**Ananda Julia R – 20230140046 – Resume PDW**

**HTTP (HyperText Transfer Protocol)**

Protokol komunikasi antara browser (client) dan web server.

Bersifat stateless (setiap permintaan berdiri sendiri).

Versi:

* HTTP/1.1, HTTP/2 (cepat dan mendukung multiplexing),
* HTTP/3 (standar terbaru).
* HTTPS: HTTP + SSL/TLS (lebih aman).

Metode:

1. GET: ambil data,
2. POST: kirim data,
3. PUT, PATCH: ubah data,
4. DELETE: hapus data

Status code:

1. 200 OK: sukses,
2. 301: redirect,
3. 404: tidak ditemukan,
4. 500: error server

Header: seperti Content-Type, Authorization, Cache-Control.

Cookie & Session: simpan data pengguna.

Teknologi terkait: WebSocket, REST API, OAuth, DNS, TCP/IP.

**HTML (HyperText Markup Language)**

Struktur dasar halaman web, dibentuk dari tag seperti <html>, <body>, <h1>, <p>.

Form HTML:

html

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<form method="POST" action="/proses">

<input type="text" name="nama">

<button type="submit">Kirim</button>

</form>

Input: text, password, checkbox, radio, file, date, select/dropdown.

Multimedia: <img>, <video>, <audio>.

Link: <a href="url">Klik</a>.

Semantic HTML: <header>, <nav>, <section>, membantu SEO & aksesibilitas.

Responsive: gunakan viewport dan satuan %, vw, vh.

**CSS (Cascading Style Sheets)**

Mengatur tampilan elemen HTML: warna, font, layout.

Penulisan:

1. Internal: dalam tag <style>,
2. External: file .css,
3. Inline: langsung di elemen (tidak disarankan)

Selector:

1. Tag: h1 {},
2. Class: .judul {},
3. ID: #utama {}

Box model: margin, border, padding, content.

Layout:

1. Flexbox: untuk 1 dimensi,
2. Grid: untuk 2 dimensi

Position: static, relative, absolute, fixed, sticky

Media Query: responsif untuk berbagai ukuran layar.

**JavaScript**

1. Dasar JavaScript

Digunakan untuk membuat halaman web interaktif.

Tipe data: string, number, boolean, array, object.

Struktur kontrol: if, for, while, switch.

Variabel: let, const, var (hindari var karena scope-nya membingungkan).

* Fungsi:

javascript

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function sapa(nama) {

alert("Halo " + nama);

}

* Event: onclick, onchange, onsubmit, dsb.

1. OOP (Object-Oriented Programming)

JavaScript mendukung class & object.

javascript

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class Mahasiswa {

constructor(nama) {

this.nama = nama;

}

perkenalan() {

return "Halo, saya " + this.nama;

}

}

const mhs = new Mahasiswa("Ayu");

console.log(mhs.perkenalan());

1. Standard Library

Math: Math.random(), Math.floor()

Date: new Date(), getFullYear()

JSON: JSON.stringify(obj), JSON.parse(str)

Array: map, filter, reduce, push, pop, forEach

String: split, slice, toUpperCase, includes

**BootStrap**

<https://getbootstrap.com/docs/5.3/getting-started/introduction/>

Fitur Utama:

Grid system: 12 kolom menggunakan container, row, col-md-6, dll.

Komponen siap pakai:

* Tombol: <button class="btn btn-primary">Klik</button>
* Form, Card, Navbar, Alert, Modal

Utilities:

* Spasi: m-3, p-2
* Warna: bg-primary, text-white
* Teks: text-center, fw-bold, fst-italic

Responsif: class breakpoint (sm, md, lg, xl, xxl)

**PHP, BootStrap, MySQL**

<https://www.petanikode.com/php-login-register/>

1. PHP Dasar

Digunakan di server untuk memproses form, login, register, dsb.

Ditulis di dalam <?php ... ?>.

1. Koneksi MySQL

php

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$conn = mysqli\_connect("localhost", "root", "", "nama\_database");

1. Login (berdasarkan Petani Kode)

* Form login: HTML + Bootstrap
* Ambil data: $\_POST['email']
* Query:

php

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$query = "SELECT \* FROM users WHERE email='$email'";

* Cek password:

php

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password\_verify($input, $hash\_dari\_db);

* Set session:

php

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$\_SESSION["user"] = $data\_user;

1. Integrasi dengan Bootstrap

Gunakan class seperti form-control, btn, alert agar tampilan rapi.

Contoh tombol:

html

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<button class="btn btn-success">Login</button>