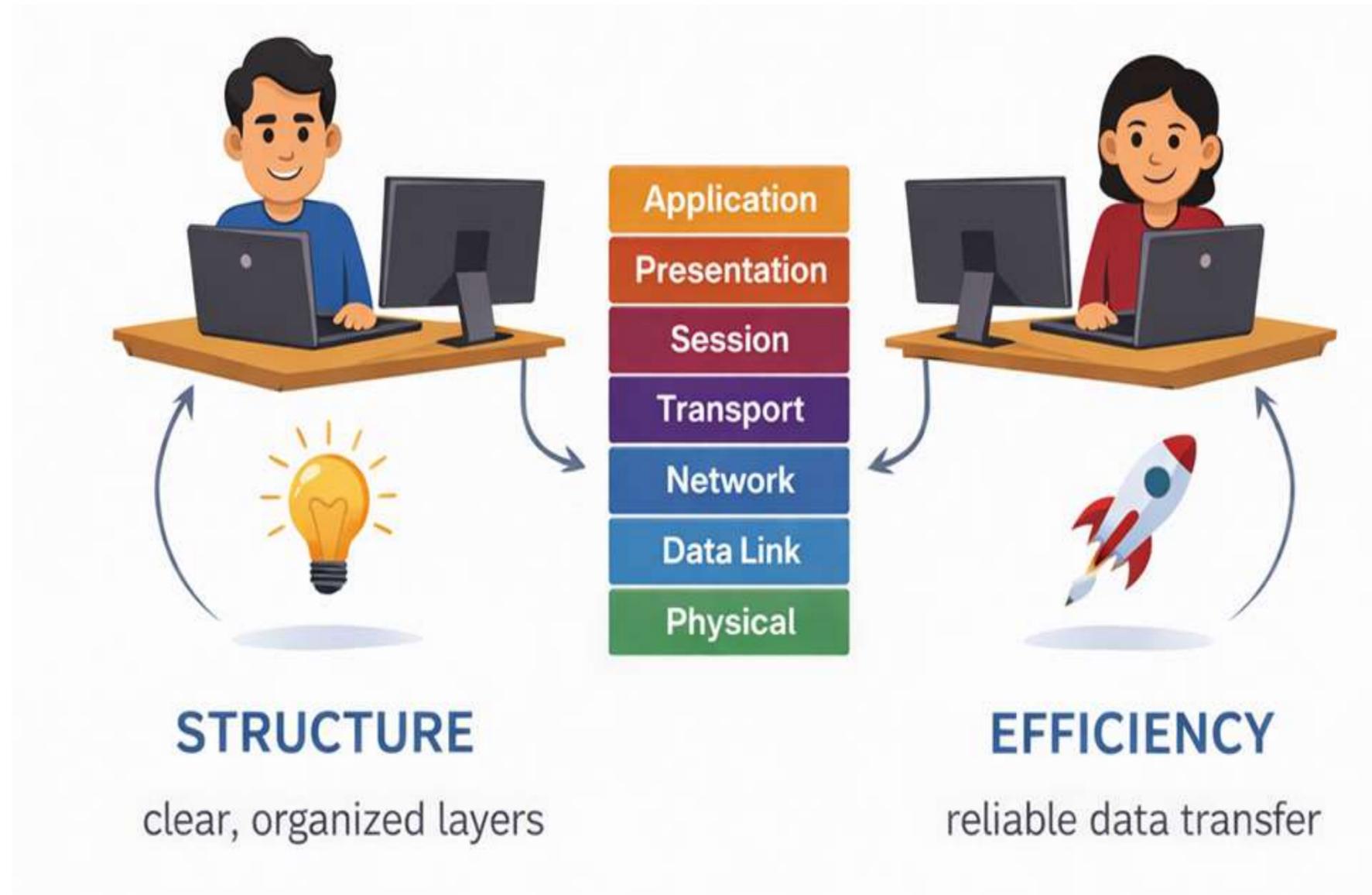
#### **Topic 5: Hypertext Transfer Protocol (HTTP)**

# Session's Agenda:

- Empathize
- Define
- Ideate
- Prototype
- Test
- Real-world Scenario
- Challenges
- Conclusion



