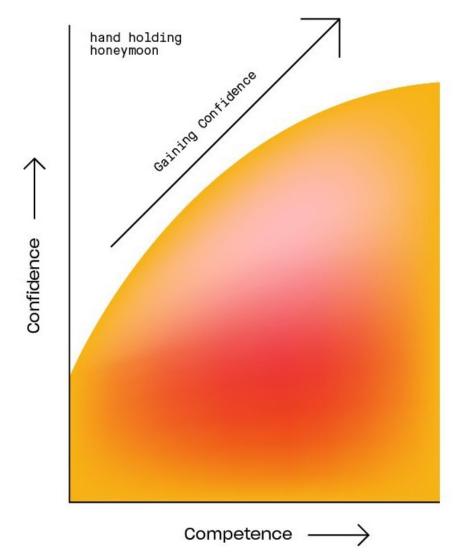
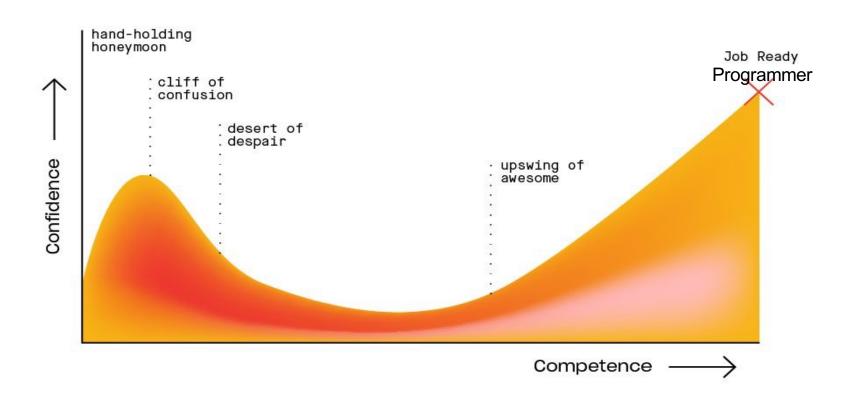
# Web Skills session #1

Salu Ylirisku 28.10.2020

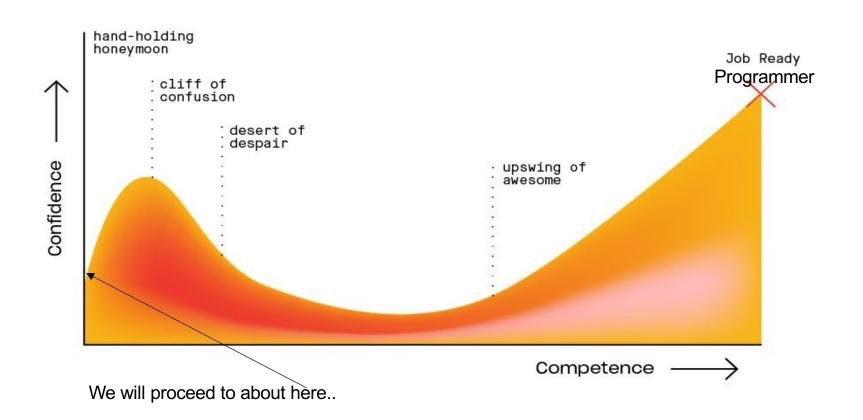
Aalto University School of Electrical Engineering



### Coding Confidenct vs Competence



### Coding Confidenct vs Competence



# NOT a programming course – but a concepting course

### **Coverage today**

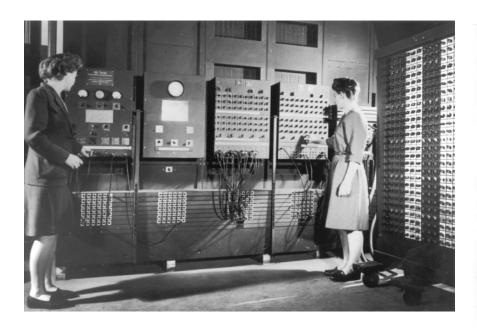
- 1. What is Web History & structure
- 2. Web Sites Web Apps Progressive Web Apps
- 3. Development tools
- 4. Exercise
  - 1. Interactive Button



