Curs 3

2025/2026

Programarea aplicațiilor web

PAW

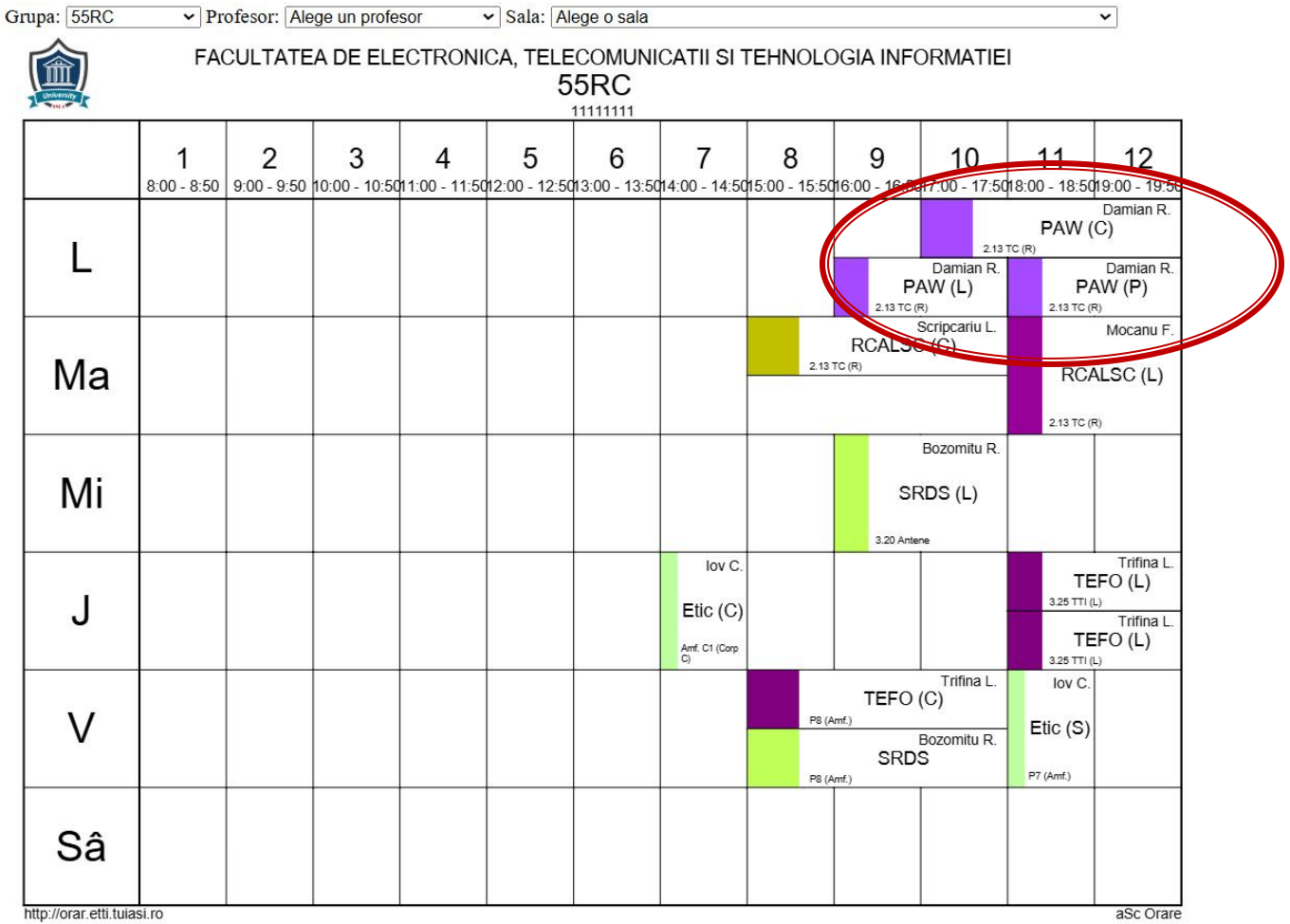
- Programarea aplicațiilor web
  - An V RC
    - 1.5C/1L/1P

Program

- An V
  - Saptamana 1
    - Luni 17-20 Curs (Intro/HTML/CSS)
  - Saptamanile **2-8**
    - Luni 16:30-18 Curs
    - Luni **18-20 Laborator**
  - Saptamanile **9-14**
    - Luni 16:30-18 Curs
    - Luni **18-20 Proiect**

Orar

- https://orar.etti.tuiasi.ro/ : C->16:30-18, L/P -> 18

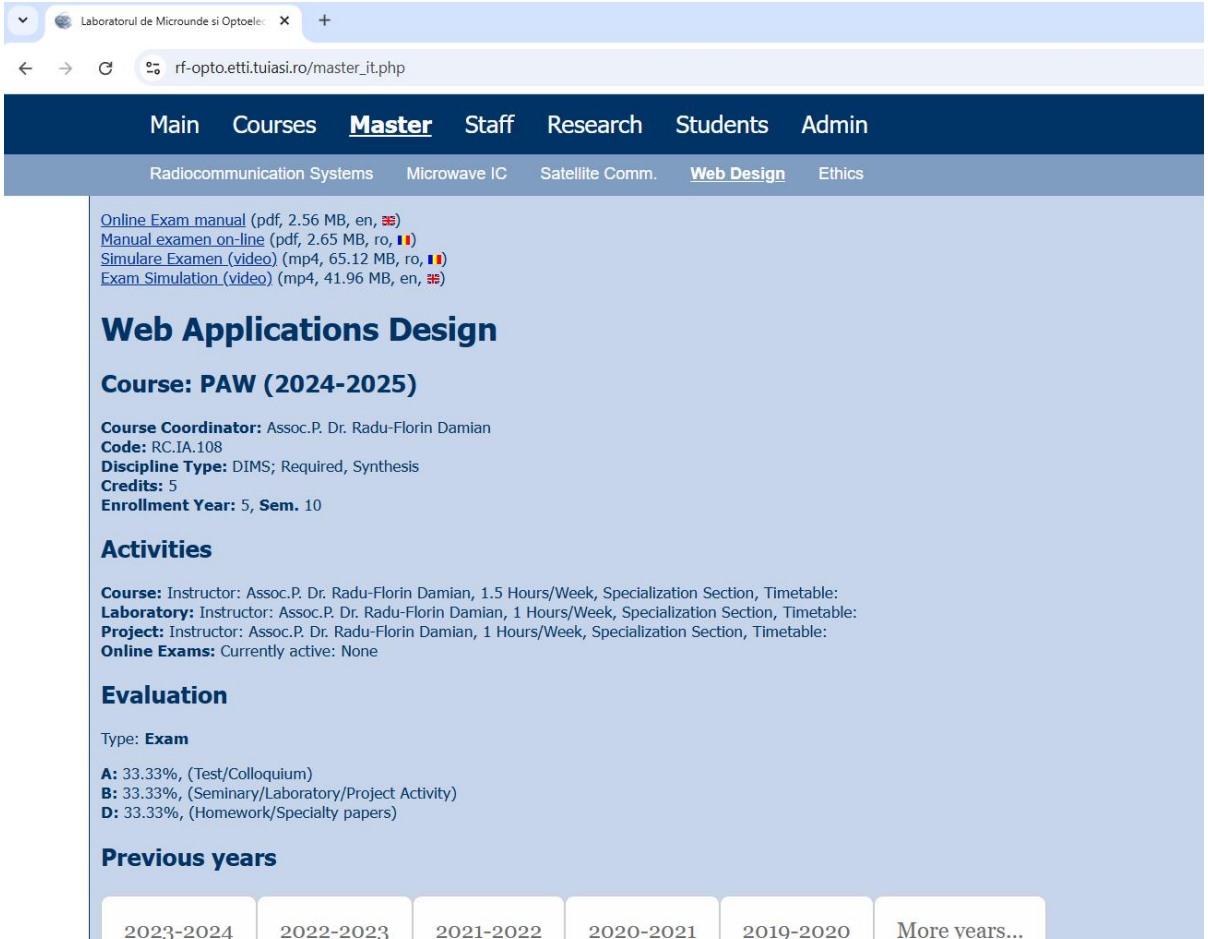


Nota

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

Documentatie

- https://rf-opto.etti.tuiasi.ro + www



Acces

- Personalizat (parola), Generic (email)

Date:

Grupa	5304 (2015/2016)
Specializarea	Tehnologii si sisteme de telecomunicatii
Marca	5184

Acceseaza ca acest student

Note obtinute

Disciplina	Tip	Data	Descriere	Nota	Puncte	Obs.
TW	Tehnologii Web					
	N	17/01/2014	Nota finala	10	-	
	A	17/01/2014	Colocviu Tehnologii Web 2013/2014	10	7.55	
	B	17/01/2014	Laborator Tehnologii Web 2013/2014	9	-	
	D	17/01/2014	Tema Tehnologii Web 2013/2014	9	-	

Login

Use the Registration no. and your

Registration no.

Email/Password

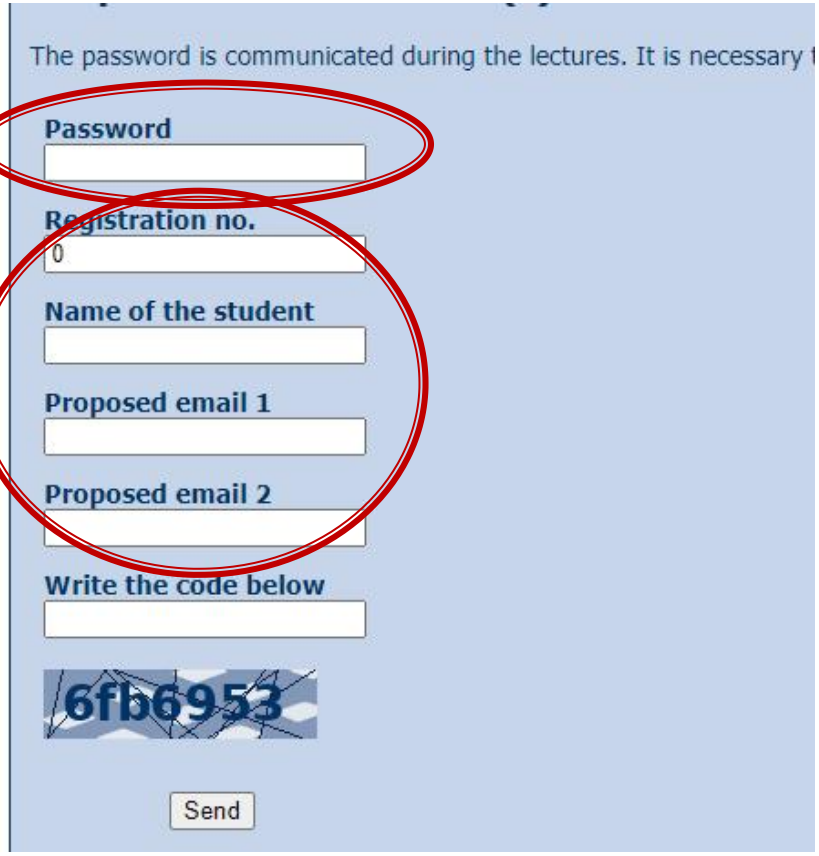
Write the code below

5dd64f9

Send

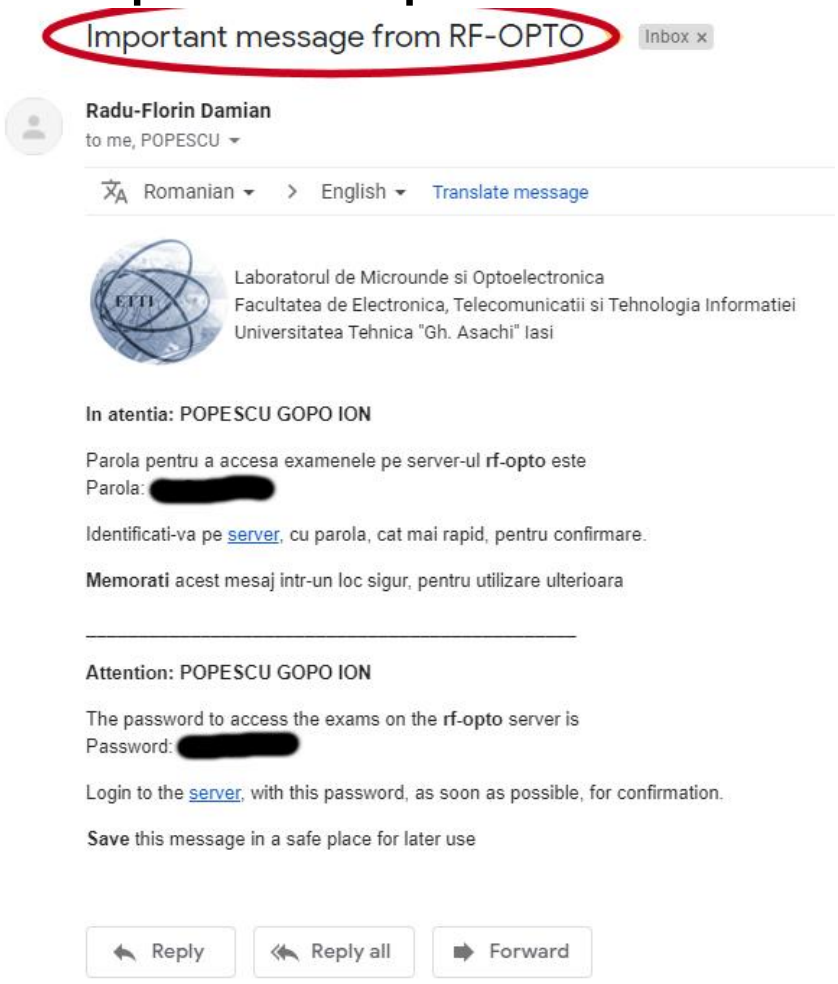
Online – Numar matricol (marca)

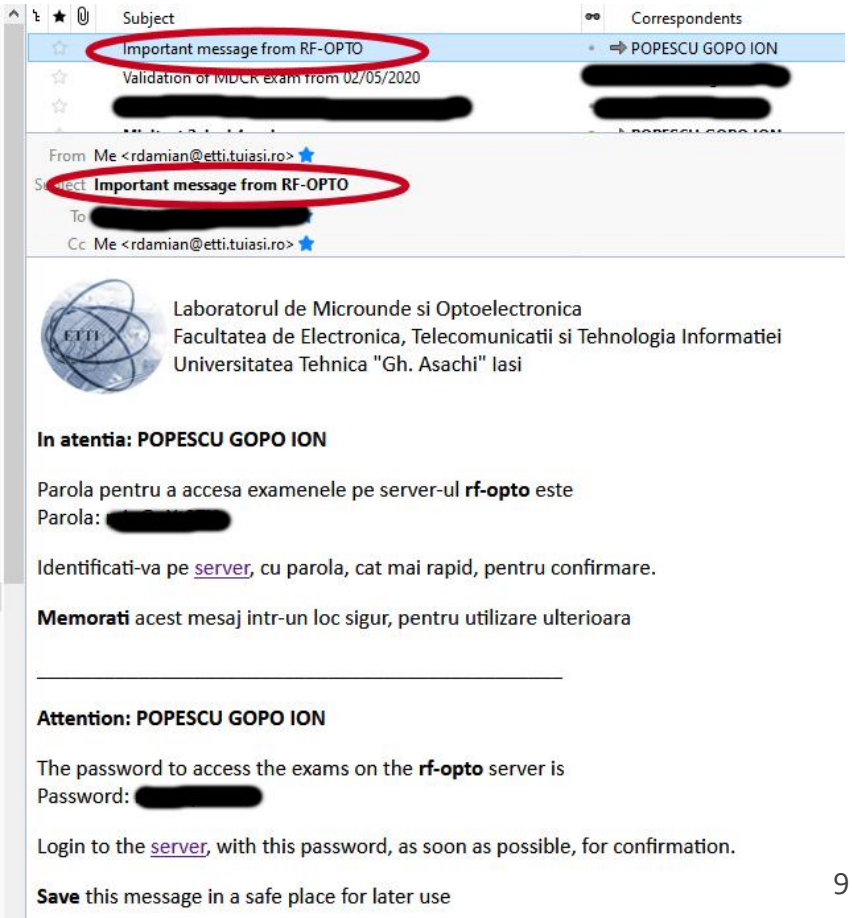
- accesul la **examene** necesita **parola** primita prin email



Parola

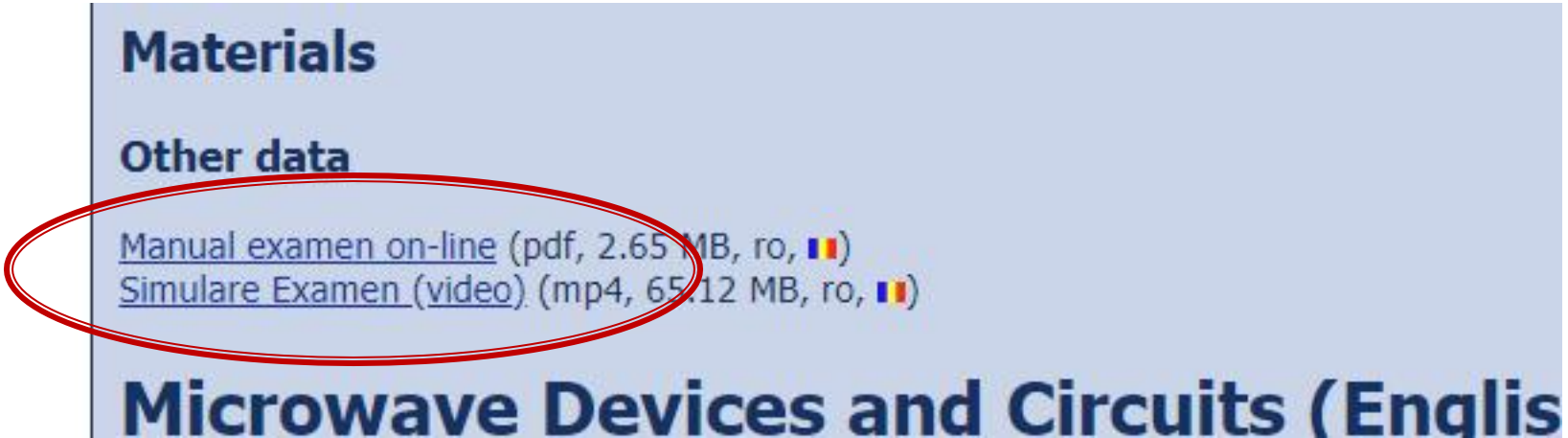
- primita prin **email**





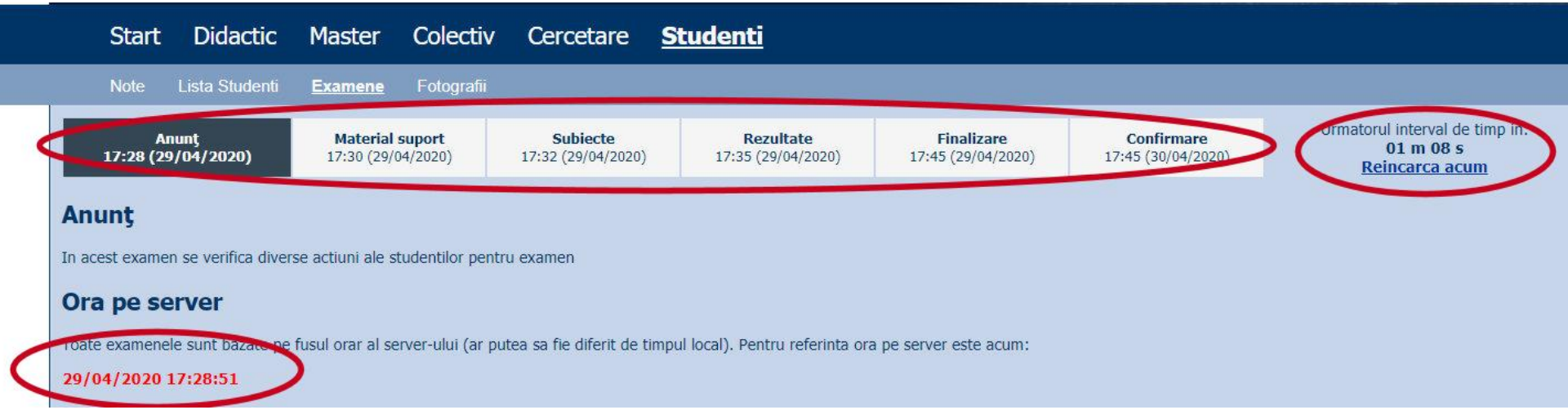
Manual examen online

- Aplicatia de examen online utilizata la:
  - ~~curs (prezenta)~~
  - laborator -> Activitate suplimentara
  - proiect -> Alocare/predare proiect
  - ~~examen~~



