

“eSkills for Volunteers”

STRATEGIC PARTNERSHIP IN THE FIELD OF YOUTH



MODULE 2: What is a domain,Html,Css,Wordpress		
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What Is a Domain

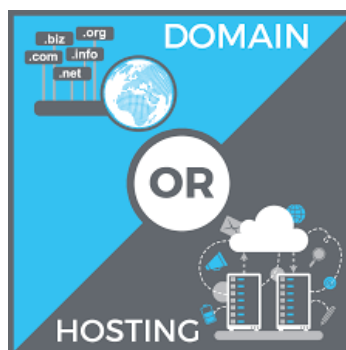
A domain is a globally unique and distinct name for an internet industry, such as a website. Domain users appear in this form:



As an essential part of a URL (Uniform Resource Locator abbreviation), the domain is where a resource is located inside a hierarchically structured **DNS** domain. The transfer from Domain to IP addresses is made by name servers. These are specialized web servers that work on **IP address name resolution**. This service works in a similar way to a regular telephone service: a user places the domain *www.myschop.com* in the search mask of his browser and it sends a request to the competent name server that link *www.myschop.com* from the database to IP address of browser.

Domain And Hosting Which Are The Differences

Hosting and Domain Services are closely related services. Although these two components are often bought together, but these are two different things.



Hosting Services

Hosting services are all those services that provide the online space needed to store your website, as well as provide the database to instal a CMS like Wordpress.

Often, a hosting plan allows to have own personalized emails (info@entreprise.com).



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Domain

Domain is the name of your website (www.enterprise.com). This name must be matched to a hosting service in order to have a website linked to its name.

If it's alone, the domain does 't allow to have a website to be installed or email with a dedicated service (Hosting Services and Email Services).

Connection between domain and hosting space

The link between domain and hosting space is very simple: a website to be visible online, it must have a domain. In some cases, you can use a free domain (for example, one of those provided by WordPress.com) but this is always a domain.

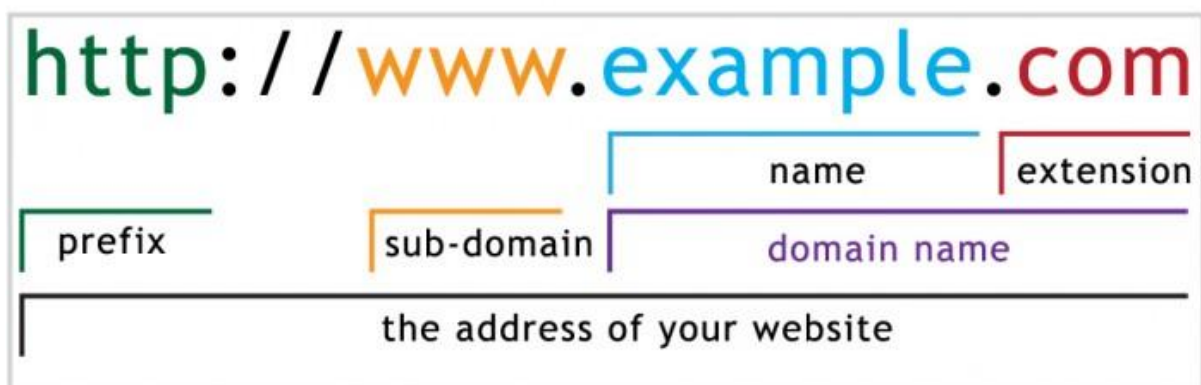
Your domain is linked to your server space so, when users search your url in the browser it will link to your files and your database.

Every web site needs a domain, the latter is often sold with the hosting plan or is included for free.

In brief, Domain is the url of your site, but the hosting plan is actually the server space on which the files are hosted.

Domain Name Structure

Thanks to the explanation in the previous paragraph, let's see what is the structure of a website.



To understand what is an internet domain, it is important to see how it is composed. In the case of www.miosito.com we have: www. (world wide web) that corresponds to the suffix that is conventionally used to identify a reference to an Internet space; myosito that



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associates with the previous part is the second level of domain and generally identifies the name of a company, a person, an enterprise or a specific service; in the end, it matches the part of the domain that identifies it as a top-level domain.

The various domain name elements are separated by a dot and together form the full domain name.

First Level Domain

The first level domain is the extension of the domain name, the last part of the address after its real name, and is also known as Top Level Domain (TLD).



