

# Web

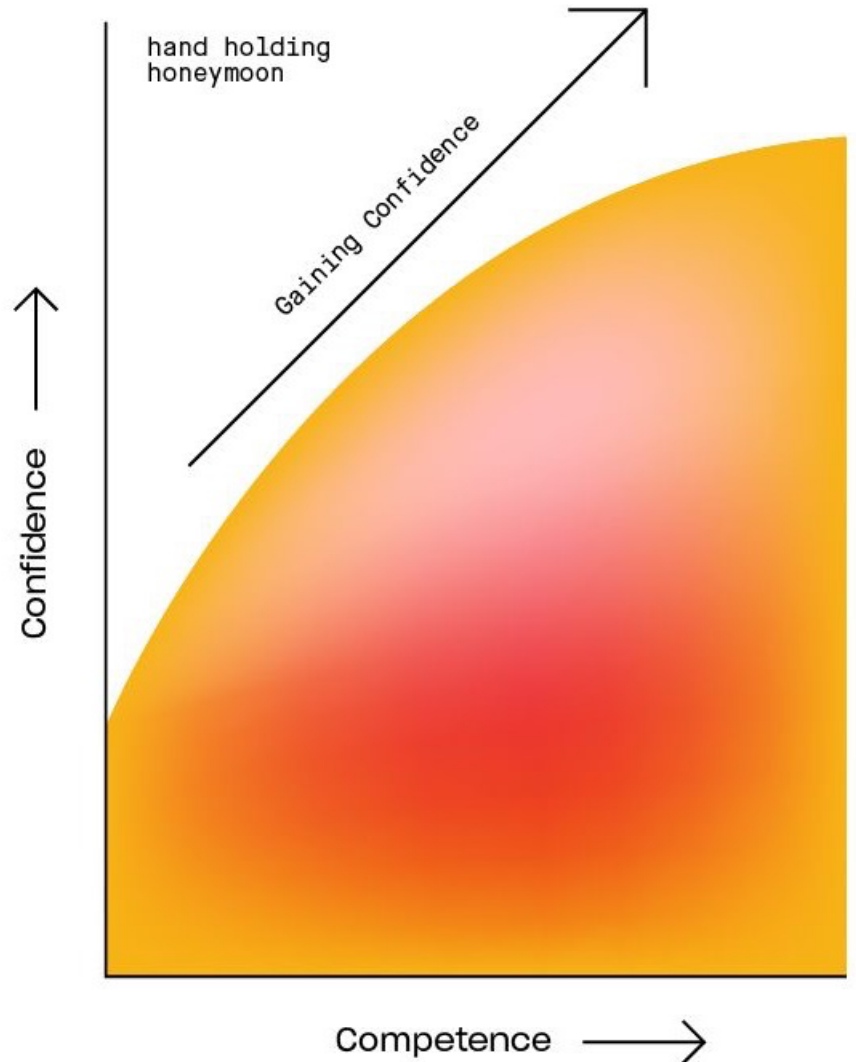
## — Skills session #1

Salu Ylirisku

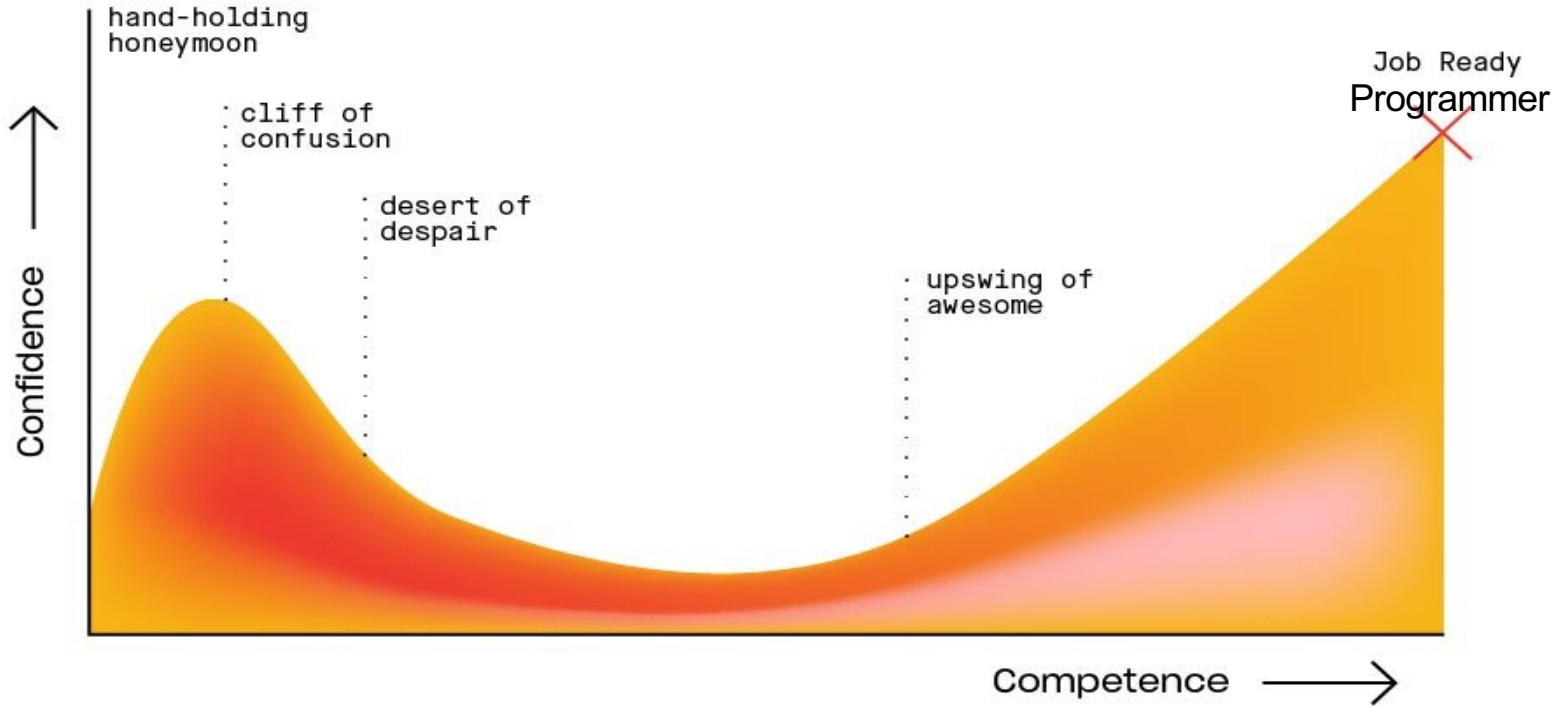
28.10.2020