# Recap



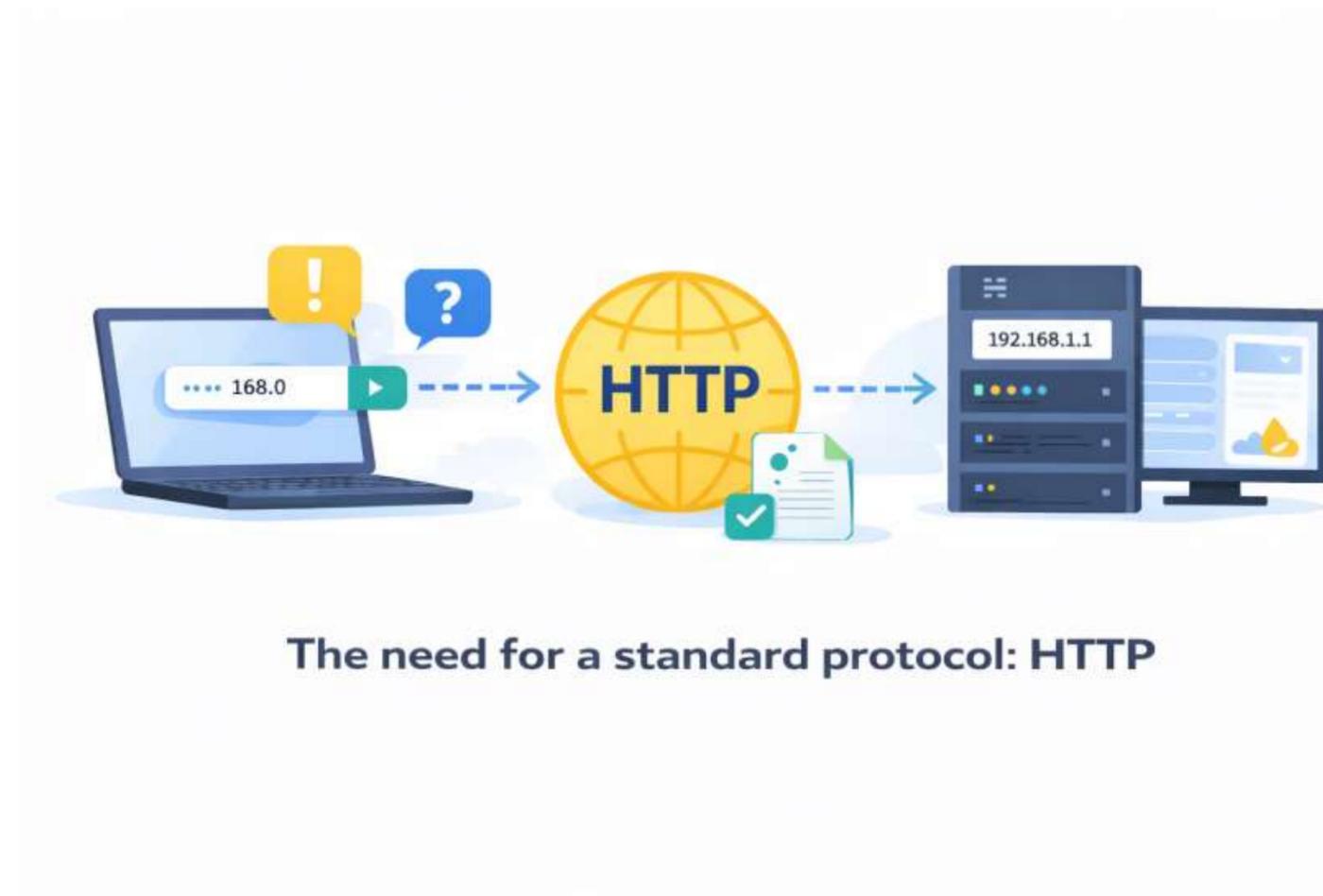
# Empathize – Why HTTP?

Why do we need HTTP to avoid confusion and ensure clear communication between web clients and servers?