The TLD can perform various functions. It can identify a national territory (eg .IT for the Italian territory or .FR for the French, etc.) or a type of activity or the nature of the website (eg .EDU for universities, .GOV for governments, etc.) .

Subdomain

A subdomain is a domain that is part of a wider domain, the only domain that is not even a subdomain is the main domain. For example, `nomescelto.dominioweb.org` is a subdomain of domain `dominioweb.org`, that is a subdomain of the top-level Domain.





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How To Register a Domain

The first step is to choose a domain name to register. Choose a name depends on your needs. It could be the company name, a person's name, a fantasy name, and so on.

A domain name must be at least three characters. They can be combinations of letters, numbers, and possibly hyphens (-). However, white space and special characters are excluded. It typically hasn't to be longer than 63 characters but this is related to the domain extension.

Example of registering a domain

The screenshot shows the Domain.com website. At the top, there's a navigation bar with links: DOMAINS, WEB HOSTING, EMAIL, WEB DESIGN, AFFILIATE PROGRAM, and SUPPORT. Below this, a large banner features a hand holding a tablet displaying various domain extensions like .App, .Design, .One, .Paris, .Corp, .Eco, .Photo, .Guru, .Club, .Agency, and .Miami. The banner text reads "The Next Great Domains Are Here" and "Pre-Register the Top New Extensions", with a prominent red "GET STARTED" button. Below the banner, there's a section for "SMART DOMAIN SEARCH" with a search bar and a "SEARCH" button. To the right, it shows ".COM \$9.99". Further right, there are sections for "SIMPLIFIED HOSTING" (New Hosting Plans, Email) and "DESIGN MADE EASY" (Site Builder, Custom Web Design). At the bottom left, it says "FREE Services with EVERY DOMAIN".

An example of a domain may be this, have to type a name in the search box to check if it's free or if it has already been registered by others. Select the extension type and click the orange search button. There is no commitment to do this, and you are not obligated to buy it.

The Choise Of Extensions

After typing the domain name to be registered, the provider give a list of the extensions where the name is still available.

There are various internet domain extensions available to web users to choose. Many are available to all network users, but others are specific and refer to particular categories.

- **.it** (accessible to all Europeans, but it is recommended to those who choose to promote a product in Italy or Italian origin)
- **.com** (is the most used and accessible to everyone, usually used by those who intend to promote their business)
- **.net** (is available for everyone and is generally used in case the .com is no longer free.)



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- **.fr** (is a free extension that typically identifies sites that refer to French sites and / or products)
- **.eu** (is one of the most popular extensions because of the easy-to-remember suffix and for direct association with European Union countries.)
- **.org** (typically identifies organizations, in particular non-profit organizations, and a suffix accessible without restrictions from both private and business)
- **.gov** (is a domain name that can be used by government agencies)
- **.uk** (is a free extension that generally identifies sites that refer to English sites and products)
- **.tv** (is a free extension that is generally used by televisions whether they are public or private)

What is HTML?

HTML is a markup language. It "tells" to the browser how to view the contents. HTML separates the "content" (words, images, audio, video, etc.) from the "presentation" (definition of the content type and instructions by how that type of content should be displayed). HTML uses a set of predefined elements to identify the type of content. For example, the paragraph element consists of the initial tag "<p>" and the closing tag "</p>". The following example shows a paragraph contained in the corresponding HTML element:

```
<p> My dog is called Billy. </p>
```

Here's how content is displayed in a browser:

My dog is called Billy.

How to start writing to HTML

In order to write on HTML, you need a simple text editor such as notepad, or more advanced text editors such as Notepad ++, Emacs, UltraText, etc.

Semantic and document structure

Doctype

Doctype is the first element to appear in an HTML document. Its function is to validate the document and, for some browsers, it uses to enable standard interpretation mode.

