

Curs 2

2012/2013

# Tehnici moderne de proiectare a aplicatiilor web

# TMPAW

- Tehnici moderne de proiectare a aplicatiilor web
  - An V RD
    - 2C/1L/1P

# Program

- An V
  - Saptamanile 1-7(8)
    - Vineri 16-18 Curs
    - Vineri 18-20 Laborator
  - Saptamanile 8(9)-14
    - Vineri 16-18 Curs
    - Vineri 18-20 Proiect



# Nota

- An V
  - 33% E
  - 66% Aplicatii
    - 33% L
    - 33% P

# Nota

- An V
  - 33% E
  - 33% L
  - 33% P
- Laborator - Prezenta
- Examen
  - asemanator cu materia de **proiect**
- Activitate suplimentara
  - dupa terminarea activitatii la laborator
  - +2p la E/L

# Examen

- probleme
- fiecare student are subiect **propriu**
- toate materialele permise
- tehnica de calcul **nu** este necesara dar este permisa

# Examen

- Oricare din temele de **proiect** (sau asemenea) poate constitui una din problemele de examen
  - se va cere realizarea planului / structurii logice a aplicatiei
- Se **poate** cere scrierea unui **cod** pentru realizarea anumitor operatii, fara necesitatea corectitudinii tehnice absolute (“;”, nume corect al functiilor, parametri functie etc.)
- Se poate cere interpretarea unui cod php/MySql cu identificarea efectului



# Curs

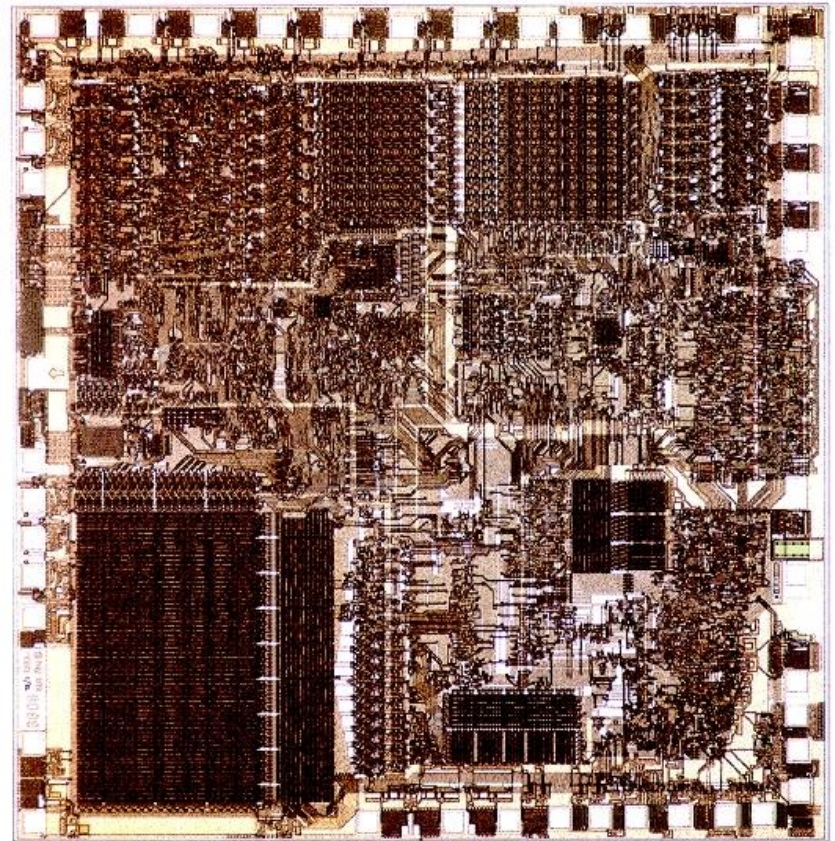
- Curs strict orientat spre laborator/proiect
  - se predă ceea ce se folosește în aceeași zi la laborator/proiect
- Orientat spre practică
  - 90% practică
  - 10% teorie
- Memorarea lui inutilă la examen

# PROIECT

- Tema de nota 8 (>6)
  - Tema unica pentru fiecare student
- Tema de nota 10 (>5)
  - Conditiiile de la tema de nota 8 **si in plus**
  - Necesitatea conlucrarii intre 2 studenti cu doua teme "pereche"
  - Necesitatea investigarii posibilitatilor de imbunatatire
- Tema de nota 10+ (>5)
  - Conditiiile de la tema de nota 10 **si in plus**
  - Tema care face apel la controlul **sesiunii** client/server
  - Necesitatea utilizarii **Javascript** in **aplicatie**
  - Tema se preda/trimite cu macar **1 zi** inaintea sustinerii ei
  - Facilitati in ceea ce priveste prezenta la laborator (**DACA** toate celelalte conditii sunt indeplinite – P = 66%, L = 0%, E = 33%)

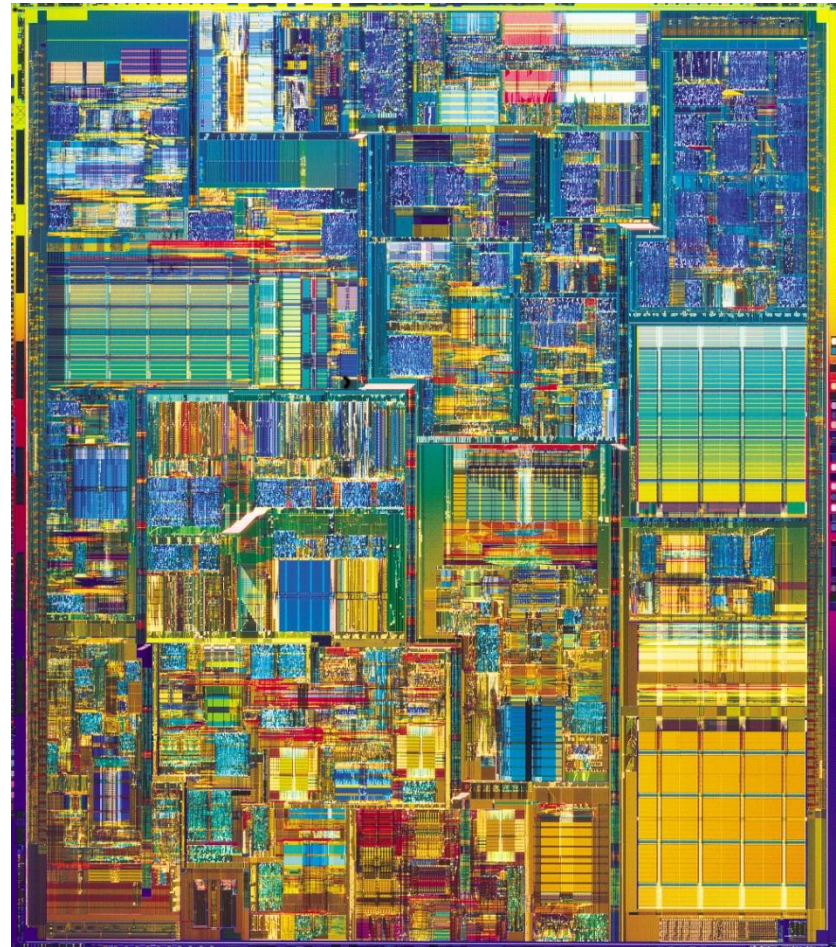
# Impresionant?

