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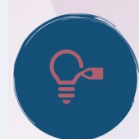
# WEB DESIGN

A WALK THROUGH WEB CONCEPTS AND  
TECHNOLOGIES



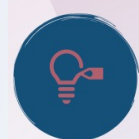
# Suggestions - backup

- What is a backup?
  - A website backup is a snapshot of all your website's important components
- Backups should include all of the following elements of a website
  - Website code files, website databases, images, add-ons, plugins, or themes
- Making backups of your website is an important part of regular site maintenance
  - Something happen - a security issue, accidentally cancel your account
- Keeping regular backups, it's a way to bring a website back without rebuilding it from scratch



# Suggestions - backup

- How to manage a backup? Different ways and when select them...
- Manually create a backup with FTP
  - Simply back up website files, and nothing more
  - Pro: useful to upload the backup to a different hosting account, Cons: MANUALLY!!!
- Use the hosting platform's built-in backup system
  - A simple one-click option to make a backup your hosting account
  - Pro: useful if you do not plan to change platforms, Cons: stored in your hosting, it could be paid
- Use a dedicated plugin
  - Exploiting a specific software, e.g.
  - Pro: a practical widely adopted approach by Web Designer, Cons: another plugin



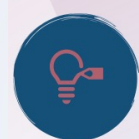


# Suggestions - backup



- How to manage a backup? Different ways and when select them...
- Manually create a backup with FTP
  - Simply back up web files, and nothing more
  - No further info
  - Pro: useful to upload the backup to a different hosting account, Cons: MANUALLY!!!
- Use the hosting platform's built-in backup system
  - A simple one-click button to make a backup your hosting account
  - A couple of slides
  - Pro: useful if you don't plan to change platforms, Cons: stored in your hosting, it could be paid
- Use a dedicated plugin
  - Exploiting a specific software, e.g. Web Designer
  - The suggestion of a couple of tutorials
  - Pro: a practical widely adopted approach, Cons: another plugin

More details at this [link](#)



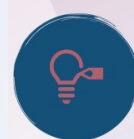


# Suggestions - backup

- Use the hosting platform's built-in backup system
  - Just some screenshots from netsons/cPanel menu



The image displays two screenshots of the cPanel interface. The left screenshot shows the 'Softaculous' section with a search bar and a list of applications including SitePad Website Builder, Blogs, Portals/CMS, Forums, Image Galleries, Wikis, Social Networking, Ad Management, Calendars, Mails, and Polls and Analytics. The right screenshot shows the 'WordPress Management' section with 'Install' and 'Scan' buttons, and a table with the URL 'https://galiziacorsodad.netsons.org' and the title 'My Course'. Both screenshots show the cPanel header with the user 'qnpbzavy' and a 'Backups and Restore' button.



- 



# Suggestions - backup

- Use the hosting platform's built-in backup system



## Hosting Web

Scegli il piano di Hosting Netsons più adatto al tuo business!

**PRIVATO**

**Hosting Web 10**

L'hosting economico per creare il tuo primo sito web

- ✓ Certificato SSL gratis
- ✓ Un dominio incluso
- ✓ 1 sito web
- ✓ Spazio web 10 GB
- ✓ 5 caselle email
- ✓ 1 database MariaDB/MySQL
- ✓ [Caratteristiche Principali](#)

€ 2.20 +iva/mese

Acquista

[Dettaglio piano](#)

**BUSINESS**

**Hosting Web 100**

L'hosting professionale per il tuo sito web vetrina

- ✓ Certificato SSL gratis
- ✓ Un dominio incluso
- ✓ 1 sito web
- ✓ Spazio web 100 GB
- ✓ 10 caselle email
- ✓ 10 database MariaDB/MySQL
- ✓ [Caratteristiche Principali](#)

€ 3.45 € 3.10 +iva/mese

Acquista

[Dettaglio piano](#)