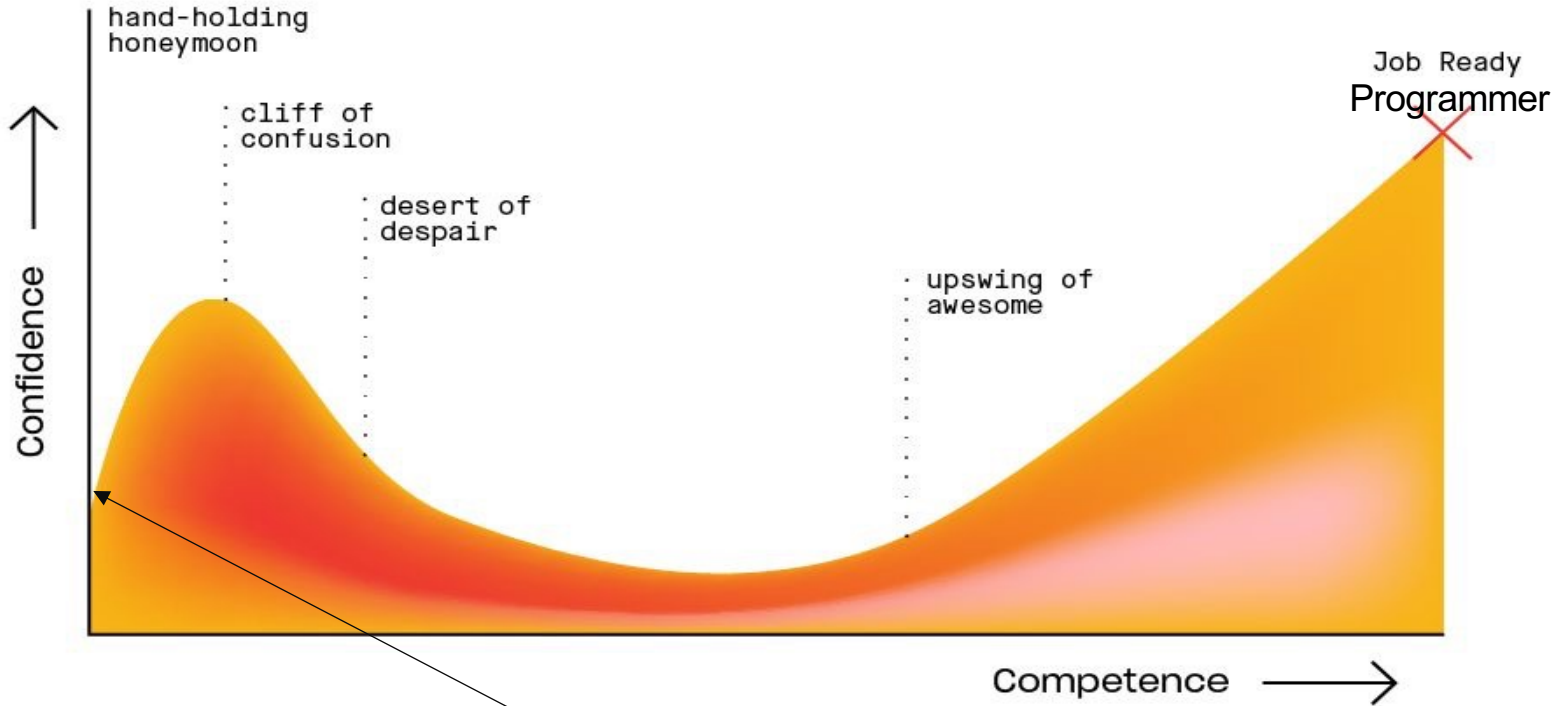
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# Coding Confidencet vs Competence