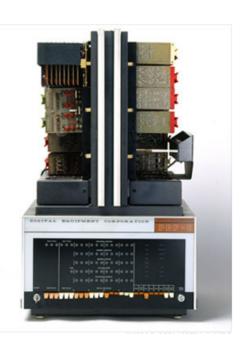
### What is web



### Early computers



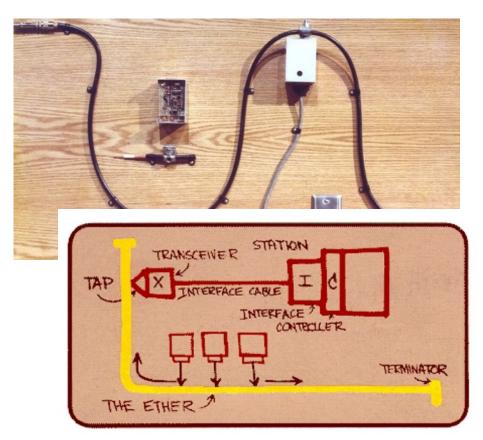


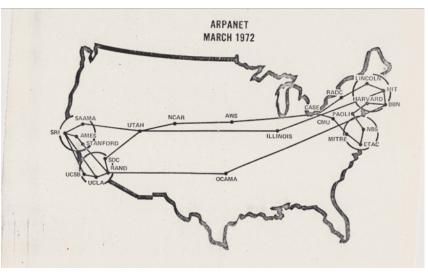


**ENIAC** 

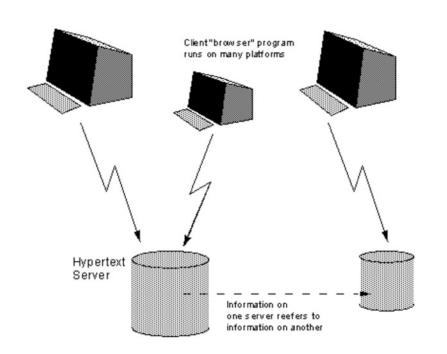
PDP-8

### Internet origins

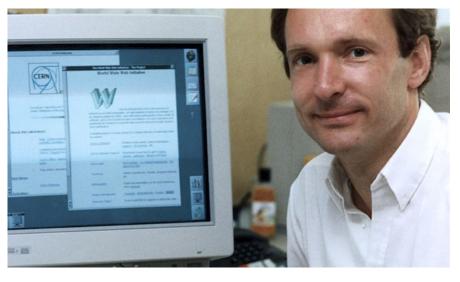




### World Wide Web



1989



- HTML: HyperText Markup Language. The markup (formatting) language for the web.
- URL: Uniform Resource Identifier. A kind of "address" that is unique and used to identify to each resource on the web. It is also commonly called a URL.
- HTTP: Hypertext Transfer Protocol. Allows for the retrieval of linked resources from across the web.

### HomePage

[Home]

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### Other Category Schemes

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Last edited August 8, 2001 4:07 am (diff)

### WikipediA



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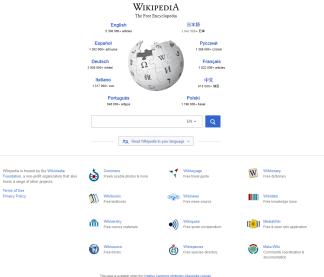
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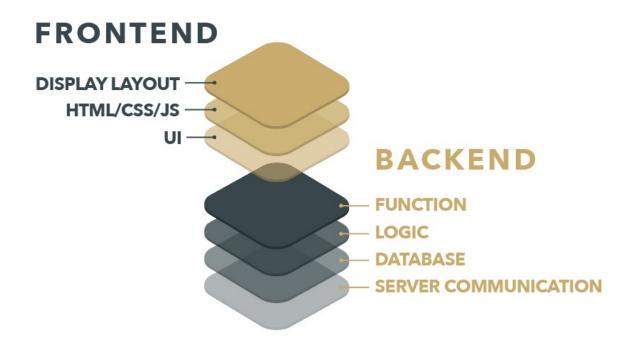
Angoya - Anap - Aymara - Bamanankan - Bamzopr - 🚓 😋 - Chamoru - Chavacano de Zamboanga - Bislama - Diné Bizaad - Dolnoserbski - Emiglián-Rumagnöl - Эрэянь - Estremeñu - Euegbe - Fiji Hindi - گشمیری / ППТSR - Нак-kā-fa / 蘇家語 - Igbo - استان التقاری التقا Kongo · Кыргызча · ылалало · lojban · Malagasy · Ming-déng-ngū · Мокшень · Молдовеняска · өөлөл · Dorerin Naoero · Něhiyawéwin / つりムケマムマ · Norfuk / Pitkern - Нохчийн - छिट्टा - Afaan Oromoo - खजभीया - धैनाची / स्ट्रेस्- Papiamentu - Qaraqalpaqsha - Qırımtatarca - झून - Romani / रोमानी - Gagana Sāmoa · Sardu · Caxa Тыла · Seeltersk · Setswana · 😤 обод · Сповѣньскь / ЯдбВФР&Р®298 · Šlúnski · Af Soomaali · SiSwati · Sranantongo · Reo Tahiti · Taqbaylit · Tetun · ܪܩܡܪ · Tok Pisin · СWУ · Xitsonga · Удмурт · لايطريب / Uyghur · Tshivenda · Wollof · isiXhosa · Zeêuws · isiZulu

Other languages • Weitere Sprachen • Autres langues • Kompletna lista języków • 他の言語 • Otros idiomas • 其他語言 • Другие языки •





