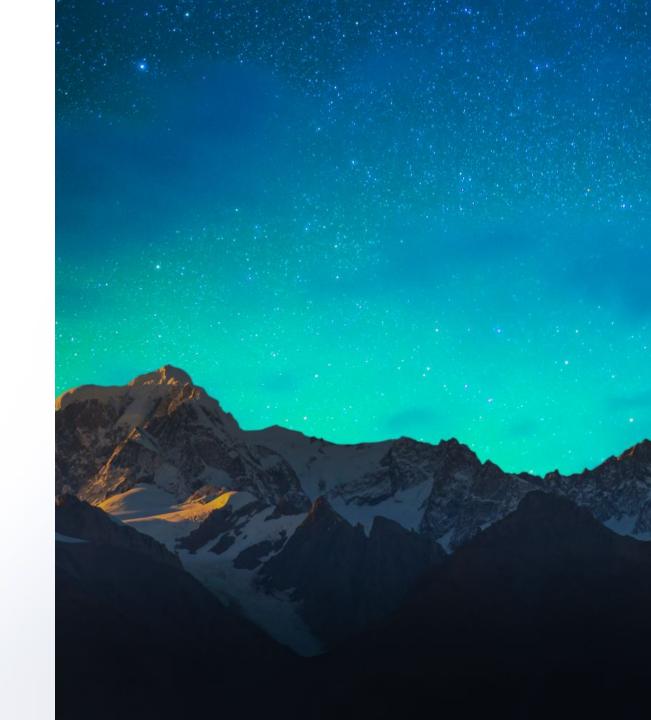


Frontend Programming

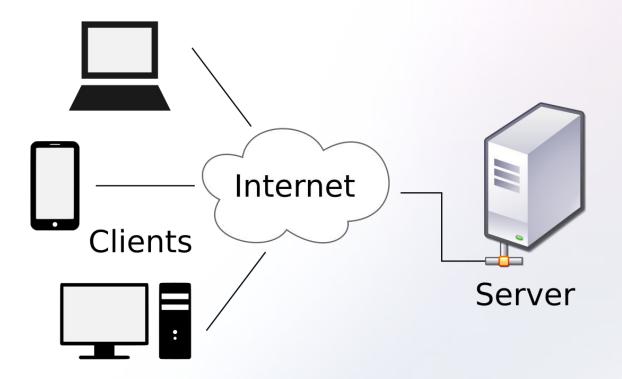
Sipan Sahakyan





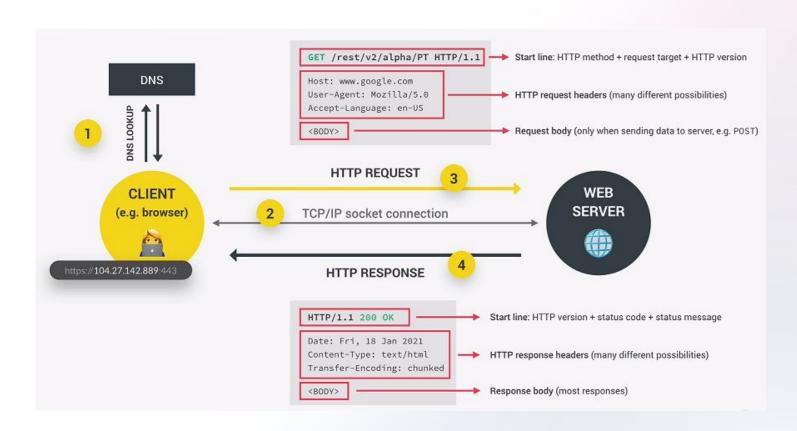


Introduction to Client/Server





Process of HTTP request and response





Introduction

- The Hypertext Transfer Protocol (HTTP) is an *application-layer protocol* for transmitting hypermedia documents, such as HTML.
- It is used for communication between web browsers and web servers, though in principle it can be used for other purposes as well.
- It follows a classical *client-server model*, with a client opening a connection, making a request then waiting for a response until it receives it.
- It also is a *stateless protocol*, meaning that the server doesn't keep any data (state) between two requests.
- Though often based on a TCP/IP layer, it could be used on any *connection-oriented transport layer* (UDP, etc.).



Web Programming



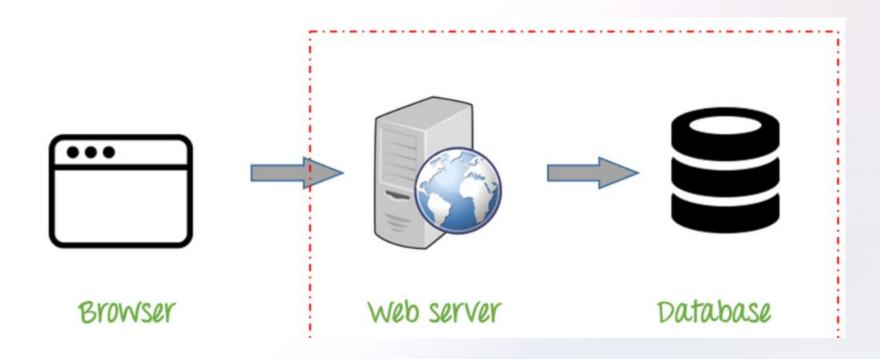


Frontend





Backend





HTML

- HTML is a markup language used by web browsers to display web pages
- HTML contains commands that tell the browsers how to paint the UI of a certain webpage
- HTML is not a programming language
- HTML uses so called tags to display elements of a UI
- Some famous tags include html, head, body, title, div, span, input, button
- Tags can contain other tags or text information
- Tags can have attributes that modify their appearance and behavior



CSS

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files



JavaScript

- JavaScript was originally named **Mocha**, later it was renamed to LiveScript
- JavaScript was initially created to "make web pages alive".
- JavaScript was developed by Netscape.
- Why is it called <u>JavaScript?</u>
- JavaScript is implementation of ECMAScript.
- JavaScript is a scripting language.
- JavaScript is used everywhere.
- JavaScript is dynamically typed language.
- Environments, V8 engine
- Code Editors, IDE, Developer Console