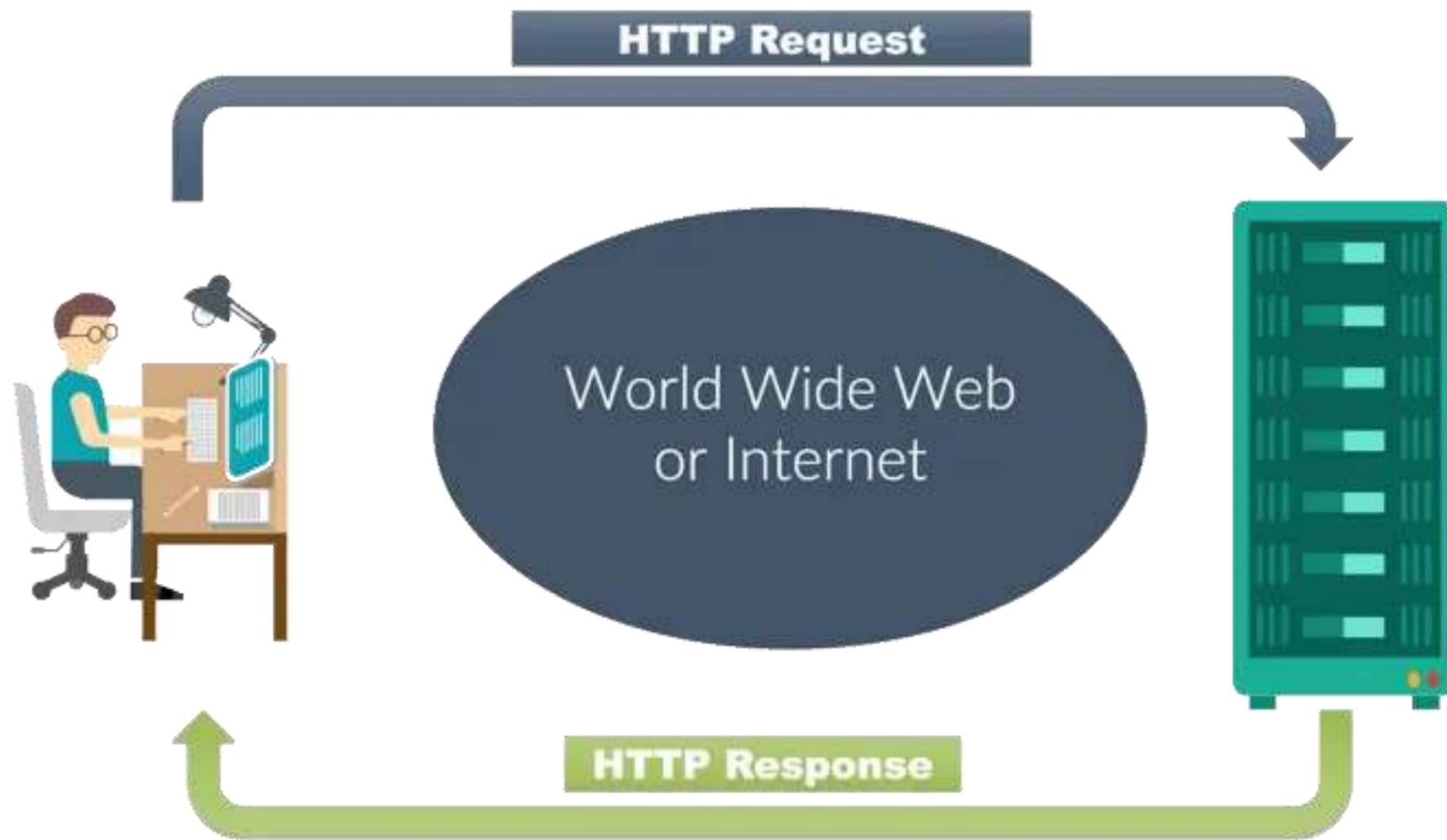
# Define – Defining the need for HTTP Protocol

Users face confusion and delays when browsers and servers do not follow common communication rules.



