WEB AND MOBILE APP DEVELOPMENT

Lecture # 2

WEBSITES

Websites were originally developed for information sharing.

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.

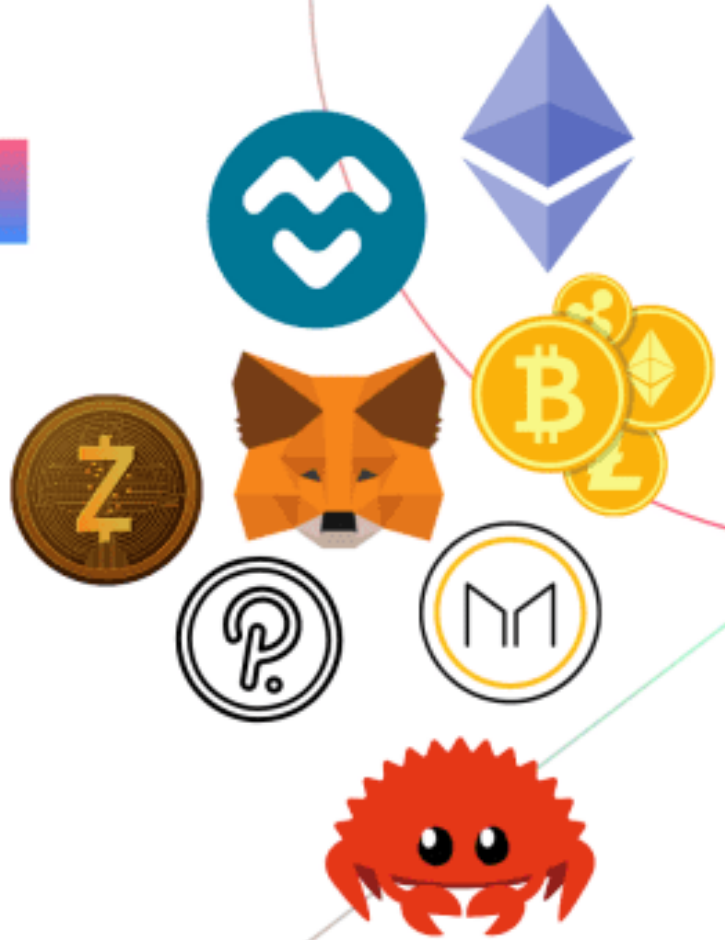
Web Evolution from 1.0 to 3.0

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 Intelligenc
- Interoperability

Forthcoming


WEB 1.0
Read-Only Web
Webmaster
WEBSITE
User
User

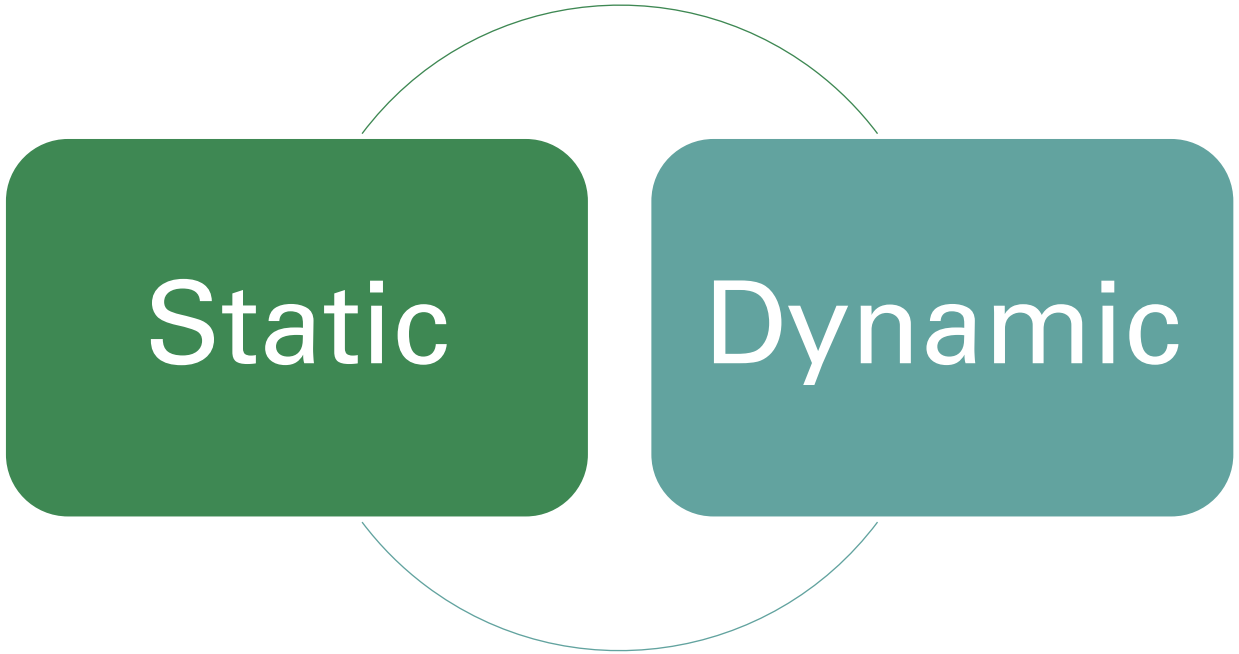

WEB 2.0
The era we live in today
Webmaster
Internet Surfers
Contributer
WEBSITE
RSS
User
User

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

Fixed Data & Design

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

Same content for longest time.

