HTML

HyperText Markup Language

Formulir (Forms)

Mengumpulkan input dari pengguna

Struktur Formulir

```html
<form action="/submit" method="POST">
  <input type="text" name="username" />
  <button type="submit">Kirim</button>
</form>
```

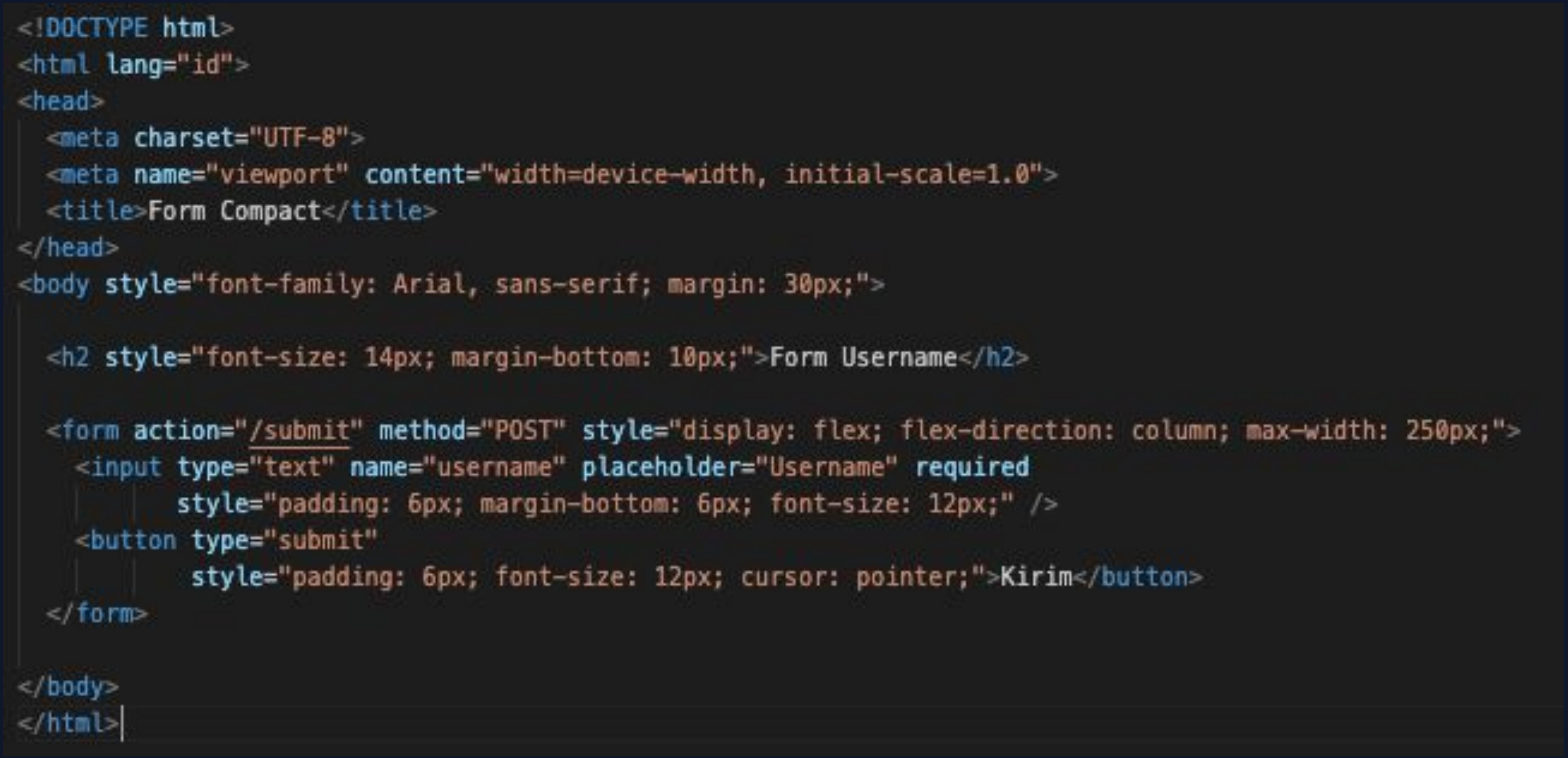
`action`	Ke mana data dikirim	`action="/submit"`
`method`	Cara mengirim data	`method="POST"`

GET vs POST:

GET:
- Data terlihat di URL
- Untuk pencarian/filter
- Bisa di-bookmark
- Ukuran data terbatas

POST:
- Data tersembunyi
- Untuk mengirim data
- Tidak bisa di-bookmark
- Data besar diizinkan