Examen online

- intotdeauna **contratimp**
  - perioada lunga (proiect, activitate suplimentara)
  - ~~perioada scurta (teste: 15min, examen: 2h)~~



Nota

- An V
  - 33% E
  - 33% L
  - 33% P
- Laborator - Prezenta
  - 1pz = 1p (p>5 ←→ Curs)
- Examen
  - Prezenta la curs: 3pz = 0.5p
  - 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 asemanatoare) 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

BIBLIOGRAFIE

- **“Am mai facut odata ceva asemanator”**
- Internet
  - www.php.net
  - www.mysql.com
  - www.w3c.org
  - www.google.com
- rf-opto.etti.tuiasi.ro
  - cereti acces! (prin adresa de email/nepersonalizat)

Curs

- Curs strict orientat spre laborator/proiect
  - se preda ceea ce se foloseste in aceeasi zi la laborator/proiect
  - curs **exact** inainte de laborator/proiect
- Orientat spre practica
  - 90% practica
  - 10% teorie
- Memorarea lui inutila la examen
- Prezenta
  - 3pz = 0.5p Examen (maxim 2p)

Proiect

- Teme in **echipa**: 2/3 membri
- Evaluare **individuala**
- Variabile ca dificultate (cu note diferite)

PROIECT (preconizat – S9 final)

- Tema de nota 8
  - Tema unica pentru fiecare student
  - Baza de date cu care se lucreaza contine minim 20 de inregistrari in tabelul cel mai "voluminos"

- Tema de nota 9
  - Conditiile de la tema de nota 8 **si in plus**
  - Necesitatea conlucrarii intre 2 studenti cu doua teme "pereche"
  - Se accepta ca un student sa realizeze ambele puncte
  - Numar **minim** de pagini dinamice (php+mysql) in aplicatie 4 = 2 X 2
  - Baza de date cu care se lucreaza contine minim 50 de inregistrari in tabelul cel mai "voluminos"

PROIECT (preconizat – S9 final)

- Tema de nota **10**
  - Conditiile de la tema de nota 9 **si in plus**
  - Necesitatea conlucrarii intre 2 **studenti** cu teme "pereche"
  - Tema se preda/trimite cu macar **1 zi** inaintea **sustinerii** ei
  - Numar **minim** de pagini dinamice (php+mysql) in aplicatie **6 = 3 X 2**
  - Baza de date cu care se lucreaza sa contina minim **100** de inregistrari in tabelul cel mai "voluminos".

PROIECT (preconizat – S9 final)

- Tema de nota **10+**
  - Conditiile de la tema de nota 10 **si in plus**
  - Numar **minim** de pagini dinamice (php+mysql) in aplicatie **8 = 4 X 2**
  - Baza de date cu care se lucreaza contine minim **300** de inregistrari in tabelul cel mai "voluminos"
  - Necesitatea investigarii posibilitatilor de **imbunatatire** a aplicatiei si adaugarii de functionalitate **(obligatoriu)**
  - nota individuala la proiect va depinde intr-o mica masura (in limita a 1p) de nota minima a colegilor din echipa
  - **+1p la nota de examen**

PROIECT (preconizat – S9 final)

- In caz de necesitate, pentru completarea echipei **cadrul didactic** poate fi membru al echipelor (9/10/10+). Conditii:
  - metoda de comunicare in echipa sa fie prin email sau direct
  - latenta de raspuns: ~ 1 zi
  - reactiv
  - nota implicita 10 (☺)
  - nu lucreaza noaptea, si in special nu in noaptea dinaintea predarii (☺)
- dezavantaj asumat: "spion" in echipa

PROIECT (preconizat – S9 final)

- Tema bonus (>5, in general **offline**)
  - Conditiile de la tema de nota 10+ **si in plus:**
  - **3 studenti/CD**
  - Baza de date cu care se lucreaza contine minim **500** de inregistrari in tabelul cel mai "voluminos"
  - Numar **minim** de pagini dinamice (php+mysql) in aplicatie **15 = 5 X 3**
  - Tema care face apel la controlul **sesiunii** client/server
  - Necesitatea utilizarii **Javascript** in **aplicatie** (aplicatie libera dar cu efect tehnic nu estetic)
  - Forma paginii controlata dual prin CSS, desktop/phone
  - Facilitati in ceea ce priveste nota (**DACA** toate celelalte conditii sunt indeplinite), la alegere:
    - prezenta la laborator: N –> P = **66%**, L = **0%**, E = 33%
    - **+2p la nota de examen**

PROIECT (preconizat – S9 final)

- proiectul se **sustine individual** (oral si practic)
- fiecare membru al unei echipe (la temele de nota 9 si 10) trebuie sa sustina in aceeasi zi proiectul
- nota individuala la proiect va depinde intr-o mica masura (in limita a 1p) de nota medie a colegilor din echipa (numai la temele de 10+)
  - N-min(E)=1 -> **-0 p**
  - N-min(E)=2 -> **-0.5 p**
  - N-min(E)=3 -> **-1 p**

Notare proiect 2020/2021

- 1p – functionalitate √
- 1p –aplicatia ruleaza pe server-ul CentOS/Ubuntu√
- numar de pagini dinamice √
- numar de inregistrari in baza de date √
- 1p – planul aplicatiei √
- 2p – prezentare in Teams a proiectului √

Notare 2026 (preconizat – S9 final)

- 1p – **functionalitate**
- 1p – mutarea **personala** a site-ului (restaurare backup + setare server) pe un server de referinta CentOS/Ubuntu**/Debian**
- 1p – cunoasterea **cod**ului
  - raspunsul la intrebari de genul: "unde ai facut aceasta", "ce face acest cod"
- 1p – **planul aplicatiei**
- Teme "de nota 10,10+"
  - Initiativa. Investigarea posibilitatilor de imbunatatire
  - Explicatii relativ la functionarea unei anumite secvente de cod
  - Utilizare sesiune, Javascript, **CSS media**

Notare 2026 (preconizat – S9 final)

- numar de pagini dinamice √
- numar de inregistrari in baza de date √
  - se verifica indeplinirea conditiilor corespunzatoare si se realizeaza **de-clasificarea** temei pana cand **ambele** conditii sunt indeplinite

Tema de nota …	Pagini	Inregistrari
bonus	15 = 5 X 3	500
10+	8 = 4 X 2	300
10	6 = 3 X 2	100
9	4 = 2 X 2	50
8	1 = 1 X 1	20

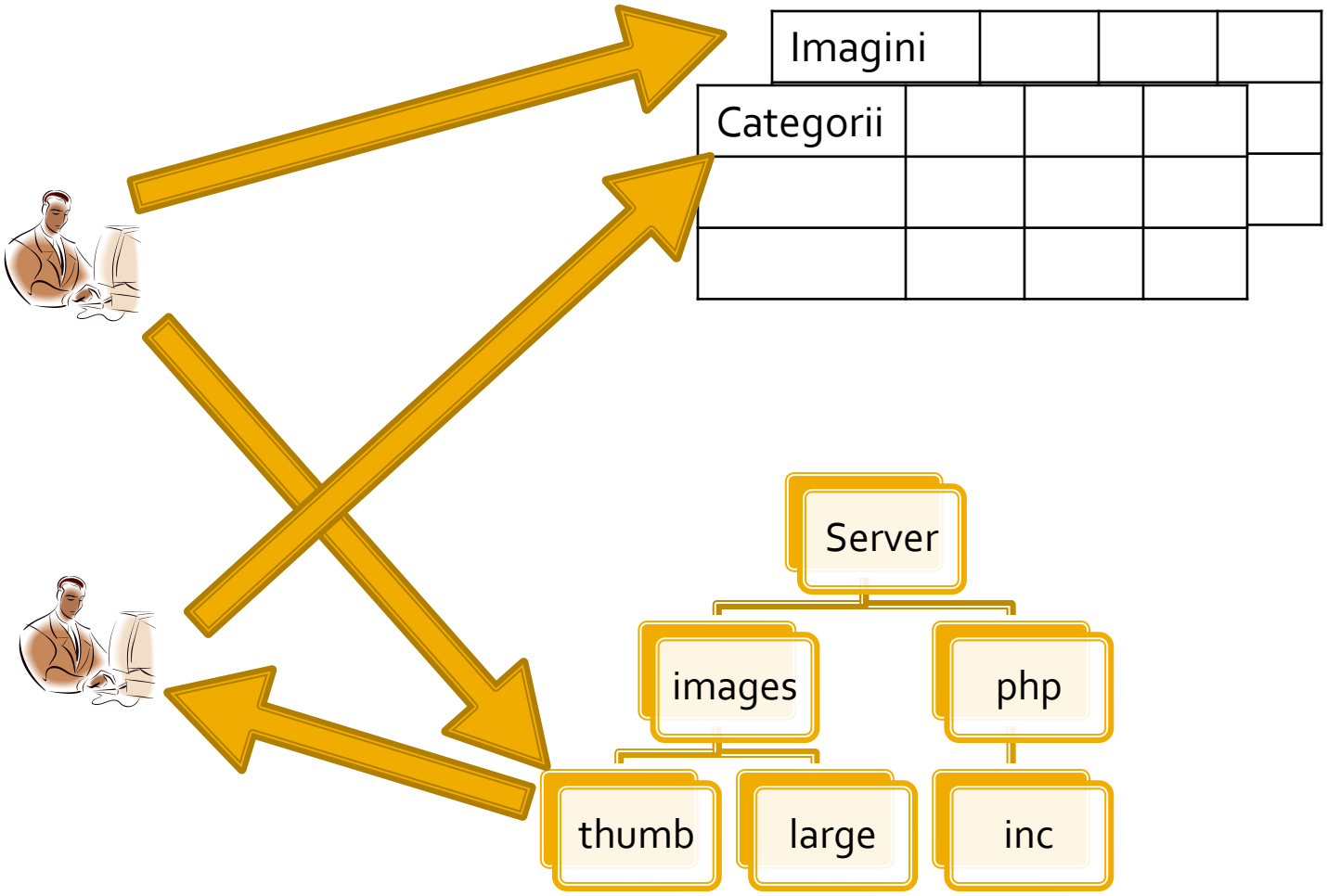
Exemplu

- 1. Galerie de imagini in care imaginile sunt ordonate dupa categorii.

a. aplicatia pentru adaugarea de categorii si afisare a imaginilor (cu alegerea prealabila a categoriei si afisarea listei de imagini format mic)

b. aplicatia pentru adaugare de imaginilor (cu alegerea prealabila a categoriei si generarea prealabila a imaginii format mic)

Exemplu



Documentatie

- RF-OPTO
  - **https://rf-opto.etti.tuiasi.ro**
- Fotografie
  - ~~de trimis prin email~~: **examen online**
  - necesara la laborator/curs
  - +1p ex. (S3), +0.5p ex (S5)
- Adresa de email
  - necesara pentru accesul la zonele sensibile de pe server
  - **obligatorie** pentru activitatea **online**
- Exemplu de teme si specificatii detaliate pentru proiect