# Coding Confidencet vs Competence



We will proceed to about here..

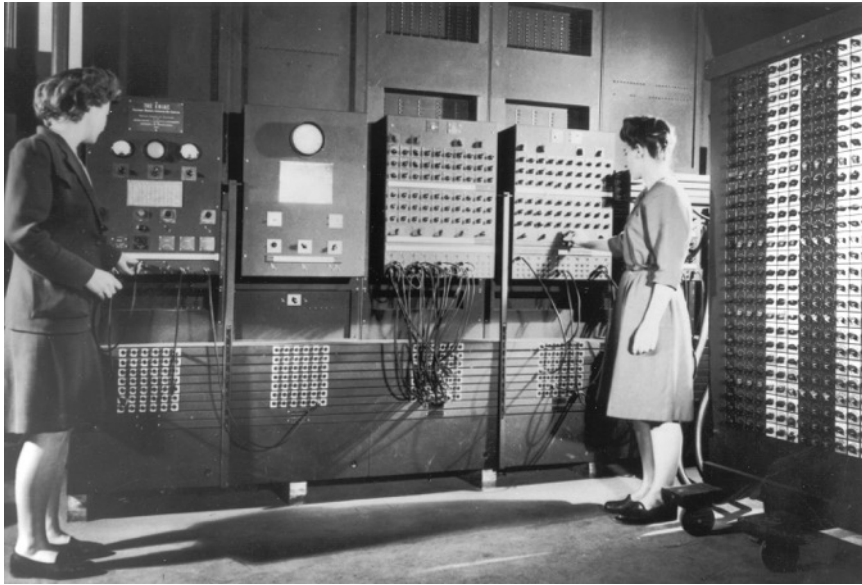
# **NOT a programming course – but a concepting course**