- Intel® 8086
- 29.000 tranzistoare pe CPU
- 1978
- 1 MB date
- 4.7 MHz



# Impresionant?

- Intel® Itanium® processors (Tukwila)
- 2009
- 2 miliarde tranzistoare pe CPU
- 16 EB date (16 G GB)
- > 3 GHz

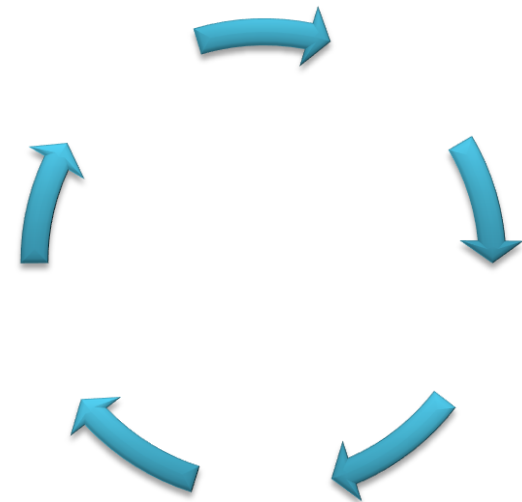


# Concepte

- Efectuare foarte rapida a unui numar **mic** de instructiuni, de **complexitate redusa**, repetate de un numar foarte mare de ori
- Programare: coborarea rationamentului la nivelul de **complexitate redusa**, cu obtinerea performantei prin structuri repetitive simple efectuate rapid.
- Operatii repetitive / date repetitive

# DA/NU

- Un programator n-a venit la servicii de **trei zile**.
- Colegii de servicii au venit la el acasă și-l găsesc pe acesta **chel**, dormind în cadă, ținând în mâini un șampon.
- Au luat șamponul și s-au apucat să citească instrucțiunile de folosire:
  - Clățiți părul cu apă.
  - Aplicați șamponul
  - Frecați
  - Așteptați două minute
  - Clățiți părul cu apă
  - **Repețiți procedura.**



# Documentatie

- RF-OPTO
  - <http://rf-opto.etc.tuiasi.ro>
  - <http://rf-opto.etti.tuiasi.ro>
- Fotografie
  - de trimis prin email: [rdamian@etti.tuiasi.ro](mailto:rdamian@etti.tuiasi.ro)
  - necesara la laborator/curs
- Exemplu de teme si specificatii detaliate pentru proiect

# Documentatie



**Microwave and Optoelectronics Laboratory**

## Internet Technology Master (romanian only)

**Curs**

[Curs nr. 1](#) - Recapitulare HTML  
[Curs nr. 2](#) - Design si CSS  
[Curs nr. 3](#) - Forme HTML si introducere MySql  
[Curs nr. 4](#) - Introducere PHP  
[Curs nr. 5](#) - PHP - continuare  
[Curs nr. 6](#) - PHP - XML  
[Curs nr. 7](#) - PHP - MySql  
[Curs nr. 8](#) - MySql  
[Curs nr. 9](#) - MySql  
[Curs nr. 10](#) - MySql  
[Curs nr. 11](#) - PHP  
[Curs nr. 12](#) - Javascript - PHP  
[Curs nr. 13](#) - Exemple  
[Curs nr. 14](#) - Solutie

**Laborator**

[Lucrarea nr. 1](#) - saptamanile 1-2  
[Lucrarea nr. 2](#) (schita) - saptamana 3  
[Lucrarea nr. 3](#) - saptamana 4 - la sfarsitul cursului 4 - [Copy/Paste](#)  
[Lucrarea nr. 4](#) - saptamana 5 - la sfarsitul cursului 5 - [Copy/Paste](#)  
[Lucrarea nr. 5](#) - saptamana 6 - la sfarsitul cursului 6 - [Copy/Paste](#) | [Galerie](#) | [BNR](#)  
[Lucrarea nr. 6](#) - saptamana 7 - la sfarsitul cursului 7 - [Copy/Paste](#) | [Lista](#)



**Proiect**



Lucrul la proiect incepe in saptamana a 8-a.

Fiecare student isi (auto) estimeaza capacitatea si isi alege in avans o tema corespunzatoare clasei de dificultate dorite.

- **Tema de nota 8 (>6)**
  - Tema unica pentru fiecare student
- **Tema de nota 10 (>5).** In plus fata de tema de nota 8:
  - Necesitatea conlucrarii intre 2 studenti cu doua teme "pereche"
  - Necesitatea investigarii posibilitatilor de imbunatatire
- **Tema de nota 10+ (>5).** In plus fata de tema de nota 10:
  - Tema care face apel la controlul sesiunii client/server
  - Necesitatea utilizarii Javascript in aplicatie
  - Tema se preda/trimite cu macar 1 zi inaintea sustinerii ei
  - Facilitati in ceea ce priveste prezenta la laborator (**DACA** toate celelalte conditii sunt indeplinite - detalii la curs sau laborator)

Pagina veche poate fi accesata [aici](#)



 English  
 Romana  
Pas encore



# Fotografii

## Studentii care au trimis fotografiile 🙌👍

Grupa: 5402

Nr.	Nume
1	<u>APETRII MARIA</u>

Grupa: 5403

Nr.	Nume
1	<u>ALEXANDRESCU SEBASTIAN</u>

Grupa: 5404

Nr.	Nume
1	<u>APERGHIS MIHAI-ALIN</u>

Grupa: 5405

Nr.	Nume
1	<u>ANGHELUS MARIU</u>

## Studentii care **inca** nu au trimis fotografiile 🙄

Grupa: 5304

Nr.	Nume
-----	------

Grupa: 5402

Nr.	Nume
-----	------

Grupa: 5403

Nr.	Nume
-----	------

Grupa: 5404

Nr.	Nume
-----	------

# Fotografii

## FLORESCU DAN-CONSTAN



### Date:

Grupa	5405 (2008)
Specializarea	Tehnologii si sisteme
Marca	3275

### Note obtinute

Disciplina	Tip	Data	Descriere	Nota	Ob
DCMR	Dispozitive si circuite de microunde pentru radiocomunicatii				
	Nota	19/06/2009	Nota finala	10	
	Exam	19/06/2009	Examen DCMR	9	
	Tema	05/06/2009	Proiect DCMR	10	

## FLORESCU DAN-CONSTA



### Date:

Grupa	5405 (2008)
Specializarea	Tehnologii si sisteme
Marca	3275

### Detalii

Finantare	Buget
Bursa	Bursa de Studii
Domiciliu	Iasi, judet Iasi
Promovare	Promovare Integrala
Credite	60
Media	8.86

# CURS

I.	HTML si XHTML (recapitulare)	1 oră
II	CSS	2 ore
III	Baze de date, punct de vedere practic	1 oră
IV	Limbajul de interogare SQL	4 ore
V	PHP - HyperText Preprocessor	8 ore
VI	XML - Extended Mark-up Language si aplicatii	4 ore
VII	Conlucrare intre PHP/MySql, PHP/XML, Javascript/HTML	2 ore
VIII	Exemple de aplicatii	6 ore
	Total	28 ore

# LABORATOR

I.	Implementarea unui sistem de dezvoltare a aplicatiilor Web, instalare PHP, MySql, Apache si legaturile dintre ele	2 ore
II	Design web avansat folosind CSS	2 ore
III	Interogarea unei baze de date. Exercitii SQL	2 ore
IV	Utilizare PHP I	2 ore
V	Utilizare PHP II	2 ore
VI	Utilizare PHP pentru accesul la o baza de date	2 ore
VII	Aplicatie distribuita complexa	2 ore
	Total	14 ore

# MOTTO

- “Universitatea nu e pentru mase locul de unde emana cunoasterea, ci un obstacol intre individ si diploma pe care i-a harazit-o destinul”
- “Universitatea fiind ceva care se interpune in mod imoral intre individ si dreptul lui natural de a fi diplomat, individul are obligatia morala sa triumfe asupra universitatii prin orice mijloace”
  - Sursa citat: Internet, user: “un student batran si plesuv”

# BIBLIOGRAFIE

- **“Am mai facut odata ceva asemanator”**
- Internet
  - [www.php.net](http://www.php.net)
  - [www.mysql.com](http://www.mysql.com)
  - [www.w3c.org](http://www.w3c.org)
  - [www.google.com](http://www.google.com)
- [rf-opto.etti.tuiasi.ro](http://rf-opto.etti.tuiasi.ro)
  - cereti link!