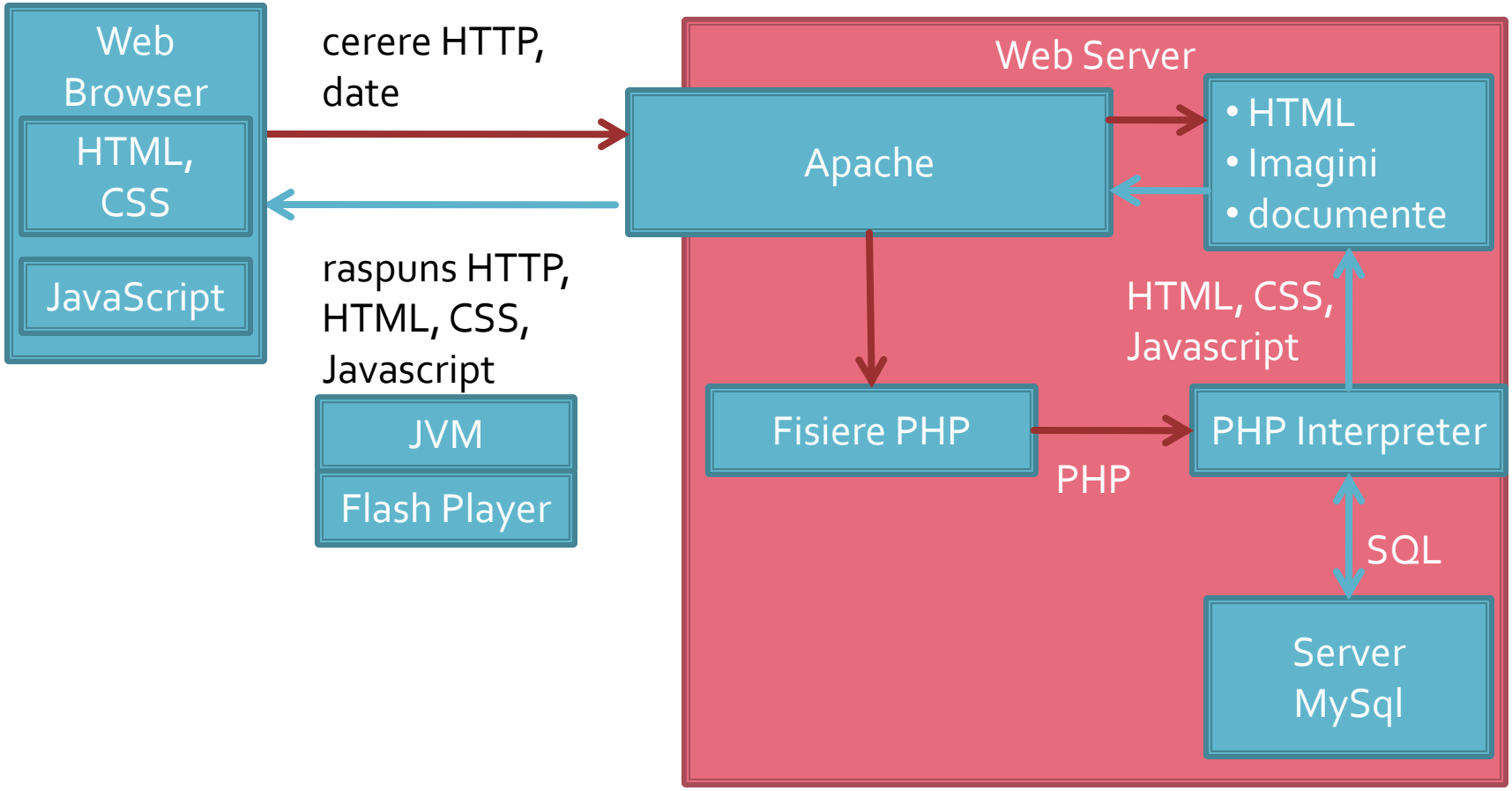
CURS

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

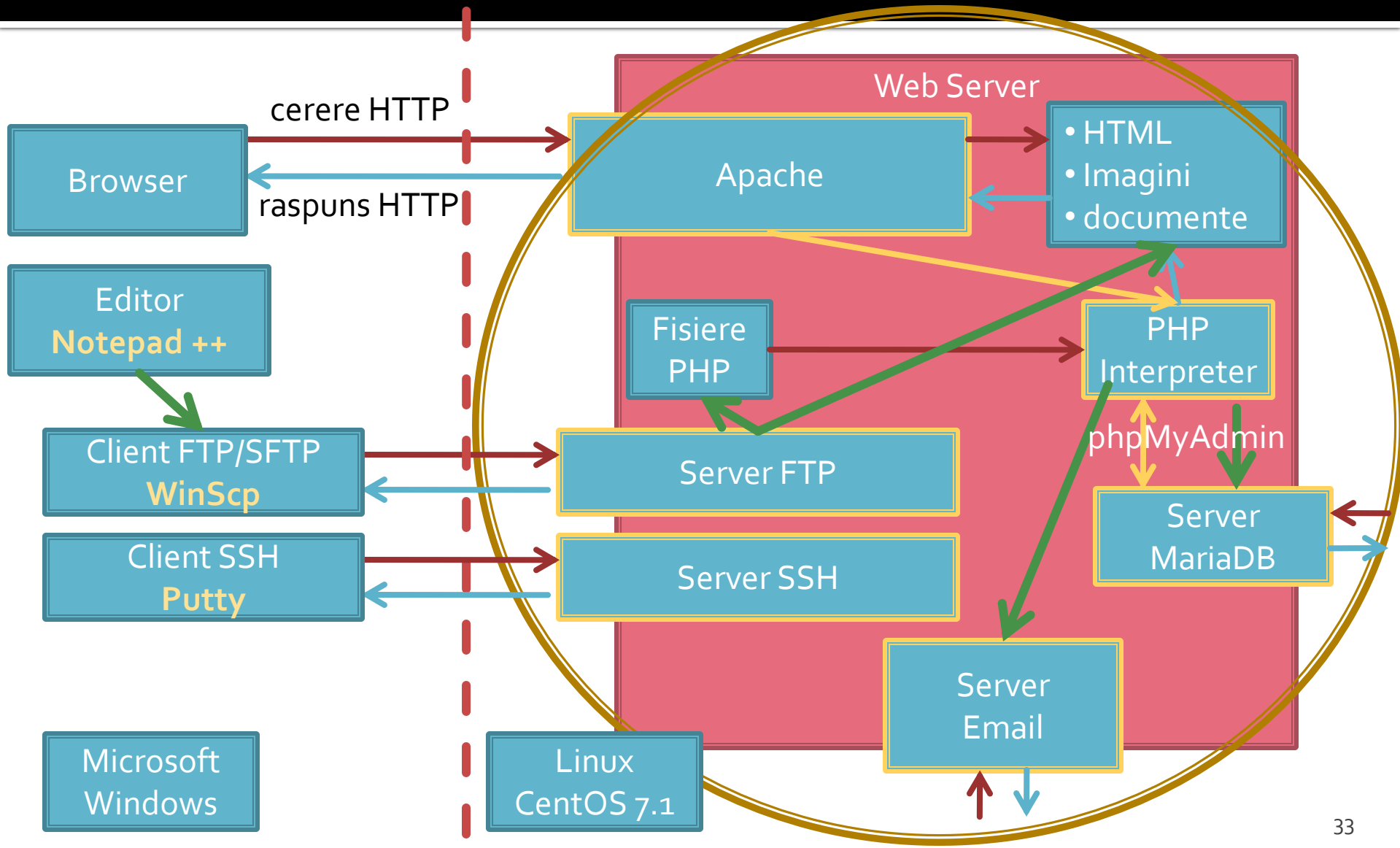
LABORATOR

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

Structura tipica W(L)AMP

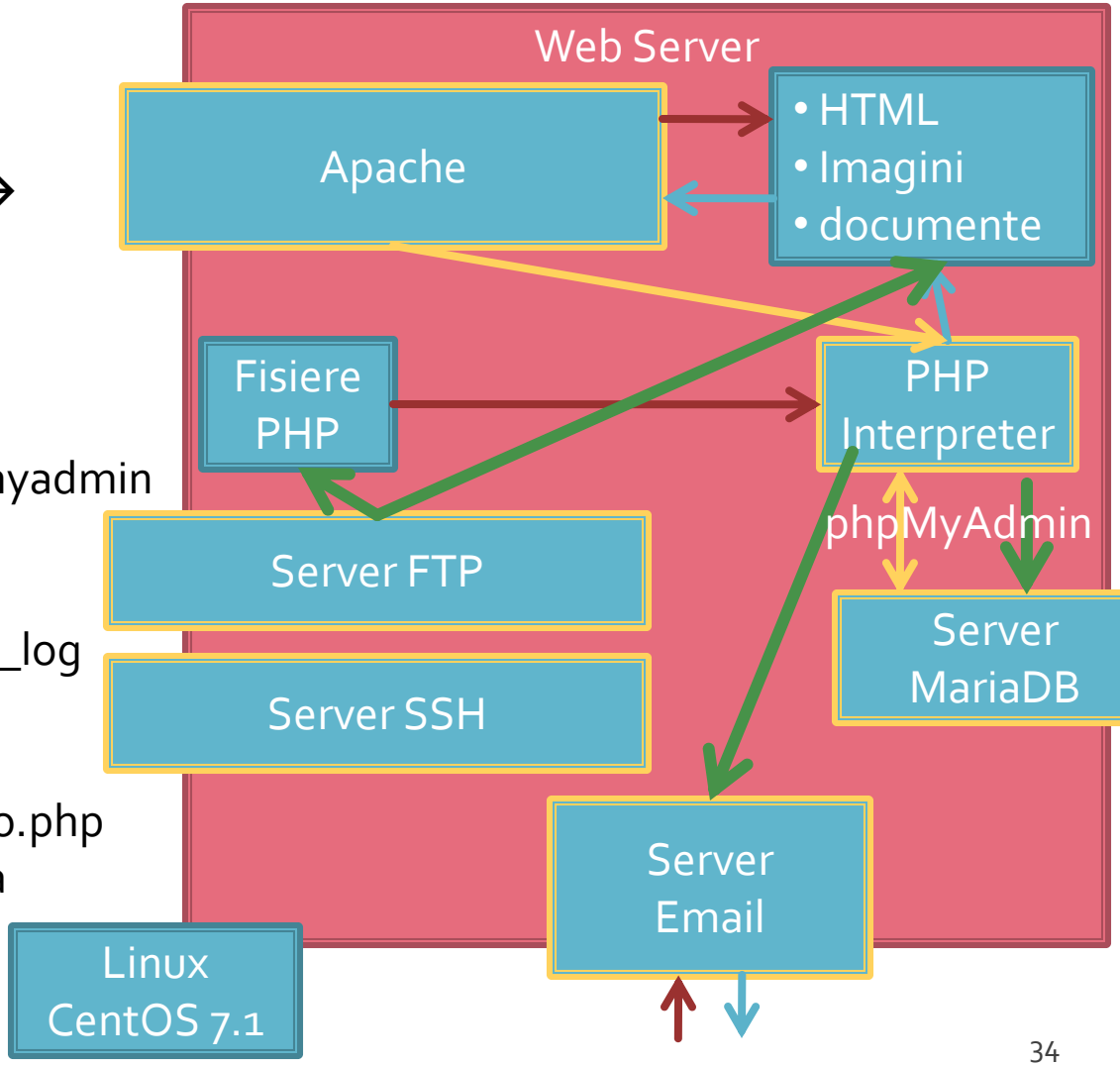


LAMP


Web Server
cerere HTTP
raspuns HTTP
Browser
Apache
• HTML
• Imagini
• documente
Editor
Notepad ++
Fisiere PHP
PHP Interpreter
phpMyAdmin
Client FTP/SFTP
WinScp
Server FTP
Server MariaDB
Client SSH
Putty
Server SSH
Server Email
Microsoft Windows
Linux CentOS 7.1

Utilizare LAMP

1. login → root:masterrc
2. ifconfig → 192.168.30.5
3. putty.exe → 192.168.30.5 → SSH → root:masterrc (remote login)
4. [alte comenzi linux dorite]
5. FTP → Winscp → SFTP → student:masterrc@192.168.30.5
6. MySql → http://192.168.30.5/phpmyadmin → root:masterrc
7. Apache Error Log →
7a. putty → nano /var/log/httpd/error_log
7b. http://192.168.30.5/logfile.php (nonstandard)
8. PHP info → http://192.168.30.5/info.php
9. daca serviciul DHCP duce la oprirea Apache: service httpd restart



HTML (+ CSS)

E:\Documents\Pagini Web\Safir dep\lista_lot.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Win

logfile.php | lista_lot.php

```
539 <?php }?>
540
541 <div id="maincontent"><!-- InstanceBeginEditable name="Conti
542 <p><span class="title">Adauga</span><br/>
543   <a href="control_lot.php?id=0">Lot nou</a></p>
544 <p class="title">Loturi active</p>
545 <?php
546 $query = "SELECT l.*, c.`nume_user` AS `user_creat`
547         FROM `lot` AS l
548         LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
549         WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
550 $result = mysql_query($query);
551 $total=0;
552 if ($result && (mysql_num_rows($result) > 0))
553     {
554     $total=mysql_num_rows($result);
555     $row = mysql_fetch_assoc($result);
556     }
557 if ($total>0)
558 {?>
559 <table align="center">
560   <tr class="lista_titlu">
561     <td align="center">Nr.</td>
562       <td>Numar</td>
563       <td>Data</td>
564       <td>Nr. pui</td>
565       <td>Gr. pui</td>
566       <td>Nr. pui morti</td>
567       <td>Gr. pui morti</td>
568       <td>Ferma</td>
569       <td>Documente</td>
570       <td>Creat</td>
571       <td>Comenzi</td>
572     </tr>
573   <?php $index=1;
574   do { ?>
575   <tr class="<?php if ($index%2) echo "lista_in
576     <td align="center"><?php echo $index; ?> </td>
577       <td><?php echo $row['Numar'];?> </td>
578       <td><?php echo date("d/m/Y", strtotime($row['Data'])
579       <td><?php echo  $row['Pui'];?> </td>
580       <td><?php echo  $row['Greutate'];?> </td>
581       <td><?php echo  $row['Pui_Morti'];?> </td>
582       <td><?php echo  $row['Greutate_Morti'];?> </td>
583       <td><?php echo  $row['Ferma'];?> </td>
584       <td><?php echo  $row['Documente'];?> </td>
```

```
<table align="center">
  <tr class="lista_titlu">
    <td align="center">Nr.</td>
      <td>Numar</td>
      <td>Data</td>
      <td>Nr. pui</td>
      <td>Gr. pui</td>
```

HTML + PHP

E:\Documents\Pagini Web\Safir dep\lista_lot.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

logfile.php | lista_lot.php

```
539  <?php }?>
540
541  <div id="maincontent"><!-- InstanceBeginEditable name="Continut" -->
542  <p><span class="title">Adauga</span><br/>
543    <a href="control_lot.php?id=0">Lot nou</a></p>
544  <p class="title">Loturi active</p>
545  <?php
546  $query = "SELECT l.*, c.`nume_user` AS `user_creat`
547          FROM `lot` AS l
548          LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
549          WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
550  $result = mysql_query($query);
551  $total=0;
552  if ($result && (mysql_num_rows($result) > 0))
553      {
554      $total=mysql_num_rows($result);
555      $row = mysql_fetch_assoc($result);
556      }
557  if ($total>0)
558  {?>
559  <table align="center">
560    <tr class="lista_titlu">
561      <td align="center">Nr.</td>
562        <td>Numar</td>
563        <td>Data</td>
564        <td>Nr. pui</td>
565        <td>Gr. pui</td>
566        <td>Nr. pui morti</td>
567        <td>Gr. pui morti</td>
568        <td>Ferma</td>
569        <td>Documente</td>
570        <td>Creat</td>
571        <td>Comenzi</td>
572      </tr>
573    <?php $index=1;
574    do { ?>
575    <tr class="<?php if ($index%2) echo "lista_impar"; else echo "lista_par";
576      <td align="center"><?php echo $index; ?> </td>
577          <td><?php echo $row['Numar'];?> </td>
578          <td><?php echo date("d/m/Y", strtotime($row['Data']));?> </td>
579          <td><?php echo  $row['Pui'];?> </td>
580          <td><?php echo  $row['Greutate'];?> </td>
581          <td><?php echo  $row['Pui_Morti'];?> </td>
582          <td><?php echo  $row['Greutate_Morti'];?> </td>
583          <td><?php echo  $row['Ferma'];?> </td>
584          <td><?php echo  $row['Documente'];?> </td>
```

```
<tr class="<?php if ($index%2) echo "lista_impar"; else echo "lista_p
  <td align="center"><?php echo $index; ?> </td>
      <td><?php echo $row['Numar'];?> </td>
      <td><?php echo date("d/m/Y", strtotime($row['Data']));?> <
      <td><?php echo  $row['Pui'];?> </td>
      <td><?php echo  $row['Greutate'];?> </td>
```

HTML + PHP + SQL

E:\Documents\Pagini Web\Safir dep\lista_lot.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

logfile.php | lista_lot.php

```
539 <?php }?>
540
541 <div id="maincontent"><!-- InstanceBeginEditable name="Continut" -->
542 <p><span class="title">Adauga</span><br/>
543   <a href="control_lot.php?id=0">Lot nou</a></p>
544 <p class="title">Loturi active</p>
545 <?php
546 $query = "SELECT l.*, c.`nume_user` AS `user_creat`
547         FROM `lot` AS l
548         LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
549         WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
550 $result = mysql_query($query);
551 $total=0;
552 if ($result && (mysql_num_rows($result) > 0))
553     {
554     $total=mysql_num_rows($result);
555     $row = mysql_fetch_assoc($result);
556     }
557 if ($total>0)
558 {?>
559 <table align="center">
560   <tr class="lista_titlu">
561     <td align="center">Nr.</td>
562       <td>Numar</td>
563       <td>Data</td>
564       <td>Nr. pui</td>
565       <td>Gr. pui</td>
566       <td>Nr. pui morti</td>
567       <td>Gr. pui morti</td>
568       <td>Ferma</td>
569       <td>Documente</td>
570       <td>Creat</td>
571       <td>Comenzi</td>
572     </tr>
573   <?php $index=1;
574   do { ?>
575   <tr class="<?php if ($index%2) echo "lista_impar"; else echo "lista_par";?>">
576     <td align="center"><?php echo $index; ?> </td>
577         <td><?php echo $row['Numar'];?> </td>
578         <td><?php echo date("d/m/Y", strtotime($row['Data']));?> </td>
579         <td><?php echo  $row['Pui'];?> </td>
580         <td><?php echo  $row['Greutate'];?> </td>
581         <td><?php echo  $row['Pui_Morti'];?> </td>
582         <td><?php echo  $row['Greutate_Morti'];?> </td>
583         <td><?php echo  $row['Ferma'];?> </td>
584         <td><?php echo  $row['Documente'];?> </td>
```

```php
<?php
$query = "SELECT l.*, c.`nume_user` AS `user_creat`
        FROM `lot` AS l
        LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
        WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
$result = mysql_query($query);
$total=0;
if ($result && (mysql_num_rows($result) > 0))
    {
    $total=mysql_num_rows($result);
    $row = mysql_fetch_assoc($result);
    }
```

Capitolul II

CSS

CSS vs. HTML

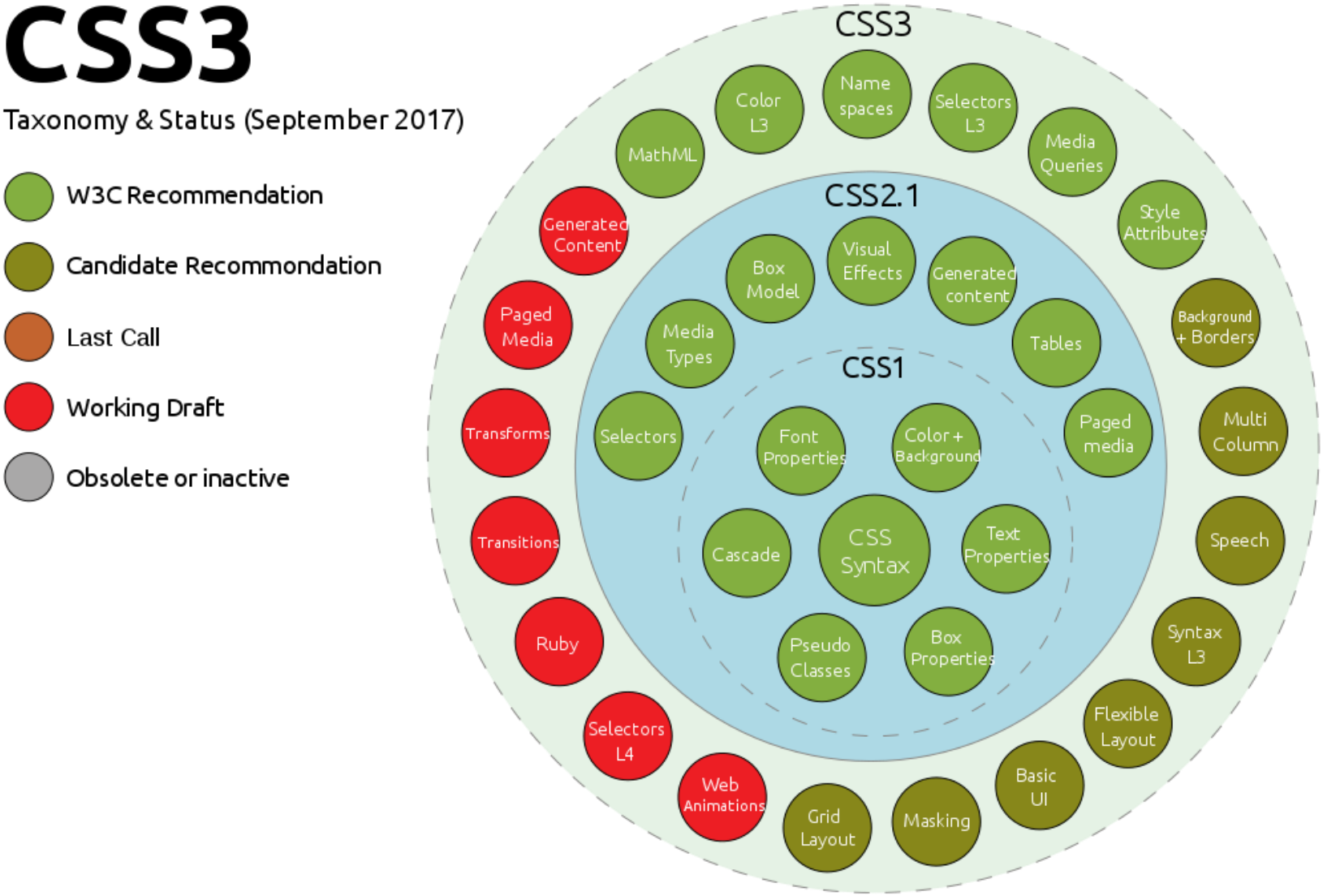
```
<!DOCTYPE html PUBLIC
<html>
<!-- created 2003-12-12 -->
 <head>
  <title>sample</title>
 </head>
 <body>
  <p>Voluptatem accusantium
   totam rem aperiam.</p>
 </body>
</html>
```

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

CSS3


CSS3
Taxonomy & Status (September 2017)
W3C Recommendation
Candidate Recommendation
Last Call
Working Draft
Obsolete or inactive
CSS3
CSS2.1
CSS1
Color L3
Name spaces
Selectors L3
Media Queries
MathML
Style Attributes
Generated Content
Box Model
Visual Effects
Generated content
Paged Media
Media Types
Tables
Background + Borders
Transforms
Selectors
Font Properties
Color + Background
Paged media
Multi Column
Transitions
Cascade
CSS Syntax
Text Properties
Speech
Ruby
Pseudo Classes
Box Properties
Syntax L3
Selectors L4
Flexible Layout
Web Animations
Basic UI
Grid Layout
Masking

www.w3schools.com

- CSS Browser Support Reference

CSS Reference With Browser Support

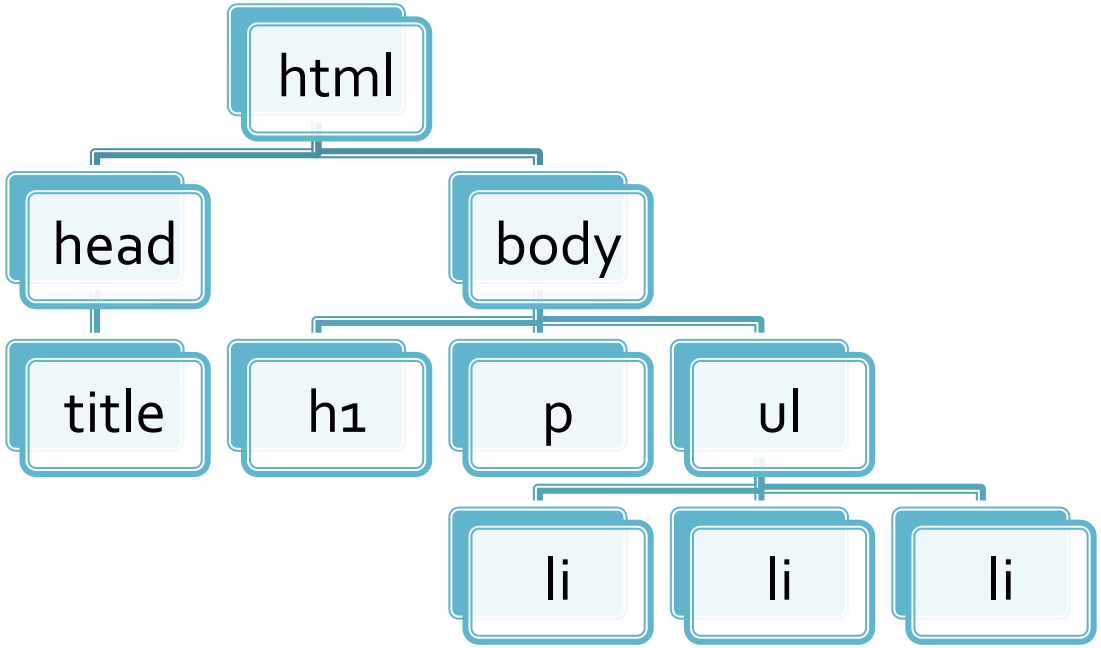
The table below lists all CSS properties and how each property is supported in the different browsers:

The number to the right of the browser icon indicates in which browser version the property was first supported.