Praktek – 01

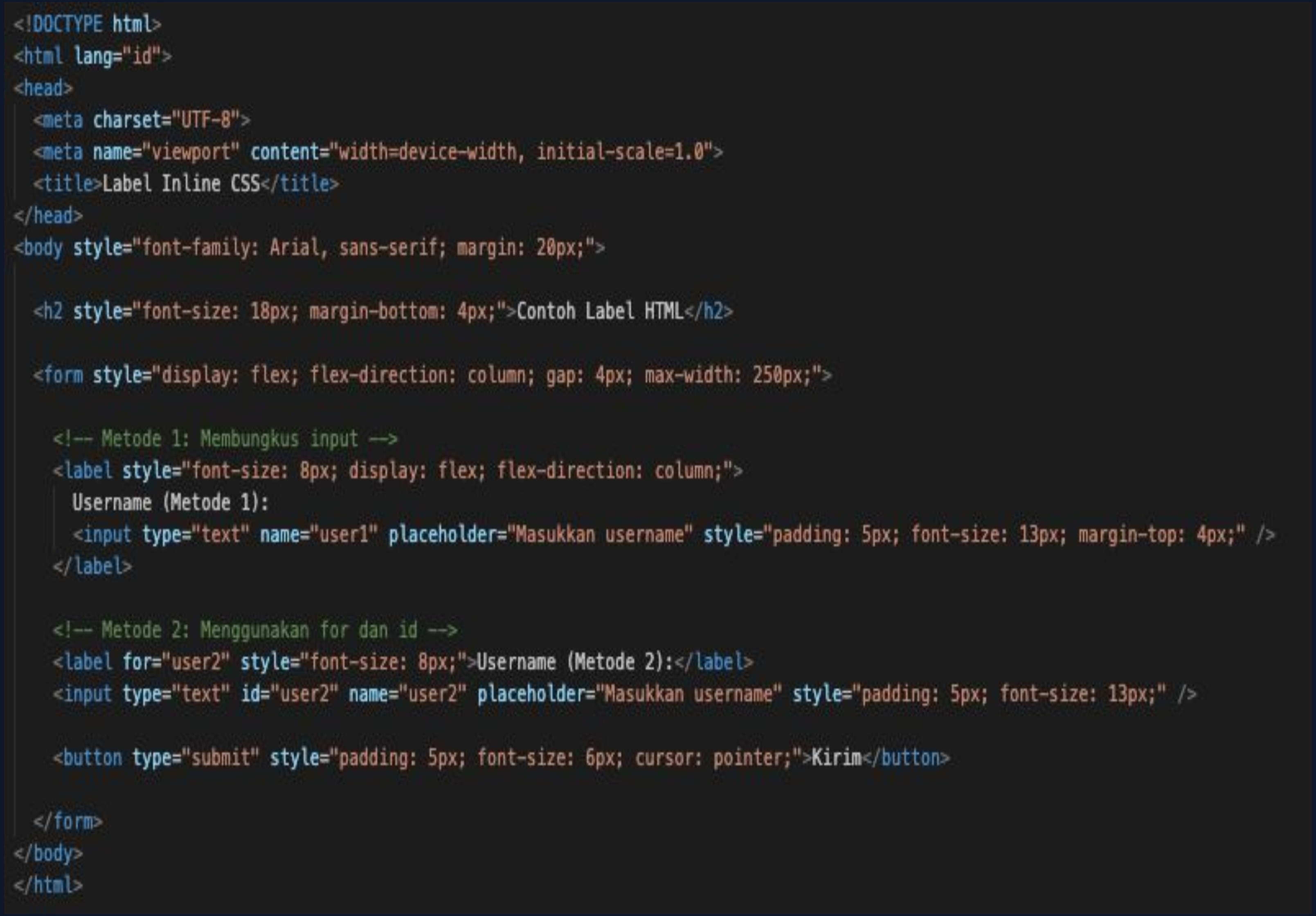


```
<!DOCTYPE html>
<html lang="id">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Compact</title>
</head>
<body style="font-family: Arial, sans-serif; margin: 30px;">

  <h2 style="font-size: 14px; margin-bottom: 10px;">Form Username</h2>

  <form action="/submit" method="POST" style="display: flex; flex-direction: column; max-width: 250px;">
    <input type="text" name="username" placeholder="Username" required
           style="padding: 6px; margin-bottom: 6px; font-size: 12px;" />
    <button type="submit"
            style="padding: 6px; font-size: 12px; cursor: pointer;">Kirim</button>
  </form>

</body>
</html>
```

Label

Label (selalu gunakan label!):

```
<!-- Metode 1: Membungkus -->
<label>
  Username:
  <input type="text" name="user" />
</label>

<!-- Metode 2: atribut for -->
<label for="user">Username:</label>
<input type="text" id="user"
  name="user" />
```