## **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

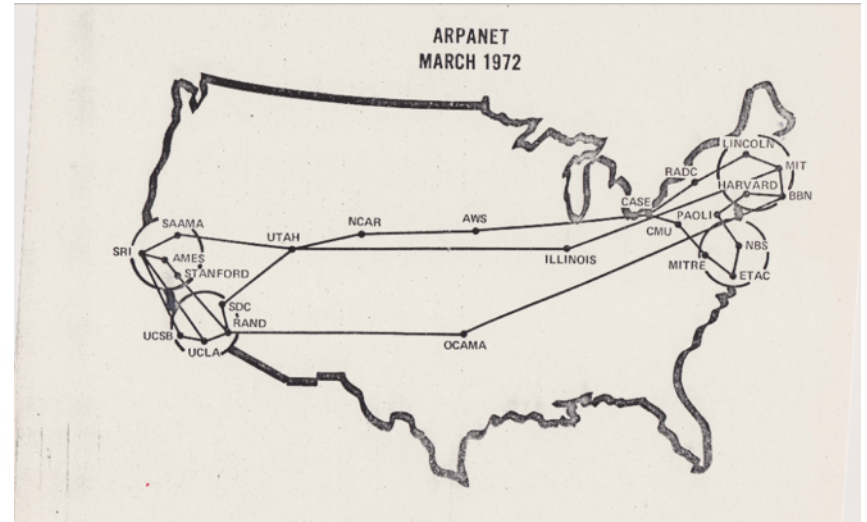
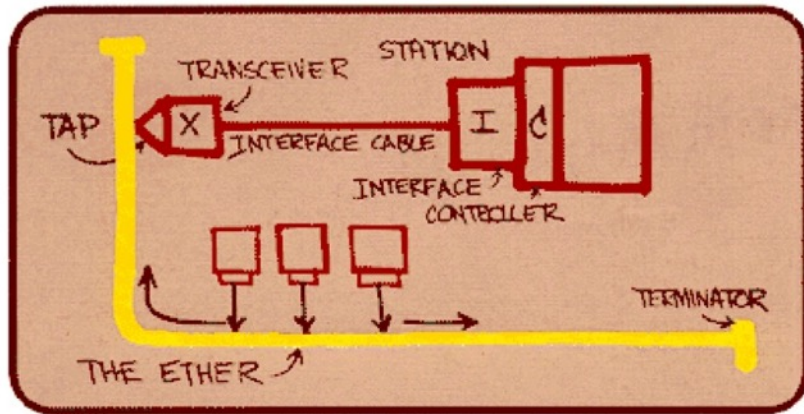
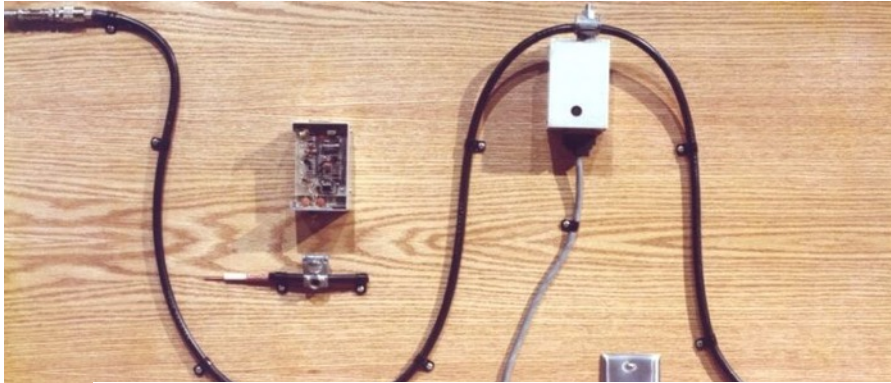


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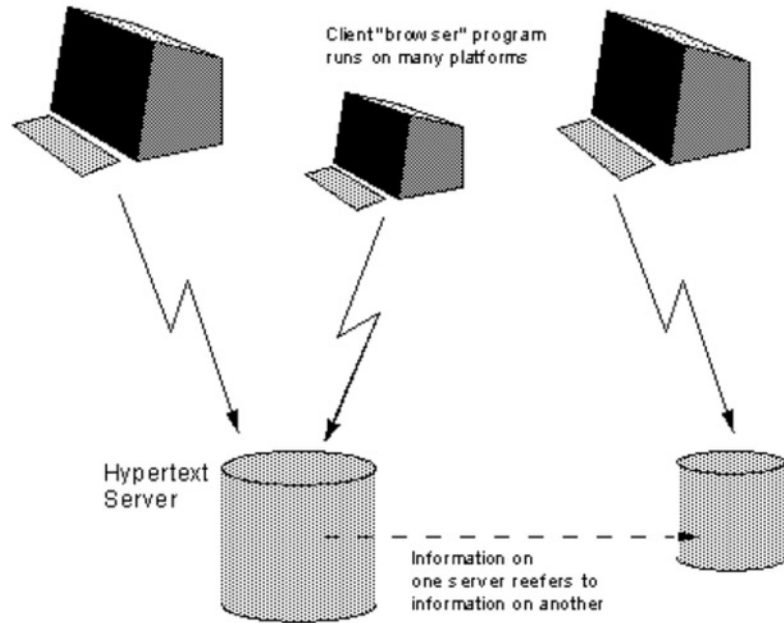