Property	Edge	Firefox	Chrome	Safari	Opera
A					
accent-color	93	92	93	15.4	79
align-content	16	52	57	10.1	44
align-items	16	52	57	10.1	44
align-self	16	52	57	10.1	44
all	79	27	37	9.1	24
animation	10	16	43	9	30
animation-delay	10	16	43	9	30
animation-direction	10	16	43	9	30

Relatia parinte copil si mostenire

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



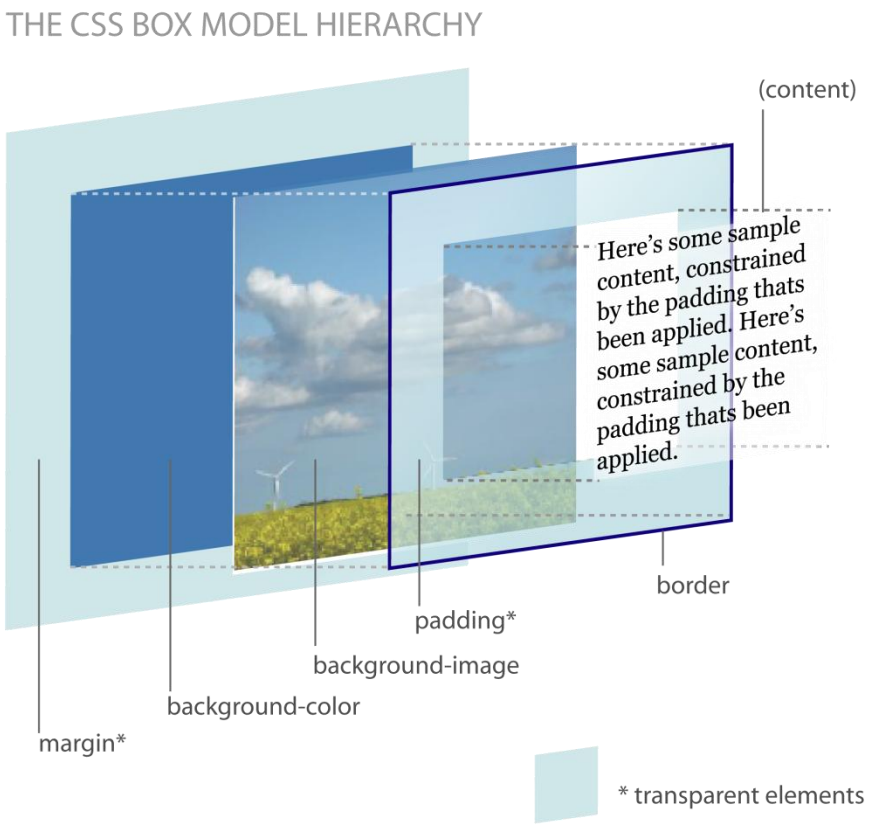

```
<html>
 <title>pagina mea</title>
 <body>
  <h1>Compozitori:</h1>
  <p>
  <ul>
   <li> elvis costello
   <li> johannes brahms
   <li> georges brassens
  </ul>
 </body>
</html>
```

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 cuvant 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

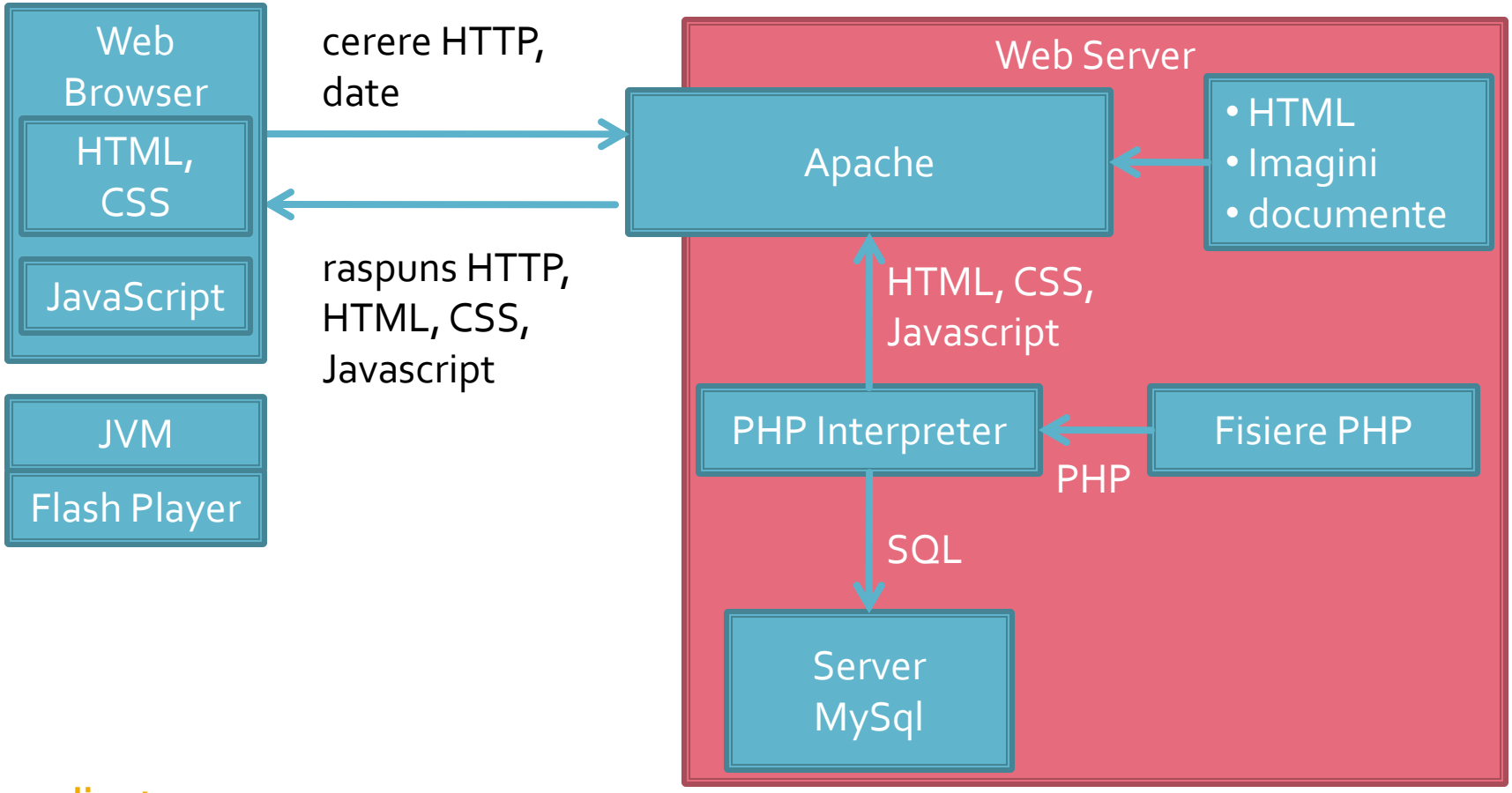
- Orientat in jurul conceptului de “cutie” – Box model



PHP

- Hypertext PreProcessor - acronim recursiv
  - initial – Personal Home Page / Form Interpreter
  - 1995 – 1.0
- versiune curenta: 8.5.3
  - 2026-02-12
- versiune curenta: 8.4.18
  - 2026-02-12
- limbaj de scripting de uz general,
- rulare pe server (server-side scripting)
- open source

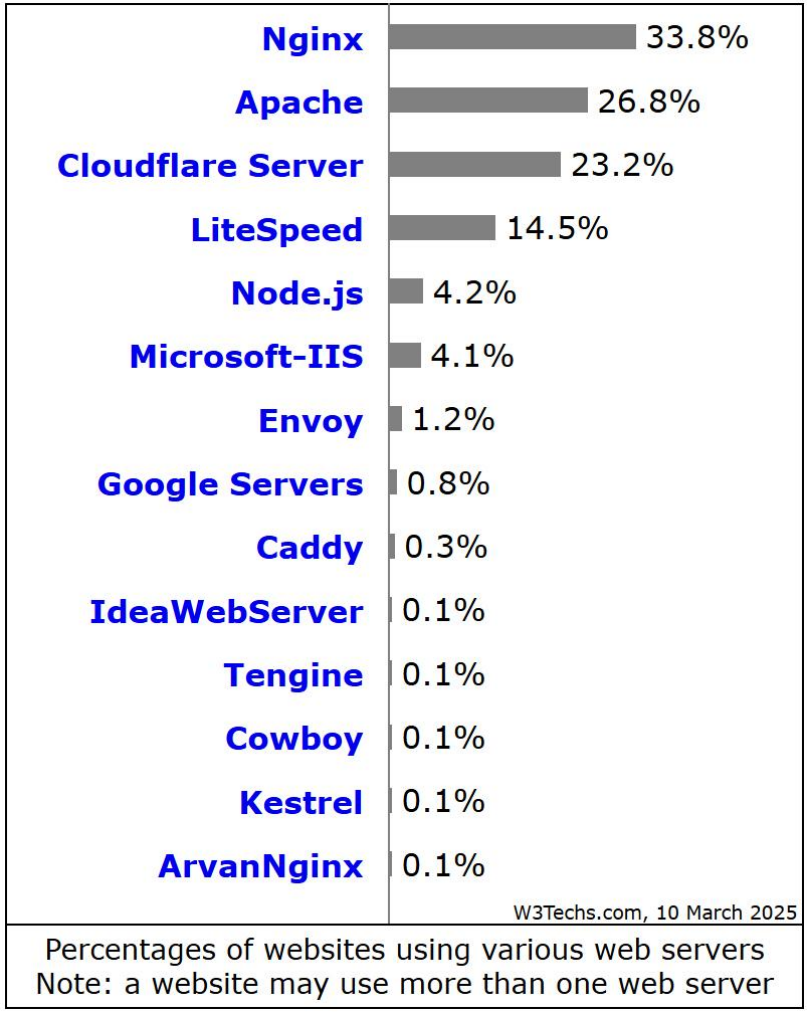
Client/Server Scripting



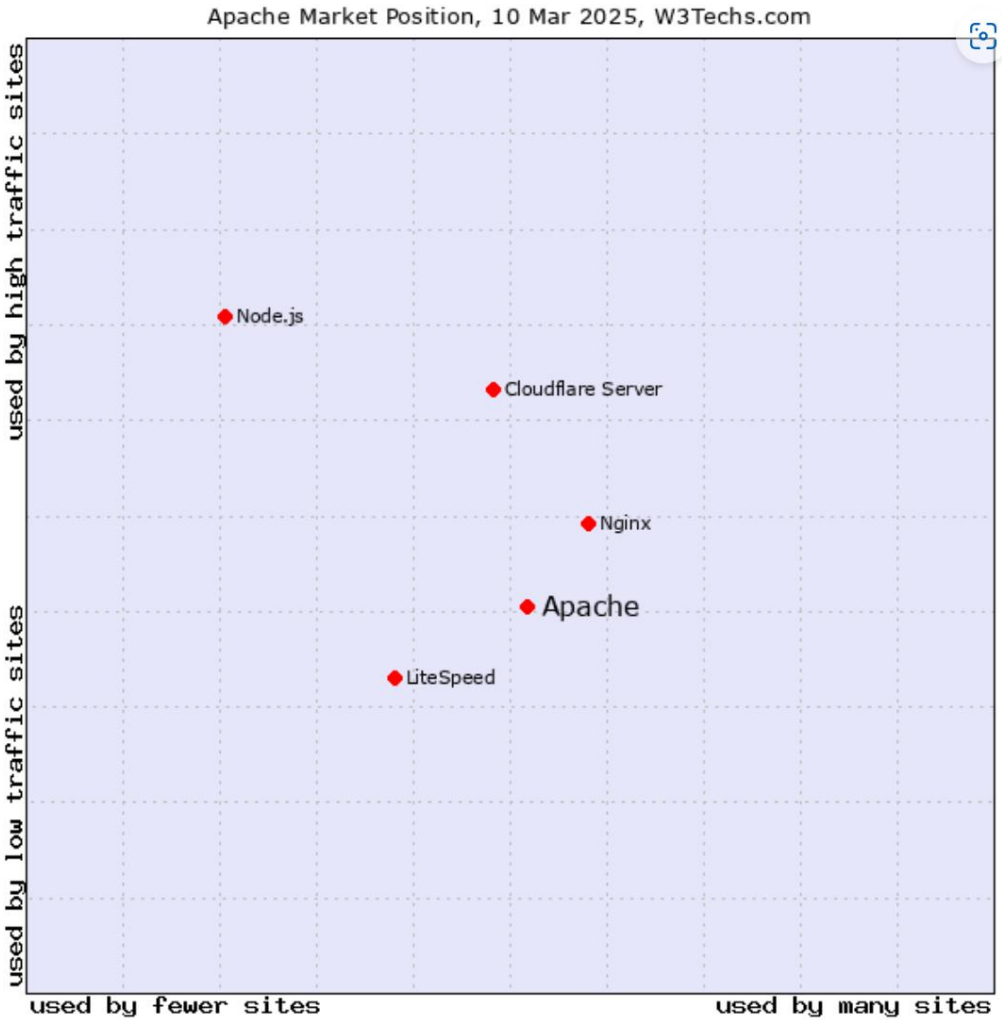
client side scripting

server side scripting

Tehnologia server-elor Web

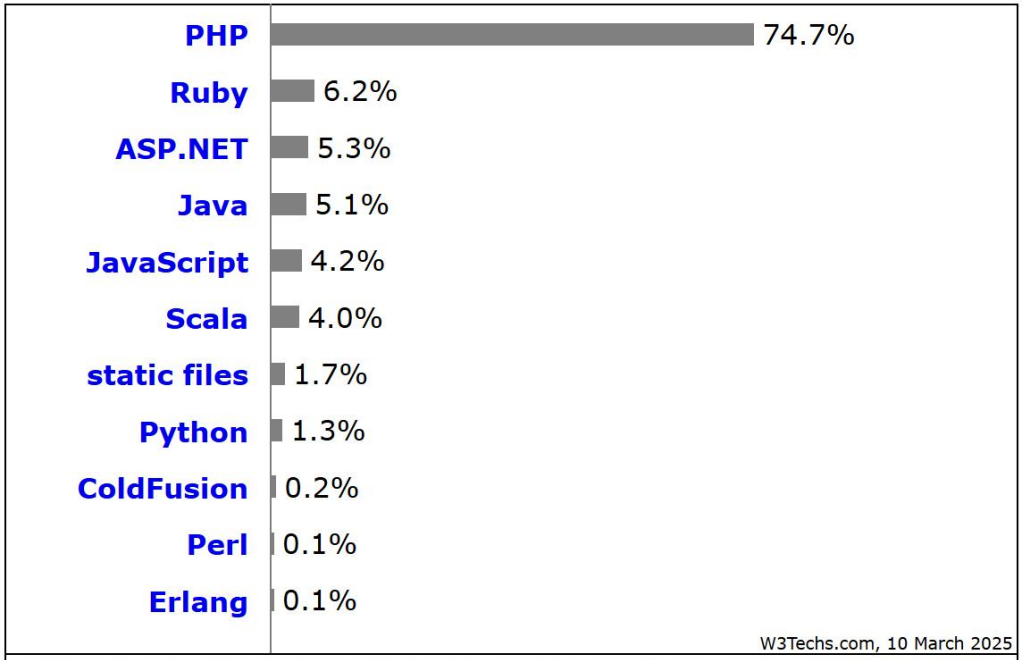


Percentages of websites using various web servers
Note: a website may use more than one web server



Tehnologia server-elor Web

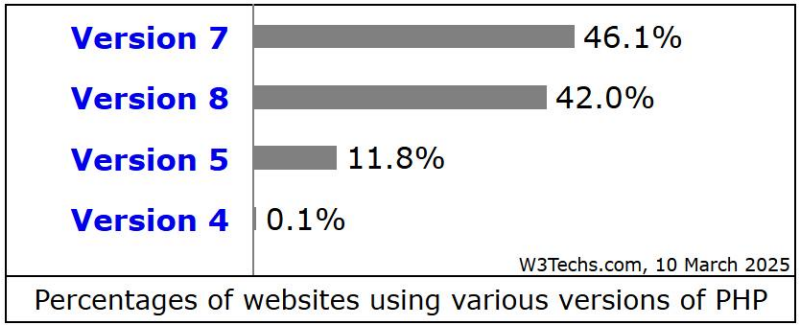
- PHP – 74.7%
- Ruby – 6.20%
- ASP.NET – 5.30%
- Java – 5.10%
- Scala – 4.0%
- JavaScript – 4.2%
- …
- Python – 1.3%



Percentages of websites using various server-side programming languages
Note: a website may use more than one server-side programming language

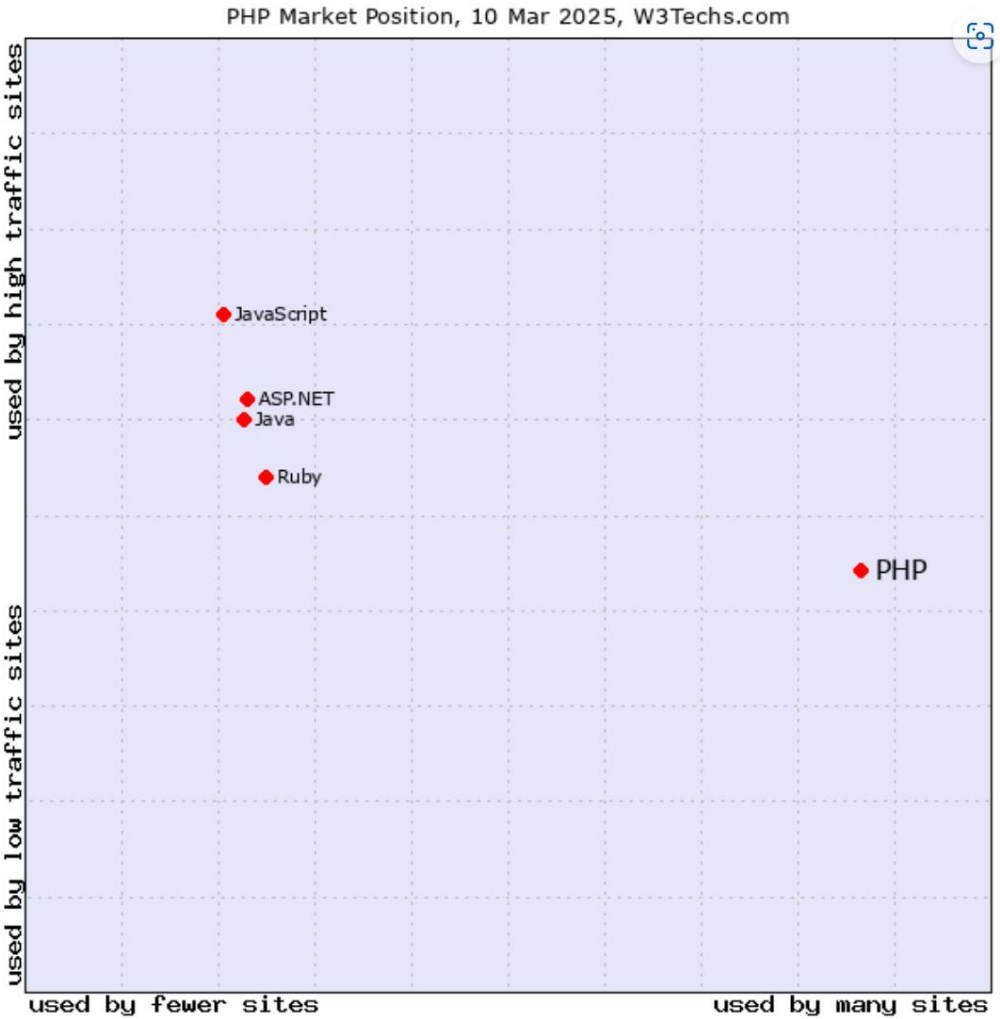
Tehnologia server-elor Web

- PHP version



Percentages of websites using various versions of PHP

- PHP 8.0
  - 26.11.2020



Server Side Scripting

	2010 1 Jan	2011 1 Jan	2012 1 Jan	2013 1 Jan	2014 1 Jan	2015 1 Jan
PHP	72.5%	75.3%	77.3%	78.7%	81.6%	80.6%
ASP.NET	24.4%	23.4%	21.7%	20.2%	18.2%	16.7%
Java	4.0%	3.8%	4.0%	4.1%	2.7%	2.8%
ColdFusion		1.3%	1.2%	1.1%	0.8%	0.7%
Perl		1.1%	1.0%	0.8%	0.6%	0.5%
Ruby	0.5%	0.5%	0.6%	0.5%	0.4%	0.9%
Python	0.3%	1.0%	1.3%	1.5%	1.7%	1.6%
JavaScript			<0.1%	<0.1%	0.1%	0.1%