Capitolul I

# Recapitulare HTML/XHTML

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# CURS

I.	HTML si XHTML (recapitulare)	1 oră
II	CSS	2 ore
III	Baze de date, punct de vedere practic	1 oră
IV	Limbajul de interogare SQL	4 ore
V	PHP - HyperText Preprocessor	8 ore
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VIII	Exemple de aplicatii	6 ore
	Total	28 ore



Web Design

# Concepte generale

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# Concepte

- Steve Krug: “**Don't Make Me Think**”
- Utilizatorii scaneaza pagina, nu o citesc
- Informatia trebuie redusa la minimul necesar in majoritatea locurilor
- “Daca ceva e greu de utilizat, mai bine nu o utilizez”
- Utilizatorii au comportament de **rechin**
- Originalitatea **nu e** intotdeauna **recomandata**

# Test – F Shape Reading Pattern

- Obisnuinta utilizatorilor de a urmari anumite zone de pe ecran



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- Efficiently manage energy expense by scaling power consumption to workload, enabled by Intel® Intelligent Power Technology
- Next generation Intel® Virtualization Technology enables best-in-class virtualization performance, superb scalability, enhanced flexibility, and simplified server management
- Intel® Data Center Manager (Intel® DCM) software development kit provides power and thermal monitoring and management for servers, racks, and groups of servers in data centers. Management Console Vendors (ISVs) and System Integrators (SIs) can integrate Intel® DCM into their console or command-line applications and provide high-value power management features to IT organizations.

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[ROI calculator](#)

# Mozilla

mozilla

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Customization

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Tips & Tricks

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Fastest Firefox

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**improved** Find the sites you love in seconds (and without having to remember clunky URLs).

#### Super Speed

**new** View Web pages way faster, using less of your computer's memory.

#### Private Browsing

**new** Surf the Web without leaving a single trace.

#### Password Manager

Remember site passwords without ever seeing a pop-up.

#### Anti-Phishing & Anti-Malware

**improved** Enjoy the most advanced protection against online bad guys.

#### Session Restore

**improved** Unexpected shutdown? Go back to exactly

#### One-Click Bookmarking

Bookmark, search and organize Web sites quickly and easily.

#### Easy Customization

**improved** Thousands of add-ons give you the freedom to make your browser your own.

#### Tabs

**improved** Do more at once with tabs you can organize with the drag of a mouse.

#### Instant Web Site ID

Avoid online scams, unsafe transactions and forgeries with

#### Browse By Category

- Security & Privacy
- Performance
- Customization
- Personal
- Productivity
- Tabs
- Search
- Universal Access
- The Cutting Edge
- Help

### Get Firefox 3.5

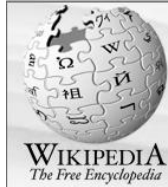
3.5.6, English (US), Windows (7.7MB)



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# Wikipedia



## navigation

- Main page
- Contents
- Featured content
- Current events
- Random article

## search

## interaction

- About Wikipedia
- Community portal
- Recent changes
- Contact Wikipedia
- Donate to Wikipedia
- Help

## toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link
- Cite this page

## languages

- Afrikaans
- Alemannisch
- العربية
- Aragonés
- Azərbaycan
- বাংলা
- Беларуская (тарашкевіца)
- Boarisch
- Bosanski
- Brezhoneg
- Български
- Català

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## HTML

From Wikipedia, the free encyclopedia

*For the use of HTML on Wikipedia, see [Help:HTML in wikitext](#).*

**HTML**, which stands for **Hyper Text Markup Language**, is the predominant [markup language](#) for [web pages](#). It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists etc as well as for links, quotes, and other items. It allows [images](#) and [objects](#) to be embedded and can be used to create [interactive forms](#). It is written in the form of HTML elements consisting of "tags" surrounded by [angle brackets](#) within the web page content. It can include or can load [scripts](#) in languages such as JavaScript which affect the behavior of HTML processors like [Web browsers](#); and [Cascading Style Sheets \(CSS\)](#) to define the appearance and layout of text and other material. The [W3C](#), maintainer of both HTML and CSS standards, encourages the use of CSS over explicit presentational markup.<sup>[1]</sup>

### Contents [hide]

- History
  - 1.1 Origins
  - 1.2 First specifications
  - 1.3 Version history of the standard
    - 1.3.1 HTML version timeline
    - 1.3.2 HTML draft version timeline
    - 1.3.3 XHTML versions
- Markup
  - 2.1 Elements
    - 2.1.1 Attributes
  - 2.2 Character and entity references
  - 2.3 Data types
  - 2.4 Document type declaration
- Semantic HTML
- Delivery
  - 4.1 HTTP
  - 4.2 HTML e-mail
  - 4.3 Naming conventions
  - 4.4 HTML Application
- Current variations
  - 5.1 SGML-based versus XML-based HTML
  - 5.2 Transitional versus strict
  - 5.3 Frameset versus transitional

## HTML

(HyperText Markup Language)

<b>Filename extension</b>	.html, .htm
<b>Internet media type</b>	text/html
<b>Type code</b>	TEXT
<b>Uniform Type Identifier</b>	public.html
<b>Developed by</b>	World Wide Web Consortium & WHATWG
<b>Type of format</b>	Markup language
<b>Extended from</b>	SGML
<b>Extended to</b>	XHTML
<b>Standard(s)</b>	ISO/IEC 15445 W3C HTML 4.01 <a href="#">[E]</a> W3C HTML 5 <a href="#">[E]</a> (draft)

# Regula nr. 1

**Don't Make Me Think**



Capitolul II

**CSS**

---

# CURS

I.	HTML si XHTML (recapitulare)	1 oră
II	CSS	2 ore
III	Baze de date, punct de vedere practic	1 oră
IV	Limbajul de interogare SQL	4 ore
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VIII	Exemple de aplicatii	6 ore
	Total	28 ore

# CSS vs. HTML

- HTML/XHTML concepute pentru a descrie **structura** documentului, nu **forma**
- Etichete HTML privitoare la **forma** (<font>, color="red") au fost introduse in HTML 3.2 si declarate depreciate in HTML 4.01
- Intercalarea intre elementele de structura si forma in HTML duce la cresterea complexitatii documentului si creste inutil dimensiunea acestuia
- Exemplu tipic: Microsoft Word -> Save as HTML -> documente de 10 ori mai mari decat un document cu aceeasi forma scris pur in HTML

# CSS

- Cascading Style Sheets
- Introdus pentru a separa **continutul** documentului de **prezentarea** sa (forma, culori, caractere)
- Permite:
  - Accesibilitate crescuta (acelasi document poate fi afisat diferit pe dispozitive diferite)
  - Tratare unitara a mai multor pagini
  - Reduce complexitatea pozitionarii