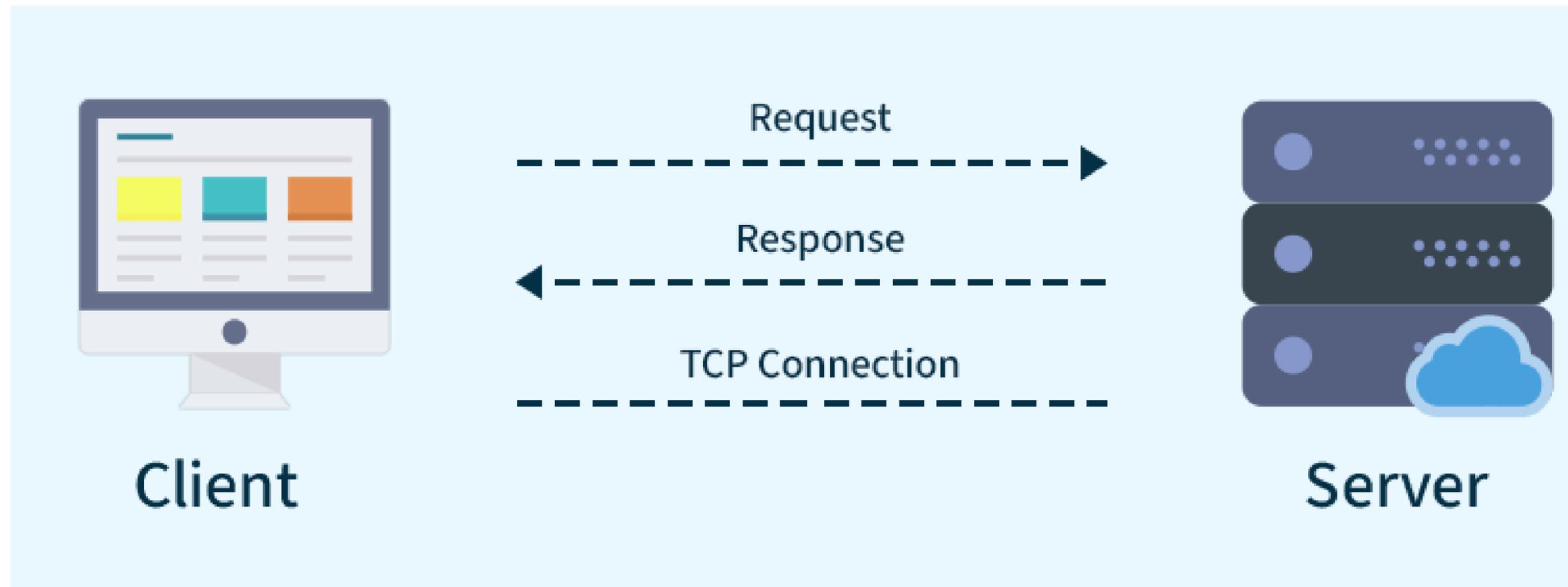
# Ideate – Designing HTTP Protocol

HTTP solves communication problems by providing a clear, standardized request–response mechanism between clients and servers.