**BUSINESS**

**Hosting Web 500**

L'hosting per gestire più siti da un unico pannello

- ✓ Certificato SSL gratis
- ✓ Un dominio incluso
- ✓ 5 siti web
- ✓ Spazio web 500 GB
- ✓ 50 caselle email
- ✓ 50 database MariaDB/MySQL
- ✓ [Caratteristiche Principali](#)

€ 7.70 € 6.84 +iva/mese

Acquista

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**BUSINESS**

**Hosting Web 1000**

L'Hosting cPanel per il tuo sito web

- ✓ Certificato SSL gratis
- ✓ Un dominio incluso
- ✓ 5 siti web
- ✓ Spazio web 1000 GB
- ✓ 50 caselle email
- ✓ 50 database MariaDB/MySQL
- ✓ [Caratteristiche Principali](#)

€ 10.10 € 9.09 +iva/mese

Acquista

[Dettaglio piano](#)

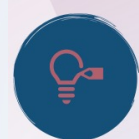
### Backup

Backup Hosting	✓
Policy backup	Giornaliera
Copertura backup	31 Giorni



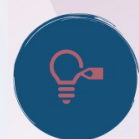
# Suggestions - backup

- Use a dedicated plugin
  - UpdraftPlus – <https://updraftplus.com>
    - Here the [link](#) to official how-to page
    - Here the [link](#) to a youtube tutorial
  - BackWPup - <https://backwpup.com>
    - Here the [link](#) to official how-to page
    - Here the [link](#) to a youtube tutorial
- Here the [link](#) to a long tutorial presenting 3 different plugins, the first two are the ones mentioned above



# Suggestions – Google Analytics

- Google analytics
  - To track website activity of individuals using the site
    - Duration, pages per session, bounce rate etc. along with information on sources of traffic
  - To understand user's behaviour, user experience, online content, device functionality etc.
    - To shape the success strategy of your business, discovering things you probably never knew about visitors on your site...
  - Here the [link](#) to a youtube tutorial
  - **Demo online...**



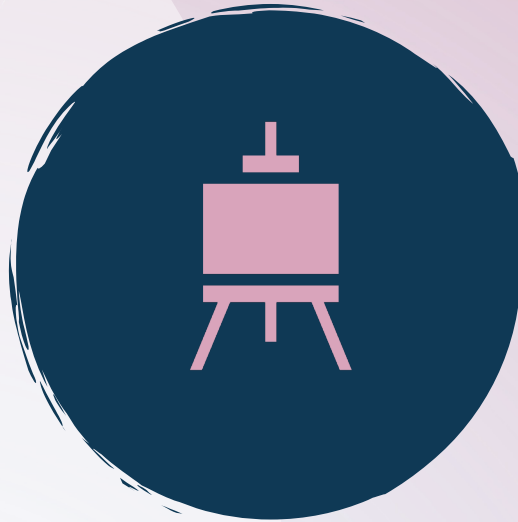
# But remember that...

To develop a site there several steps



## Collect the contents

Text, img, videos,  
renders, logo,  
icon, files



## Design the concept

Draw it as you  
prefer but start  
drawing



## Implement the project

Be focused on  
the concept and  
built it



# A walk through



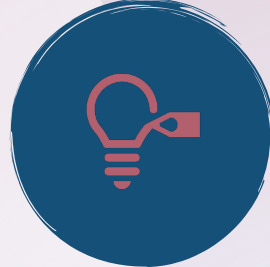
A web site...

What actually is?  
Focusing on the  
«dark side»



The magic of  
being online...

A roadmap to  
publish a site:  
domain, hosting...



How is built...

Technologies beyond  
the front end



Let's give  
a try!