PDP-8

# 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.

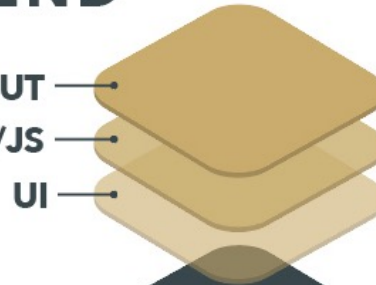




# Full stack

## FRONTEND

DISPLAY LAYOUT —  
HTML/CSS/JS —  
UI —



## BACKEND

FUNCTION —  
LOGIC —  
DATABASE —  
SERVER COMMUNICATION —

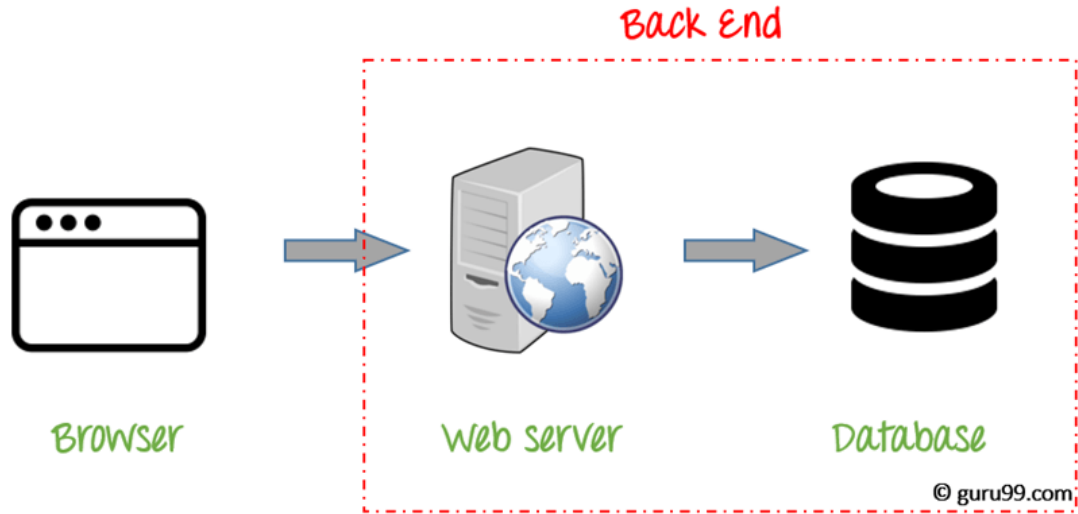


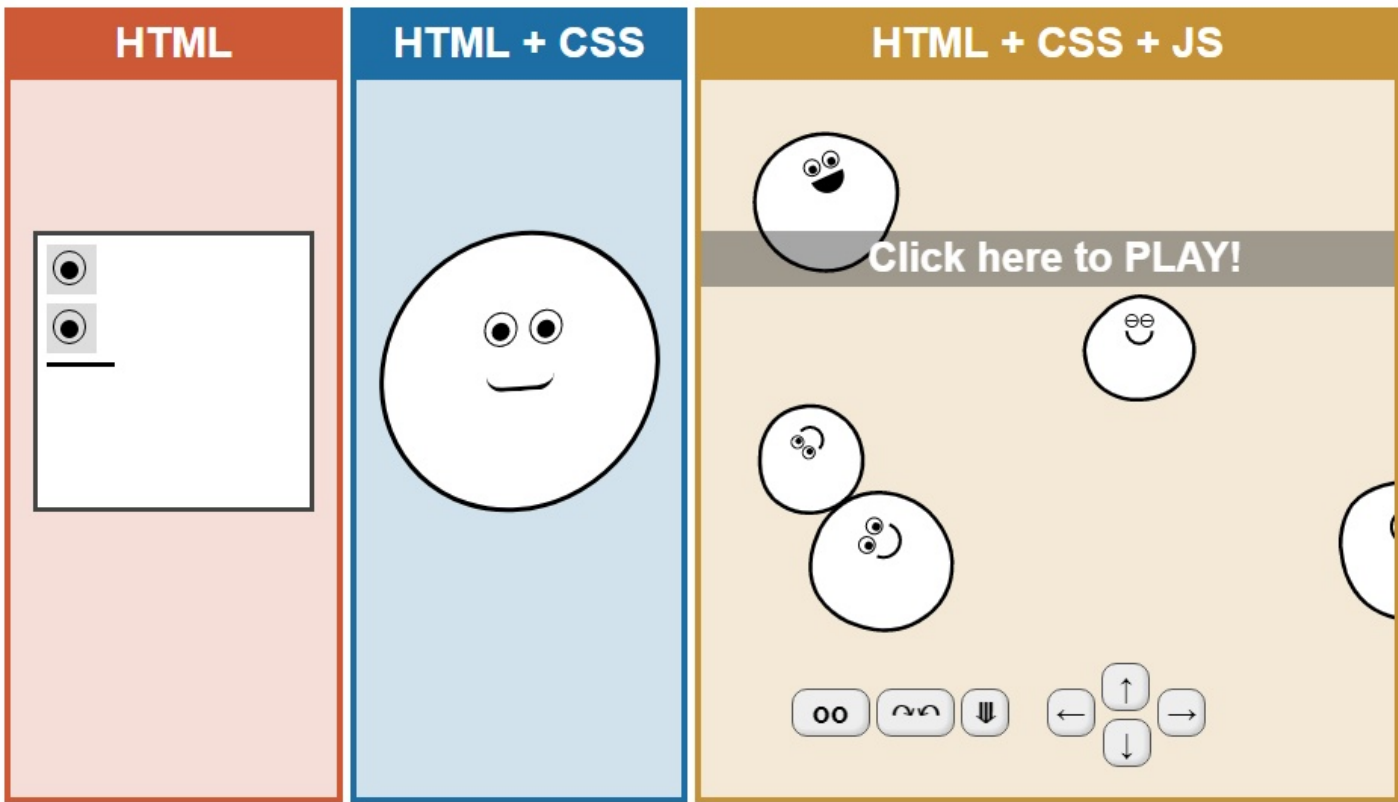
# Front-End



This runs on the web browser – on your local device