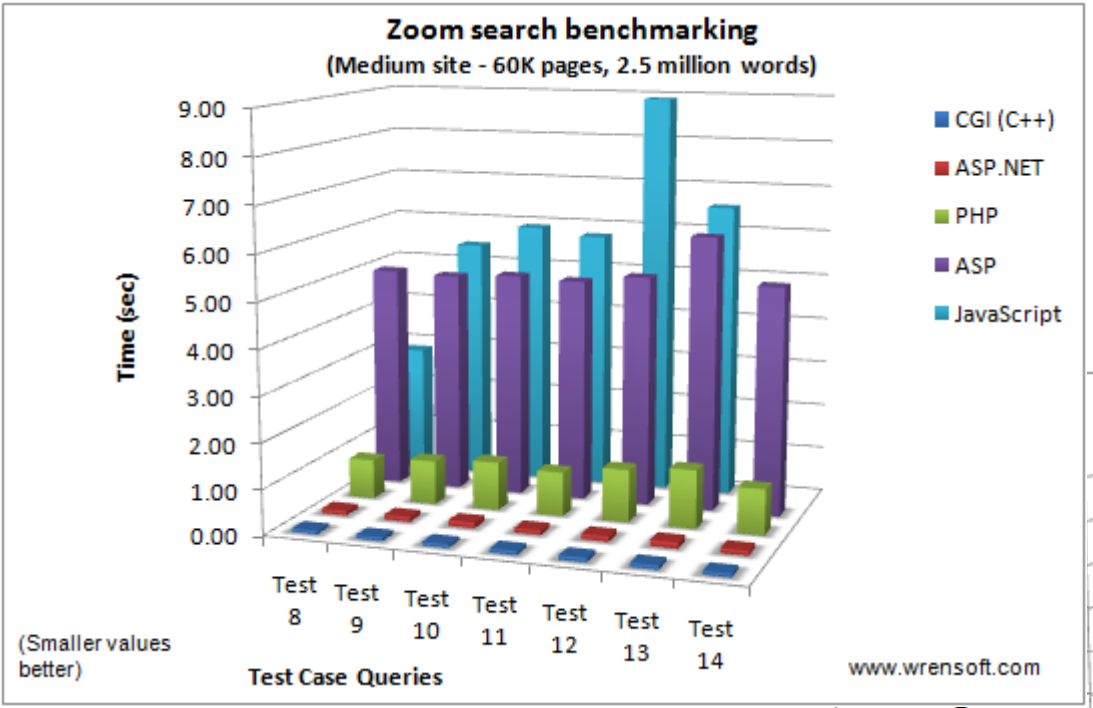
Sites

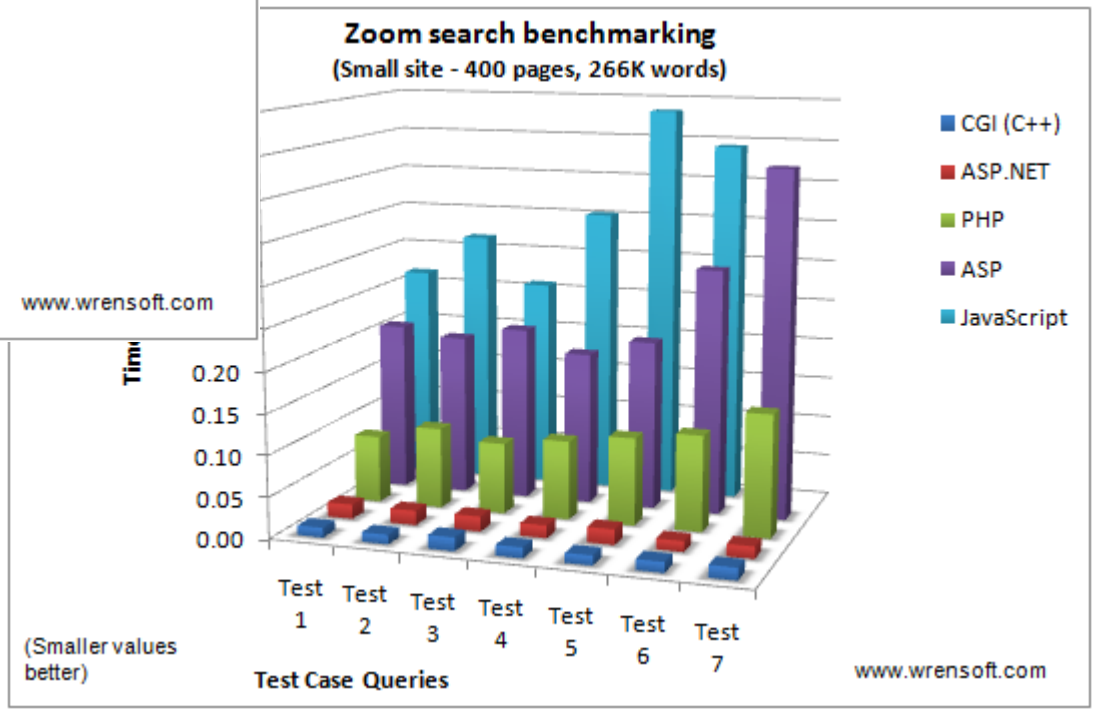
- Facebook.com
- Wikipedia.org
- Wordpress.org
- Pinterest.com
- Vimeo.com
- Wordpress.com
- Mozilla.org
- Europa.eu
- Tumblr.com
- Digicert.com

Avantaje PHP

- Performanta ridicata
- Interfata cu multe sisteme de baze de date
- Costuri reduse
- Biblioteci incluse pentru majoritatea operatiunilor uzuale in aplicatii web
- Usurinta in invatare (C)
- Portabilitate
  - Disponibilitate a codului sursa
- Exemple disponibile in comunitate
- Suport disponibil

Performanta



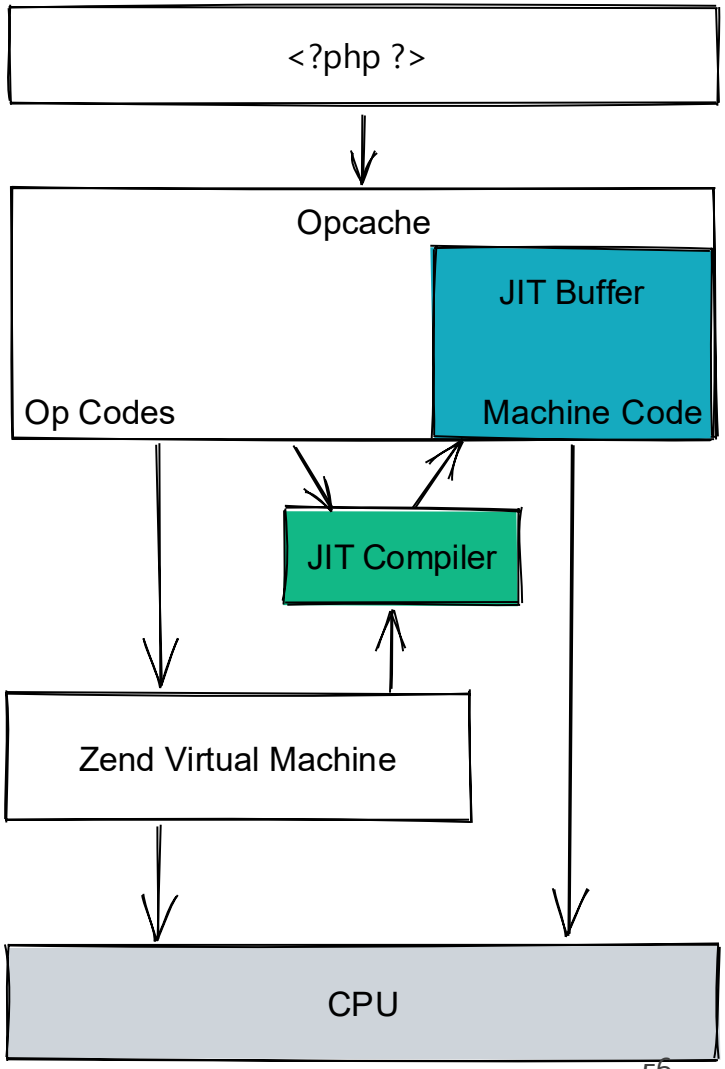


PHP - Concepte

- limbaj interpretat – compilat "on the fly" de interpretorul PHP de pe server
- script-urile PHP contin sursele
  - exista posibilitatea pre-compilarii surselor pentru spor de viteza
  - Hip-Hop for PHP / Facebook
  - HipHop Virtual Machine / Facebook
- orientat spre aplicatii web dinamice (biblioteci)
- poate fi integrat in HTML – utilizarea tipica

PHP 8 JIT

- traditional PHP este un limbaj strict interpretat
- limbajele compilate (Ahead-Of-Time - AOT) necesita codul sa fie compilat inainte de rulare.
- compilare Just-In-Time (JIT) este un model hibrid de interpretor si compilare AOT, o parte sau chiar codul in intregime este pre-compilat, deseori la momentul rularii, fara necesitatea compilarii manuale.



Integrare

E:\Documents\Pagini Web\Safir dep\lista_lot.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

logfile.php | lista_lot.php

```
539  <?php }?>
540
541  <div id="maincontent"><!-- InstanceBeginEditable name="Continut" -->
542  <p><span class="title">Adauga</span><br/>
543    <a href="control_lot.php?id=0">Lot nou</a></p>
544  <p class="title">Loturi active</p>
545  <?php
546  $query = "SELECT l.*, c.`nume_user` AS `user_creat`
547          FROM `lot` AS l
548          LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
549          WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
550  $result = mysql_query($query);
551  $total=0;
552  if ($result && (mysql_num_rows($result) > 0))
553      {
554      $total=mysql_num_rows($result);
555      $row = mysql_fetch_assoc($result);
556      }
557  if ($total>0)
558  {?>
559  <table align="center">
560    <tr class="lista_titlu">
561      <td align="center">Nr.</td>
562        <td>Numar</td>
563        <td>Data</td>
564        <td>Nr. pui</td>
565        <td>Gr. pui</td>
566        <td>Nr. pui morti</td>
567        <td>Gr. pui morti</td>
568        <td>Ferma</td>
569        <td>Documente</td>
570        <td>Creat</td>
571        <td>Comenzi</td>
572      </tr>
573    <?php $index=1;
574    do { ?>
575    <tr class="<?php if ($index%2) echo "lista_impar"; else echo "lista_par";
576      <td align="center"><?php echo $index; ?> </td>
577          <td><?php echo $row['Numar'];?> </td>
578          <td><?php echo date("d/m/Y", strtotime($row['Data']));?> </td>
579          <td><?php echo  $row['Pui'];?> </td>
580          <td><?php echo  $row['Greutate'];?> </td>
581          <td><?php echo  $row['Pui_Morti'];?> </td>
582          <td><?php echo  $row['Greutate_Morti'];?> </td>
583          <td><?php echo  $row['Ferma'];?> </td>
584          <td><?php echo  $row['Documente'];?> </td>
```

```
<tr class="<?php if ($index%2) echo "lista_impar"; else echo "lista_p
  <td align="center"><?php echo $index; ?> </td>
      <td><?php echo $row['Numar'];?> </td>
      <td><?php echo date("d/m/Y", strtotime($row['Data']));?> <
      <td><?php echo  $row['Pui'];?> </td>
      <td><?php echo  $row['Greutate'];?> </td>
```

Separare cod PHP

- un fisier sursa PHP **este** un fisier HTML (in general) cu sectiuni de cod PHP **in interior**
- interpretorul PHP cauta sectiunile pe care trebuie sa le interpreteze si in interiorul lor proceseaza instructiunile ca fiind PHP
- ce se gaseste in **exteriorul** acestor sectiuni este trimis spre server-ul web **nemodificat**
- de cele mai multe ori rezultatul procesarii este un "fisier text" virtual continand cod **HTML** (strict) (+CSS/Javascript) transmis(e) server-ului web pentru distribuire

Separare cod PHP

- **<?php ... ?>**
  - stil XML – implicit, disponibil intotdeauna, recomandat
- <? ... ?>
  - scurt, este de obicei dezactivat
  - lipsa in PHP 7,8
- <script language="php"> ... </script>
  - stil script, disponibil (**?**)
- <% ... %>
  - stil ASP, de obicei dezactivat
  - lipsa in PHP 7,8

Variante de integrare

- echo …. afiseaza un text la “iesire” (echivalent cu puts() din C)
- poate realiza procesarea datelor
- in exemplu se trimite spre iesire un sir static (echivalent cu puts() din C)
- “iesire” in marea majoritate a cazurilor reprezinta datele trimise clientului de server-ul web
- "iesire" poate fi considerata de obicei:
  - documentul curent
  - pozitia curenta (a scriptului in fisierul HTML curent)

Variante de integrare

- Toate variantele ofera aceeasi sursa HTML pentru browser
- E **recomandata** cea care lasa structura HTML nemodificata si doar datele dinamice sunt rezultatul procesarii
- Codul HTML + PHP e interpretat mult mai elegant in editoarele WYSIWYG

```
<h2>Rezultate comanda</h2>
<?php echo '<p>Comanda receptionata</p>';?>
```

```
<h2>Rezultate comanda</h2>
<p><?php echo 'Comanda receptionata';?></p>
```

```
<?php echo '<h1>Magazin online XXX SRL</h1>';?>
<?php echo '<h2>Rezultate comanda</h2>';?>
<?php echo '<p>Comanda receptionata</p>';?>
```

```
<?php
echo '<h1>Magazin online XXX SRL</h1>';
echo '<h2>Rezultate comanda</h2>';
echo '<p>Comanda receptionata</p>';
?>
```

Variante de integrare

test.php

```
1  <h2>Rezultate comanda</h2>
2  <p><?php echo 'Comanda receptionata';?></p>
3
4  <?php
5  echo '<h1>Magazin online XXX SRL</h1>';
6  echo '<h2>Rezultate comanda</h2>';
7  echo '<p>Comanda receptionata</p>';
8  ?>
9
```

PHP – instructiuni

- instructiunile PHP trebuie sa se termine cu ;
  - exceptie: se poate omite ; la sfarsitul blocului de cod php: **… echo 'ceva' ?>**
- instructiunile pot sa fie scrise pe acelasi rand (fara trecerea la linia noua)
  - **echo 'ceva1'; echo 'ceva2'; …**
  - nu este in general recomandat

PHP – comentarii

- comentariile in PHP respecta regulile C si Pearl
- la sfarsit de linie:
  - // echo ceva; //comentariu
  - # echo ceva; #comentariu
- comentariu bloc
  - /* ... */
  - /* un comentariu
    pe mai multe
    linii */

PHP – constante

- Ca orice limbaj de programare PHP se bazeaza pe utilizarea
  - constante
  - variabile
  - functii
- Definirea constantelor:
  - define('PRETCARTE', 100);
  - "case sensitive"
  - prin conventie, numai cu litere mari
  - echo PRETCARTE; // 100

PHP – variabile

- variabila – semnul **$** urmat de un nume
- numele e "case sensitive"
- o greseala frecventa e uitarea semnului $
  - PHP Notice: Use of undefined constant an – assumed $an (sau 'an') in D:\\Server\\
- Tipuri de date
  - scalar
  - compus
  - special

PHP – tipuri de date

- scalar
  - boolean
  - integer
  - float (double)
  - **string**
- compus
  - array
  - object
- special
  - resource
  - NULL

PHP – tipuri de date

- **declararea** variabilelor **nu** e necesara decat cand se declara un domeniu de definitie (variabile globale)
  - global $a, $b;
    $c=$a+$b;
- eliberarea memoriei nu este necesara, se face automat la terminarea executiei

PHP – tipuri de date

$var = **expresie**

- Controlul variabilelor se face automat, “on the fly”
  - Daca $var nu era definita anterior, in urma atribuirii se defineste de tipul dat de rezultatul expresiei
  - Daca $var era definita, de un anumit tip (oarecare), in urma atribuirii devine de tipul dat de rezultatul expresiei
  - La finalizarea executiei script-ului se elimina variabila din memorie (automat)
  - Numele de variabile sunt "case-sensitive" ($age si $AGE sunt doua variabile diferite)

PHP – tipuri de date

- tipul de date este in totalitate dependent de ceea ce se stocheaza
- PHP reactualizeaza tipul pentru a putea primi ceea ce se stocheaza

```
<?php
echo $variabila ;  //  tip Null, neinitializat – valoare NULL (doar)
$variabila = "0";  // $variabila  tip  string (ASCII 48)
$variabila  += 2;   // $variabila   tip  integer (2)
$variabila  = $variabila  + 1.3;  // $variabila   tip  float (3.3)
$variabila  = 5 + "10 obiecte"; // $variabila   tip  integer (15)
$var2=5; // $var2   tip  integer (5)
$variabila=$var2."10 obiecte";    //  $variabila  tip  string  "510 obiecte"
?>
```

PHP – operatori

- In general similari celor din C/C++
- Opertori
  - Aritmetici
  - Atribuire
  - Bit
  - Comparare
  - Incrementare/Decrementare
  - Logici
  - **Sir**

PHP – operatori

- Aritmetici
  - -$a – Negare
  - $a + $b – Adunare
  - $a - $b – Scadere
  - $a * $b – Inmultire
  - $a / $b Impartire
  - $a % $b Modulo (rest)
- Sir
  - **$a.$b – Concatenare sir a si sir b**

PHP – operatori

- Atribuire
  - $a=$b
  - $a+=$b (a=a+b)
  - $a-=$b (a=a-b)
  - $a/=$b (a=a/b)
  - $a*=$b (a=a*b)
  - $a%=$b (a=a%b)
  - $a.=$b (a=a concatenat b - siruri)

PHP – operatori

- Operatori la nivel de bit
  - similari celor din C
  - ~ , & , | , ^ , << , >>
- Operatori logici
  - ofera rezultat boolean true/false
  - similari celor din C
  - && , || , !
  - suplimentar
    - and , or , xor – echivalenti dar de prioritate mai mica
    - $a=55/0 or die('impartire prin 0');

PHP – operatori

- Operatori de comparare
  - ofera rezultat boolean true/false
  - similari celor din C
  - == , != , > , < , <> , >= , <=
  - suplimentar
    - === identic, valoare egala **SI** de acelasi tip
    - !== "neidentic", valoare diferita **SAU** de tipuri diferite

Precedenta operatorilor PHP5

non-associative	clone new	clone and new
left	[	array()
non-associative	++ --	increment/decrement
right	~ - (int) (float) (string) (array) (object) (bool) @	types
non-associative	instanceof	types
right	!	logical
left	* / %	arithmetic
left	+ - .	arithmetic and string
left	<< >>	bitwise
non-associative	< <= > >= <>	comparison
non-associative	== != === !==	comparison
left	&	bitwise and references
left	^	bitwise
left	|	bitwise
left	&&	logical
left	||	logical
left	? :	ternary
right	= += -= *= /= .= %= &= |= ^= <<= >>=	assignment
left	and	logical
left	xor	logical
left	or	logical
left	,	many uses

Precedenta operatorilor PHP7

non-associative	clone new	clone and new
left	[	array()
non-associative	++ --	increment/decrement
right	~ - (int) (float) (string) (array) (object) (bool) @	types
non-associative	instanceof	types
right	!	logical
left	* / %	arithmetic
left	+ - .	arithmetic and string
left	<< >>	bitwise
non-associative	< <= > >= <>	comparison
non-associative	== != === !== <=>	comparison
left	&	bitwise and references
left	^	bitwise
left	|	bitwise
left	&&	logical
left	||	logical
right	??	comparison
left	? :	ternary
right	= += -= *= /= .= %= &= |= ^= <<= >>=	assignment
left	and	logical
left	xor	logical
left	or	logical
left	,	many uses