Practical  
development  
and tutorial



Exam

To obtain the credit  
of the course, a test  
on all topics



Knowledge

HTML, CSS,  
JavaScript, MySQL  
/ PostgreSQL



IDE Integrated  
Development Environment

Brackets,  
Sublime, Atom,  
Adobe  
Dreamweaver

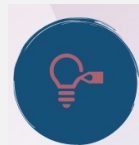


Client FTP

fileZilla, WinSCP  
e Cyberduck

# How to develop a web site from scratch

What we need to know:  
mandatory (basic) skills  
and tools



# How to develop a web site from scratch

## HTML (Hyper Text Markup Language)

- Basic structure that makes semantic content for the web browser
- Sequential tags (with an opening and a closing) and structurally a keyword enclosed in angle brackets

## Scripting Language

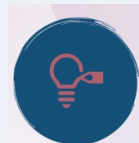
- HTML and CSS are not interactive. To create a dynamic web page we need languages like JavaScript and jQuery
- Server-side languages like PHP, Python, and Ruby may also be needed over time

## CSS (Cascading Style Sheets)

- Style language used to “decorate” the HTML markup of a web page
- Without CSS, a web page would appear as a large white page with unordered text and images

## Database Management

- To store, manage and access data of a website a database is needed
- DB management system: MySQL, MongoDB and PostgreSQL - server side





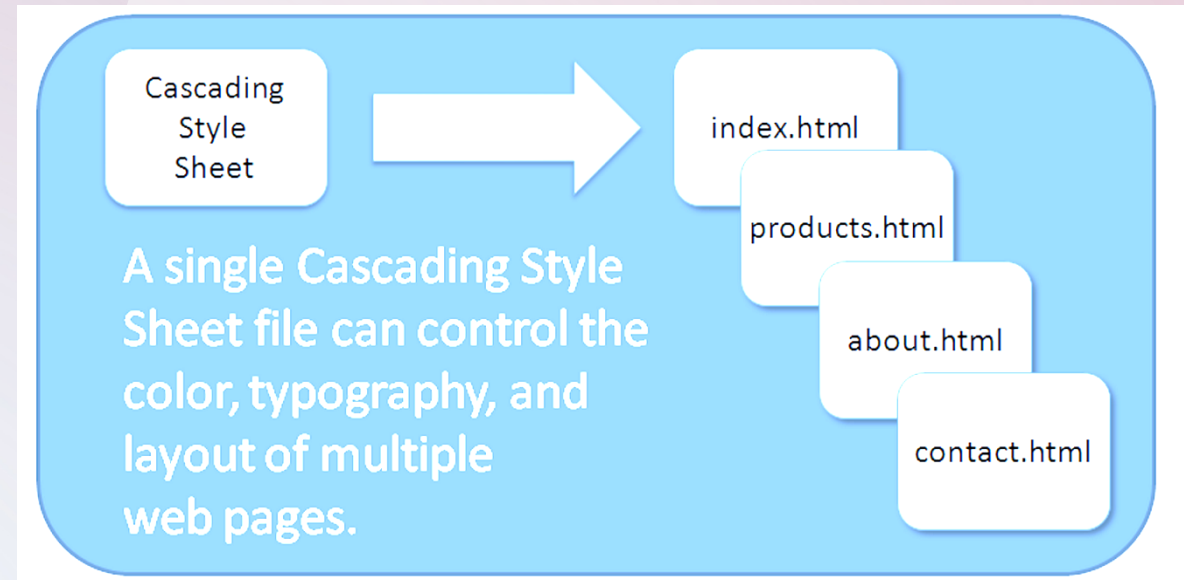
# CSS - Cascading Style Sheets

- **Language to define the presentation of a web page**
  - provides the functionality of style sheets (and much more) for web developers,
  - a flexible, cross-platform, standards-based language developed by the W3C,
  - used to add colour, background images, textures, and to arrange elements on the page,
  - used to enhance the usability of a website.
- See what is possible with CSS, visit <http://www.csszengarden.com>



# CSS pros

- Greater typography and page layout control
- Style is separate from structure
- Styles can be stored in a separate document and associated with the web page
- Potentially smaller documents
- Easier site maintenance