# CSS vs. HTML

```
<!DOCTYPE html PUBLIC
<html>
<!-- created 2003-12-12 -->
<head>
  <title>sample</title>
</head>
<body>
  <p>Voluptatem accusantium
  totam rem aperiam.</p>
</body>
</html>
```

**HTML**

```
h1 { color: white;
      background: orange;
      border: 1px solid bla
      padding: 0 0 0 0;
      font-weight: bold;
}
/* begin: seaside-theme */

body {
  background-color:white;
  color:black;
  font-family:Arial,sans-serif;
  margin: 0 4px 0 0;
  border: 12px solid;
}
```

**CSS**

# Cascading Style Sheets

- CSS 1 – 1996 (forma)
- CSS 2 – 1998 (pozitionare)
- CSS 2.1 – 2007 (corectii)
- CSS 3.0 – in lucru
- Utilitatea dependenta de suportul din partea dispozitivelor de afisare
- Majoritatea browser-elor suporta CSS 2.
- CSS implica degradare eleganta (“degrade gracefully”)

# CSS Concepte

- Specificatiile CSS sunt de forma:
  - Selector { "regula CSS"; ["regula CSS"; ] }
- Reguli CSS de forma:
  - atribut:valoare;
- Comentarii
  - Similar cu C/C++ , PHP, etc.
  - Cuprinse intre `"/**"` si `"*/"`

# Selector CSS

- Selector HTML
  - conceput pentru a modifica modalitatea de afisare standard a etichetelor HTML
- Selector clasa
  - conceput pentru a lucra cu atributul HTML `class="..."`
  - util pentru aplicare uniforma a formei mai multor elemente din document
- Selector identificator
  - conceput pentru a lucra cu atributul HTML `id="..."`
  - util pentru aplicarea unei forme specifice unui anume element din document



# Selector CSS

- Redefinirea etichetelor HTML standard
  - exemplu: afisarea implicita a tuturor celulelor de tabel din document este schimbata
- Redefinirea se poate face **si** doar in interiorul unei clase
  - exemplu: in interiorul claselor "footer" link-urile vor fi afisate altfel

```
td {  
  font-family:Tahoma, Verdana;  
  font-size:14px;  
  color:#D5A787;  
  vertical-align: top;  
  text-align: center;  
}
```

```
.footer a {  
  color:#FFD2B3;  
  text-decoration:none;  
}  
.footer a:hover {  
  color:#ffffff;  
  text-decoration:none;  
}
```

# Selector CSS

- clase – “.”
  - Semnul “.” inaintea numelui
  - permit reutilizarea unei anumite forme grafice
    - `<p class="menu">...</p>`
    - `<h1 class="menu">...</h1>`
    - `<tr class="menu">...</tr>`
- identificator element – “#”
  - Semnul “#” inaintea numelui
    - `<tr class="menu">...<td id="menu_curent">...</td>...</tr>`

```
.menu {  
font-family:Tahoma, Verdana;  
font-size:14px;  
color:#6F3A15;  
text-align:center;  
font-weight:bold;  
}
```

```
#menu_curent {  
font-family:Tahoma, Verdana;  
font-size:15px;  
color:#FFFFFF;  
text-align:center;  
font-weight:bold;  
}
```

# Selector CSS

- selector clasa si identificator concepute pentru a fi utilizate cu elementele de grupare HTML
  - `<div>...</div>` : grupare de tip bloc ("block")
  - `<span>...</span>` : grupare inserata ("in-line")
- anumite reguli au efect numai daca sunt atribuite unor elemente corespunzatoare (block sau in-line)

# Specificari complexe ale selectorilor

- `.clasa1 {}` – pentru orice element caruia i se atribuie atributul HTML `class="clasa1"`
- `p.clasa1 {}` – numai paragrafelor care sunt afectate clasei "clasa1" `<p class="clasa1">...`
- `.clasa1 p {}` – oricarui paragraf aflat in interiorul unui bloc afectat clasei "clasa1"
  - `<div class="clasa1"><p>...</p><p>...</p></div>`
- in anumite conditii speciale (mai ales pentru eticheta HTML `<a>`)
  - `a:hover {}` , `a:visited {}`

# CSS concepte

- Trei modalitati de a specifica stiluri
  - stiluri externe (External style sheet)
  - stiluri interne (Internal style sheet)
  - stiluri inserate (Inline style)
- Trei entitati care impun stiluri:
  - dispozitivul de afisare (browser)
  - autorul documentului
  - cititorul documentului

# CSS concepte

- In orice moment un element din document poate fi sub controlul mai multor reguli care se contrazic
- Ordinea prioritatilor (in ordinea cresterii acesteia)
  - dispozitivul de afisare (browser)
  - autorul documentului – in ordinea definirii. De obicei:
    - External style sheet
    - Internal style sheet
    - Inline style
  - cititorul documentului (in diverse forme, "text size", "zoom" de ex)
- Prioritatea maxima data cititorului documentului este in dezbatere si inconsistenta (nu la toate regulile)

# External style sheet

- regulile CSS se gasesc intr-un fisier extern, de obicei cu extensia “.css”
- fisierul respectiv este incarcat in document in sectiunea antet
  - `<head><link rel="stylesheet" type="text/css" href="stiluri.css" /></head>`
- utilizare obligatorie cand o suita de documente au o prezentare comuna

```
<head>  
<link rel="stylesheet" type="text/css" href="stiluri.css" />  
</head>
```

# External style sheet

- Dezavantaje – minore in conditiile actuale
  - necesitatea unei conexiuni suplimentare la server
  - cantitatea de date mai mare (doar la prima pagina incarcata – se aduc si stilurile care nu sunt folosite)
- Avantaje
  - separa total **continutul** de **forma**
  - tratare unitara a paginilor, usureaza
    - navigarea, dpdv. al utilizatorului
    - intretinerea si modificarea intregului site, dpdv. al designer-ului
  - dimensiune minima a documentelor (o regula se aplica de multe ori dar se scrie o singura data)
  - incepand de la a doua pagina din suita, browser-ul este deja in posesia stilurilor, viteza e sporita



# Internal style sheet

- Regulile CSS sunt indicate de asemenea in sectiunea antet (<head>... </head>)
- Se foloseste eticheta HTML <style>...</style>
- Se foloseste cand un document are o forma unica in site

```
<head>  
<style type="text/css">  
hr {color:sienna;}  
p {margin-left:20px;}  
body {background-image:url("b.gif");}  
</style>  
</head>
```

# Internal style sheet

- Avantaj
  - se elimina conexiunea suplimentara la server
  - separa **continutul** de **forma**
- Dezavantaj/Avantaj
  - Daca in sectiunea antet apare dupa fisierul extern de stiluri, va suprascrie stilurile corespunzatoare
- Dezavantaj
  - nu permite tratarea uniforma a documentelor

