



Programación de Aplicaciones Telemáticas

# TEMA 3: HTML

# AGENDA

- Introducción
- ¿Que es un documento web?
- HTML
- Estructura de un documento web
- Contenido
- 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

- Head
- Body



# 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</title>
<meta http-equiv="Refresh" content="900000; url=//as.com/?omnina">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="Description" content="Últimas noticias de deportes">

<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

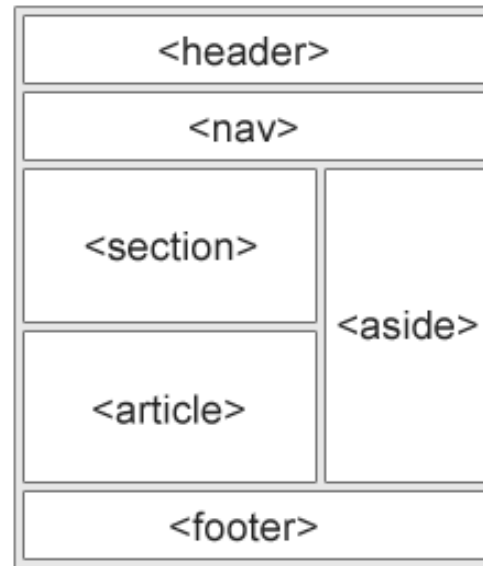
```
<form action="/login" method="post">  
  <input type="text" name="user">  
  <input type="password" name="password">  
  <button type="submit">Login</button>  
</form>
```

**EXAMPLE**

# 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

# 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

# INTERACCIÓN

```
<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
- CSS

# 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_layout.asp)
- [https://www.w3schools.com/html/html\\_forms.asp](https://www.w3schools.com/html/html_forms.asp)
- <https://html5sec.org/>

*Creating Effective Web Pages*

**6th Edition**



# HTML & XHTML

*The Definitive Guide*

**O'REILLY®**

*Chuck Musciano & Bill Kennedy*