

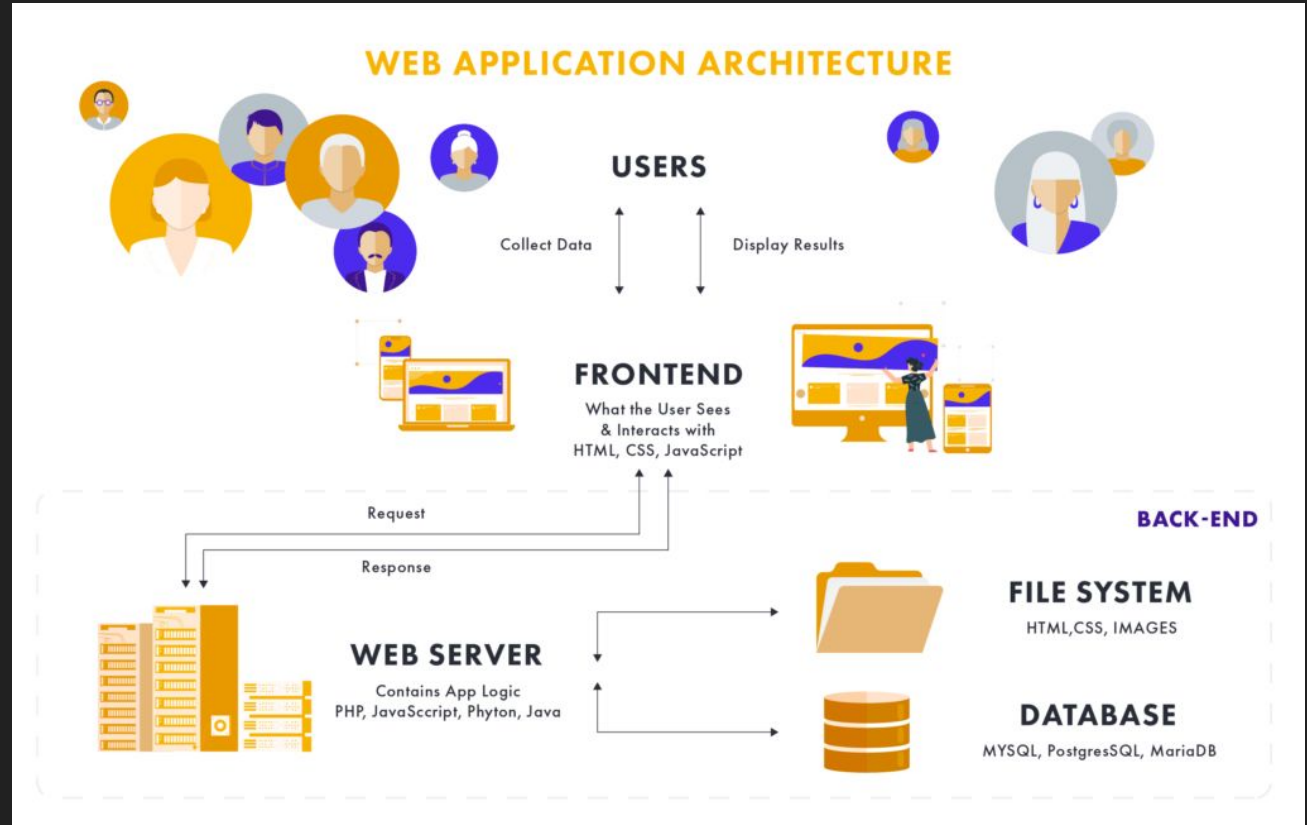
Pengembangan Aplikasi Web: Frontend

Praktisi Mengajar - Politeknik Hasnur
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Outline

- Web architecture review: frontend, backend
- Frontend: general overview
 - RWD (responsive web design) and mobile-first design
- Frontend stack
 - HTML
 - CSS
 - Javascript

Source:
<https://www.evertop.pl/en/frontend-vs-backend/>



Frontend: general overview

- HTML is the main component that allows us to define the website's structure
- CSS is something we use to define styles for the website
- Javascript is a programming language that is often being used for controlling website's interaction both to the user and the server

<https://jsfiddle.net/750L6pa8/>

Frontend stack: HTML

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.
- HTML is **NOT** a programming language

Adapted from: https://www.w3schools.com/html/html_intro.asp

HTML example

Demo - vscode

Demo - w3schools

Assignment: HTML

- Buat file index.html dengan hasil akhir seperti pada screenshot pada slide berikutnya. Tuliskan ringkasan materi (100 kata) di dalam file tersebut.
- Pengumpulan file via github anda masing-masing:
 - Folder: pemrograman-web/tree/main/assignments/3-frontend
 - File name: index.html
 - Contoh: <https://github.com/adityaputra/pemrograman-web/tree/main/assignments/3-frontend>