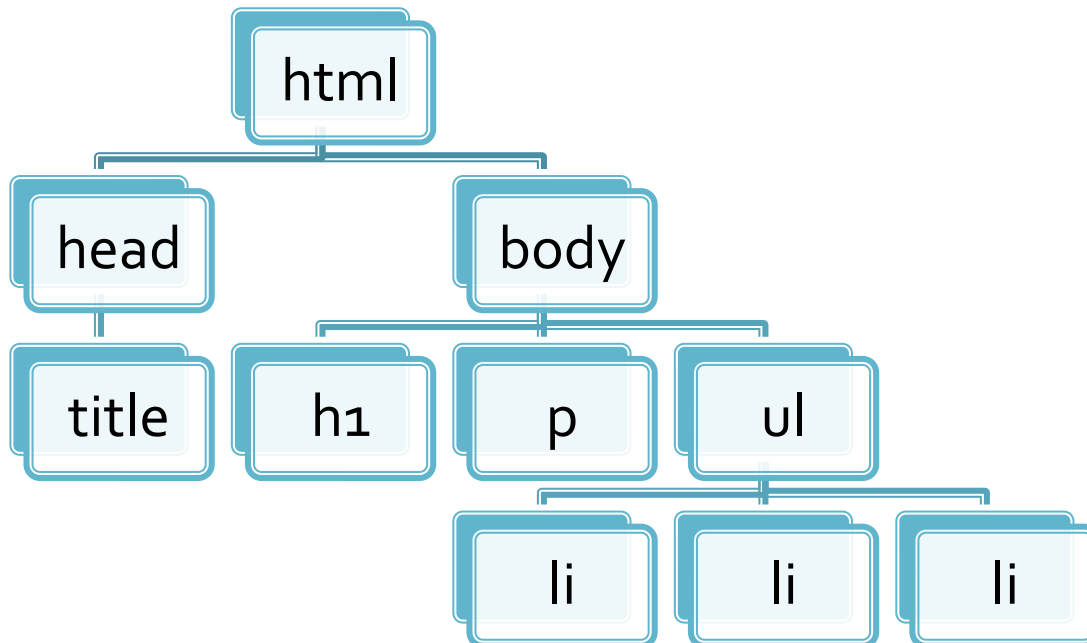
# Inline style sheet

- Se utilizeaza **atributul** HTML `style=""`
- Modifica o singura eticheta
- `<p style="color:sienna;margin-left:20px">Un paragraf</p>`
- De obicei utilizat punctual pentru a introduce efecte ce nu pot fi obtinute cu HTML
- De evitat:
  - **nu** separa forma de continut
  - creste dimensiunea documentului (vezi un fisier HTML salvat cu Microsoft Word)

```
<p style="color:sienna;margin-left:20px">Un paragraf</p>
```

# Relatia parinte copil si mostenire

- Orice document are o structura de tip graf in care elementele sunt introduse in interiorul altor elemente



```
<html>
  <title>pagina mea</title>
  <body>
    <h1>Compozitori:</h1>
    <p>
    <ul>
      <li> elvis costello
      <li> johannes brahms
      <li> georges brassens
    </ul>
  </body>
</html>
```