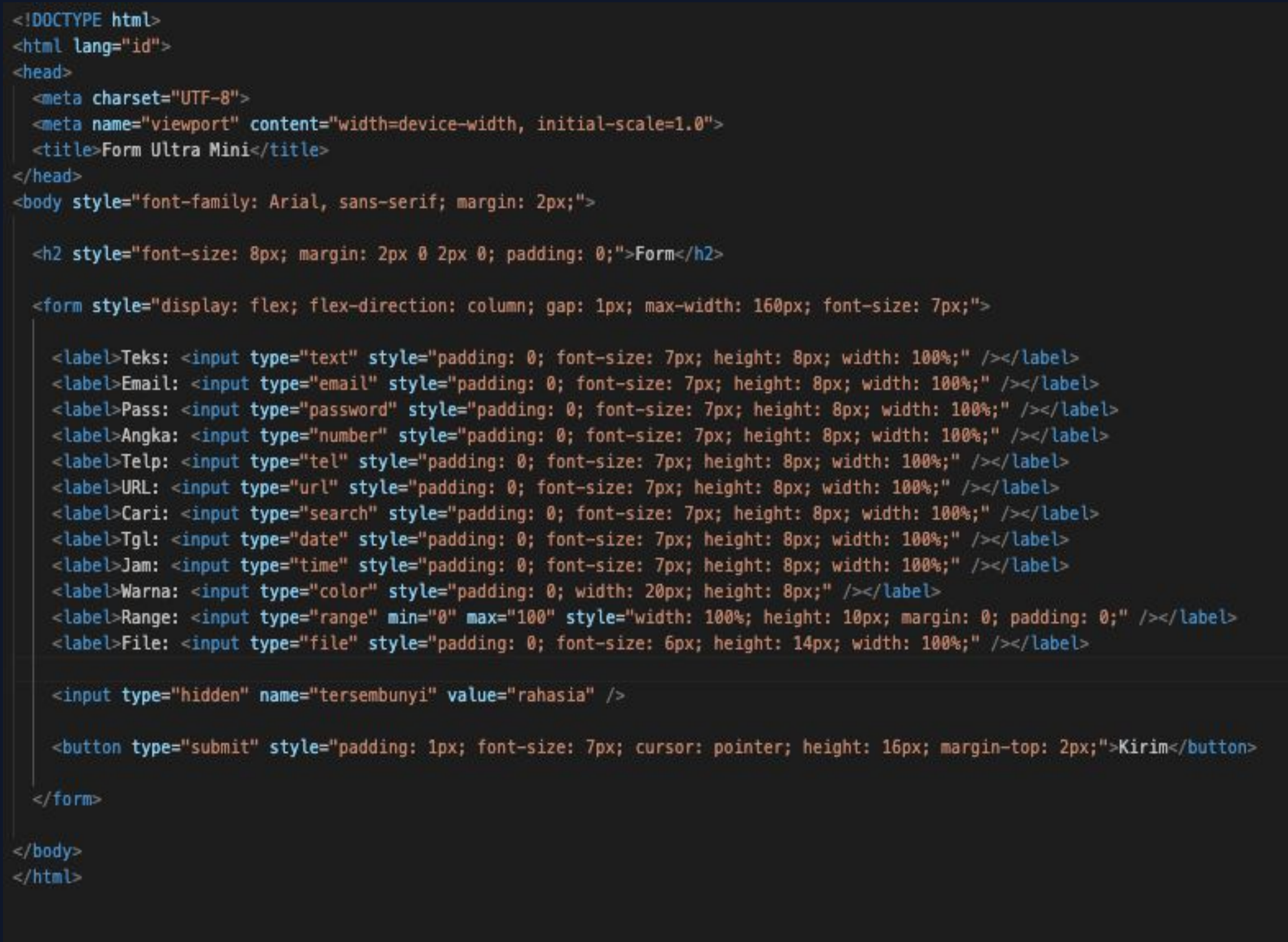


```
<!DOCTYPE html>
<html lang="id">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Label Inline CSS</title>
</head>
<body style="font-family: Arial, sans-serif; margin: 20px;">

  <h2 style="font-size: 18px; margin-bottom: 4px;">Contoh Label HTML</h2>

  <form style="display: flex; flex-direction: column; gap: 4px; max-width: 250px;">

    <!-- Metode 1: Membungkus input -->
    <label style="font-size: 8px; display: flex; flex-direction: column;">
      Username (Metode 1):
      <input type="text" name="user1" placeholder="Masukkan username" style="padding: 5px; font-size: 13px; margin-top: 4px;" />
    </label>

    <!-- Metode 2: Menggunakan for dan id -->
    <label for="user2" style="font-size: 8px;">Username (Metode 2):</label>
    <input type="text" id="user2" name="user2" placeholder="Masukkan username" style="padding: 5px; font-size: 13px;" />

    <button type="submit" style="padding: 5px; font-size: 6px; cursor: pointer;">Kirim</button>

  </form>
</body>
</html>
```

Tipe Input

Tipe Input Umum:

```
<input type="text"     /> Teks
<input type="email"    /> Email
<input type="password" /> Kata sandi
<input type="number"   /> Angka
<input type="tel"      /> Telepon
<input type="url"      /> URL
<input type="search"   /> Pencarian
<input type="date"     /> Tanggal
<input type="time"     /> Waktu
<input type="color"    /> Warna
<input type="range"    /> Rentang
<input type="file"     /> File
<input type="hidden"   />
Tersembunyi
```

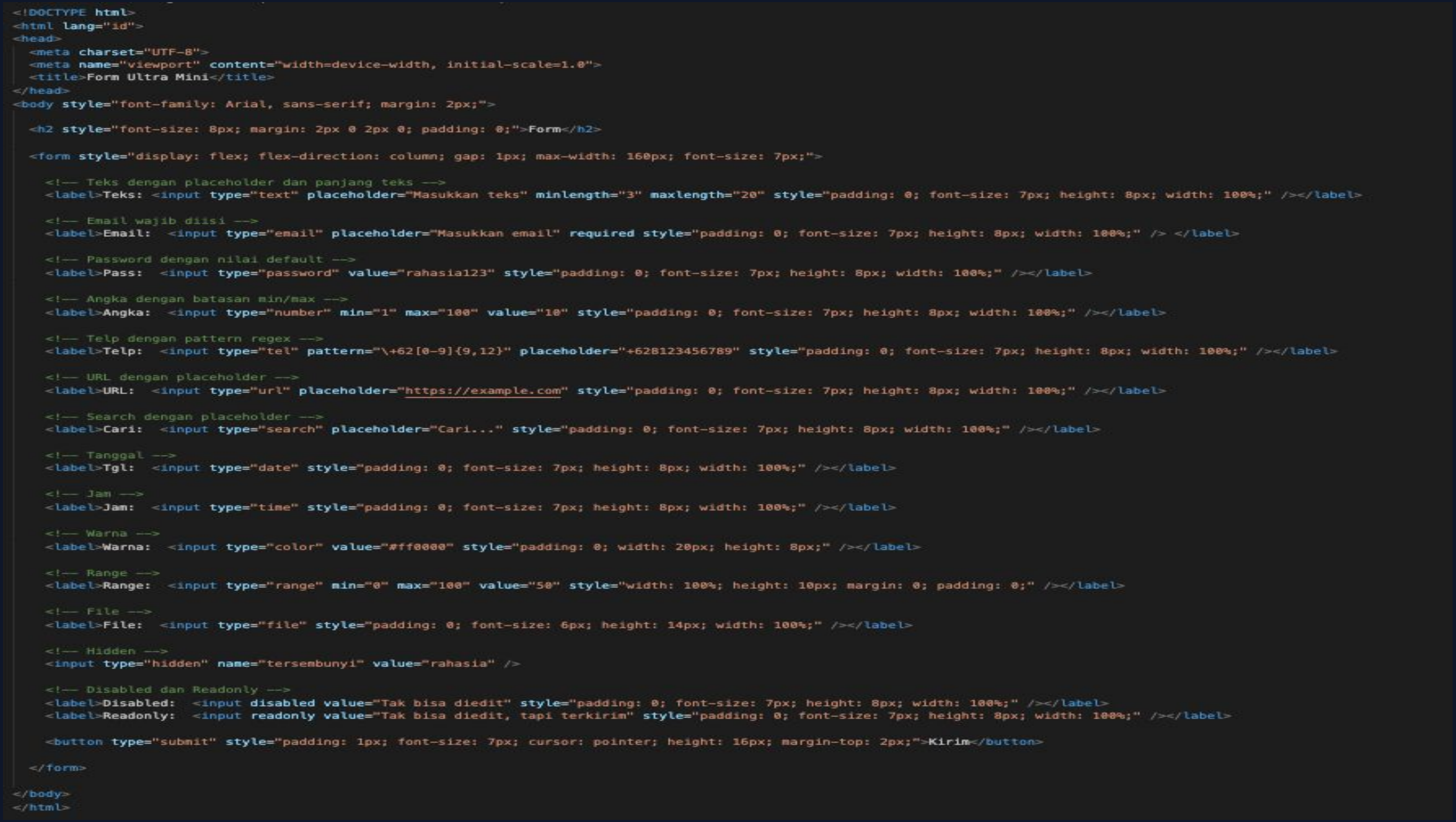


```
<!DOCTYPE html>
<html lang="id">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Ultra Mini</title>
</head>
<body style="font-family: Arial, sans-serif; margin: 2px;">

  <h2 style="font-size: 8px; margin: 2px 0 2px 0; padding: 0;">Form</h2>

  <form style="display: flex; flex-direction: column; gap: 1px; max-width: 160px; font-size: 7px;">

    <label>Teks: <input type="text" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Email: <input type="email" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Pass: <input type="password" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Angka: <input type="number" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Telp: <input type="tel" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>URL: <input type="url" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Cari: <input type="search" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Tgl: <input type="date" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Jam: <input type="time" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Warna: <input type="color" style="padding: 0; width: 20px; height: 8px;" /></label>
    <label>Range: <input type="range" min="0" max="100" style="width: 100%; height: 10px; margin: 0; padding: 0;" /></label>
    <label>File: <input type="file" style="padding: 0; font-size: 6px; height: 14px; width: 100%;" /></label>

    <input type="hidden" name="tersembunyi" value="rahasia" />

    <button type="submit" style="padding: 1px; font-size: 7px; cursor: pointer; height: 16px; margin-top: 2px;">Kirim</button>

  </form>

</body>
</html>
```

