

# WEB DESIGN

A WALK THROUGH WEB CONCEPTS AND TECHNOLOGIES





# A methodological approach

A high-level list of steps Way of thinking **Useful** information

### Main difficulties and requests Pls feedbacks

Next lesson: 3<sup>rd</sup> of May

Accessibilità: Dr. Giovanni Caruso

Ricercatore CNR

Portate: pc, guanti, scotch, occhiali vecchi (sole o anche da vista)



# 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



## 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



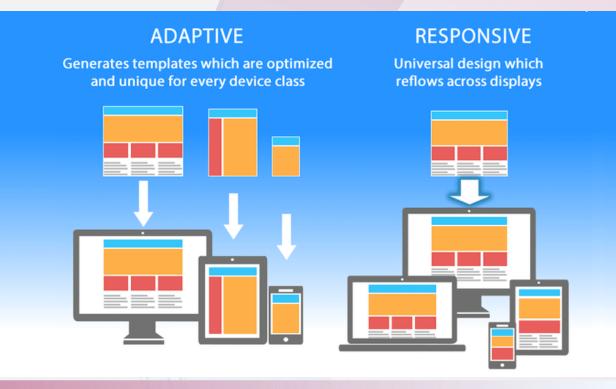


## **Responsive Design**

Definition

Adaptive (vs Responsive)

- Responsive desertion responds to the viewed
- The goal is to b the visitor's scr and change the
- Responsive we of flexible layo cascading style



is an approach to web e developers create f the same site to fit to ensions

Il first detect the user's screen and, able layouts created, e that is most

Reactive software development

Reactive and Responsive design are mostly the same



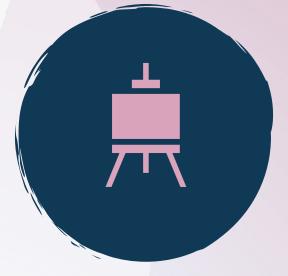
### Remember that...

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

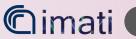
### Recap on class assignments

- Class assignments up to now:
  - Select your argument, theme, domain and hosting plan etc.,
  - Collect collect contents, start the design,
  - Analysis of the competitors submitted on the 5<sup>th</sup> of April
- With respect to WordPress:
  - Install your theme,
  - Install the Elementor plugin,
  - Complete the tutorial

And if it is not clear... Conclude the design of your site and start the implementation in WP!!!

- With respect to HTML:
  - Experiment HTML usage,
  - Complete the exercise to be submitted on the 26<sup>th</sup> of April





### Please remember that:

Two different MANDATORY assignments



20

#### **HTML + CSS exercises**

- considering arguments presented during the lessons,
- two submissions are foreseen.

# A website in WordPress and the related document describing the work

- the topic must be chosen by students,
- the site must be at least 4 pages, NO BLOG, NO eCommerce, NO VBLOG!!! etc
  - someone prosed a social network, we need to discuss it!
- the template for the document is on AulaWeb at this link



# First assignment: competitor analysis

- All of you should have received an evaluation
  - if this is not the case, please contact us!
- Consider that this work has to be integrated in the final document describing your site...
  - address the comments provided with the evaluation,
  - try to improve your work (even if you achieved 30!) rethinking the aim and customizing your text:

Scegliete almeno tre competitor e analizzate i loro siti in termini di design, funzionalità offerte, usabilità (chiarezza, completezza, accessibilità daivari dispositivi, ...).

- Some comments/suggestions: it is a SWOT analysis
  - it can contain some pics, etc
  - it must be a critical analysis, not the description of the contents of your competitor
  - properly introduce why you selected such competitors
  - summarize the aspects you would consider and the ones you are going to improve!!!



## We gave a try

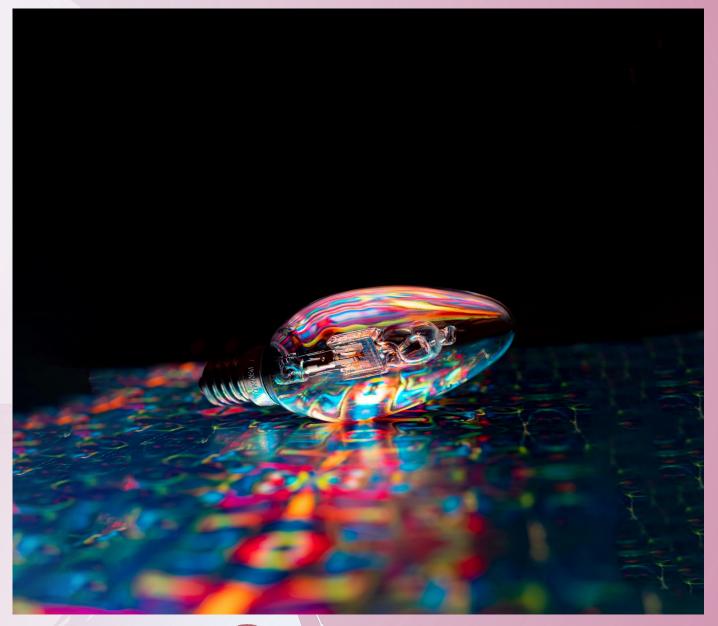
First steps with WordPress...

- install a WordPress instance;
- select and install a free theme;
- exploring the WP menu;
- large tutorial 2 lessons...

# Let's give a try

Install several plugin

- Google Analitycs
- Iubenda
- Under construction







# **Google Analytics**

- Google Analytics <u>link</u>
  - 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...

#### **Measure Matters!**

Here the <u>link</u> to a youtube tutorial to add Google Analytics to WordPress

Demo online by Google



Let's view it online





# Google Analytics

- Google Analytics
  - Start with an account on Google Analytics
    - Generate property and further setting
  - Then you can add them to your site, as codes, or as plugins
    - I usually install the code, but selecting a plugin I go for the Google one, but also MonsterInsight is very popular
  - Here the <u>link</u> to a simple written tutorial, where you find also summarised the different concepts





## Further tools from Google – besides Google Analytics

Related to a website performance



https://web.dev/measure/

Search

**Search Console** 

https://search.google.com/se arch-console

Monitor and manage a site's presence in Google Search results

PageSpeed Insight

https://developers.google.co m/speed/pagespeed/insights

How a website performs and tips to improve user experience

Reports on page performance and tips on possible improvements

### lubenda

- Iubenda
  - To manage all legal aspects, <u>link</u> to the official tutorial
  - The solution to draft, update and maintain your Privacy and Cookie Policy





### Privacy and Cookie Policy

Provide a Privacy and Cookie Policy that also includes any third party service providers you're using, like Google Analytics or Google Adsense.



#### EU Cookie Law

If you have users from the EU, you must display a cookie banner, provide a cookie policy, acquire consent for the installation of cookies and block profiling cookies until consent has been obtained.



#### Terms and Conditions

Terms and Conditions set the terms for how your site, app or service must be used and, most importantly, protect you from potential liabilities.



### GDPR Consent Records

If you have EU-based users and you use web-forms on your site — such as newsletter sign-up forms or registration forms — you must collect and maintain valid records of consent in order for the consent you've collected to be considered valid.



#### **CPRA Disclosures**

If you have a business and you target Californian consumers, you will need to comply with CPRA (CCPA amendment) requirements.

This includes making specific disclosures regarding your data processing practices and honoring consumer rights.





### **Under construction**