# Relatia parinte copil si mostenire

- in CSS valoarea implicita a multor reguli este **inherit** mostenire de la parinte
- Exemplu:
  - daca pentru body se fixeaza regula: `body {color:#FF0000;}` textul va fi implicit rosu pentru toate elementele incluse (p,li,ul) daca:
    - nu apar reguli suplimentare (p {color:black;} )
    - nu exista reguli predefinite (h1 – regula browser-ului – h1 mai mare decat p)

```
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    <h1>Compozitori:</h1>
    <p>
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      </ul>
    </p>
  </body>
</html>
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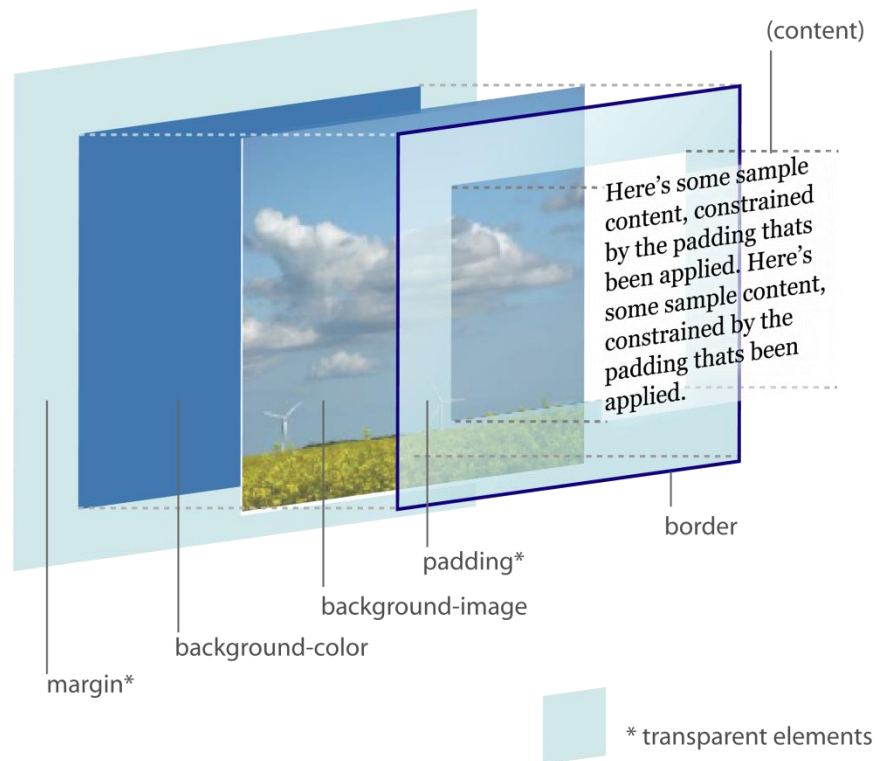
# Dimensiunile in CSS

- relativ la dimensiunea implicita in browser
  - xx-small, x-small, small, medium, large, x-large, xx-large (implicit medium)
- relativ la dimensiunea din blocul parinte
  - smaller, larger
- absolute
  - in, cm, mm, pt (1 point = 1/72 in), pc (1 pica = 12 pt)
- relative
  - em, ex – relative la dimensiunea in blocul parinte
    - un cuvânt cu dimensiunea 2em = dimensiunea de 2 ori mai mare decat a textului din acel paragraf
    - precizie mai buna, valori fractionare permise (1.25em, 0.85em etc.)
  - px (pixeli) dependent de dispozitivul de afisare

# CSS Box Model

- Orientat in jurul conceptului de "cutie" – Box model

THE CSS BOX MODEL HIERARCHY



# Controlul fundalului: culoare

- Pentru elementele cu structura bloc
- `background-color=culoare`
  - nume:
    - `background-color= black;`
  - Hexa - # Rosu (0-255=00-FF), Verde, Albastru
    - `background-color=#FF0000;`
  - RGB – `rgb(rosu = 0-255,verde,albastru)`
    - `background-color:rgb(15,150,47);`



# Controlul fundalului: imagine

- background-image
  - body {background-image:url('bgdesert.jpg');}
- background-repeat
  - repeat-x; repeat-y; repeat; no-repeat; inherit;
- background-attachment: fixed; scroll;
- background-position: "oriz." "vert.";
  - "oriz.": left; right; center; valoare[um]
  - "vert.": top; bottom; center; valoare[um]

# Controlul fundalului - scurt

- background
- Exemplu: `body {background:#ffffff url('img_bkg.png') no-repeat top right;}`
- Ordinea:
  - background-color
  - background-image
  - background-repeat
  - background-attachment
  - background-position

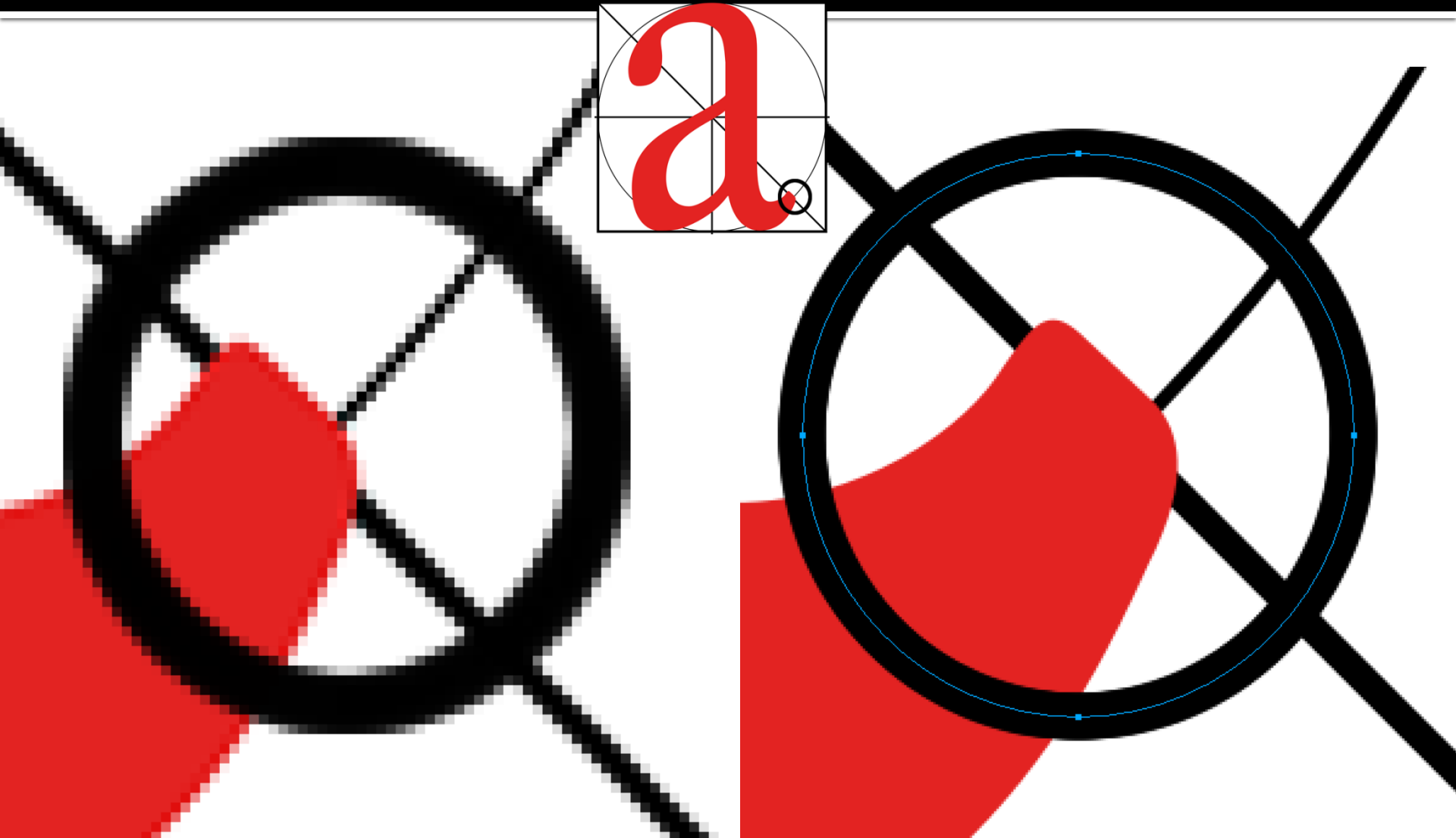
# Modificarea textului

- culoare – `color:[valoare];`
- aliniere – `text-align:left | center | right | justify;`
- decorare – `text-decoration:overline | line-through | underline | blink | none;`
  - de obicei utilizat pentru eliminarea sublinierii la link-uri `<a style="text-decoration: none;">`
- transformare – `text-transform:uppercase | lowercase | capitalize;`
- indent – alinierea primului rand din paragraf  
`text-indent:50px;`

## 4.2. Font

- Definitie: Font = desenul (forma grafica) a caracterului
- Fonturi
  - Outline font (True type) = desen vectorial, curbe Bezier - scalarea pastreaza calitatea maxima
  - Bitmap font = harta de pixeli – scalarea duce la aparitia artifactelor

# True Type - Bitmap



# Web safe font

- Fonturi definite de CSS
  - sans-serif
  - serif
  - monospace
  - cursive
  - fantasy
- Fonturi safe Microsoft
  - Arial
  - Courier New
  - Georgia
  - Times New Roman
  - Verdana
  - Trebuchet MS
  - Lucida Sans

sans-serif

serif

monospace

**cursive**

*fantasy*

Arial

Courier New

Georgia

Times New Roman

Verdana

Trebuchet MS

Lucida Sans

# Font

- desen de caractere

F

Sans-serif

F

Serif

Generic	Familie	Descriere