Doctype HTML 5



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`<! DOCTYPE html>`

Doctype HTML 4.01 strict

```
<! DOCTYPE HTML PUBLIC "-// W3C // DTD HTML 4.01 // EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

It's no simple insert the doctype of HTML 4. Fortunately, thanks to the new specification the syntax of this element is much more simple.

An HTML document is composed by text and elements that define the structure. Each element is marked by tags. Here's an example of an HTML document:

```
<Html>
```

```
<Head>
```

```
<Title> </ title>
```

```
</ Head>
```

```
<body> body of the document </ body>
```

```
</ Html>
```

As you can see, `<html>` elements embed the rest of the document, and the `<body>` element includes the content of the page. This structure is often represented as a tree with its branches (in this case, the `<body>` and `<p>`) elements that arise from the trunk (`<html>`). This hierarchical structure is called **DOM: Document Object Model**.

Tags

In HTML, a tag (label) consists in a word optionally followed by an attribute list, all enclosed in the `<e>` features.

A word is composed of alphanumeric characters: from 'a' to 'z' and from '0' to '9'.

HTML tags can be

- Opening: `<example>`
- Closing: `</ example>`
- opening and closing: `<example />`



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Structure elements

The structure elements are the tags that specify the subdivision of a web page.

From the beginning, the structure of a web page was composed by tables divided into rows and columns in which the various sections of the HTML document were present.

The main disadvantages of this methodology were: rendering engines, as the presence of multiple nested tables slowed the download of the web page, and the problem of mixing between elements used to mark content and those used for display. Also, to make a substantial change to page display, the times were certainly not short, thanks to the complexity of the structure that was often created.

Afterward, the tables were replaced by <div>.

Element <div>

The Div tag is one of the most important tags in HTML as it can be defined as a "neutral" element of the markup that allow to perform various tasks including, above all, the definition of several portions within a web page .

The term DIV was born as an abbreviation of "divide" and, in a sense, the function of this tag consists precisely of this: to create sections within a web page in order to separate different areas of the page such as, for example, the header, menu, and footer.

Example of div:

```
<Html>
```

```
<Body>
```

```
<div id = "container">
```

```
<div id = "header" ... </ div>
```

```
<div id = "menu"> ... </ div>
```

```
<div id = "content"> ... </ div>
```

```
<div id = "footer"> ... </ div>
```

```
</ Div>
```

```
</ Body>
```



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```
</ Html>
```

Normally, then, each div is assigned a class or ID.

Therefore, knowledge of Css style sheets is an indispensable requirement to work with this powerful tag.

Element <header>

The header element specifies the header of a section and it is used to introduce or support documents, where it can be repeated since there may be more sections in a document and consequently multiple headers. A right example can be a blog, where each news has its header.

In addition, headers can be multiple within a document.

Example:

```
<Header>
```

```
<h1> Example header </ h1>
```

```
<p> Example 1 </ p>
```

```
<p> Example 2 </ p>
```

```
</ Header>
```

<title> Element

The title tag allow to associate a title with a document.

The <title> tag is located in the header section of the document and it's the title of the page that you can see in the top bar or browser tabs. Each Html document has only one title.

Example:

```
<Html>
```

```
<Head>
```

```
<title> Title Example </ title>
```

```
</ Head>
```

```
</ Html>
```



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<body> element

The <body> element (body) defines the page you will see on video: texts, images and everything you need to control and format the page itself.

It also allows you to modify some graphic aspects such as background colour, insert an image as a document background, the colour of the link or text, and so on. These modifications can be done by the body tag attributes.

Customization Elements:

- **BACKGROUND:** allow to set an image as the background of the page.
- **BGCOLOR:** Set a colour to the background of the page.
- **TEXT:** Set the default colour of page text.
- **LINK:** Sets the default colour of hyperlinks (links) on the page.
- **ALINK:** Changes the colour of the hyperlink enabled or the colour that appears on the link when you click the mouse.
- **VLINK:** Changes the colour of the hyperlinks of the page you have already visited.

Example:

```
<Html>
```

```
<Head>
```

```
<title> Title Example </ title>
```

```
</ Head>
```

```
<Body>
```

```
Body of the document
```

```
</ Body>
```

```
</ Html>
```

<section> Element

The section element is used to define a set of related content between them and represents a generic section of the document.



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It is used for chapters or for the same home page, for example: introduction, news, contacts.

Example:

```
<Section>
```

```
<h1> Title 1 </ h1>
```

```
<p> Text related to Title 1. </ p>
```

```
</ Section>
```

```
<Section>
```

```
<h1> Title 2 </ h1>
```

```
<p> Text related to Title 2. </ p>
```

```
</ Section>
```

<article> Element

The <article> element represents an article, an information, a content that is independent of the rest of the document. Therefore, it's used to enclose all information that may be independent of the rest of the document and it can be reproduced and reused on their own.