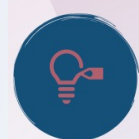


Pls note: HTML and CSS are not interactive. To create a dynamic web page we need languages like JavaScript



# CSS

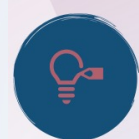
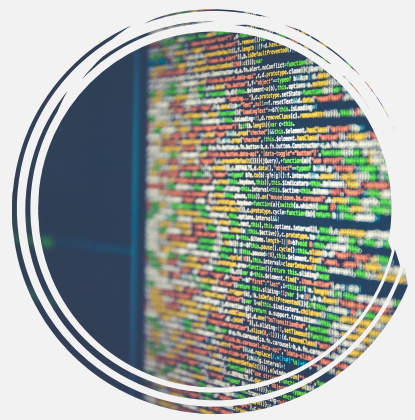
- Language defines the presentation of a web page
  - Used to add colour, background images, textures, and to arrange elements on the page
  - Used to enhance the usability of a website
- Language to style the visual presentation of web pages, and to tell web browsers how to render the different parts of a web page
  - Every item or element on a web page is part of a document written in a markup language, XML
    - *Content* should be added to the website using a markup language such as HTML
    - *Presentation* of the website content should be defined by a styling language such as CSS
  - CSS saves a lot of work controlling the layout of multiple web pages all at once



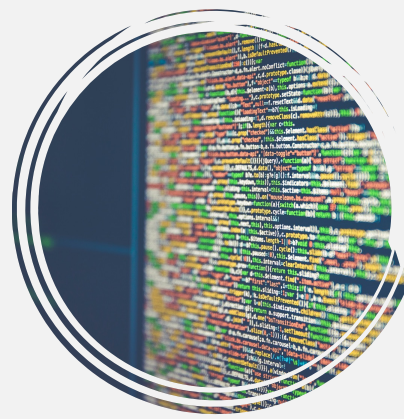


# CSS - Syntax

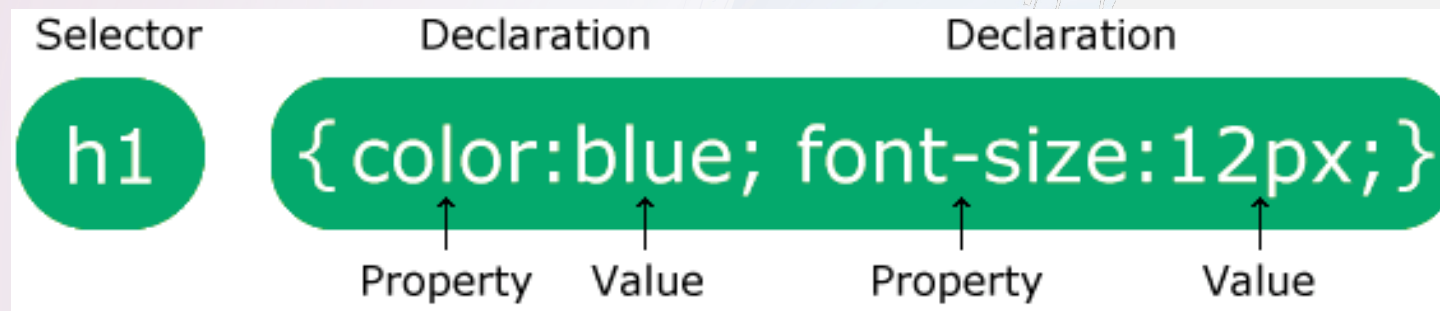
- CSS syntax includes selectors, properties, values, declarations, declaration blocks, rulesets, at-rules, and statements
- A *selector* is a code snippet used to identify the web page element or elements that are to be affected by the styles
- A *property* is the aspect of the element that is to be affected
  - Colour, padding, margin, and background - some of the most commonly used CSS properties
- A *value* is used to define a *property*
  - The property colour might be given the value of red **color: blue;**