### Full stack

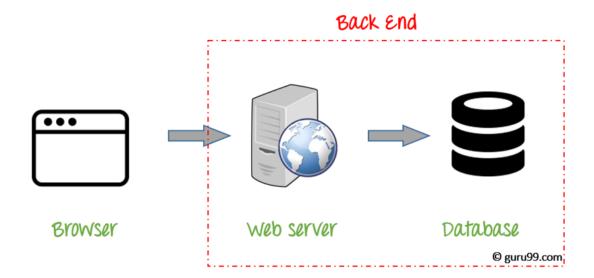


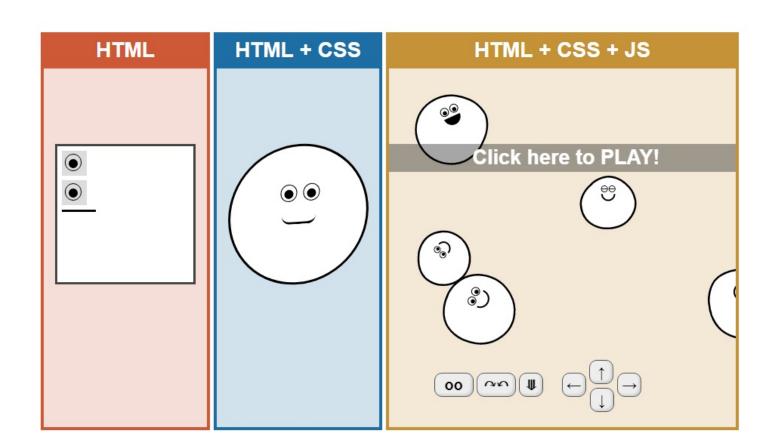
### Front-End



This runs on the web browser – on your local device

### Back-End





## **Images**



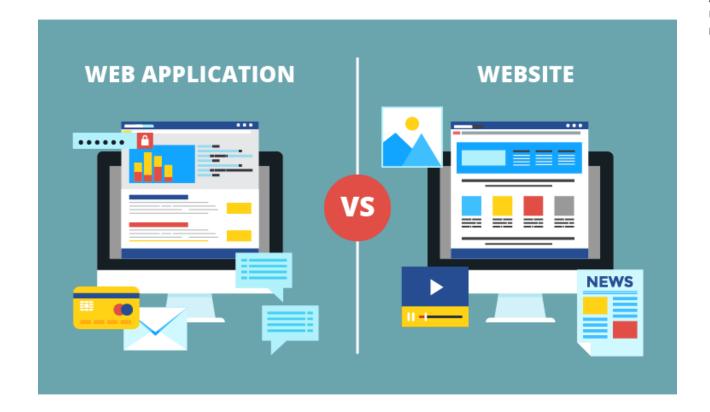
### Examples of what JavaScript can do

- 2D graphics <a href="https://d3js.org/">https://d3js.org/</a>
- 3D graphics <a href="https://threejs.org/">https://threejs.org/</a>



### Web Sites - Web Apps - Progressive Web Apps





### What is a Website?

A website is a group of globally accessible, interlinked web pages which have a single domain name. It can be developed and maintained by an individual, business or organization. The website aims to serve a variety of purposes. Example: Blogs.

A website is hosted on a single or multiple web server. It is accessible via a network like the Internet or a private local area network via IP address.

> https://www.guru99.com/differenceweb-application-website.html

### What is a Web Application?

A web application is a software or program which is accessible using any web browser. Its frontend is usually created using languages like HTML, CSS, Javascript, which are supported by major browsers. While the backend could use any programming stack like LAMP, MEAN, etc. Unlike mobile apps, there is no specific SDK for developing web applications.

Web Applications came to prominence with the advent of Software as a Service (SaaS) movement.

https://www.guru99.com/difference-web-application-website.html



May not be that a meaningful distinction, as so many websites are web apps

### **Progressive Web Apps**



- Access device properties
  - Such as location, camera, movements, storage
- Work off-line
- Install on home screen

- These are similar to 'native' Apps
  - Just created with Web technologies



Edge device

LoRaWAN 2G-4G WiFi BlueTooth RF (433 Mhz)



The Think Network

Our Web service



Web Client





## JavaScript Frameworks

- React from Facebook
- Angular from Google
- Vue from individuals

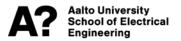


# **Development Tools**



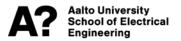
# Today – Figma

- What is Figma
- How to create a simple Button in Figma



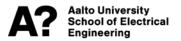
# Today – Figma

- What is Figma
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# Figma is a prototyping tool for Web Applications

https://www.figma.com/



# Technical considerations when sketching the UI with Figma

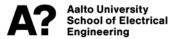
- Think of the possible development framework
  - CSS: Bootstrap, Bulma

- Graphics libraries:
  - Chartjs
  - Grafana



# **Steps**

- Figma overview
- Frames & components
- Prototype



## **Self-learning**

- Web is full of tutorials
  - Good for learning figma
- Web development:
  - https://www.theodinproject.com/courses/foundations



## **Weather App**

- Find inspiration:
  - https://dribbble.com/tags/weather\_app
  - https://www.behance.net/search?search=weather%20app
  - https://www.figma.com/community/search?model\_type=hub\_files& q=weather