Atribut Input

```
                <!-- Placeholder (teks petunjuk) -->
<input type="text" placeholder="Masukkan nama" />

<!-- Nilai default -->
<input type="text" value="Indonesia" />

<!-- Field wajib diisi -->
<input type="email" required />

<!-- Disabled vs Readonly -->
<input disabled value="Tak bisa diedit" />
<input readonly value="Tak bisa diedit, tapi terkirim" />

<!-- Batasan angka -->
<input type="number" min="1" max="100" />

<!-- Panjang teks -->
<input minlength="3" maxlength="20" />

<!-- Pattern (regex) -->
<input type="tel" pattern="\+62[0-9]{9,12}" />
```

`placeholder`	Teks petunjuk
`value`	Nilai default
`required`	Field wajib
`disabled`	Tidak bisa interaksi
`readonly`	Tidak bisa edit
`min/max`	Rentang angka
`minlength/maxlength`	Panjang teks
`pattern`	Validasi regex



```html
<!DOCTYPE html>
<html lang="id">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Ultra Mini</title>
</head>
<body style="font-family: Arial, sans-serif; margin: 2px;">

  <h2 style="font-size: 8px; margin: 2px 0 2px 0; padding: 0;">Form</h2>

  <form style="display: flex; flex-direction: column; gap: 1px; max-width: 160px; font-size: 7px;">

    <!-- Teks dengan placeholder dan panjang teks -->
    <label>Teks: <input type="text" placeholder="Masukkan teks" minlength="3" maxlength="20" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Email wajib diisi -->
    <label>Email:  <input type="email" placeholder="Masukkan email" required style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /> </label>

    <!-- Password dengan nilai default -->
    <label>Pass:  <input type="password" value="rahasia123" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Angka dengan batasan min/max -->
    <label>Angka:  <input type="number" min="1" max="100" value="10" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Telp dengan pattern regex -->
    <label>Telp:  <input type="tel" pattern="\+62[0-9]{9,12}" placeholder="+628123456789" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- URL dengan placeholder -->
    <label>URL:  <input type="url" placeholder="https://example.com" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Search dengan placeholder -->
    <label>Cari:  <input type="search" placeholder="Cari..." style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Tanggal -->
    <label>Tgl:  <input type="date" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Jam -->
    <label>Jam:  <input type="time" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <!-- Warna -->
    <label>Warna:  <input type="color" value="#ff0000" style="padding: 0; width: 20px; height: 8px;" /></label>

    <!-- Range -->
    <label>Range:  <input type="range" min="0" max="100" value="50" style="width: 100%; height: 10px; margin: 0; padding: 0;" /></label>

    <!-- File -->
    <label>File:  <input type="file" style="padding: 0; font-size: 6px; height: 14px; width: 100%;" /></label>

    <!-- Hidden -->
    <input type="hidden" name="tersembunyi" value="rahasia" />

    <!-- Disabled dan Readonly -->
    <label>Disabled:  <input disabled value="Tak bisa diedit" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>
    <label>Readonly:  <input readonly value="Tak bisa diedit, tapi terkirim" style="padding: 0; font-size: 7px; height: 8px; width: 100%;" /></label>

    <button type="submit" style="padding: 1px; font-size: 7px; cursor: pointer; height: 16px; margin-top: 2px;">Kirim</button>

  </form>

</body>
</html>
```