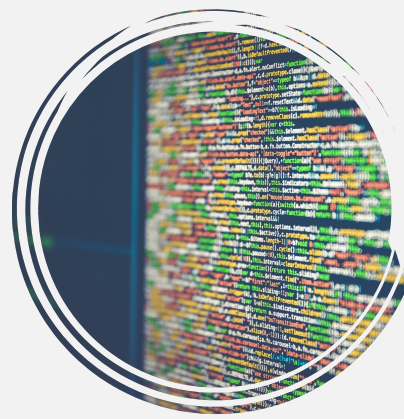
# CSS - Syntax



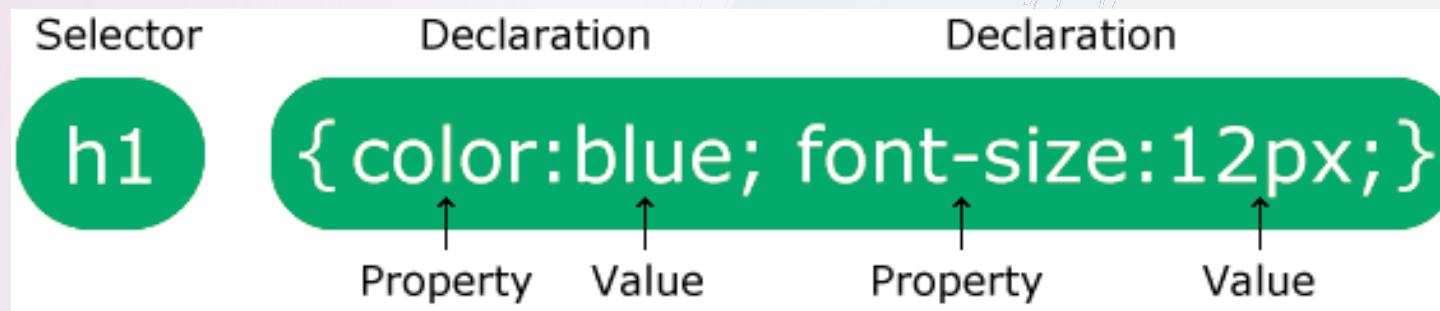
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# CSS - Syntax



- The combination of a *property* and a *value* is called a *declaration*
  - Multiple *declarations* can be (usually are) applied to a single *selector*
- A *declaration block* is all of the declarations applied to a single *selector*
- A single *selector* and the *declaration block* (that follows it) in combination are a *ruleset*
- *At-rules* are similar to *rulesets* but begin with the @ sign rather than with a *selector*
  - The most common at-rule is the @media rule which is often used to create a block of CSS rules that are applied based on the size of the device viewing the web page
  - Both *rulesets* and *at-rules* are CSS *statements*



Inline Styles

Embedded Styles

External Styles

Imported Styles

## Using an External Style Sheet

External Style Sheet color.css

```
body { background-color: #0000FF;  
        color: #FFFFFF;  
    }
```

To associate the external style sheet called color.css, the HTML code placed in the head section is:

```
<link rel="stylesheet" href="color.css">
```

is red

A;



# CSS Selectors

---

CSS style rules can be configured for an:

- HTML element selector
- class selector
- id selector
- descendant selector

# Using CSS with “class”

## class Selector

- Apply a CSS rule to a certain "class" of elements on a web page
- Does not associate the style to a specific HTML element

```
<style>  
  .new { color: #FF0000;  
         font-style: italic;  
        }  
</style>
```

## Configure with .classname

- code CSS to create a class called “new” with red italic text.

Apply the class:

**<p class=“new”>This is text is red and in italics</p>**

*This is text is red and in italics*

# Using CSS with “id”

## id Selector

- Apply a CSS rule to ONE element on a web page.

## Configure with #idname

- Code CSS to create an id called “new” with red, large, italic text.

```
<style>
#new { color: #FF0000;
      font-size:2em;
      font-style: italic;
      }
</style>
```

## Apply the id:

**<p id=“new”>This is text is red, large, and in italics</p>**

*This is text is red, large, and in italics*

# CSS Descendant Selector

Specify an element within the context of its container (parent) element.