# Prototype – OSI Layers

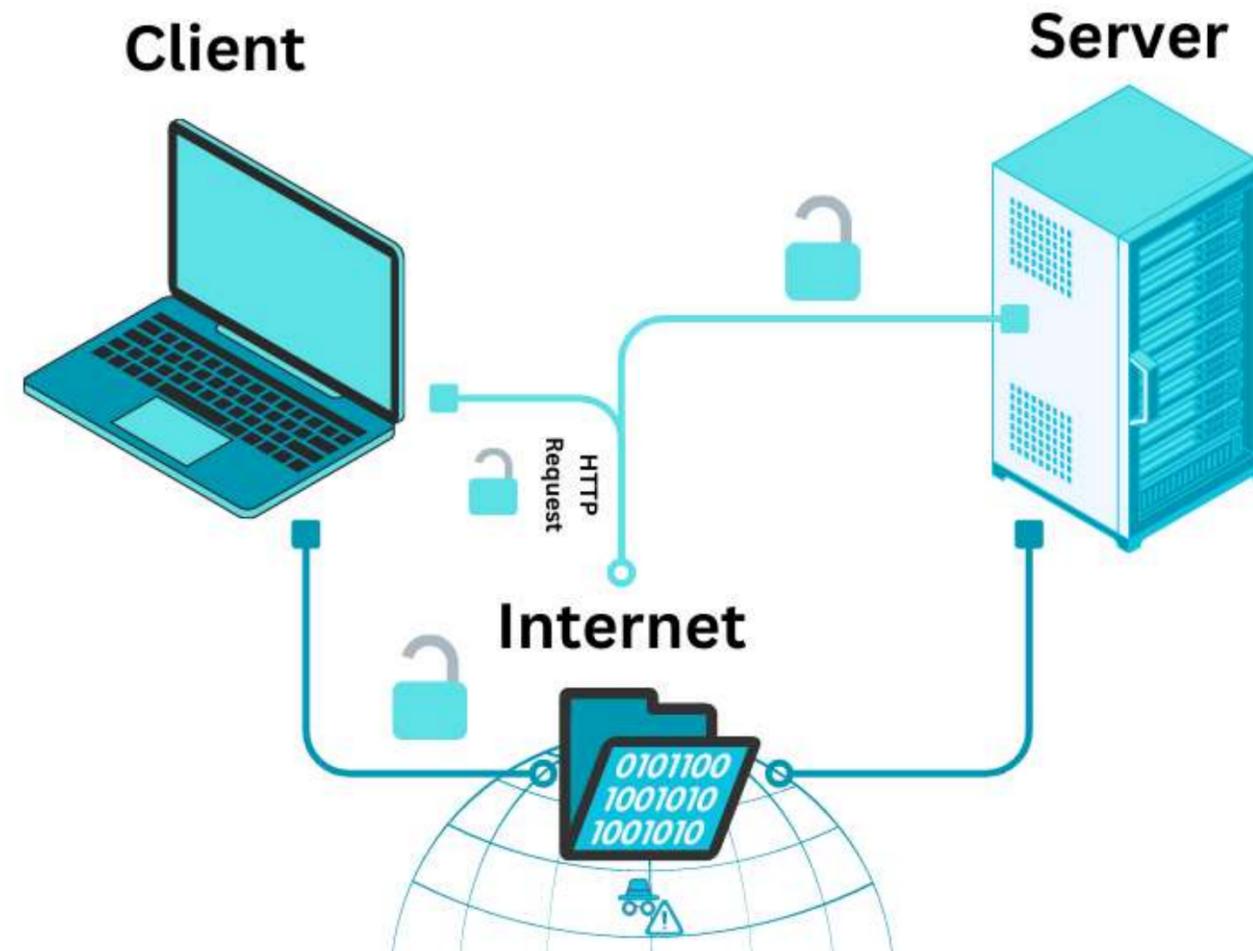
How can HTTP be prototyped to demonstrate step-by-step web data flow from client to server and back?



# Test – How Data Travels

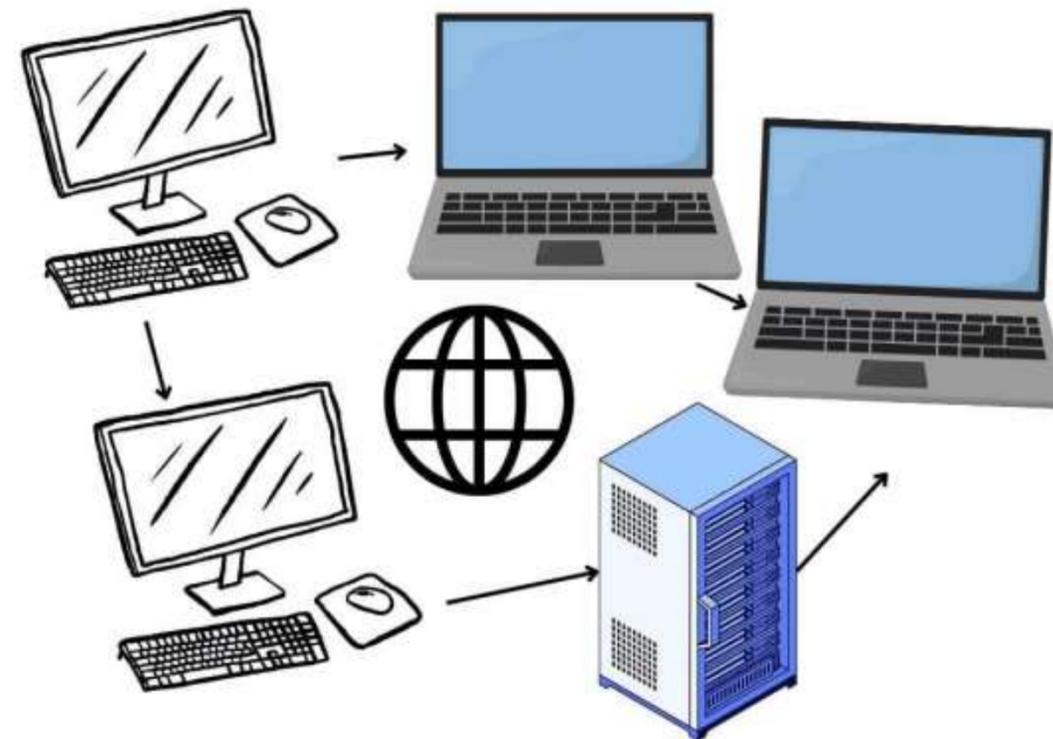
How does a web request reach a server and return to the user (HTTP)?