Textarea, Select, Checkbox & Radio

Textarea:

```
<textarea name="msg"
  rows="5" cols="40"
  maxlength="500"
  placeholder="Pesan...">
</textarea>
```

Select (Dropdown):

```
<select name="negara">
  <option value=""
    disabled selected>
    Pilih...</option>
  <option value="id">
    Indonesia</option>
  <optgroup label="Lainnya">
    <option>Malaysia
    </option>
  </optgroup>
</select>
```

Checkbox (multi):

```
<label>
  <input type="checkbox"
    name="hobi"
    value="membaca" />
  Membaca
</label>
<label>
  <input type="checkbox"
    name="hobi"
    value="coding" checked
/>
  Coding
</label>
```

Radio (tunggal):

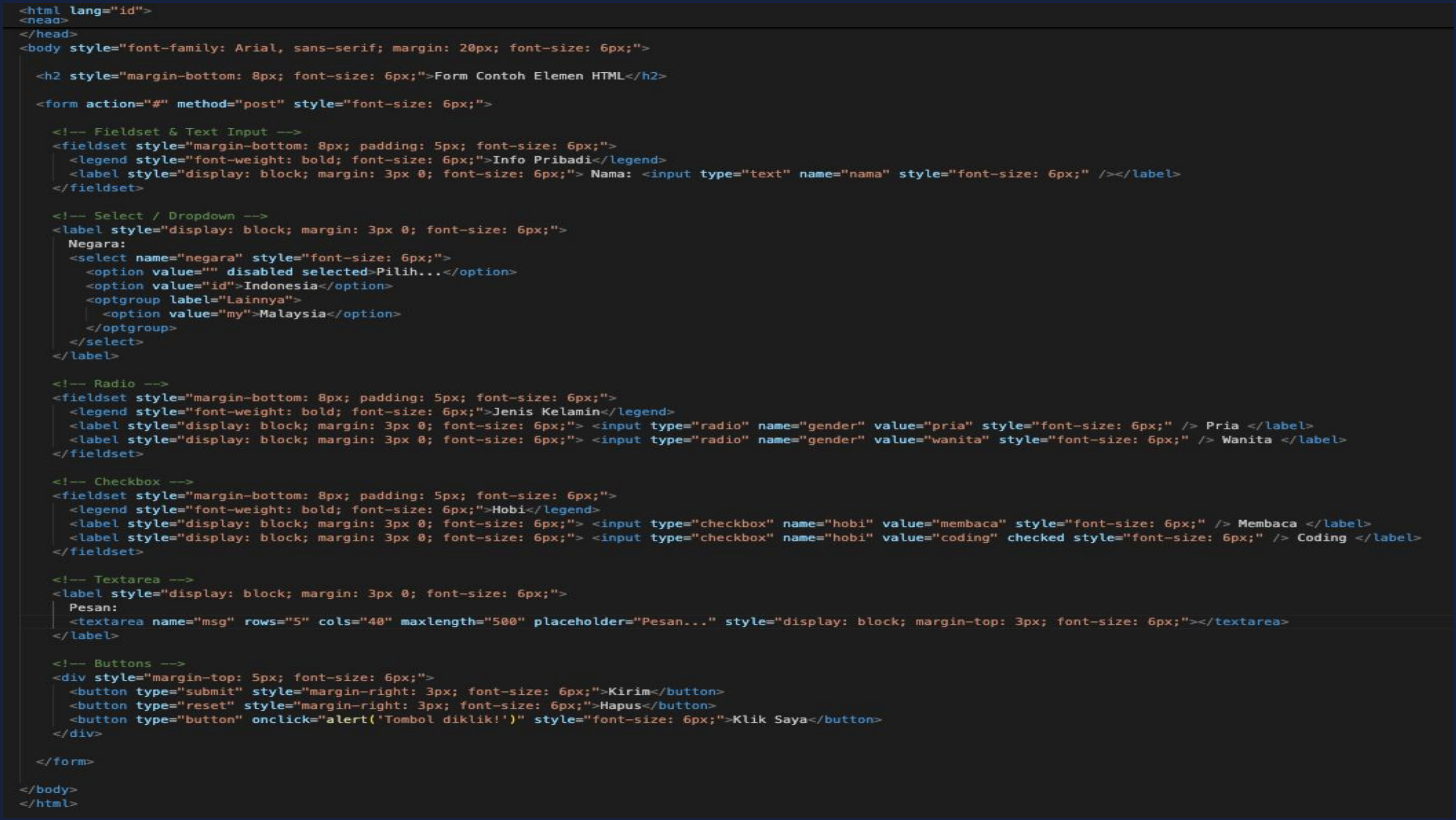
```
<!-- Nama sama = 1 grup
-->
<label>
  <input type="radio"
    name="gender"
    value="pria" />
  Pria
</label>
<label>
  <input type="radio"
    name="gender"
    value="wanita" />
  Wanita
</label>
```

Tombol & Fieldset:

```
<button type="submit">Kirim</button>     <button type="reset">Hapus</button>     <button type="button">Klik
Saya</button>

<fieldset>
  <legend>Info Pribadi</legend>
  <label>Nama: <input type="text" name="nama" /></label>
</fieldset>
```

