

SECTION 3 — INTRODUCTION TO BACK-END WEB DEVELOPMENT



JONAS.IO
SCHMEDTMANN

NODE.JS, EXPRESS & MONGODB

THE COMPLETE BOOTCAMP



@JONASSCHMEDTMAN

SECTION

INTRODUCTION TO BACK-END WEB
DEVELOPMENT

LECTURE

AN OVERVIEW OF HOW THE WEB WORKS

WHAT HAPPENS WHEN WE ACCESS A WEBPAGE

👉 Request-response model or Client-server architecture



WHAT HAPPENS WHEN WE ACCESS A WEBPAGE

Domain Name Server -
phonebooks of internet -
matches the host to the
server IP address

DNS

DNS LOOKUP

https://216.58.211.206:443

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CLIENT

(e.g. browser)

https://www.google.com/maps

Protocol

(HTTP or HTTPS)

Domain name

Resource

GET /maps HTTP/1.1

Host: www.google.com
User-Agent: Mozilla/5.0
Accept-Language: en-US

<BODY>

Start line: HTTP method + request target + HTTP version

HTTP request headers (many different possibilities)

Request body (only when sending data to server, e.g. POST)

HTTP- another communication protocol that allows clients
and server to communicate through requests and
responses

HTTP REQUEST

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TCP/IP socket connection

Transmission Control Protocol and Internet Protocol -
Protocols that control how data moves in the internet

SERVER

HTTP RESPONSE

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HTTP/1.1 200 OK

Date: Fri, 18 Jan 2021
Content-Type: text/html
Transfer-Encoding: chunked

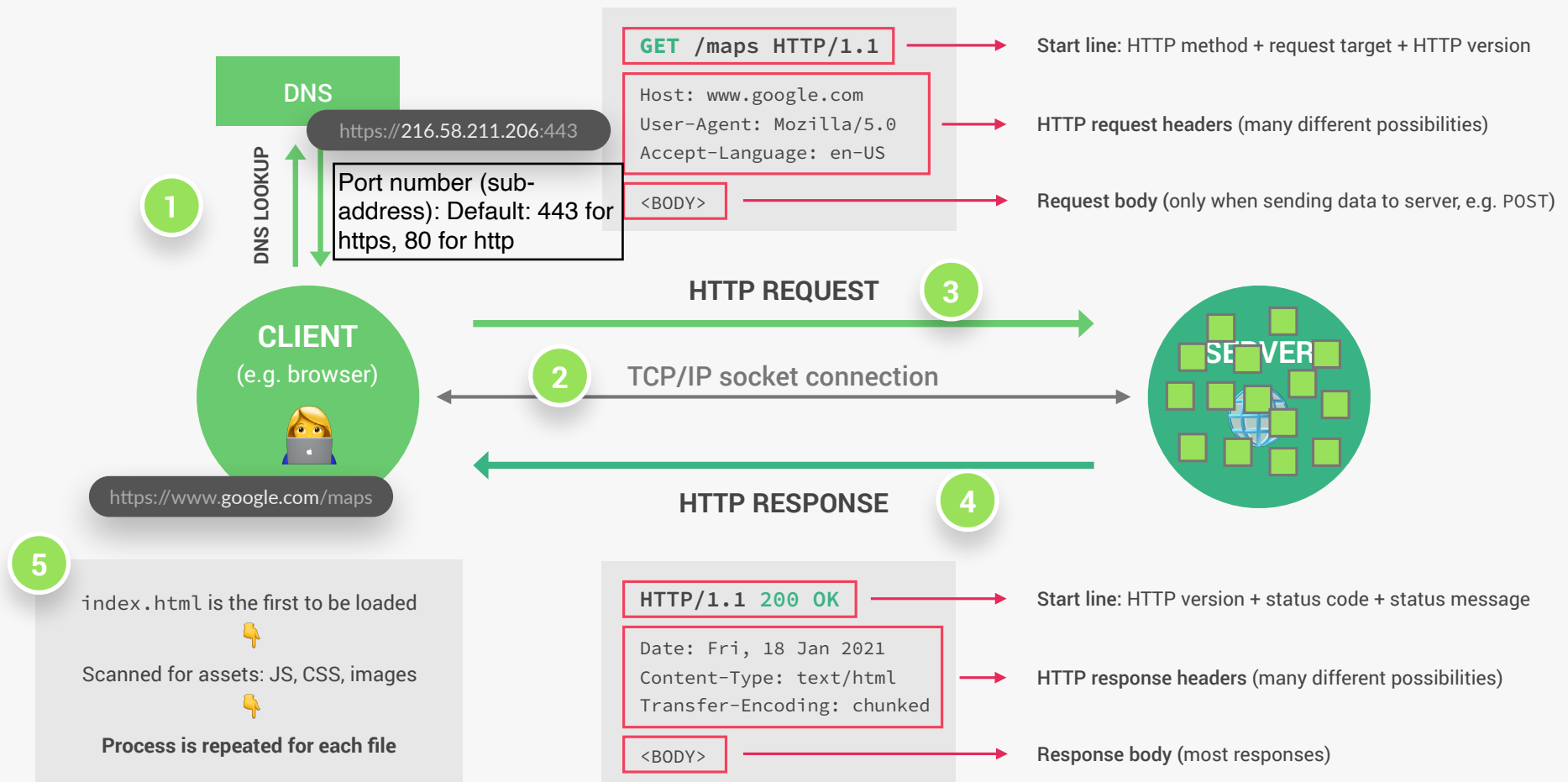
<BODY>

Start line: HTTP version + status code + status message

HTTP response headers (many different possibilities)

Response body (most responses)

WHAT HAPPENS WHEN WE ACCESS A WEBPAGE



TCP - breaks the requests and responses into small chunks (packets). When they get at the destination it will reassemble all packets into the original request and response.
IP - sent and rout all the packets through the internet using IP addresses into every packet