



# WEB AND MOBILE APP DEVELOPMENT

Lecture # 2



# WEBSITES

Websites were originally developed for information sharing.

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# First Website

Tim Berners-Lee, a British scientist, invented the World Wide Web (WWW) in 1989, while working at CERN. The Web was originally conceived and developed to meet the demand for automated information-sharing between scientists in universities and institutes around the world.



info.cern.ch



# Web Evolution from 1.0 to 3.0

Web1.0

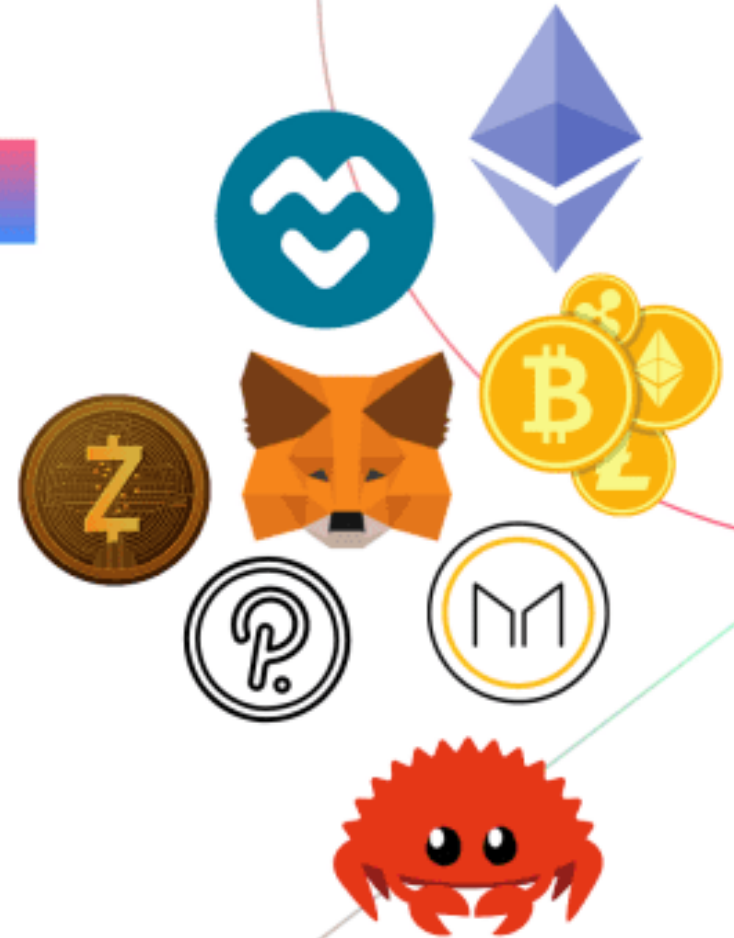


WIKIPEDIA  
The Free Encyclopedia

Web2.0



Web3.0





## WEB 1.0

- Basic Web pages
- HTML
- Ecommerce
- Java

1990 - 2005



## WEB 2.0

- Social Media
- Global Internet Access
- Web Apps
- Data Monetization

2006 - Present



## WEB 3.0

- NFTs
- Semantic Web
- Metaverse (AR & VR)
- Blockchains
- Artificial Intelligence
- Interoperability