Serif	Times New Roman Georgia	Apar mici linii la terminatia anumitor caractere
Sans-serif	Arial Verdana	Fara liniute la sfarsit de caracter
Monospace	Courier New Lucida Console	Latime constanta a caracterelor

# Font

- desen de caracter – `font-family:[lista];`
  - `font-family: Arial , "Times New Roman", sans-serif;`
    - se utilizeaza Arial
    - daca Arial nu exista se utilizeaza Times New Roman
    - daca nici Times New Roman nu exista se utilizeaza sans-serif
    - daca nici sans-serif nu exista se utilizeaza fontul implicit in browser
- `font-style:normal | italic | oblique;`
- `font-size:[dimensiune];`
- `font-weight: normal | bold | bolder | lighter | 100 – 900;`
- `inherit` implicit pentru toate attributele;



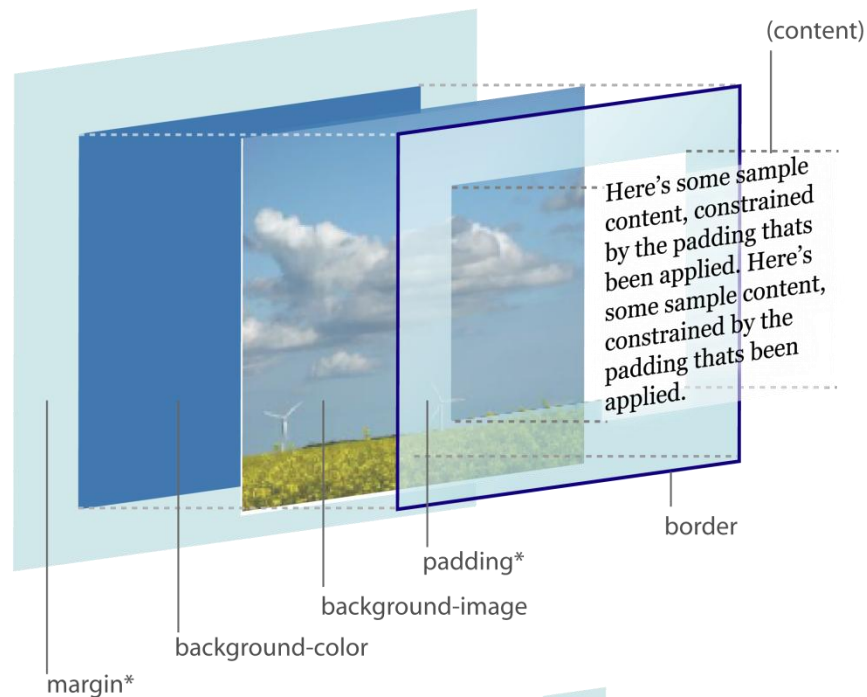
# Dimensiunile in CSS (text)

- relativ la dimensiunea implicita in browser
  - xx-small, x-small, small, medium, large, x-large, xx-large (implicit medium)
- relativ la dimensiunea din blocul parinte
  - **smaller, larger**
- absolute
  - in, cm, mm, pt (1 point = 1/72 in), pc (1 pica = 12 pt)
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  - **em, ex – relative la dimensiunea in blocul parinte**
    - un cuvânt cu dimensiunea 2em = dimensiunea de 2 ori mai mare decat a textului din acel paragraf
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- Orientat in jurul conceptului de "cutie" – Box model

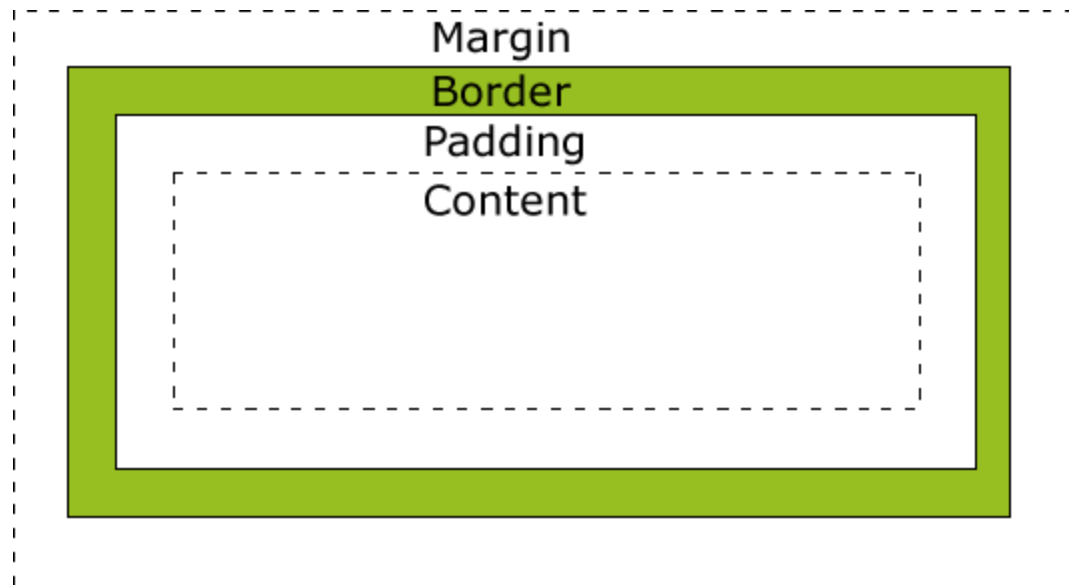
THE CSS BOX MODEL HIERARCHY



\* transparent elements

# CSS Box Model

- parametrii "box model" pot fi aplicati tuturor elementelor cu structura bloc, controland intregul bloc (marginii, chenar, distanta intre chenar si continut).



# Margine

- spatiu liber lasat in exteriorul blocului
- `margin-top:[valoare] | auto;`
- `margin-right:[valoare] | auto;`
- `margin-bottom:[valoare] | auto;`
- `margin-left:[valoare] | auto;`
- scurt
  - `margin: [top] [right] [bottom] [left];`
  - `margin: [top] [right= left] [bottom];`
  - `margin: [top=bottom] [right= left];`
  - `margin: [top=bottom=right= left];`

# Chenar

- **border-style**: none | hidden | dotted | dashed | solid | double | groove | ridge | inset | outset | inherit; - deblocheaza celelalte proprietati
- **border-color**: culoare;
- **border-width**: thin | medium | thick | [valoare] | inherit;
- scurt: **border**: [border-width] [border-style] [border-color];
  - border: 5px solid red;
- detaliat:
  - **border-left-color**: ...
  - **border-top-width**: ...
  - etc.

# Distanța chenar-continut

- spațiu liber lasat în interiorul blocului
- `padding-top:[valoare] | auto;`
- `padding-right:[valoare] | auto;`
- `padding-bottom:[valoare] | auto;`
- `padding-left:[valoare] | auto;`
- scurt
  - `padding: [top] [right] [bottom] [left];`
  - `padding: [top] [right= left] [bottom];`
  - `padding: [top=bottom] [right= left];`
  - `padding: [top=bottom=right= left];`

# Dimensiuni, vizibilitate, afisare

- **height**: auto | [valoare] | [%] | inherit
- **width**: auto | [valoare] | [%] | inherit
- CSS 2: **min-height**, **max-height**, **min-width**, **max-width**: none(max) | [valoare] | [%] | inherit
- **visibility**: visible | hidden;
- **display**: none | inline | block;

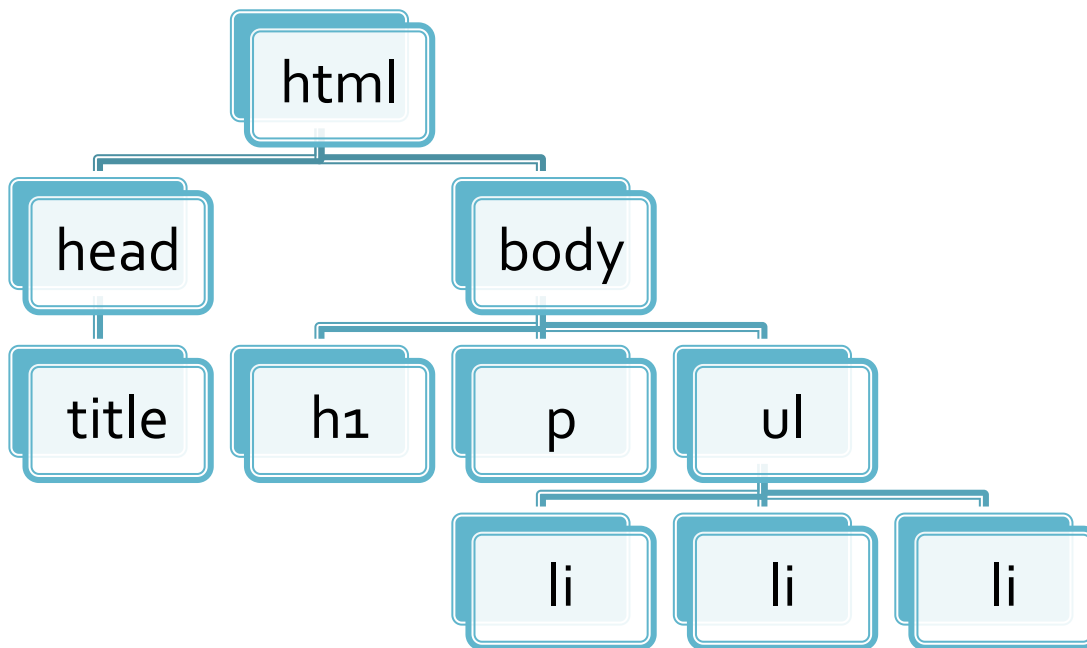
# Pozitionare

- `position`: absolute | fixed | relative | static | inherit;
- `top, right, bottom, left`: auto | [valoare] | [%] | inherit;
- `z-index`: [valoare intreaga]; - mai mare = deasupra



# DOM

- DOM – Document Object Model: structura de tip graf