A browser sends an HTTP request to the server, the server processes it and sends back an HTTP response, which the browser displays as web content.



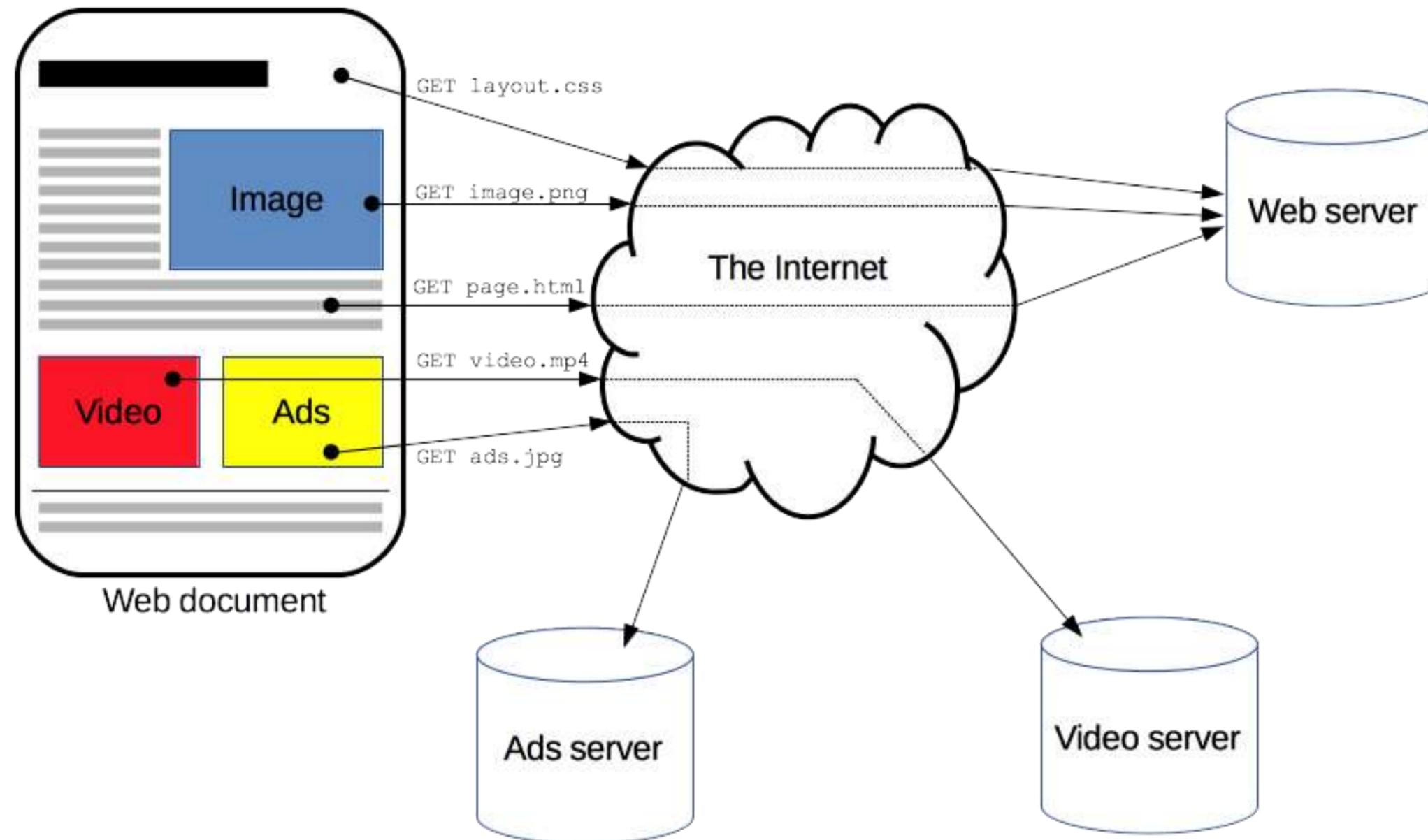
# Real-world Scenario

How can HTTP communication be tested to verify that web data travels correctly from client to server and back?