Semantic HTML

Tag yang mendeskripsikan makna, bukan hanya tampilan



```
<html lang="id">
<head>
</head>
<body style="font-family: Arial, sans-serif; margin: 20px; font-size: 6px;">

  <h2 style="margin-bottom: 8px; font-size: 6px;">Form Contoh Elemen HTML</h2>

  <form action="#" method="post" style="font-size: 6px;">

    <!-- Fieldset & Text Input -->
    <fieldset style="margin-bottom: 8px; padding: 5px; font-size: 6px;">
      <legend style="font-weight: bold; font-size: 6px;">Info Pribadi</legend>
      <label style="display: block; margin: 3px 0; font-size: 6px;"> Nama: <input type="text" name="nama" style="font-size: 6px;" /></label>
    </fieldset>

    <!-- Select / Dropdown -->
    <label style="display: block; margin: 3px 0; font-size: 6px;">
      Negara:
      <select name="negara" style="font-size: 6px;">
        <option value="" disabled selected>Pilih...</option>
        <option value="id">Indonesia</option>
        <optgroup label="Lainnya">
          <option value="my">Malaysia</option>
        </optgroup>
      </select>
    </label>

    <!-- Radio -->
    <fieldset style="margin-bottom: 8px; padding: 5px; font-size: 6px;">
      <legend style="font-weight: bold; font-size: 6px;">Jenis Kelamin</legend>
      <label style="display: block; margin: 3px 0; font-size: 6px;"> <input type="radio" name="gender" value="pria" style="font-size: 6px;" /> Pria </label>
      <label style="display: block; margin: 3px 0; font-size: 6px;"> <input type="radio" name="gender" value="wanita" style="font-size: 6px;" /> Wanita </label>
    </fieldset>

    <!-- Checkbox -->
    <fieldset style="margin-bottom: 8px; padding: 5px; font-size: 6px;">
      <legend style="font-weight: bold; font-size: 6px;">Hobi</legend>
      <label style="display: block; margin: 3px 0; font-size: 6px;"> <input type="checkbox" name="hobi" value="membaca" style="font-size: 6px;" /> Membaca </label>
      <label style="display: block; margin: 3px 0; font-size: 6px;"> <input type="checkbox" name="hobi" value="coding" checked style="font-size: 6px;" /> Coding </label>
    </fieldset>

    <!-- Textarea -->
    <label style="display: block; margin: 3px 0; font-size: 6px;">
      Pesan:
      <textarea name="msg" rows="5" cols="40" maxlength="500" placeholder="Pesan..." style="display: block; margin-top: 3px; font-size: 6px;"></textarea>
    </label>

    <!-- Buttons -->
    <div style="margin-top: 5px; font-size: 6px;">
      <button type="submit" style="margin-right: 3px; font-size: 6px;">Kirim</button>
      <button type="reset" style="margin-right: 3px; font-size: 6px;">Hapus</button>
      <button type="button" onclick="alert('Tombol diklik!')" style="font-size: 6px;">Klik Saya</button>
    </div>

  </form>

</body>
</html>
```

Apa itu Semantic HTML?

Semantik = berkaitan dengan makna. Gunakan tag yang menjelaskan tujuan kontennya.

Non-Semantik (apa ini?):

```
<div class="header">...</div>
<div class="nav">...</div>
<div class="main">...</div>
<div class="footer">...</div>
```

Semantik (jelas mendeskripsikan!):

```
<header>...</header>
<nav>...</nav>
<main>...</main>
<footer>...</footer>
```