# Back-End





# Images



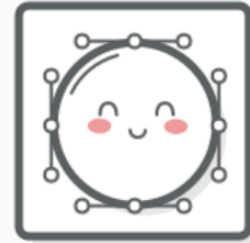
MOCHI.JPG



MOCHI.GIF



MOCHI.PNG



MOCHI.SVG

# Examples of what JavaScript can do

- 2D graphics <https://d3js.org/>
- 3D graphics <https://threejs.org/>

# Web Sites - Web Apps - Progressive Web Apps



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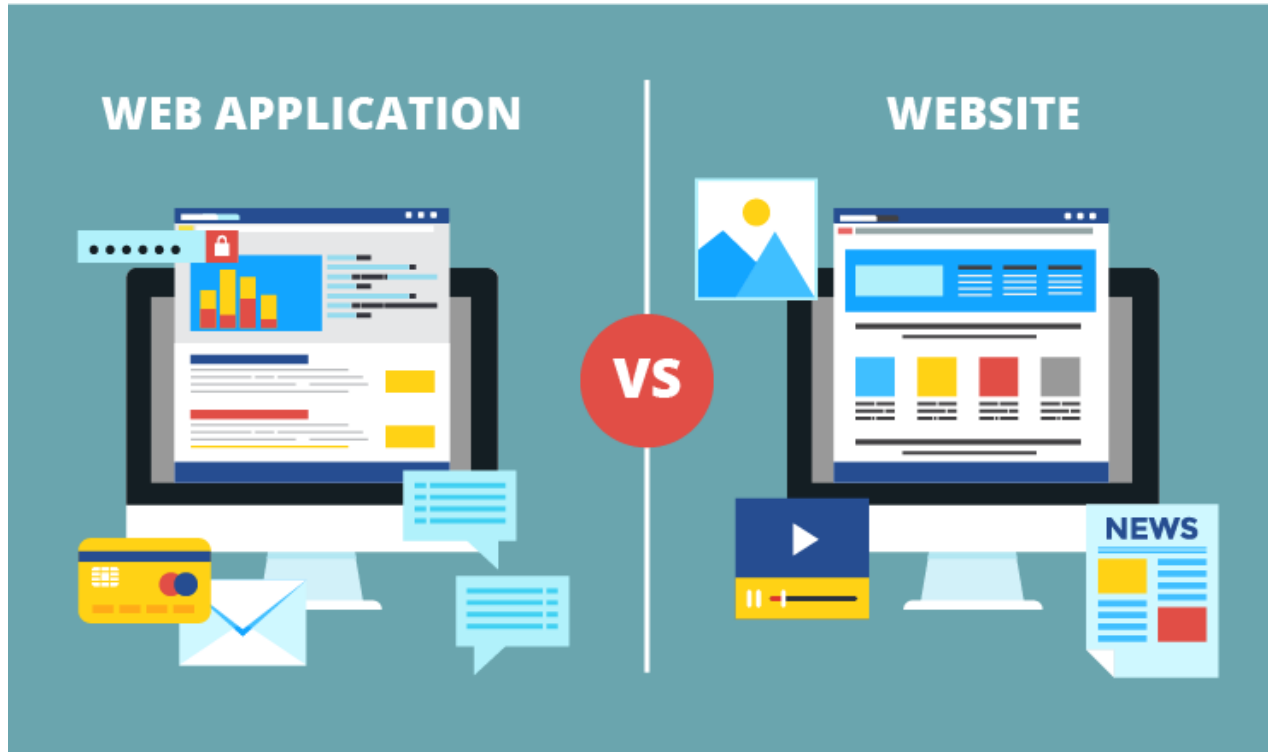