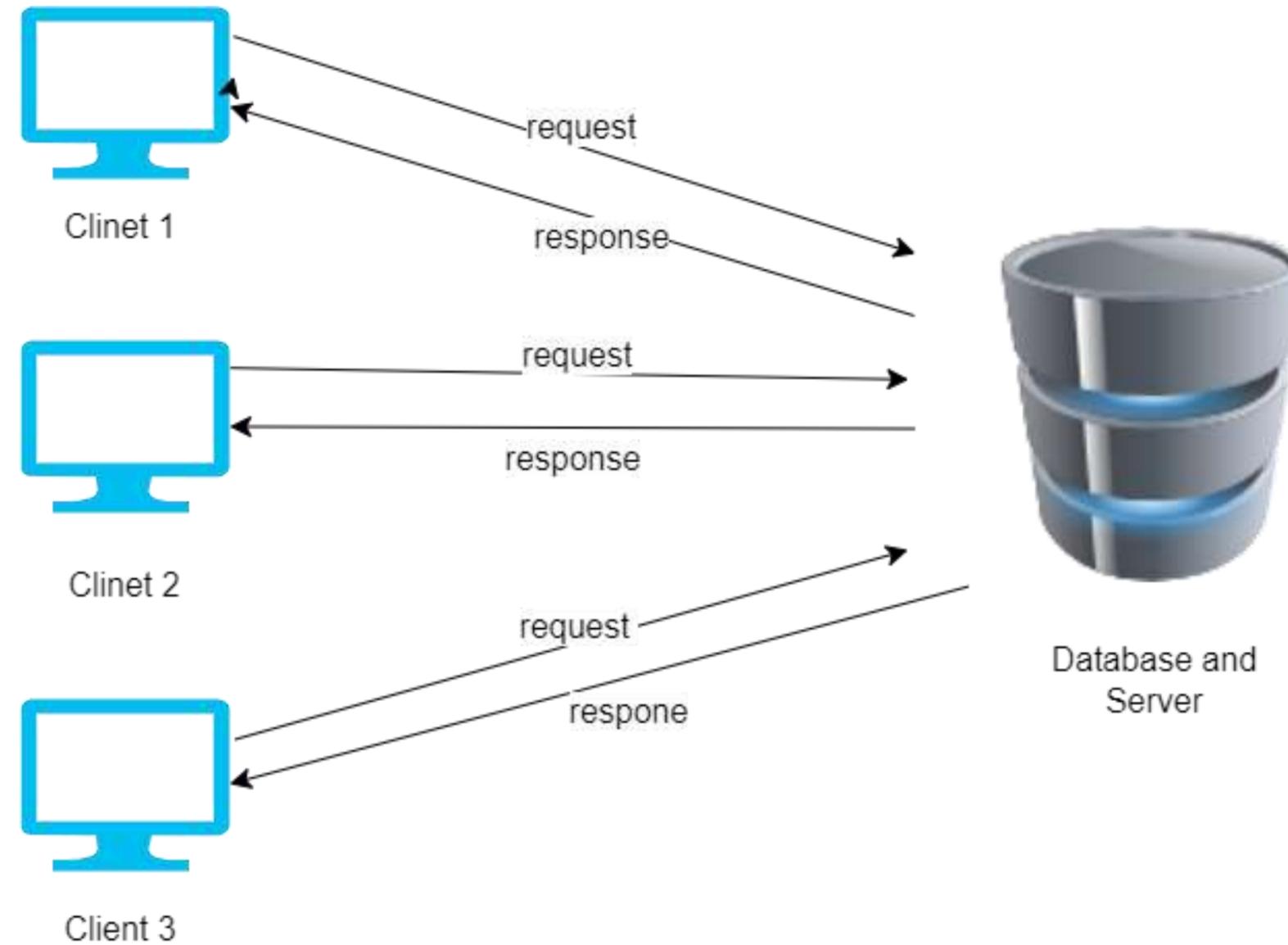
# Challenges of HTTP

How does HTTP's stateless nature affect session management between client and server?