AKA contextual selector

The example configures a green text color only for p tags located *within* an element assigned to the id named content

```
<style>  
#content p { color: #00ff00; }  
</style>
```

Advantage of contextual selectors:

Reduces the number of classes and ids you need to apply in the HTML



# span element

---

## Purpose:

- configure a specially formatted area displayed in-line with other elements, such as within a paragraph.

There is no additional empty space above or below a span – it is inline display.

# span Element Example

Embedded CSS:

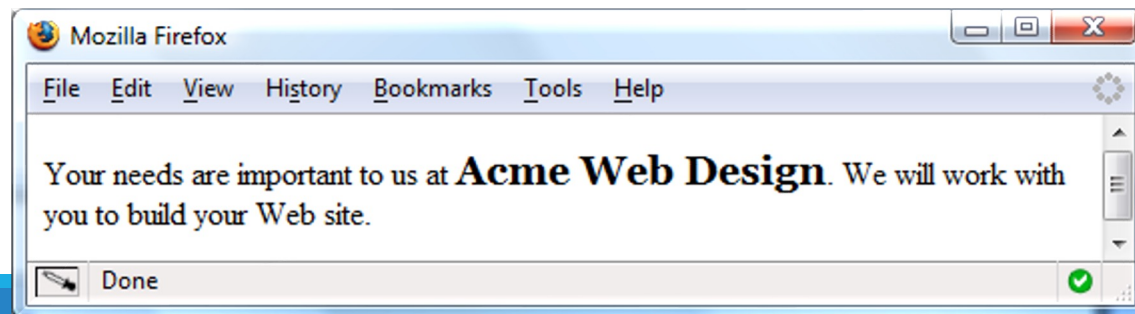
```
<style>
```

```
.companyname { font-weight: bold;  
                font-family: Georgia, "Times New Roman", serif;  
                font-size: 1.25em; }
```

```
</style>
```

HTML:

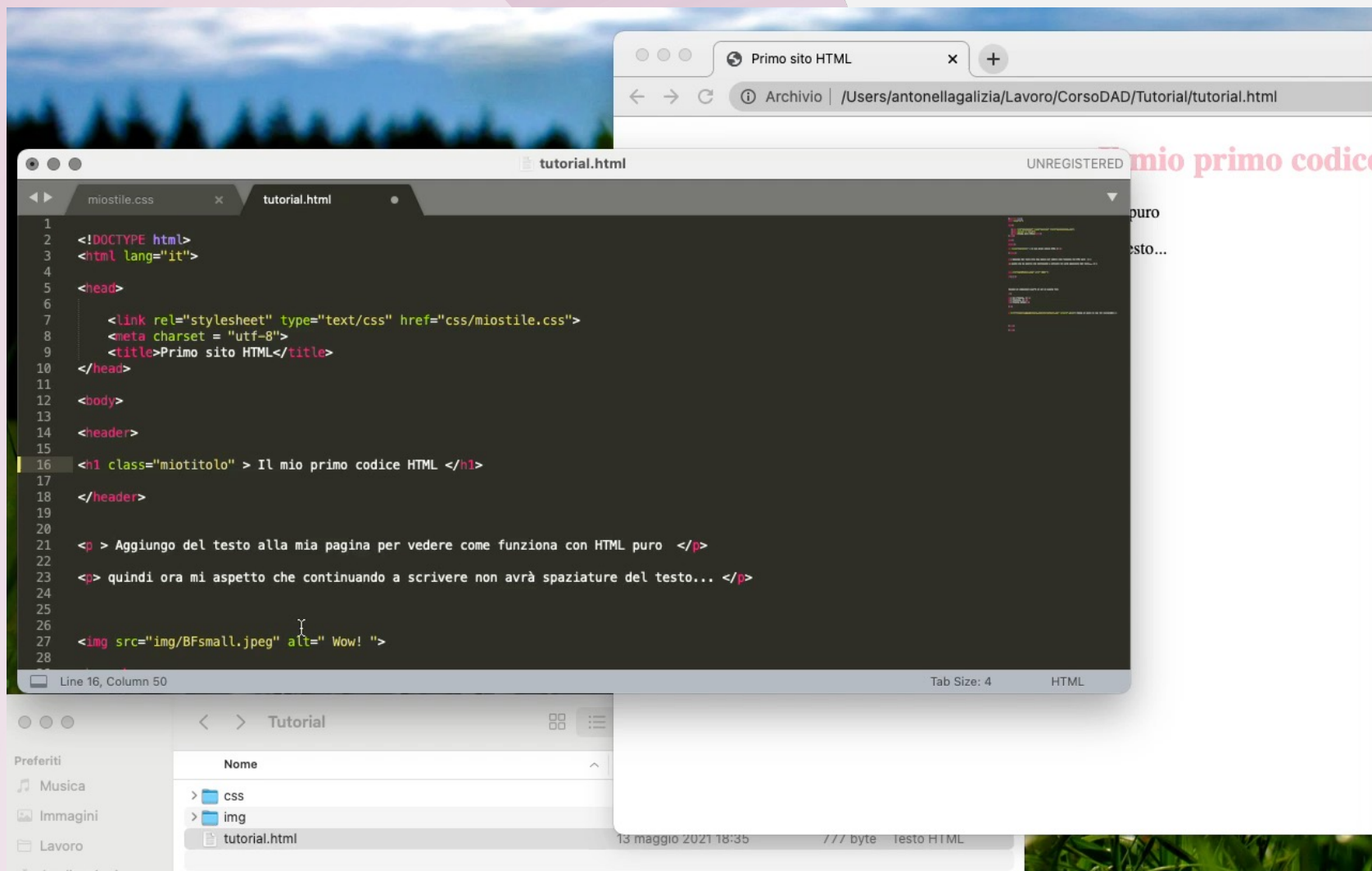
```
<p>Your needs are important to us at <span  
class="companyname">Acme Web Design</span>.  
We will work with you to build your Web site.</p>
```



The screenshot shows a Mac desktop with two windows. The foreground window is a Finder window titled 'Tutorial'. It has a sidebar on the left with 'Preferiti' (Favorites) and 'iCloud' sections. The main area shows a table of files in the 'Tutorial' folder. The table has columns for 'Nome' (Name), 'Data di modifica' (Modification Date), 'Dimensioni' (Size), and 'Tipo' (Type). The first row shows a file named 'tutorial.html' with a modification date of 'oggi 10:44', a size of 'Zero byte', and a type of 'Testo HTML'. The background window is a web browser titled 'tutorial.html', which is displaying the content of the file.

Nome	Data di modifica	Dimensioni	Tipo
tutorial.html	oggi 10:44	Zero byte	Testo HTML

# CSS





# Common Formatting CSS Properties

---

- ... Common CSS Properties, including:
  - background-color
  - color
  - font-family
  - font-size
  - font-style
  - font-weight
  - line-height
  - margin
  - text-align
  - text-decoration
  - width

# Using Color on Web Pages



**Red: #FF0000**



**Green: #00FF00**



**Blue: #0000FF**



**Black: #000000**



**White: #FFFFFF**



**Grey: #CCCCCC**

Computer monitors display color as intensities of red, green, and blue light

## RGB Color

The values of red, green, and blue vary from 0 to 255.

Hexadecimal numbers (base 16) represent these color values.