Doesn’t use database

No Server

Fast loading

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

Static Website – Skills Required

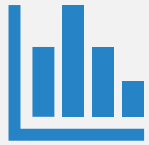
- HTML
- CSS
- JS
- Bootstrap

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

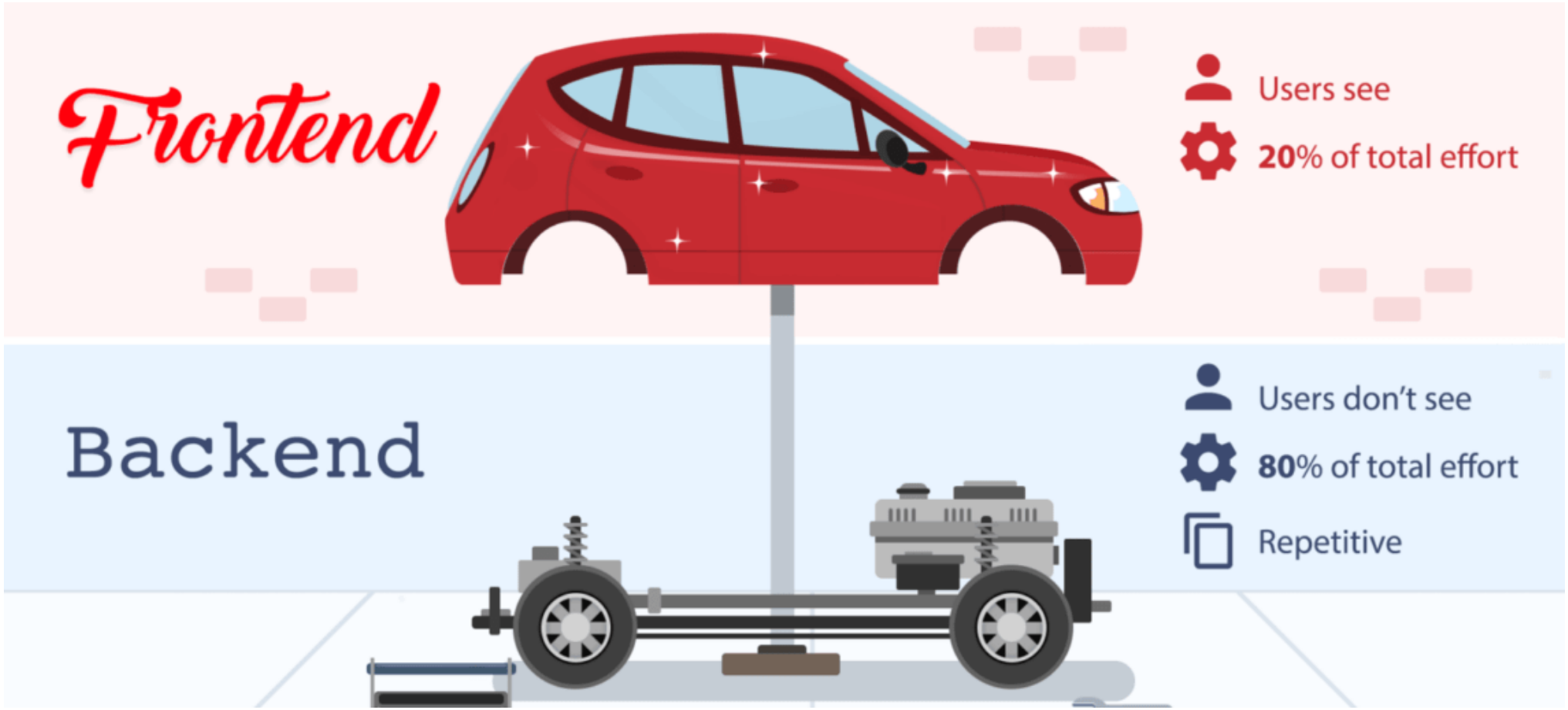
Dynamic Website - Skills Required

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

USERS

Collect Data

Display Results

FRONTEND

What the User Sees
& Interacts with
HTML, CSS, JavaScript

Request

Response

BACK-END

WEB SERVER

Contains App Logic
PHP, JavaSccript, Phyton, Java

FILE SYSTEM

HTML,CSS, IMAGES

DATABASE

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**.

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**

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