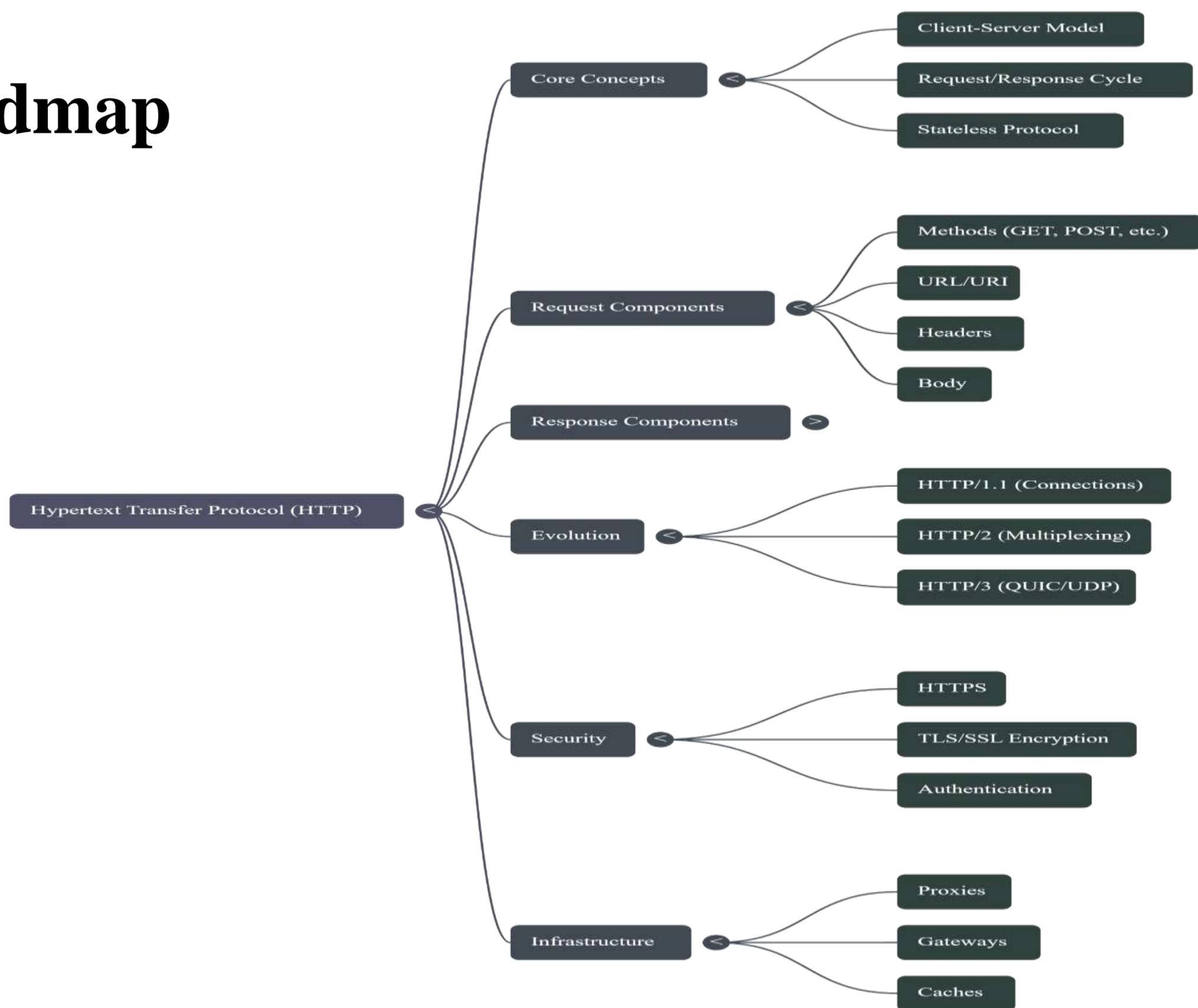


# Conclusion – HTTP solves Real Problems

Why is HTTP essential?



# Mindmap



# Thank You