Forthcoming

WEB 1.0

Read-Only Web



WEBSITE

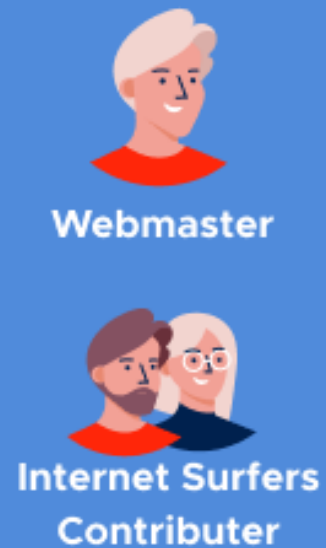


User



User

## WEB 2.0



WEBSITE



User

User

## The era we live in today



# Web 3.0

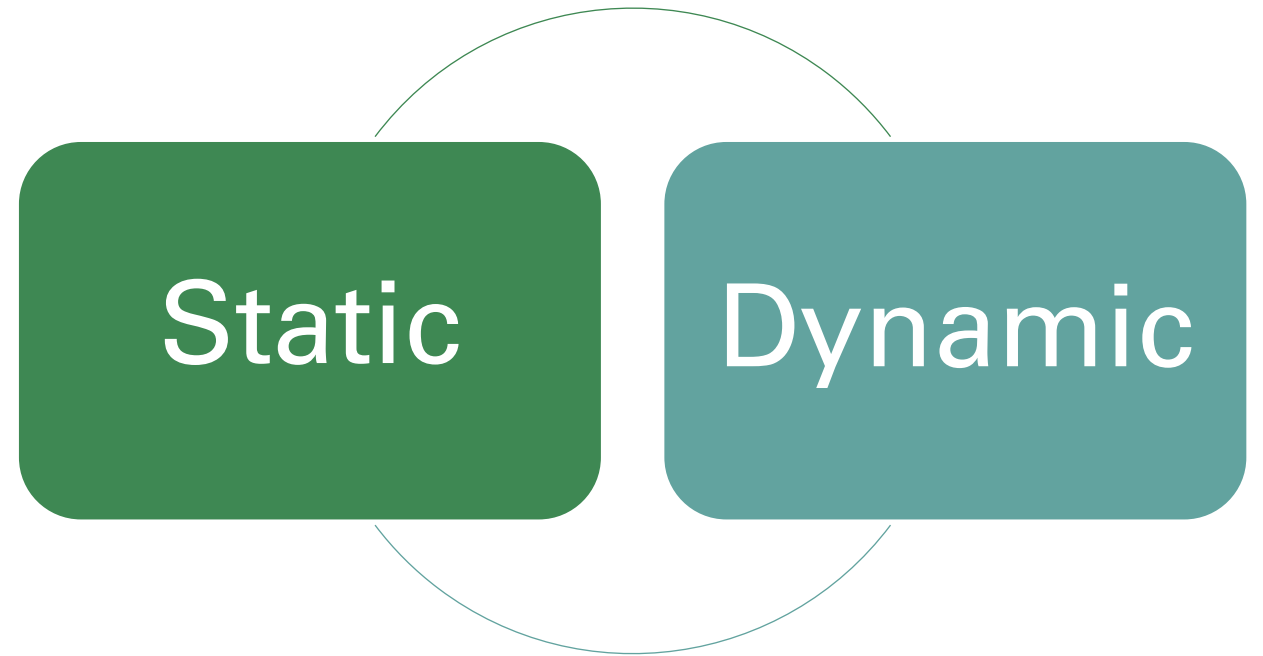


Web 3.0 is not dependent or lead by any human.



It is entirely working on defined piece of code called  
**“Smart Contracts”**

# Types of Website



# Static Website

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Fixed Data & Design

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Developer Dependent (User can't make changes on own)

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Same content for longest time.

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Doesn't use database

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No Server

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Fast loading

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Design part of a Website is usually **Static**

# Static Website – Skills Required

HTML

CSS

JS

Bootstrap



# Example of Static Site



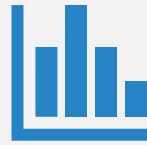
Portfolios



Resumes



# Dynamic Website



Enables changing in Data



Can have unique content on every visit.

# Dynamic Websites



Dynamic websites have 2 parts:



User-Facing > Website



Client Handled > Control Panel / Admin Panel

# Dynamic Website - Skills Required



Dynamic Websites requires Database and Server Connection.



Hence, you need to have grip on DBs like MongoDB, MySQL, Postgresql, Firebase.



Server like, Nodejs, PHP, Python, Java, .net.