#FFFFFF	#FFFFCC	#FFFF99	#FFFF66	#FFFF33	#FFFF00
#FFCCFF	#FFCCCC	#FFCC99	#FFCC66	#FFCC33	#FFCC00
#FF99FF	#FF99CC	#FF9999	#FF9966	#FF9933	#FF9900
#FF66FF	#FF66CC	#FF6699	#FF6666	#FF6633	#FF6600
#FF33FF	#FF33CC	#FF3399	#FF3366	#FF3333	#FF3300
#FF00FF	#FF00CC	#FF0099	#FF0066	#FF0033	#FF0000

# Hexadecimal Color Values

- # indicates a hexadecimal value
- Hex value pairs range from 00 to FF
- Three hex value pairs describe an RGB color

#000000 black	#FFFFFF white
#FF0000 red	#00FF00 green
#0000FF blue	#CCCCCC grey

# Web Color Palette

- A collection of 216 colors
- Display the most similar on the Mac and PC platforms
- Hex values: 00, 33, 66, 99, CC, FF
- Color Chart <http://webdevfoundations.net/color>

Web Safe Color Chart

#FFFFFF	#FFFFCC	#FFF999	#FFF666	#FFF333	#FFF000
#FFCCFF	#FFCCCC	#FFCC99	#FFCC66	#FFCC33	#FFCC00
#FF99FF	#FF99CC	#FF9999	#FF9966	#FF9933	#FF9900
#FF66FF	#FF66CC	#FF6699	#FF6666	#FF6633	#FF6600
#FF33FF	#FF33CC	#FF3399	#FF3366	#FF3333	#FF3300
#FF00FF	#FF00CC	#FF0099	#FF0066	#FF0033	#FF0000
#CCFFFF	#CCFFCC	#CCFF99	#CCFF66	#CCFF33	#CCFF00
#CCCCFF	#CCCCCC	#CCCC99	#CCCC66	#CCCC33	#CCCC00
#CC99FF	#CC99CC	#CC9999	#CC9966	#CC9933	#CC9900
#CC66FF	#CC66CC	#CC6699	#CC6666	#CC6633	#CC6600
#CC33FF	#CC33CC	#CC3399	#CC3366	#CC3333	#CC3300
#CC00FF	#CC00CC	#CC0099	#CC0066	#CC0033	#CC0000
#99FFFF	#99FFCC	#99FF99	#99FF66	#99FF33	#99FF00
#99CCFF	#99CCCC	#99CC99	#99CC66	#99CC33	#99CC00
#9999FF	#9999CC	#999999	#999966	#999933	#999900
#9966FF	#9966CC	#996699	#996666	#996633	#996600
#9933FF	#9933CC	#993399	#993366	#993333	#993300
#9900FF	#9900CC	#990099	#990066	#990033	#990000



# Configuring Text with CSS

---

## CSS properties for configuring text:

- font-weight
  - Configures the boldness of text
- font-style
  - Configures text to an italic style
- font-size
  - Configures the size of the text
- font-family
  - Configures the font typeface of the text

# The font-size Property

Accessibility Recommendation: Use em or percentage font sizes – these can be easily enlarged in all browsers by users

<b>Text Values</b>	<b>Em Units</b>	<b>Px Units</b>	<b>Pt Units</b>	<b>Percentage</b>
xx-small	.5 em	8 px	6 pt	50%
x-small	.60 em	11 px	8 pt	60%
small	.75 em	13 px	10 pt	75%
medium	1 em	16 px	12 pt	100%
large	1.15 em	18 px	13.5 pt	110%
x-large	1.5 em	24 px	18 pt	150%
xx-large	2 em	30 px	24 pt	200%

# The font-family Property

---

Font-family Category	Font Typeface
serif	Times New Roman, Georgia, Times
sans-serif	Arial, Verdana, Geneva
monospace	Courier New, Lucida Console
cursive	<i>Brush Script MT, Comic Sans MS</i>
fantasy	<i>Jokerman, Curlz MT</i>

Not everyone has the same fonts installed in their computer  
Configure a list of fonts and include a generic family name

```
p { font-family: Arial, Verdana, sans-serif; }
```



## A methodological approach

A high-level list of steps

Way of thinking

Useful information



**GRAZIE**