## What is a Website?

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/difference-web-application-website.html>

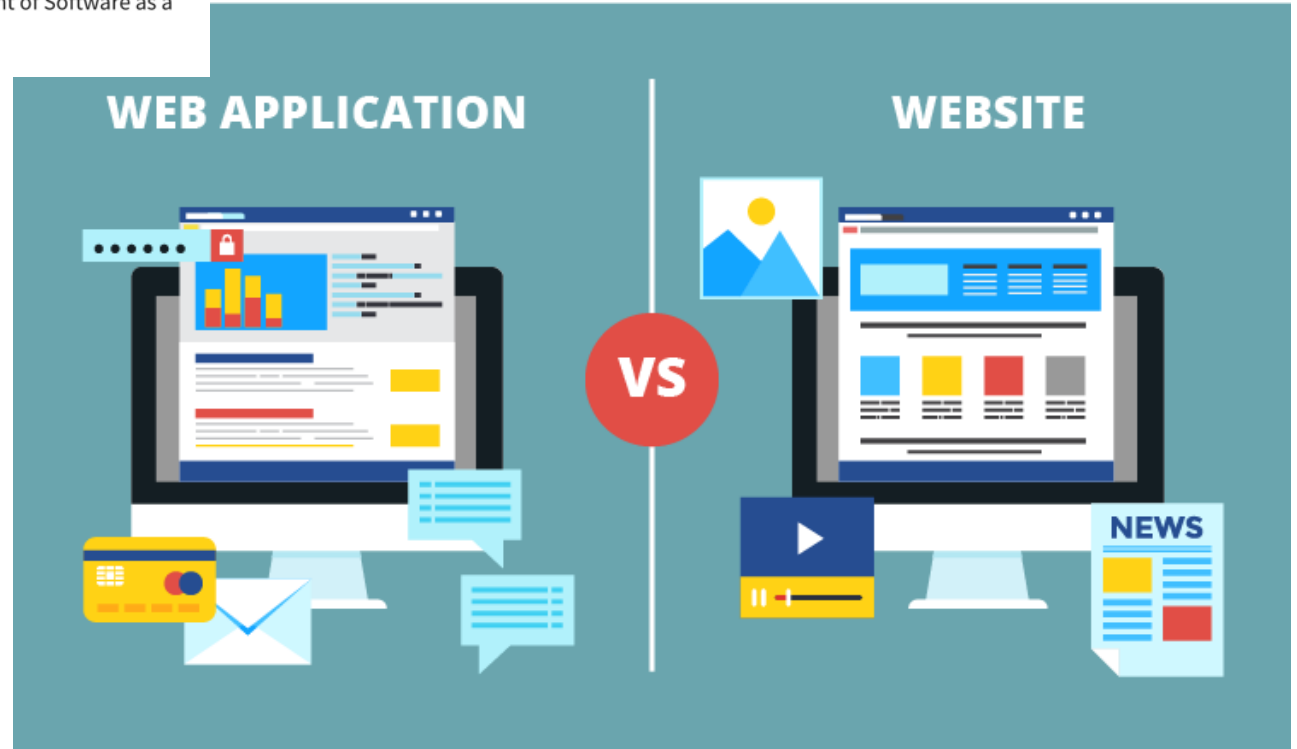


## What is a Web Application?

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)

Router



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

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



# 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://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](https://www.figma.com/community/search?model_type=hub_files&q=weather)