SEO

Mesin pencari lebih mudah
memahami konten kamu

Aksesibilitas

Screen reader dapat
navigasi dengan benar

Pemeliharaan

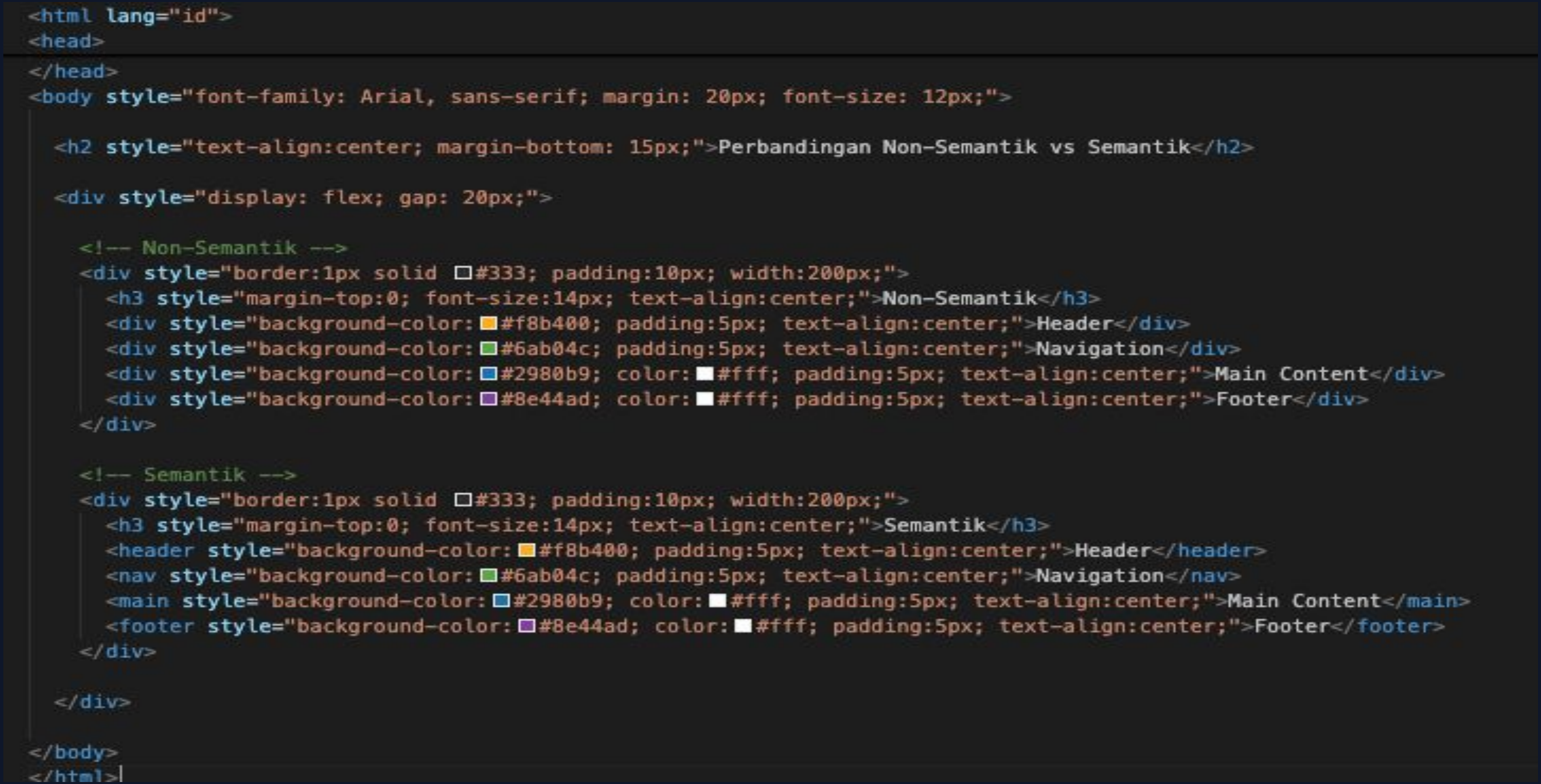
Kode lebih mudah
dibaca dan dipelihara

Elemen Struktur Halaman

```
                          <body>
  <header>      -- Header situs
    <nav>        -- Link navigasi
      <ul>...</ul>
    </nav>
  </header>
  <main>        -- Konten utama (SATU per halaman)
    <article>   -- Konten mandiri
      <header>  -- Header artikel
      </header>
      <section> -- Konten tergrup
      </section>
    </article>
    <aside>     -- Konten samping (sidebar)
    </aside>
  </main>
  <footer>       -- Footer situs
  </footer>
</body>
```

Elemen	Kegunaan
`<header>`	Header halaman/bagian
`<nav>`	Link navigasi
`<main>`	Konten utama (1 per halaman)
`<footer>`	Footer halaman/bagian
`<section>`	Konten terkait yang digrup
`<article>`	Konten yang berdiri sendiri
`<aside>`	Konten samping/tangensial

Elemen Struktur Halaman



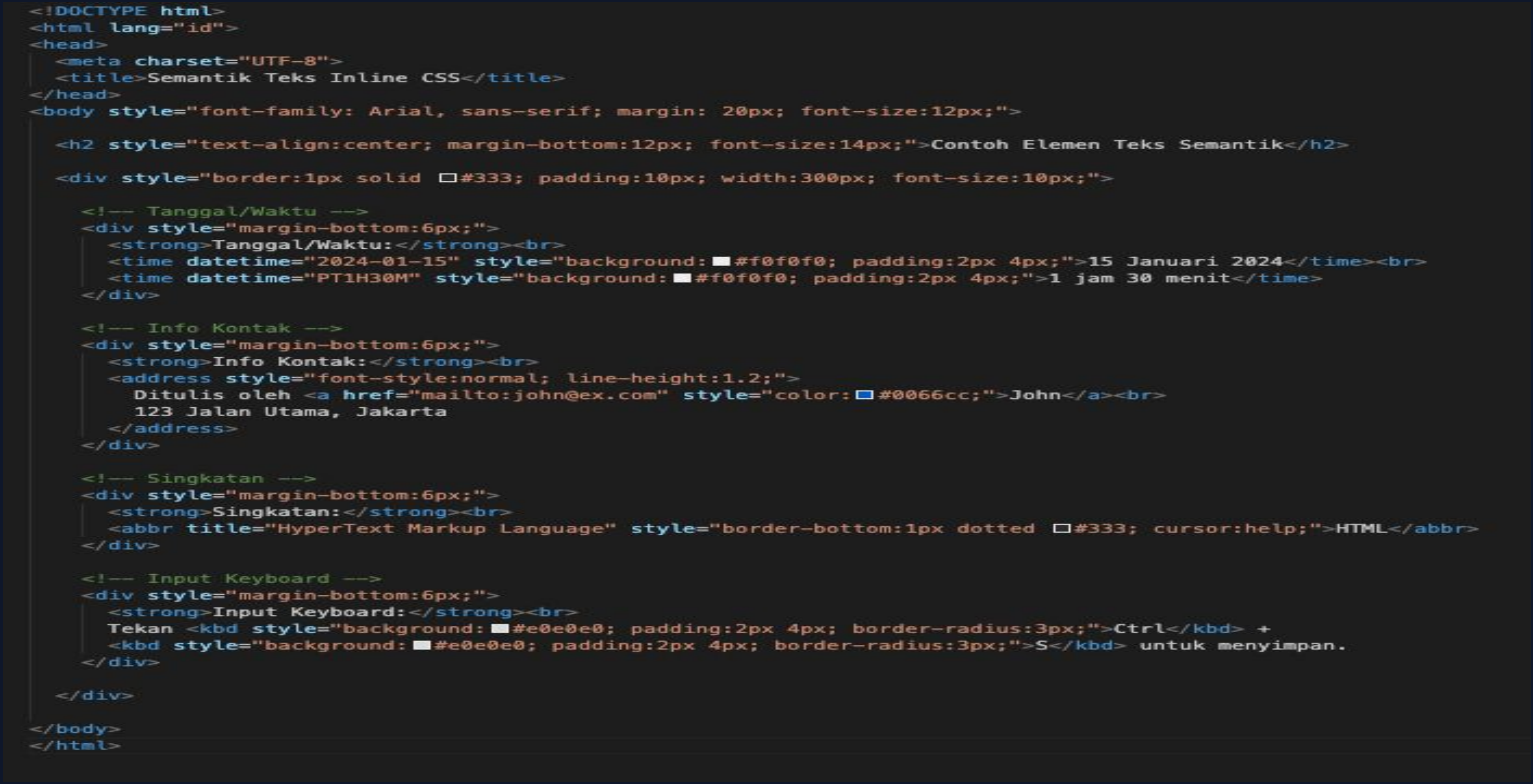
```
<html lang="id">
<head>
</head>
<body style="font-family: Arial, sans-serif; margin: 20px; font-size: 12px;">

  <h2 style="text-align:center; margin-bottom: 15px;">Perbandingan Non-Semantik vs Semantik</h2>

  <div style="display: flex; gap: 20px;">

    <!-- Non-Semantik -->
    <div style="border:1px solid □#333; padding:10px; width:200px;">
      <h3 style="margin-top:0; font-size:14px; text-align:center;">Non-Semantik</h3>
      <div style="background-color:🟧#f8b400; padding:5px; text-align:center;">Header</div>
      <div style="background-color:🟩#6ab04c; padding:5px; text-align:center;">Navigation</div>
      <div style="background-color:🟦#2980b9; color:⬜#fff; padding:5px; text-align:center;">Main Content</div>
      <div style="background-color:🟪#8e44ad; color:⬜#fff; padding:5px; text-align:center;">Footer</div>
    </div>

    <!-- Semantik -->
    <div style="border:1px solid □#333; padding:10px; width:200px;">
      <h3 style="margin-top:0; font-size:14px; text-align:center;">Semantik</h3>
      <header style="background-color:🟧#f8b400; padding:5px; text-align:center;">Header</header>
      <nav style="background-color:🟩#6ab04c; padding:5px; text-align:center;">Navigation</nav>
      <main style="background-color:🟦#2980b9; color:⬜#fff; padding:5px; text-align:center;">Main Content</main>
      <footer style="background-color:🟪#8e44ad; color:⬜#fff; padding:5px; text-align:center;">Footer</footer>
    </div>

  </div>

</body>
</html>
```