Example:

```
<Article>
```

```
<Header>
```

```
<h1> Example Title1 </ h1>
```

```
<p> Paragraph of the text </ p>
```

```
</ Header>
```

```
</ Article>
```

<aside> Element

The <aside> element is used for notes or comments not so relevant, for side sections, for advertisements, and any other content that is not related to the main content of the page.

Example:



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```
<Aside>
```

```
<p> Visit the page for more information </ p>
```

```
</ Aside>
```

<style> Element

The <style> element is used to identify an internal style statement for the single page that contains the statement. This tag needs its closing tag </ style>.

Example:

```
<style type = "text / css"> statements </ style>
```

<nav> Element

The <nav> element is used to define a number of useful links to surf. Therefore, it is used to collect link blocks such as menu or any other useful link to surf, not necessarily all links must be contained in this tag.

Example:

```
<nav> <ul>
```

```
<li> <a href="sample1.html"> Projects </a> </ li>
```

```
<li> <a href="sample2.html"> About Us </a> </ li>
```

```
<li> <a href="sample3.html"> Contacts </a> </ li>
```

```
</ Ul>
```

```
</ Nav>
```

<footer> Element

The footer element is used for code parts that usually fit at the end of the page but also at the end of the section if a page has more than one section.

Example:

```
<Footer>
```

```
<p> Footer Example </ p>
```

```
</ Footer>
```



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New Elements Inserted in HTML5

<figure> and <figcaption> Elements

The <figure> element is used to contain code lists, images, diagrams, etc. with the condition that they are not a basic part of the context in which they fit. The <figcaption> element can enrich the description of the element inside the <figure> tag.

Example:

```
<Figure>
```

```
<img src = "example.png" alt = "">
```

```
<Figcaption>
```

```
Example photo
```

```
</ Figcaption>
```

```
</ Figure>
```

<hgroup> Element

The <hgroup> element represents the header of a section. The element is used to group of a set elements h1-h6 when the title has multiple levels, such as subtitles, or alternate titles.

Example:

```
<Hgroup>
```

```
<h1> This is the title </ h1>
```

```
<h2> This is a subtitle </ h2>
```

```
</ Hgroup>
```

<time> and <datetime> Elements

The Time Element is used to define a precise time or date in the Gregorian calendar with optionally time and a time zone difference.

We can specify a data more detail adding the datetime attribute:

Example:

```
<p> Mario Rossi came to school at
```



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```
<time datetime = "2017-02-22T09: 00 + 1: 00">
```

```
9 o'clock on February 22, 2017
```

```
</ time> due to a bus delay. </ p>
```

<progress> Element

The <progress> element represents the state of completion of a task. An example could be to load a file:

Example:

```
<Section>
```

```
<p> Loading <progress id = "Loading" max = "100" value = "10"> <span> 0 </ span>% </ progress>
```

```
</ P>
```

</ Section> element

The value attribute identifies the amount of job completed, while the max attribute identifies the amount of job required in total. Units are subjective and unspecified.

<meter> Element

The <meter> element represents a progressive measure within a range, or a fractional value.

Example:

```
<meter value = "2" min = "0" max = "6"> 2 GB used on 6 GB </ meter>
```

There are 6 attributes to identify the value:

- max indicates the maximum available value;
- min indicates the minimum available value;
- value indicates the value of the element;
- low indicates the low value of the element;
- high indicates the high value of element;



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- Optimum indicates a value that is considered "optimal".

<mark> Element

The <mark> element allows authors to highlight some portions of the document.

Example:

```
<p> Lorem Ipsum is a placeholder text used in the printing and printing industry.
```

```
<mark> Lorem Ipsum </ mark> is considered standard plaque text since the sixteenth  
century when an anonymous typographer took a <mark> character </ mark> cassette and  
assembled them to prepare a sample text. </ p>
```

Attributes

Attributes are used to identify the function or type of the element. The list of attributes is composed of a series of name attribute = "value" separated by space feature and is included in the opening or closing-opening tag.

Attributes usually composed by 2 parts:

- An attribute name.
- A value of the attribute.

An attribute tag is written in this way:

```
<tag tagname1 = "value1" attribute name2 = "value2">
```

A practical example can be as follows:

```
<input type = "color" name = "favcolor">
```