Precedenta operatorilor PHP8

non-associative	clone new	clone and new
right	**	arithmetic
non-associative	++ --	increment/decrement
right	~ - (int) (float) (string) (array) (object) (bool) @	types
left	instanceof	types
right	!	logical
left	* / %	arithmetic
left	+ -	arithmetic
left	<< >>	bitwise
left	.	string
non-associative	< <= > >= <>	comparison
non-associative	== != === !== <=>	comparison
left	&	bitwise and references
left	^	bitwise
left	|	bitwise
left	&&	logical
left	||	logical
right	??	comparison
non-associative	? :	ternary
right	= += -= *= /= .= %= &= |= ^= <<= >>=	assignment
left	and	logical
left	xor	logical
left	or	logical
left	,	many uses

Exemplu de separare cod php Raspuns dinamic

- <form action="rezultat.php" method="post">

```
<html>
<head>
<title>Magazin online XXX SRL</title>
</head>
<body>
<h1>Magazin online XXX SRL</h1>
<h2>Rezultate comanda</h2>
<p><?php echo 'Comanda receptionata';?></p>
</body>
</html>
```

```
</head>
<body>
<h1>Magazin online XXX SRL</h1>
<h2>Rezultate comanda</h2>
<p>Comanda receptionata</p>
</body>
</html>
```

PHP – Functii

- conceptual similare celor din C/C++
- functiile nu trebuie declarate inainte de a fi folosite
- numele functiilor este "case-insensitive"
- un mare numar de functii cu utilitate directa in aplicatiile web exista in bibliotecile PHP
- unele biblioteci trebuie activate in momentul configurarii PHP
  - extension=php_gd2.dll (linia 639) // pentru functii de procesare grafica de exemplu
  - extension=php_mysql.dll (linia 651) // pentru functii de acces la baze de date MySql
  - extension=php_mysqli.dll (linia 652) // pentru functii de acces la baze de date MySql (**obligatoriu** de la PHP 5.6)

Utilizarea functiilor PHP

- <form action="rezultat.php" method="post">

```
<p>Comanda receptionata la data:
<?php echo date('d/m/Y')." ora ".date('H:i');?></p>
```

```
<body>
<h1>Magazin online XXX SRL</h1>
<h2>Rezultate comanda</h2>
<p>Comanda receptionata la data:
10/03/2010 ora 13:36</p>
</body>
```

Elemente de control

- majoritatea notiunilor si sintaxei sunt similare celor din C/C++
- instructiune compusa: separata de acolade {…}
- if / else / elseif – executie conditionata

```
<?php
if ($a > $b) {
   echo "a mai mare ca b";
} elseif ($a == $b) {
   echo "a egal cu b";
} else {
   echo "a  mai mic ca  b";
}
?>
```

Elemente de control

- while
- do-while
- for
- switch
- return
- break
- goto

- Similare cu echivalentele C/C++

```
$i = 1;
while ($i <= 10) {
   echo $i++;
}
```

```
$i = 10;
do {
   echo $i--;
} while ($i > 0);
```

```
for ($i = 1; $i <= 10; $i++) {
   echo $i;
}
```

```
switch ($i) {
   case 0:
      echo "i este 0";
      break;
   case 1:
      echo "i  este  1";
      break;
   default:
      echo "i nici 1 nici 0";
      break;
}
```

Elemente de control

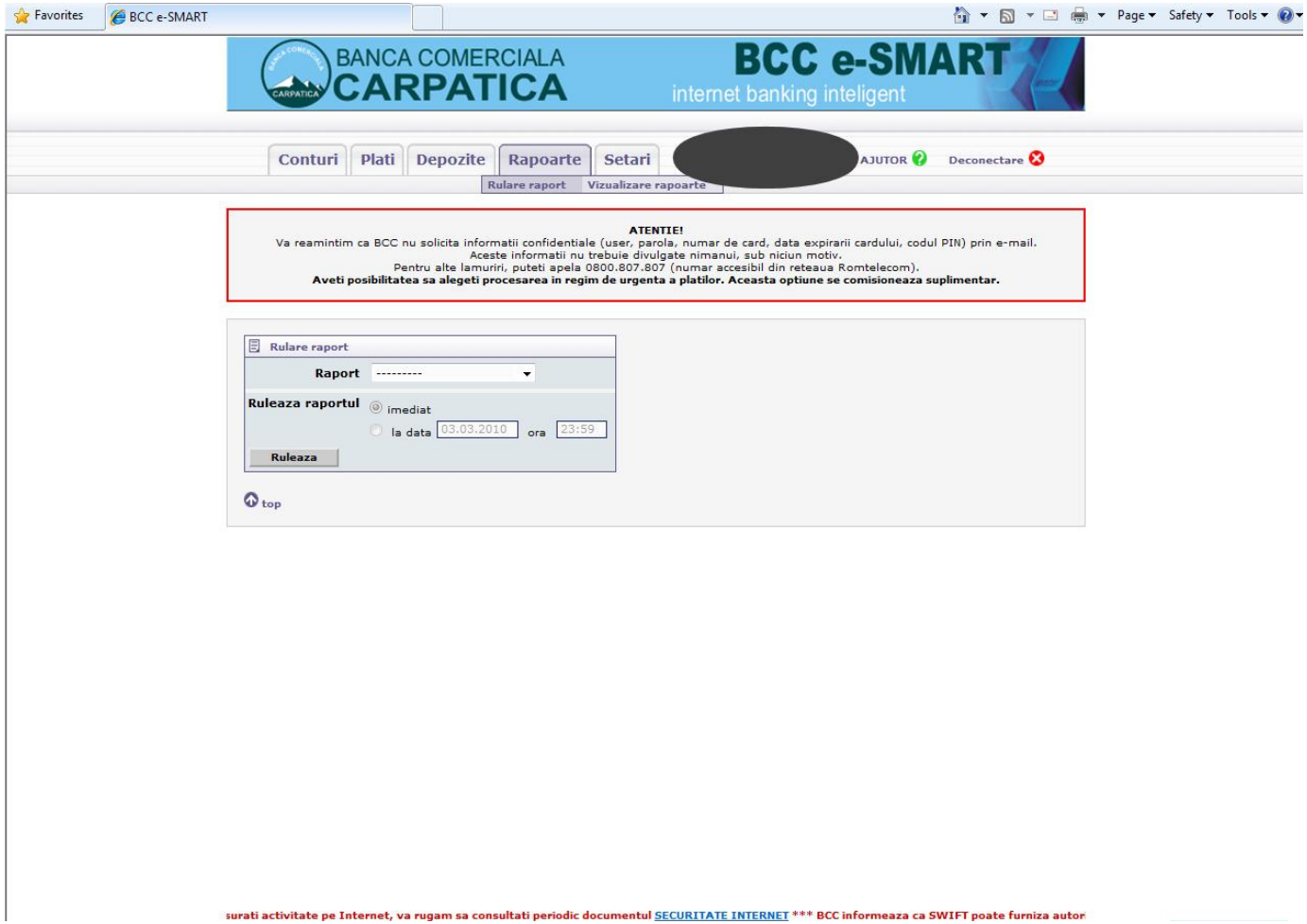
- include()
- require()
- include_once()
- require_once()

- pentru inserarea **SI** evaluarea fisierului folosit ca parametru
- folosite pentru a nu multiplica sectiunile de cod comune
- require opreste executia script-ului curent daca fisierul parametru nu este gasit
- …_once() verifica daca respectivul fisier a mai fost introdus si **nu** il mai introduce inca o data

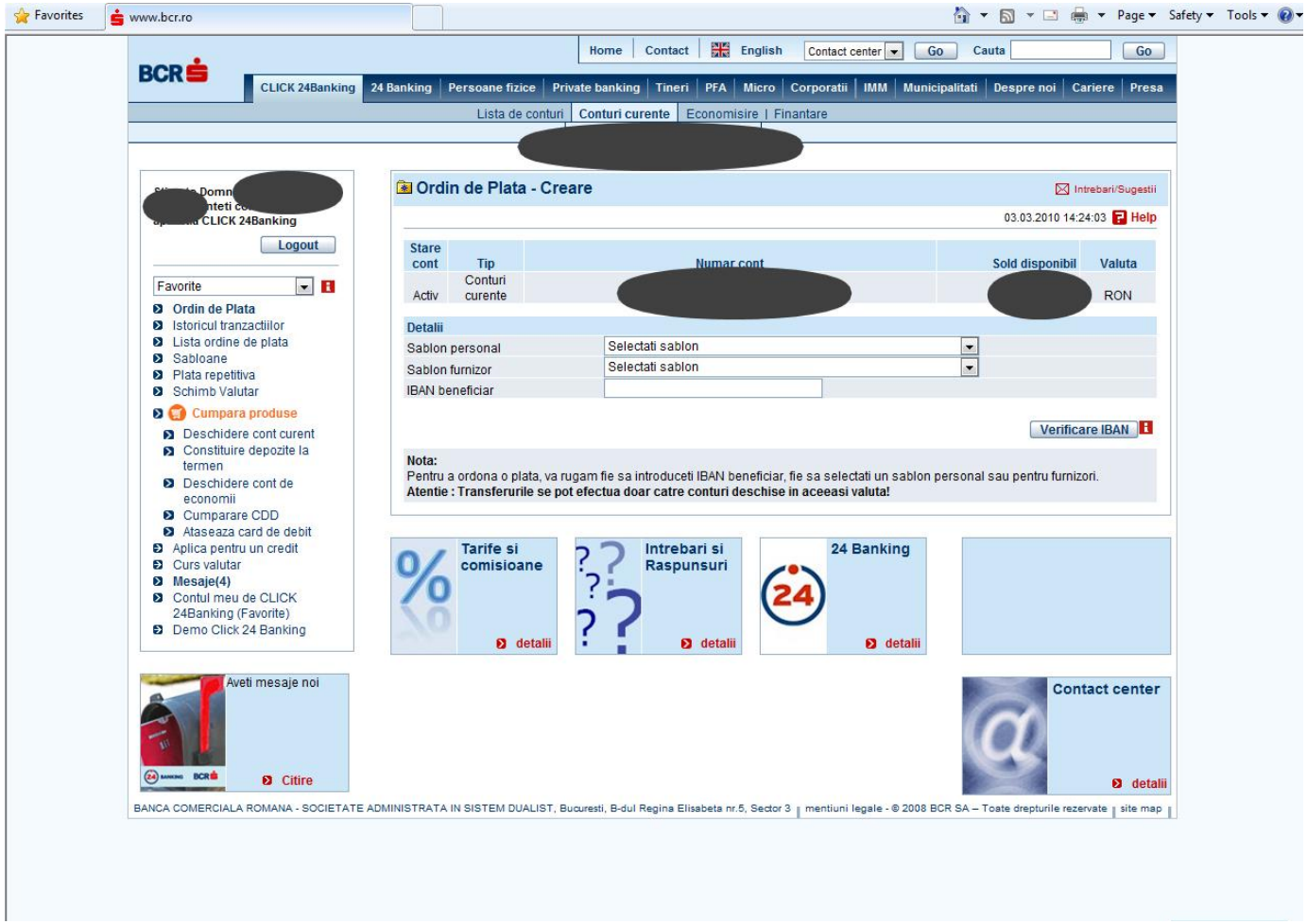
Consideratii generale

Aplicatii

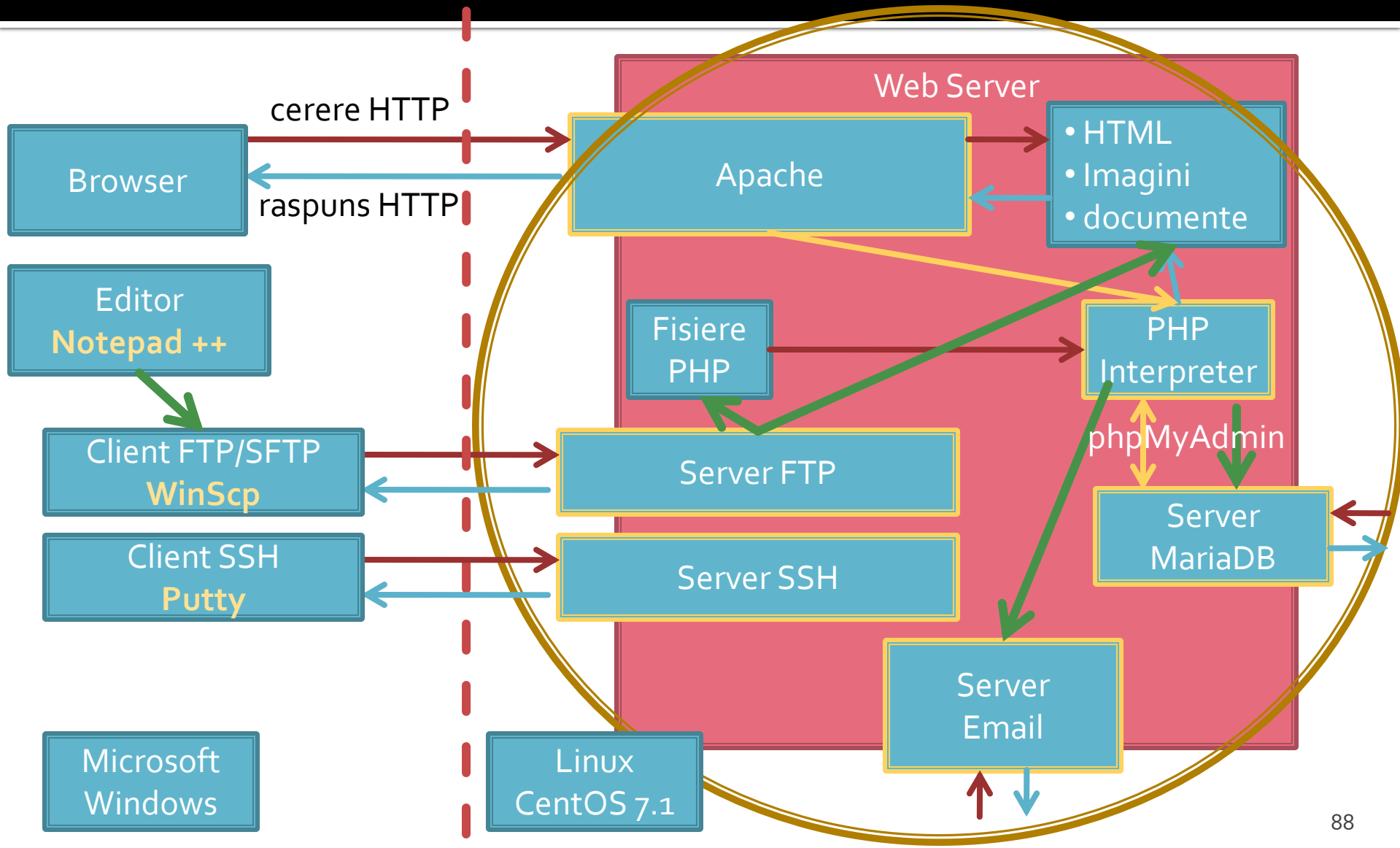
Aplicatii


Favorites
BCC e-SMART
Page
Safety
Tools
BANCA COMERCIALA CARPATICA
BCC e-SMART
internet banking inteligent
Conturi
Plati
Depozite
Rapoarte
Setari
AJUTOR
Deconectare
Rulare raport
Vizualizare rapoarte
ATENTIE!
Va reamintim ca BCC nu solicita informatii confidentiale (user, parola, numar de card, data expirarii cardului, codul PIN) prin e-mail.
Aceste informatii nu trebuie divulgate nimanui, sub niciun motiv.
Pentru alte lamuriri, puteti apela 0800.807.807 (numar accesibil din reteaua Romtelecom).
Aveti posibilitatea sa alegeti procesarea in regim de urgenta a platilor. Aceasta optiune se comisioneaza suplimentar.
Rulare raport
Raport
Ruleaza raportul
imediat
la data
03.03.2010
ora
23:59
Ruleaza
top
surati activitate pe Internet, va rugam sa consultati periodic documentul SECURITATE INTERNET *** BCC informeaza ca SWIFT poate furniza autor

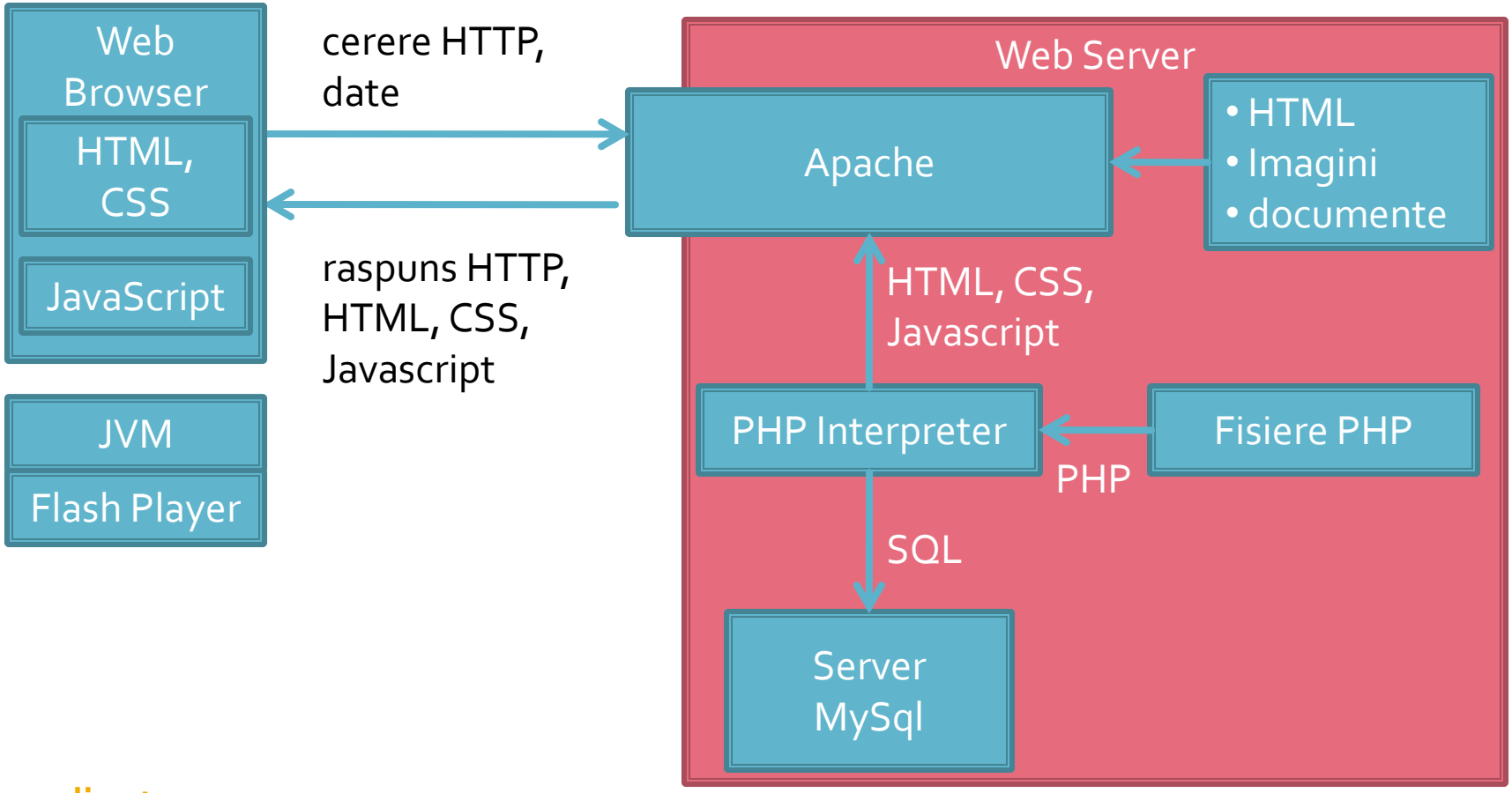
Aplicatii


Favorites
www.bcr.ro
Page
Safety
Tools
BCR
Home
Contact
English
Contact center
Go
Cauta
Go
CLICK 24Banking
24 Banking
Persoane fizice
Private banking
Tineri
PFA
Micro
Corporatii
IMM
Municipalitati
Despre noi
Cariere
Presa
Lista de conturi
Conturi curente
Economisire | Finantare
[redacted]
CLICK 24Banking
Logout
Favorite
Ordin de Plata
Istoricul tranzactiilor
Lista ordine de plata
Sabloane
Plata repetitiva
Schimb Valutar
Cumpara produse
Deschidere cont curent
Constituire depozite la termen
Deschidere cont de economii
Cumparare CDD
Ataseaza card de debit
Aplica pentru un credit
Curs valutar
Mesaje(4)
Contul meu de CLICK 24Banking (Favorite)
Demo Click 24 Banking
Ordin de Plata - Creare
Intrebari/Sugestii
03.03.2010 14:24:03
Help
Stare cont
Tip
Numar cont
Sold disponibil
Valuta
Activ
Conturi curente
[redacted]
RON
Detalii
Sablon personal
Selectati sablon
Sablon furnizor
Selectati sablon
IBAN beneficiar
Verificare IBAN
Nota:
Pentru a ordona o plata, va rugam fie sa introduceti IBAN beneficiar, fie sa selectati un sablon personal sau pentru furnizori.
Atentie : Transferurile se pot efectua doar catre conturi deschise in aceeasi valuta!
Tarife si comisioane
detalii
Intrebari si Raspunsuri
detalii
24 Banking
detalii
Aveti mesaje noi
Citire
Contact center
detalii
BANCA COMERCIALA ROMANA - SOCIETATE ADMINISTRATA IN SISTEM DUALIST, Bucuresti, B-dul Regina Elisabeta nr.5, Sector 3
mentiuni legale - © 2008 BCR SA – Toate drepturile rezervate
site map