Elemen Semantik Level Teks

```html
<!-- Tanggal/Waktu (dapat dibaca mesin) -->
<time datetime="2024-01-15">15 Januari 2024</time>
<time datetime="PT1H30M">1 jam 30 menit</time>

<!-- Info kontak -->
<address>
  Ditulis oleh <a href="mailto:john@ex.com">John</a>
  123 Jalan Utama, Jakarta
</address>

<!-- Singkatan -->
<abbr title="HyperText Markup Language">HTML</abbr>

<!-- Input keyboard -->
Tekan <kbd>Ctrl</kbd> + <kbd>S</kbd> untuk menyimpan.
```

<time>	Tanggal/waktu
<address>	Info kontak
<mark>	Teks disorot
<abbr>	Singkatan
<cite>	Judul karya
<code>	Kode
<kbd>	Input keyboard
<samp>	Output program
<var>	Variabel

Elemen Semantik Level Teks



```html
<!DOCTYPE html>
<html lang="id">
<head>
  <meta charset="UTF-8">
  <title>Semantik Teks Inline CSS</title>
</head>
<body style="font-family: Arial, sans-serif; margin: 20px; font-size:12px;">

  <h2 style="text-align:center; margin-bottom:12px; font-size:14px;">Contoh Elemen Teks Semantik</h2>

  <div style="border:1px solid □#333; padding:10px; width:300px; font-size:10px;">

    <!-- Tanggal/Waktu -->
    <div style="margin-bottom:6px;">
      <strong>Tanggal/Waktu:</strong><br>
      <time datetime="2024-01-15" style="background:■#f0f0f0; padding:2px 4px;">15 Januari 2024</time><br>
      <time datetime="PT1H30M" style="background:■#f0f0f0; padding:2px 4px;">1 jam 30 menit</time>
    </div>

    <!-- Info Kontak -->
    <div style="margin-bottom:6px;">
      <strong>Info Kontak:</strong><br>
      <address style="font-style:normal; line-height:1.2;">
        Ditulis oleh <a href="mailto:john@ex.com" style="color:🟦#0066cc;">John</a><br>
        123 Jalan Utama, Jakarta
      </address>
    </div>

    <!-- Singkatan -->
    <div style="margin-bottom:6px;">
      <strong>Singkatan:</strong><br>
      <abbr title="HyperText Markup Language" style="border-bottom:1px dotted □#333; cursor:help;">HTML</abbr>
    </div>

    <!-- Input Keyboard -->
    <div style="margin-bottom:6px;">
      <strong>Input Keyboard:</strong><br>
      Tekan <kbd style="background:■#e0e0e0; padding:2px 4px; border-radius:3px;">Ctrl</kbd> +
      <kbd style="background:■#e0e0e0; padding:2px 4px; border-radius:3px;">S</kbd> untuk menyimpan.
    </div>

  </div>

</body>
</html>
```

Latihan: Bangun 2–3 Halaman HTML

Terapkan semua yang kamu pelajari dengan membangun halaman lengkap dari nol:

Proyek 1: Portofolio Pribadi

- Struktur semantik (header, main, footer)
- Navigasi dengan anchor link
- Bagian tentang dengan heading & paragraf
- Bagian keahlian dengan list
- Bagian proyek dengan gambar & link
- Bagian kontak dengan link email/telepon
- Hierarki heading yang benar (h1>h2>h3)

Proyek 2: Blog Resep

- Beberapa artikel resep
- Bahan sebagai unordered list
- Langkah sebagai ordered list
- Gambar makanan dengan figure/figcaption
- Description list untuk info nutrisi
- Sidebar (aside) dengan resep terkait
- Form kontak untuk kirim resep

Proyek 3: Form Registrasi

- Form registrasi lengkap
- Grup fieldset (Pribadi, Akun, Preferensi)
- Semua tipe input (text, email, date, dll)
- Dropdown select dengan option group
- Checkbox dan radio button
- Validasi (required, pattern, min/max)
- Checkbox persetujuan syarat