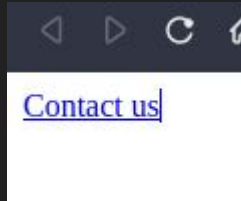
Tugas 3: frontend - HTML

NAMA ANDA: Ringkasan materi 100 kata

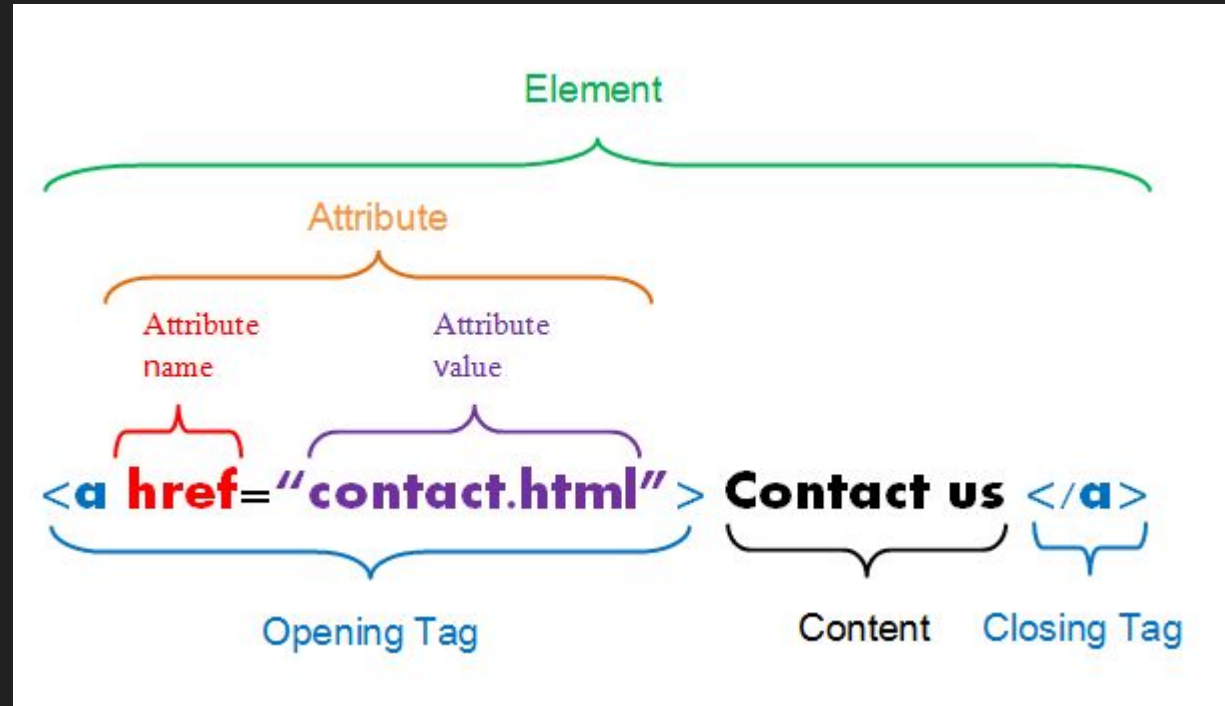
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Frontend - cont'd

HTML components



```
<a href="contact.html"> Contact us </a>
```



Contoh HTML elements

- Header: title, script, link, meta
- Struktur: div, section, main
- Heading: h1, h2, h3
- Text: p, span, textarea
- Table: table, thead, tbody, tr, td
- List: li, ol, ul
- Input: input, button, select, option
- Media: img, source, video, svg

Source: <https://www.w3schools.com/tags/default.asp>

DEMO

CSS

- Cascading Style Sheets (CSS) digunakan untuk mengatur layout / tata letak dan tampilan halaman web
 - Warna
 - Font
 - Ukuran teks / gambar / elemen lainnya
 - Penempatan
 - Lainnya

Menggunakan CSS

- Inline
 - Menggunakan *atribut* **style** di dalam elemen HTML
- Internal
 - Menggunakan *elemen* **<style>** di bagian **<head>**
- Eksternal
 - Menggunakan *elemen* **<link>** untuk menambahkan file CSS yang terpisah dari HTML

HTML + CSS Demo

- HTML tanpa CSS: <https://jsfiddle.net/seamz23d/>
- Inline: <https://jsfiddle.net/seamz23d/1/>
- Internal: <https://jsfiddle.net/seamz23d/3/>
- Eksternal: <https://jsfiddle.net/seamz23d/2/>

Bootstrap CSS

- Framework yang digunakan untuk memudahkan implementasi CSS
- Responsive, dioptimasi untuk membuat tampilan desktop dan mobile
- <https://getbootstrap.com/>
- Demo

Tugas Individu

- Buat layout HTML+CSS sederhana menyerupai halaman google.com
- Silakan kerjakan di jsfiddle.net
- Note: boleh menggunakan bootstrap / framework CSS lainnya
- Kirimkan via jsfiddle / codepen
 - Google spreadsheet
- Deadline: 26 oktober

Tugas Kelompok

- Tentukan desain halaman website (1 halaman) yang akan dibangun untuk project akhir
 - Desain tidak harus membuat dari nol
- Referensi: <https://www.elegantthemes.com/layouts/>
- Kirimkan via whatsapp:
 - Nama kelompok
 - Anggota
 - File gambar jpg / png desain halaman website nya
 - Deadline: 26 oktober

Bonus

Github student developer pack