



Programación de Aplicaciones Telemáticas

TEMA 3: HTML

AGENDA

- Introducción
- ¿Que es un documento web?
- HTML
- Estructura de un documento web
- Contenido
- Navegación
- Layout
- Interacción
- Seguridad
- Referencias

INTRODUCCIÓN

La web permite interaccionar con Humanos y Máquinas a través del protocolo HTTP.

¿QUE ES UN DOCUMENTO WEB?

Los documentos web componen la unidad minima de información que permite intercambiar un Servidor Web con un Cliente Web a través de una petición Http.

Un documento web se compone de:

- HTML
- CSS
- Javascript

¿QUE ES UN DOCUMENTO WEB?

Un documento tambien puede incluir:

- Imágenes
- Vídeo
- Objetos hipermedia incluidos (PDF, otros...)

HTML

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

ESTRUCTURA DE UN DOCUMENTO WEB

- Doctype
- Head
- Body

DOCTYPE

Todos los documentos web, deben empezar con una declaración `<!DOCTYPE>`

Indica con que tipo version de documento HTML debe ser parseada.

HEAD

The HTML `< head >` element contains machine-readable information (metadata) about the document, like its title, scripts, and style sheets.

HEAD

Example: `view-source:https://as.com/`

```
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<meta name="robots" content="index, follow">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>AS.com - Diario online deportivo. Fútbol, motor y mucho más
<meta http-equiv="Refresh" content="900000; url=//as.com/?omni">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="Description" content="Últimas noticias de deportes y actualidad de AS.com" />

<style type="text/css"></style>
<script language="JavaScript" type="text/javascript"></script>
```

BODY

The HTML `< body >` Element represents the content of an HTML document. There can be only one `< body >` element in a document.

EXAMPLE

CONTENIDO

En un documento web se pueden añadir:

- Títulos
- Párrafos
- Tablas
- Multimedia
- Formularios Web

CONTENIDO

TÍTULOS

```
<h1>Header 1</h1>  
<h2>Header 2</h2>  
<h3>Header 3</h3>  
<h4>Header 4</h4>
```


CONTENIDO

PARRAFOS

```
<p>
Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Maecenas viverra turpis id pharetra accumsan.
Praesent et nibh non purus ultrices gravida sed id ligula.
Curabitur luctus, erat non rutrum accumsan, nibh nisi tempor o
finibus ultrices quam lectus ut elit. Donec molestie euismod n
</p>
```

CONTENIDO

TABLAS

```
<table>
  <thead>
    <tr>
      <th>Columna 1</th>
      <th>Columna 2</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Valor 1</td>
      <td>Valor 2</td>
    </tr>
  </tbody>
</table>
```

CONTENIDO

MULTIMEDIA

```

```

CONTENIDO

FORMULARIOS

```
<form action="/login" method="post">  
  <input type="text" name="user">  
  <input type="password" name="password">  
  <button type="submit">Login</button>  
</form>
```

CONTENIDO

FORMULARIOS

- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/form>
- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/button>
- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input>

CONTENIDO

FORMULARIOS

- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/select>
- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/option>
- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/textarea>

EXAMPLE

NAVEGACION

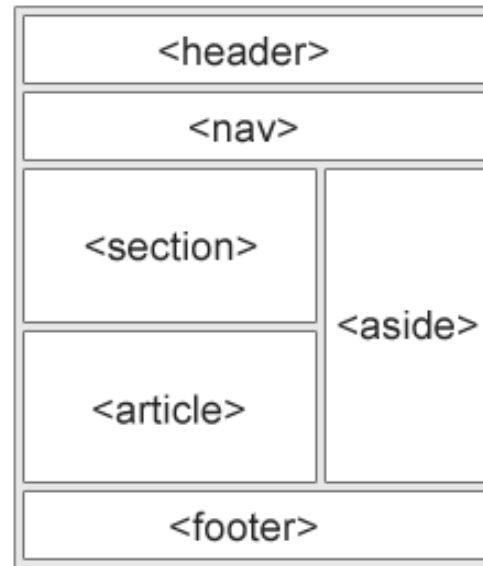
The HTML < a> tag defines a hyperlink.

```
<a href="url">link text</a>
```


LAYOUT

- `< header >` - Defines a header for a document or a section
- `< nav >` - Defines a set of navigation links
- `< section >` - Defines a section in a document
- `< article >` - Defines an independent, self-contained content
- `< aside >` - Defines content aside from the content (like a sidebar)
- `< footer >` - Defines a footer for a document or a section

LAYOUT



LAYOUT TECHNIQUES

- CSS float property
- CSS flexbox
- CSS grid

Otros tipos: Iframes

EXAMPLE

INTERACCIÓN

Web forms are one of the main points of interaction between a user and a web site or application. Forms allow users to enter data, which is generally sent to a web server for processing and storage (see Sending form data later in the module), or used on the client-side to immediately update the interface in some way (for example, add another item to a list, or show or hide a UI feature).

INTERACCIÓN

CONTACT

Name:

E-mail:

Message:

SEND YOUR MESSAGE

INTERACIÓN

```
<form action="/my-handling-form-page" method="post">  
</form>
```

INTERACIÓN

```
<form action="/my-handling-form-page" method="post">
  <ul>
    <li>
      <label for="name">Name:</label>
      <input type="text" id="name" name="user_name">
    </li>
    <li>
      <label for="mail">E-mail:</label>
      <input type="email" id="mail" name="user_email">
    </li>
    <li>
      <label for="msg">Message:</label>
      <textarea id="msg" name="user_message"></textarea>
    </li>
  </ul>
```


EXAMPLE

SEGURIDAD

HTML

- XSS
- Self-executing
- JavaScript execution
- Passive JavaScript execution
- HTML comment parsing issues
- Iframes
- Link hijacking

REFERENCIAS

- <https://developer.mozilla.org/en-US/docs/Web/HTML>
- https://www.w3schools.com/html/html_layout.asp
- https://www.w3schools.com/html/html_forms.asp
- <https://html5sec.org/>
- https://developer.mozilla.org/en-US/docs/Learn/Common_questions/set_up_a_local_testing_environment

Creating Effective Web Pages

6th Edition



HTML & XHTML

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