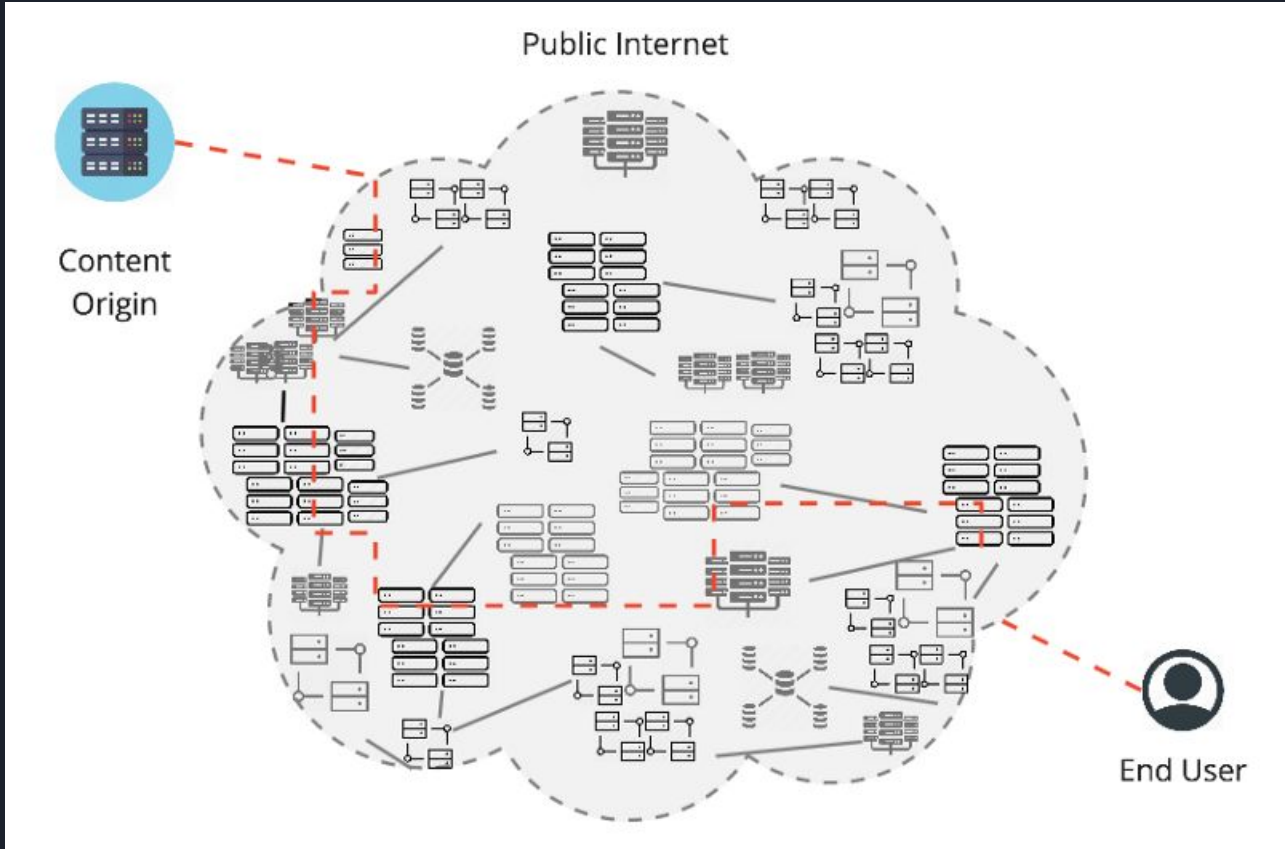
Javascript

How does the Internet work?



CDN, ISP, DNS, Port number

CDN - Content Delivery Network

ISP - Internet Service Provider

DNS - Domain Name Server

Port number

- Well known port numbers: 01 - 1024 (Web service by default 80)
- Ephemeral ports

Localhost? 192.168.0.0?

Localhost refers to your own server, running on 127.0.0.1

So typing localhost to your browser URL field means the same thing with 127.0.0.1

And as Port 80 is the default port for web service, typing localhost alone would do the job

Optical fiber network

https://www.infrapedia.com/app

Client side code and Server side code

GET requests, other requests and response code

GET, POST, PUT, PATCH, UPDATE, DELETE

200

404

https://en.wikipedia.org/wiki/List_of_HTTP_status_codes

Tell the HTML to get Javascript and CSS files

<script src=”path-to-js-folder/script.js”/>

<link href=”path-to-css-folder/styles.css”/>

Variables

var older Javascript syntax

const notify the browser that the value stored in this variable **WILL NOT** change

let notify the browser that the value stored in this variable **WILL** change

https://caniuse.com/?search=es6

Check type of variables with typeof()

typeof(10)

typeof(true)

typeof('hello world')

Boolean type

```
console.log(true && true)

console.log(true && false)

console.log(false && false)

console.log(1 && 0)

console.log(1 && 2)

console.log(-1 && -2)

console.log('hello' && 0)
```

Conditional statements

```
if (true){
    console.log('hell world')
}

if (typeof('hello world') === 'string'){
    console.log('hello world')
}

if (typeof('-1') === 'string') {
    console.log('-1 is a string')
}
```

Conditional statements - If

```
let chosenNumber = Math.floor(Math.random() * 10);

if (chosenNumber === 1) {
    console.log('The random number is 1');
} else {
    console.log('Not 1')
}
```

Conditional statements - Switch

```
let chosenNumber = Math.floor(Math.random() * 10);

switch(chosenNumber){
    case 1:
        console.log('One');
    case 2:
        console.log('Two');
    case 3:
        console.log('Three');
    case 4:
        console.log('Four');
    case 5:
        console.log('Five');
    case 6:
        console.log('Six');
    default:
        console.log('Dont know')
}
```

Conditional statements - Switch

```
let chosenNumber = Math.floor(Math.random() * 10);

switch(chosenNumber){
    case 1:
        console.log('One');
        break;
    case 2:
        console.log('Two');
        break;
    case 3:
        console.log('Three');
        break;
    default:
        console.log('Dont know');
        break;
}
```

Conditional statements - Switch

```
let chosenNumber = Math.floor(Math.random() * 100);

if (chosenNumber < 32 && chosenNumber > 0){
    console.log('valid number for date')
} else {
    console.log('Invalid number for date')
}
```

Practice exercise

Create a software that generate 5 random numbers of either 0 or 1

Let the user knows which are the 5 random numbers that they have gotten with console.log or alert

If the user get all five 1s, congrat the user because he/she has won a jackpot prize.

Also show them what has been the chance of winning the jackpot by performing a calculation of the winning probability (basically 1/2^5)

If the user get all five 0s, congrat them anyway because it is as hard as winning the jackpot except he/she didn't win anything

Practice exercise

Create a software that generate 1 random number between 0 - 1000

Create a software that will translate that number into text in **FINNISH**

Example:

10 - ten, 11 - eleven, 12 - twelve

25 - twenty five

122 - one hundred and twenty two, etc.

235 - two hundred**S** and thirty five, 212 - two hundred**S** and twelve