LAMP


Web Server
cerere HTTP
raspuns HTTP
Browser
Apache
• HTML
• Imagini
• documente
Editor
Notepad ++
Fisiere PHP
PHP Interpreter
phpMyAdmin
Client FTP/SFTP
WinScp
Server FTP
Server MariaDB
Client SSH
Putty
Server SSH
Server Email
Microsoft Windows
Linux CentOS 7.1

Client/Server Scripting



client side scripting

server side scripting

Exemple reale

- View Source (sau echivalent) ofera acces **TOTAL** la surse:
  - HTML
  - CSS
  - Javascript
- numai pentru observatorul "avizat"
- Firefox/Chrome beneficiaza de cateva extensii extrem de utile pentru web designer
  - Web Developper/Developer Tools
  - Firebug
  - Dom Inspector (implicit pana la 3.0)

Exemple reale

- Nu e valabil pentru sursele PHP/MySql care nu ajung pe calculatorul client decat in caz de eroare
- Flash si Java ajung de asemenea in forma binara, compilata
- cateodata apar artificii de “ascundere” a codului: se ingreuneaza citirea de un utilizator uman

HTML

Forme

Aplicatie Web

- presupune prelucrarea unor date si oferirea unui document personalizat (rezultat al datelor respective)
- datele pot fi obtinute:
  - de la utilizator
  - o sursa externa (baze de date)
  - **combinatie** utilizator/baze de date

Forme in HTML

- necesare pentru ca utilizatorul sa poate trimite date server-ului
- **<form>…</form>**
- Atribute specifice:
  - action: adresa documentului care preia datele
    - <form **action**="<?php echo $_SERVER['PHP_SELF'];?>">
    - <form **action**="actiuni/fisier2.html">
  - method: modalitatea de transmitere a datelor: post sau get
    - <form **method**="post" action= … >

Metode de transmitere

- **post** datele sunt transmise in bloc
- **get** datele sunt atasate adresei documentului de procesare : results.php?prob=81&an=2009
- **get** trebuie folosit numai cand datele sunt "idempotente",
  - nu cauzeaza efecte colaterale
  - nu modifica starea server-ului (baze date, etc)
- se poate simula realizarea unei forme (**get**) prin scrierea corespunzatoare a link-urilor

Elemente de interactiune cu utilizatorul – <form>

- in interiorul etichetei <form>…</form>
  - input
  - select/option
  - textarea
  - button
- **toate** elementele vor avea un nume
  - atribut: name=“”
  - numele va fi intalnit in uri-ul generat prin get, sau in numele variabilei trimisa prin post
- trimiterea datelor se face prin intermediul unui buton cu tipul type="submit"

INPUT

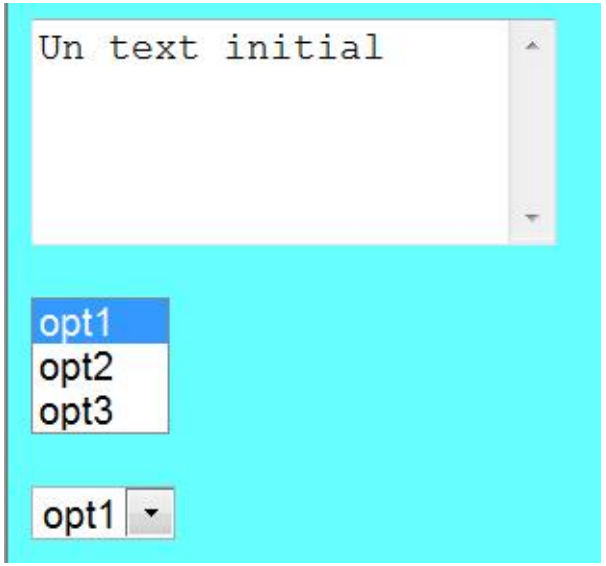
- <input .../>
- Atribute:
  - type: text | password | checkbox | radio | submit | reset | file | hidden | image | button
  - name: numele variabilei
  - value: valoarea trimisa server-ului la selectie (valoarea initiala in anumite cazuri)
  - checked/src/size/maxlength in functie de tip

Exemple

```
<input name="textfield" type="text" value="ceva" />

<input name="Ok" type="submit" value="Trimite" />

<label><input name="check" type="checkbox" value="5" checked />check1</label>

<label><input name="RG1" type="radio" value="a" checked="checked" />but1</label>
<label><input name="RG1" type="radio" value="b" />but2</label>

<input name="hid" type="hidden" value="6" />
```

TEXTAREA/SELECT

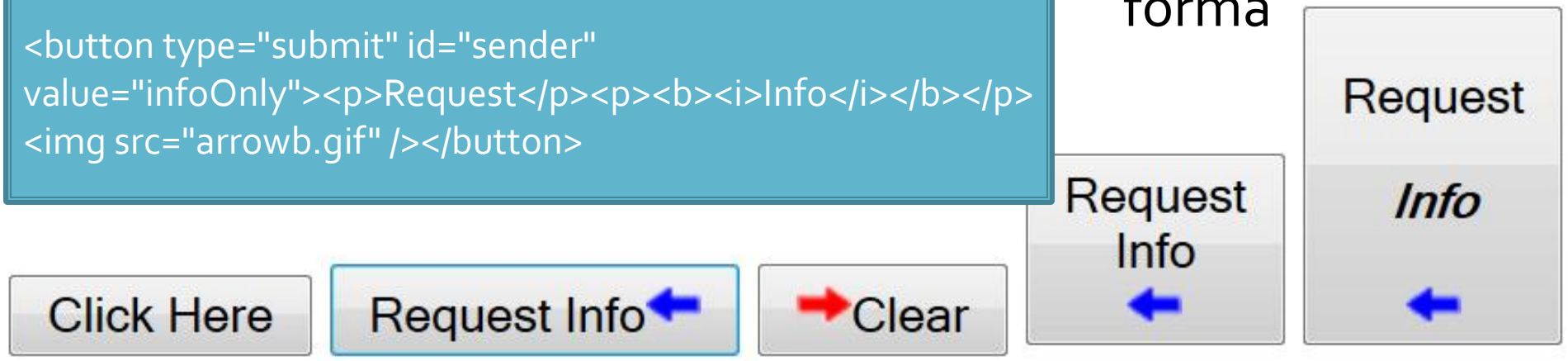
```
<textarea name="textarea" cols="20" rows="5">Un text initial</textarea><br /><br />

<select name="select." size="3">
 <option value="1" selected="selected">opt1</option>
 <option value="2">opt2</option>
 <option value="3">opt3</option>
</select><br /><br />

<select name="select...">
 <option value="1" selected="selected">opt1</option>
 <option value="2">opt2</option>
 <option value="3">opt3</option>
</select>
```



BUTTON

```
<button type="button" onClick="do ( );">Click Here</button>

<button type="submit" value="infoOnly">Request Info<img
src="arrowb.gif" /></button>

<button type="reset"><img src="arrowr.gif" />Clear</button>

<button type="submit" id="sender"
value="infoOnly">Request<br />Info<br /><img
src="arrowb.gif" /></button>

<button type="submit" id="sender"
value="infoOnly"><p>Request</p><p><b><i>Info</i></b></p>
<img src="arrowb.gif" /></button>
```

- introdus pentru a oferi posibilitatea introducerii de continut mai complex (text formatat,imagini) in interiorul butoanelor de pe forma

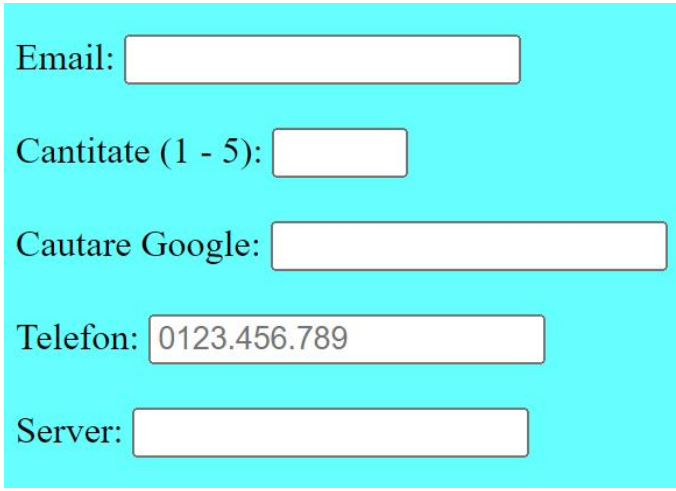


HTML 5 – Validare input

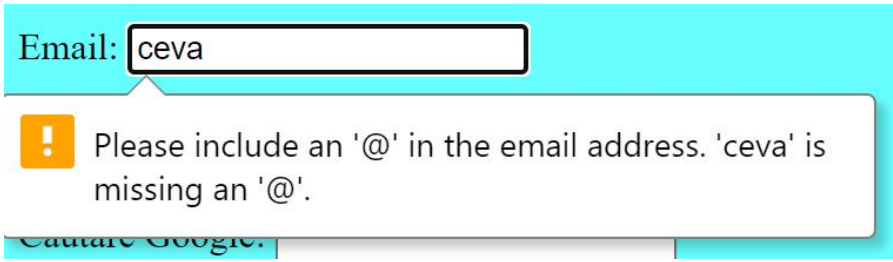
- <input type="email">
- <input type="number">
- <input type="search">
- <input type="tel">
- <input type="url">

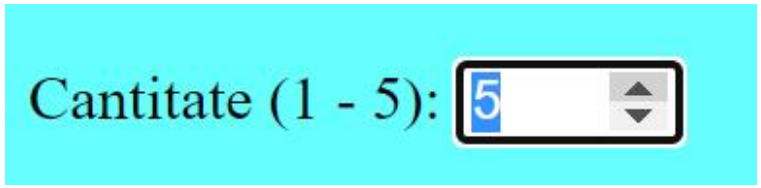
HTML 5 – Validare input

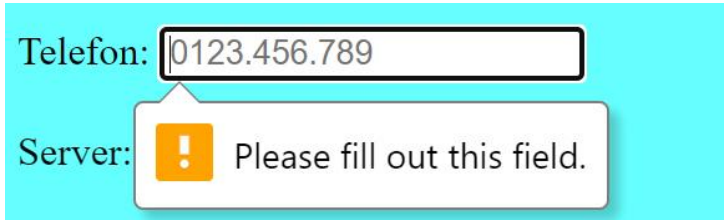
```
<label for="email">Email:</label>
<input type="email" id="email" name="email">
<br /><br />
<label for="can">Cantitate (1 - 5):</label>
<input type="number" id="can" name="can" min="1" max="5">
<br /><br />
<label for="gsearch">Cautare Google:</label>
<input type="search" id="gsearch" name="gsearch">
<br /><br />
<label for="phone">Telefon:</label>
<input type="tel" id="phone" name="phone"
placeholder="0123.456.789" pattern="[0-9]{4}.[0-9]{3}.[0-9]{3}"
required>
<br /><br />
<label for="server">Server:</label>
<input type="url" id="server" name="server">
```

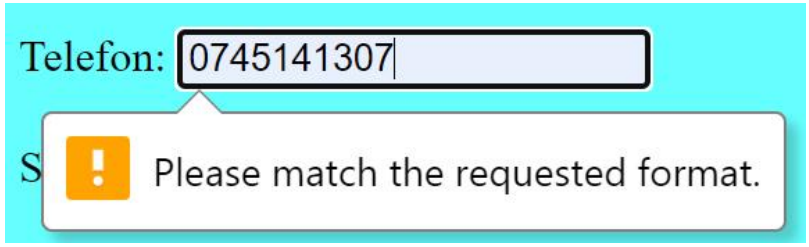


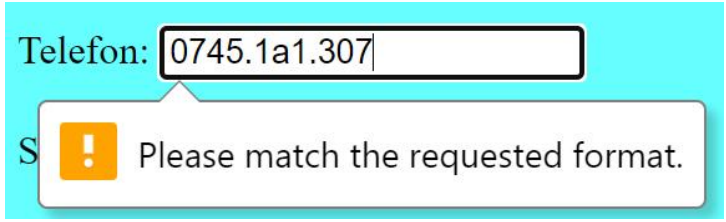
HTML 5 – Validare input









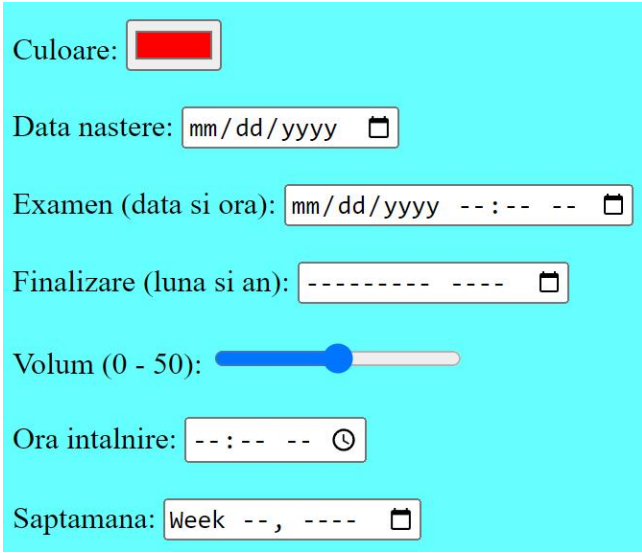


HTML 5 – Interfata nativa browser

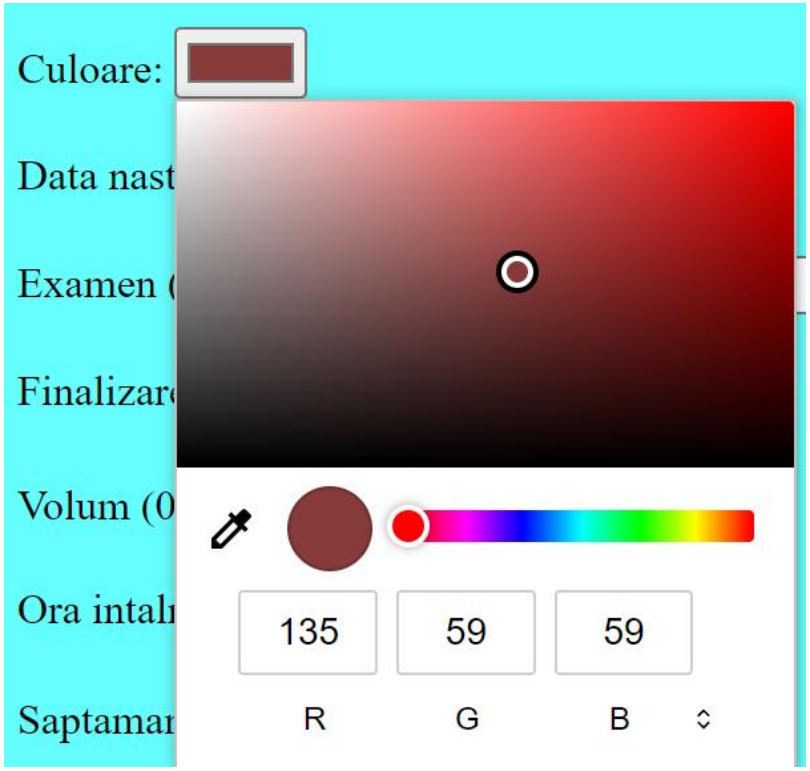
- <input type="color">
- <input type="date">
- <input type="datetime-local">
- <input type="month">
- <input type="range">
- <input type="time">
- <input type="week">

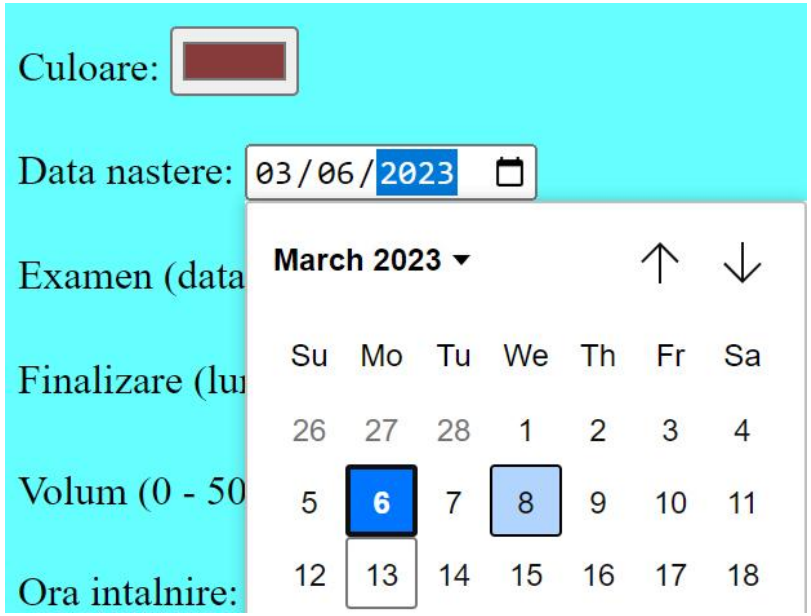
HTML 5 – Interfata nativa browser

```
<label for="culoare">Culoare:</label>
<input type="color" id="culoare" name="culoare" value="#ffoooo">
<br /><br />
<label for="nastere">Data nastere:</label>
<input type="date" id="nastere" name="nastere">
<br /><br />
<label for="examen">Examen (data si ora):</label>
<input type="datetime-local" id="examen" name="examen">
<br /><br />
<label for="fin">Finalizare (luna si an):</label>
<input type="month" id="fin" name="fin">
<br /><br />
<label for="vol">Volum (0 - 50):</label>
<input type="range" id="vol" name="vol" min="0" max="50">
<br /><br />
<label for="ora">Ora intalnire:</label>
<input type="time" id="ora" name="ora">
<br /><br />
<label for="sap">Saptamana:</label>
<input type="week" id="sap" name="sap">
```