# FRONTEND & BACKEND



# Frontend

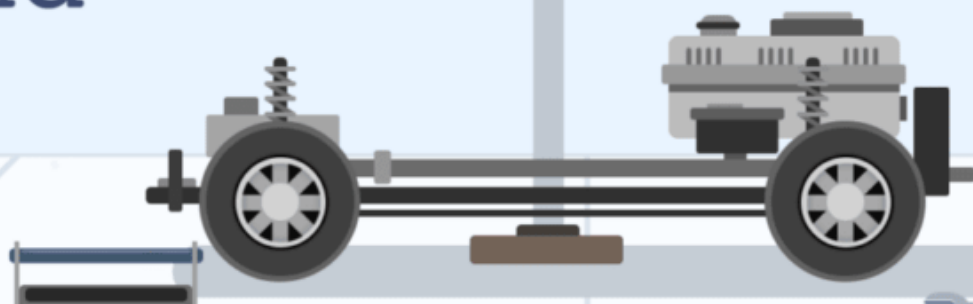


Users see



20% of total effort

# Backend



Users don't see



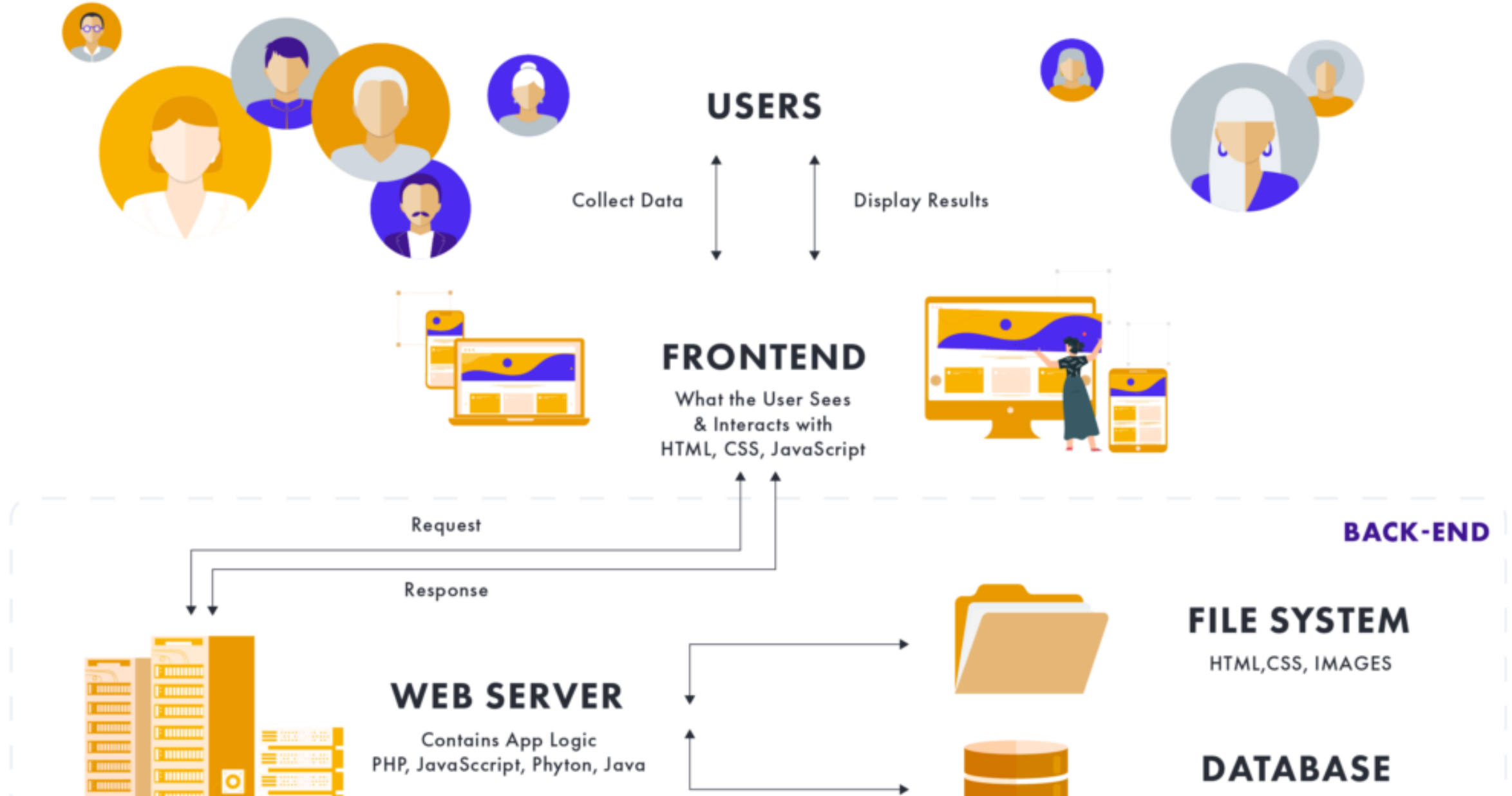
80% of total effort



Repetitive



# WEB APPLICATION ARCHITECTURE



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# Frontend

Front-end development is the process of building components that interact with users. Examples are the **user interface, buttons, user-entered data, and user experience (UX) features.**

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# Backend

The back-end, also called the server-side, consists of the server which provides **data on request**, the application that channels it, and the **database which organizes the information**

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# Database

Databases support good data access because: **Large volumes of data can be stored in one place.** Multiple users can read and modify the data at the same time. Databases are searchable and sortable, so the data you need can be found quick and easily.



# WEB CATEGORIES



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# WEB CATEGORIES

- Blogs. ([medium.com](https://medium.com))
- Business/Corporate Websites. ([techloset.com](https://techloset.com))
- NGO /Non-Profit Websites. ([saylaniwelfareuk.com](https://saylaniwelfareuk.com))
- E-Commerce Websites. ([khaadi.com](https://khaadi.com))
- Multi-vendor Websites. ([daraz.pk](https://daraz.pk))
- Educational Websites. ([lms.uaf.edu.pk](https://lms.uaf.edu.pk))
- Entertainment Website. ([Netflix.com](https://Netflix.com))
- Portfolio Website.
- Social Media Websites.([Facebook.com](https://Facebook.com))