```
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<p>  
<ul>  
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<li> johannes brahms  
<li> georges brassens  
</ul>  
</body>  
</html>
```

# Relatie cu Javascript in aplicatii

- Javascript poate accesa prin intermediul obiectului DOM atasat documentului HTML elementele din structura arbore DOM si modifica proprietatile corespunzatoare
- se deschide astfel calea spre aplicatii dinamice

# CSS Zen Garden

- <http://www.csszengarden.com/>
- un fisier html comun
- schimbarea formei permisa numai prin intermediul CSS

# CSS Zen Garden – HTML original

## css Zen Garden

### The Beauty of CSS Design

A demonstration of what can be accomplished visually through CSS-based design. Select any style sheet from the list to load it into this page.

Download the sample [html file](#) and [css file](#)

### The Road to Enlightenment

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, and broken CSS support.

Today, we must clear the mind of past practices. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WaSP and the major browser creators.

The css Zen Garden invites you to relax and meditate on the important lessons of the masters. Begin to see with clarity. Learn to use the (yet to be) time-honored techniques in new and invigorating fashion. Become one with the web.

### So What is This About?

There is clearly a need for CSS to be taken seriously by graphic artists. The Zen Garden aims to excite, inspire, and encourage participation. To begin, view some of the existing designs in the list. Clicking on any one will load the style sheet into this very page. The code remains the same, the only thing that has changed is the external .css file. Yes, really.

CSS allows complete and total control over the style of a hypertext document. The only way this can be illustrated in a way that gets people excited is by demonstrating what it can truly be, once the reins are placed in the hands of those able to create beauty from structure. To date, most examples of neat tricks and hacks have been demonstrated by structurists and coders. Designers have yet to make their mark. This needs to change.

### Participation

Graphic artists only please. You are modifying this page, so strong CSS skills are necessary, but the example files are commented well enough that even CSS novices can use them as starting points. Please see the [CSS Resource Guide](#) for advanced tutorials and tips on working with CSS.

You may modify the style sheet in any way you wish, but not the HTML. This may seem daunting at first if you've never worked this way before, but follow the listed links to learn more, and use the sample files as a guide.

Download the sample [html file](#) and [css file](#) to work on a copy locally. Once you have completed your masterpiece (and please, don't submit half-finished work) upload your .css file to a web server under your control. [Send us a link](#) to the file and if we choose to use it, we will spider the associated images. Final submissions will be placed on our server.

### Benefits

Why participate? For recognition, inspiration, and a resource we can all refer to when making the case for CSS-based design. This is sorely needed, even today. More and more major sites are taking the leap, but not enough have. One day this gallery will be a historical curiosity; that day is not today.

### Requirements

We would like to see as much CSS1 as possible. CSS2 should be limited to widely-supported elements only. The css Zen Garden is about functional, practical CSS and not the latest bleeding-edge tricks viewable by 2% of the browsing public. The only real requirement we have is that your CSS validates.

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# CSS Zen Garden



## Css Zen Garden

*the beauty of css design.*

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[DOWNLOAD THE SAMPLE HTML FILE AND CSS FILE](#)

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by Eric Stoltz
- [Make 'em Proud](#)  
by Michael McAdgon and  
Scotty Ralf Snyder
- [Orchid Beauty](#)  
by Kevin Addison
- [Oceanscape](#)  
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- [Kyoto Forest](#)  
by John Polkowski
- [A Walk in the Garden](#)  
by Simon Van  
Hauwermeiren

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## CSS ZEN GARDEN

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### Archives



# CSS Zen Garden

## CSS Zen Garden

The Beauty of CSS Design

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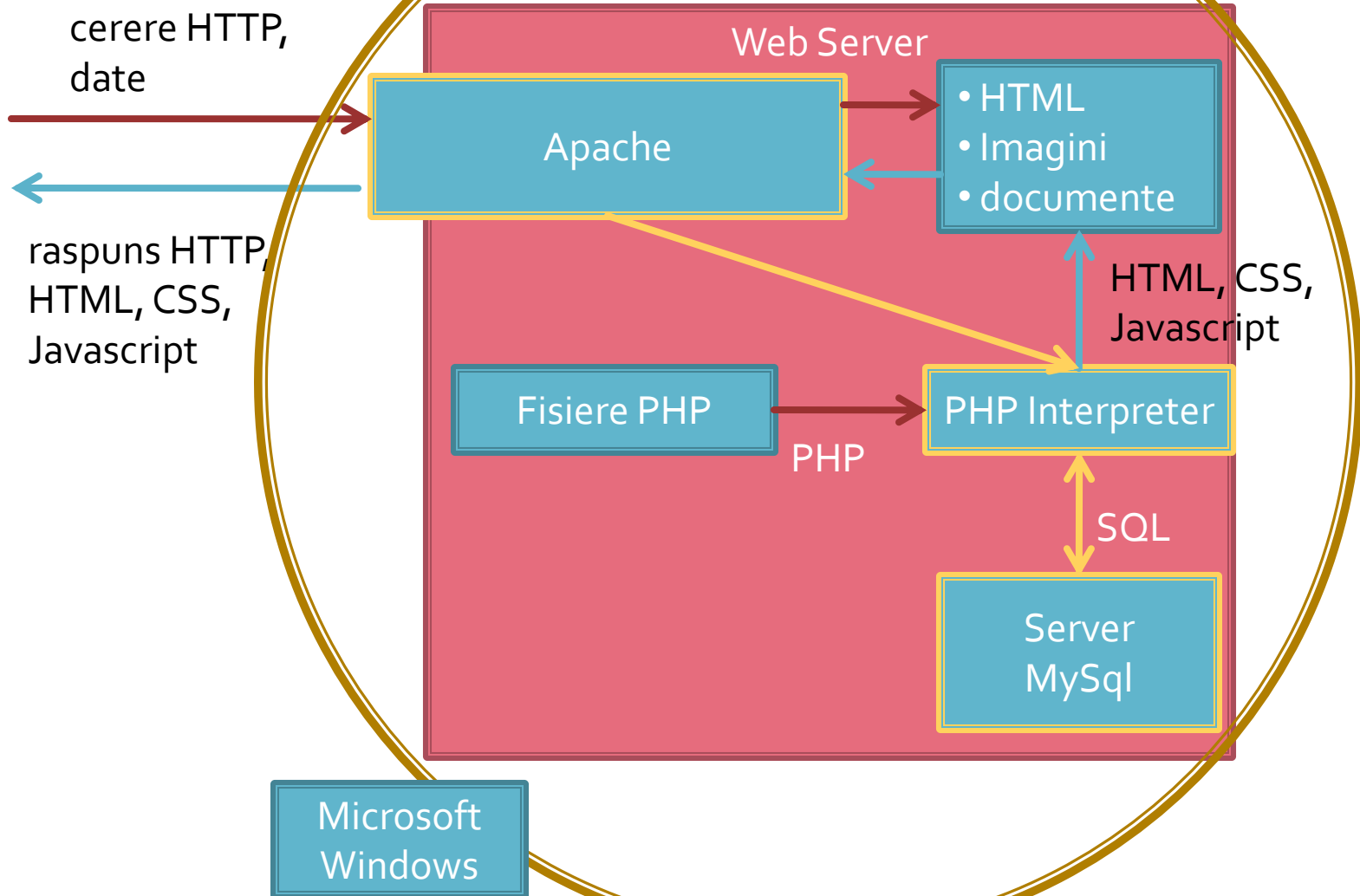
### Resources:

- [View This Design's CSS](#)
- [CSS Resources](#)
- [FAQ](#)
- [Submit a Design](#)
- [Translations](#)

# Laborator 1

- Lucrarea de față este orientată spre punerea la punct a unui sistem de dezvoltare de aplicații web, tehnologia avută în vedere este combinația:
  - Apache ca server web, interfață între aplicația realizată și restul lumii
  - MySQL, ca server de baze de date
  - PHP, Hypertext Preprocessor, ca limbaj de procesare la nivelul server-ului

# WAMP



# Contact

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