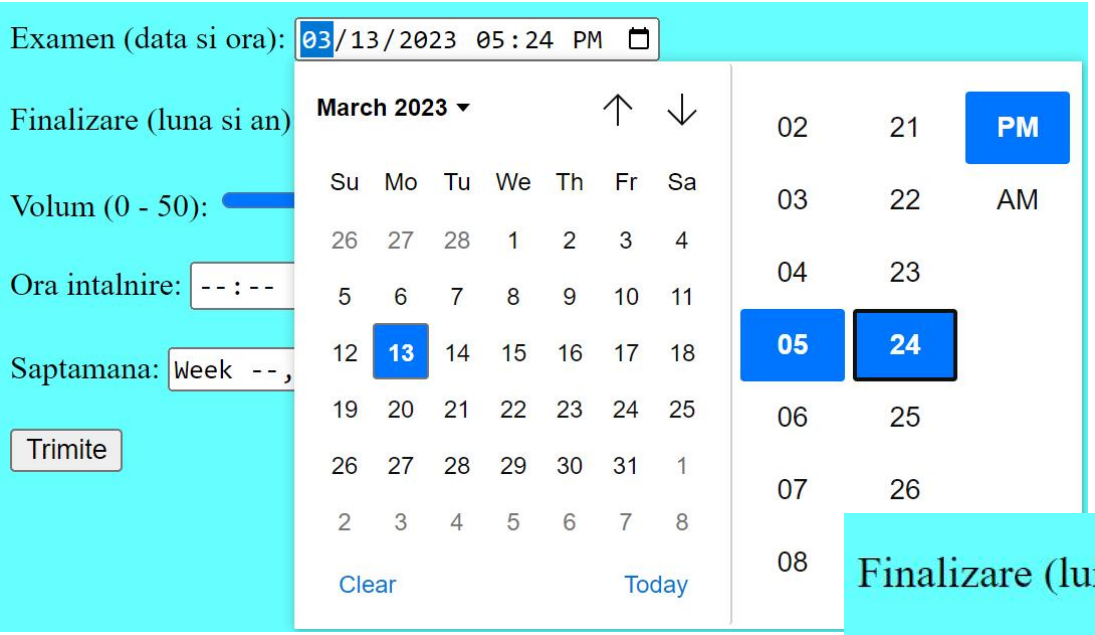


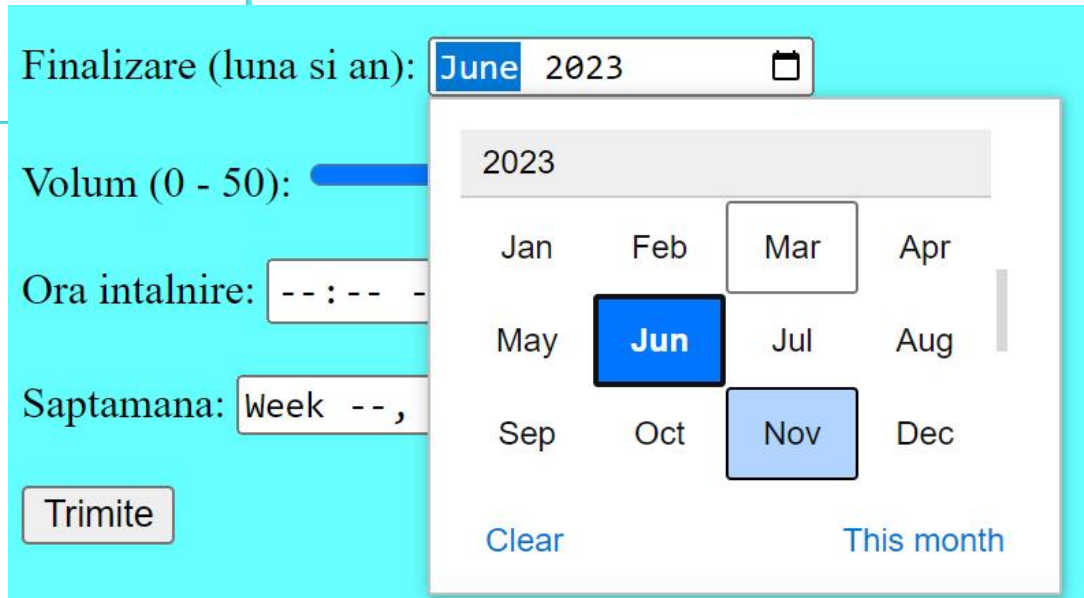
HTML 5 – Interfata nativa browser



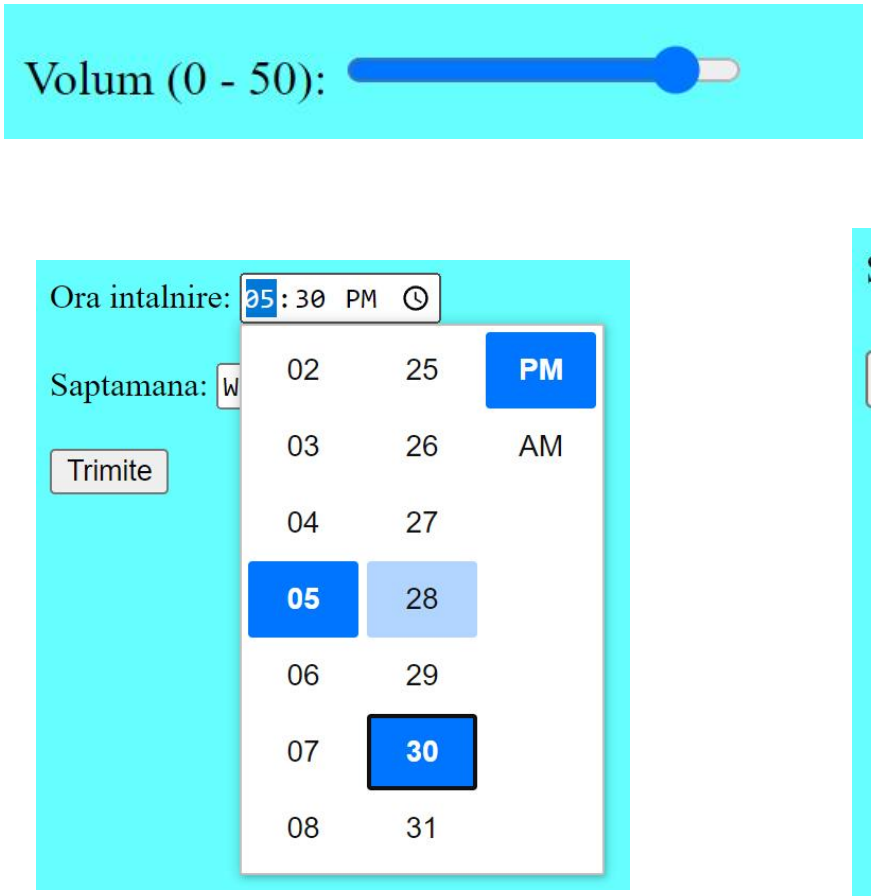


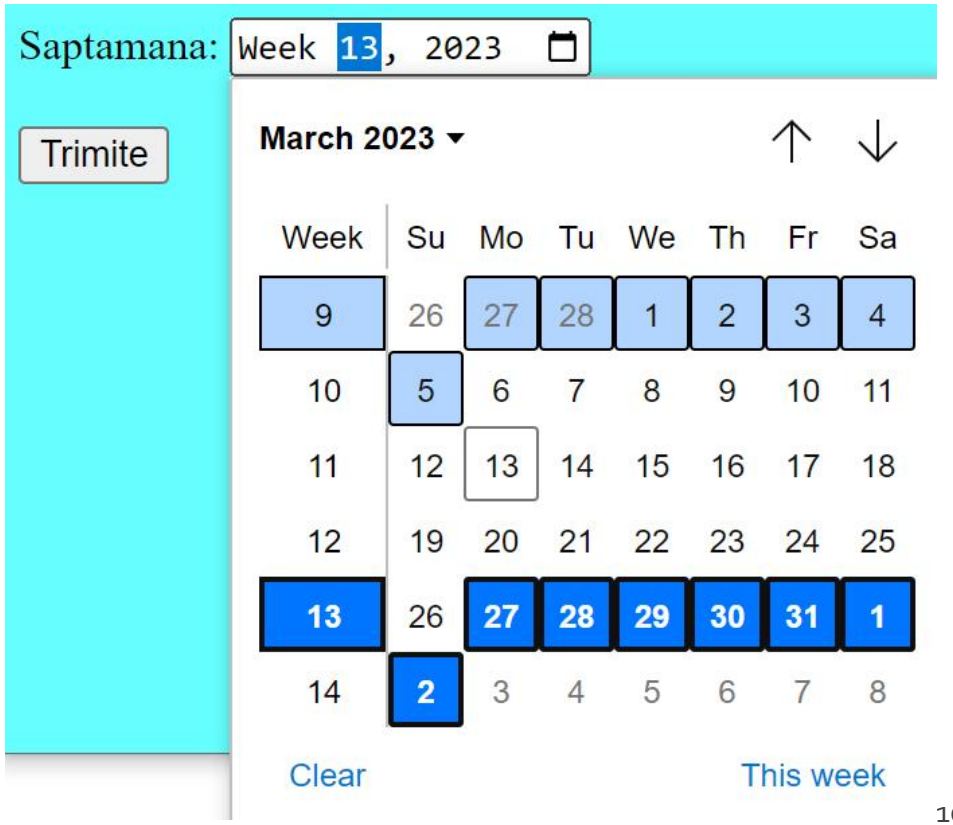
HTML 5 – Interfata nativa browser





HTML 5 – Interfata nativa browser

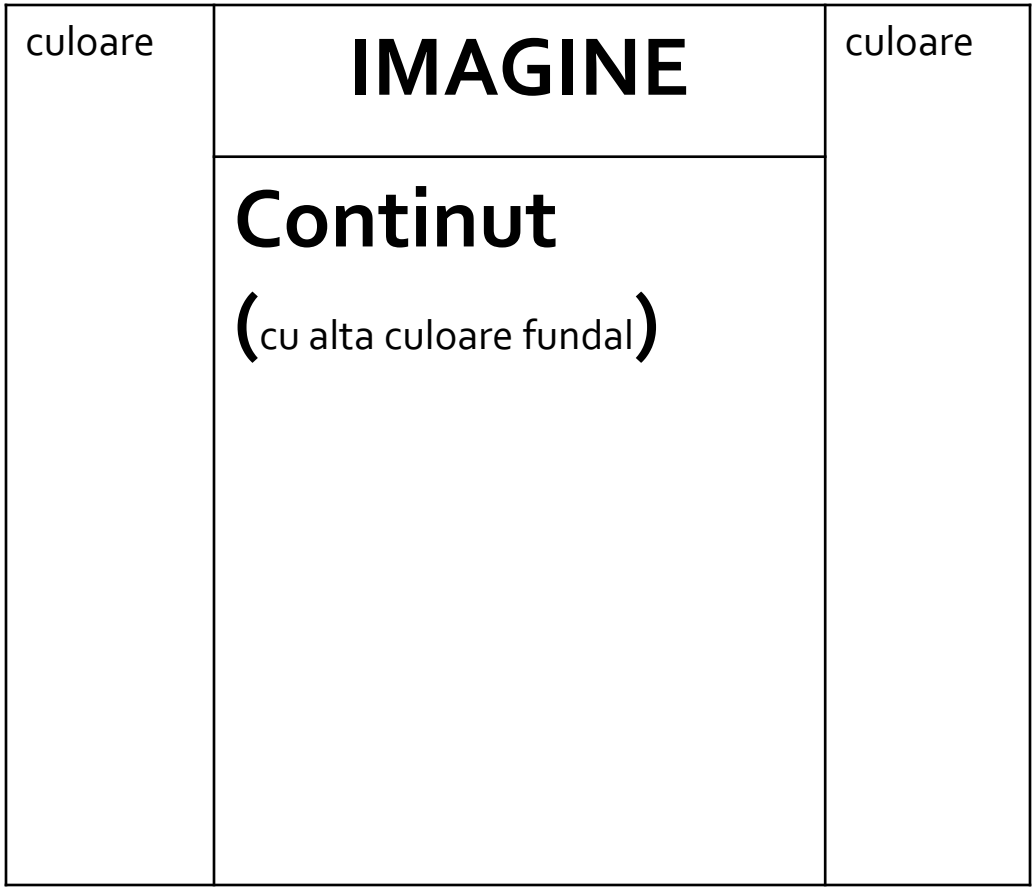




Laborator 2

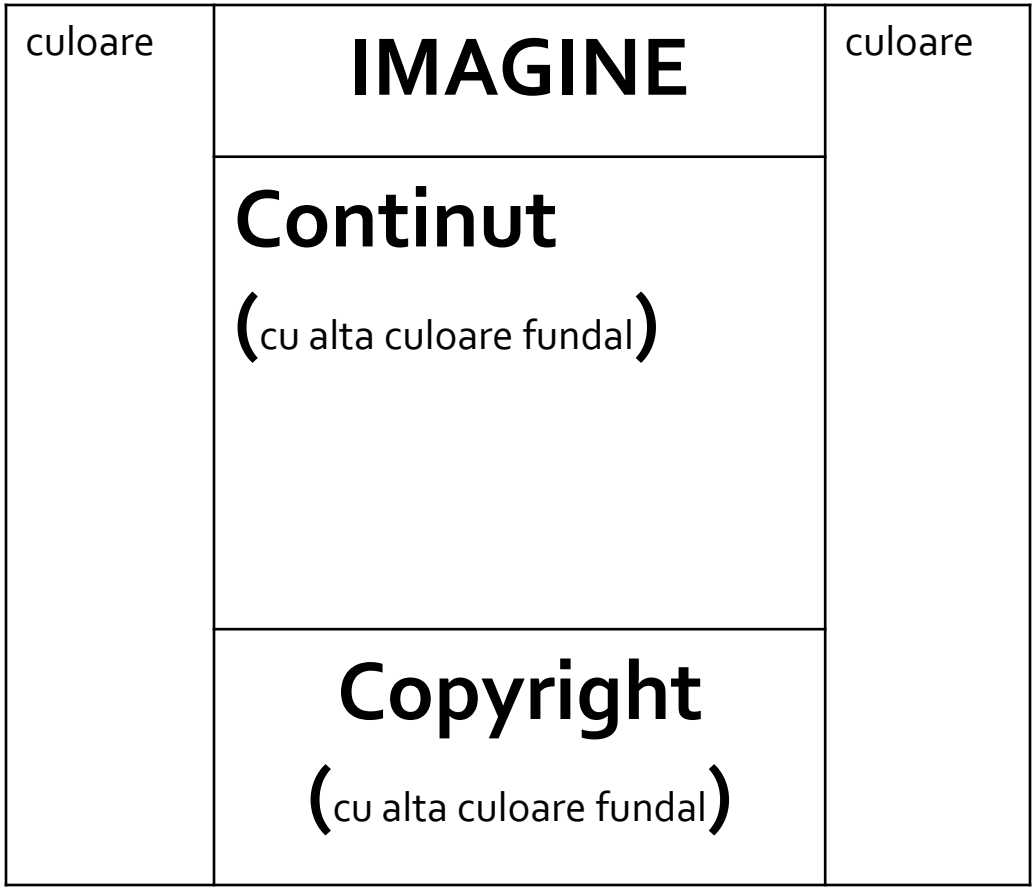
HTML

- se creaza o pagina care sa arate ca in schita alaturata
- forma paginilor:
  - CSS (**recomandat**)
  - tabel
- Se experimenteaza diversele elemente de **interactiune cu utilizatorul (<form> + ...)**



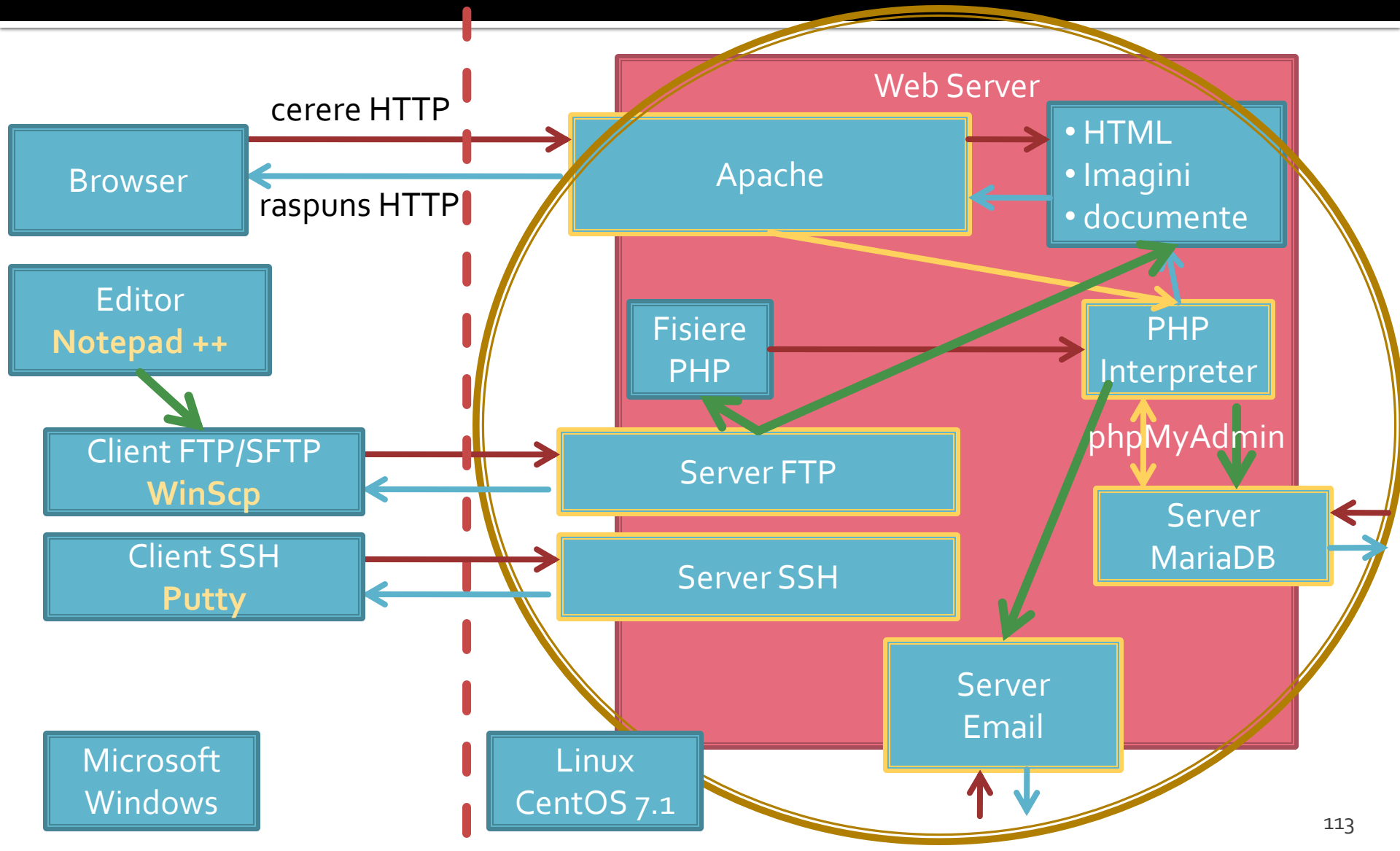
Suplimentar

- forma din schita alaturata
- forma paginilor:
  - (tabel) controlat prin CSS
- se experimenteaza cu **functii** generale php de ex:
  - data
  - timp
  - etc.



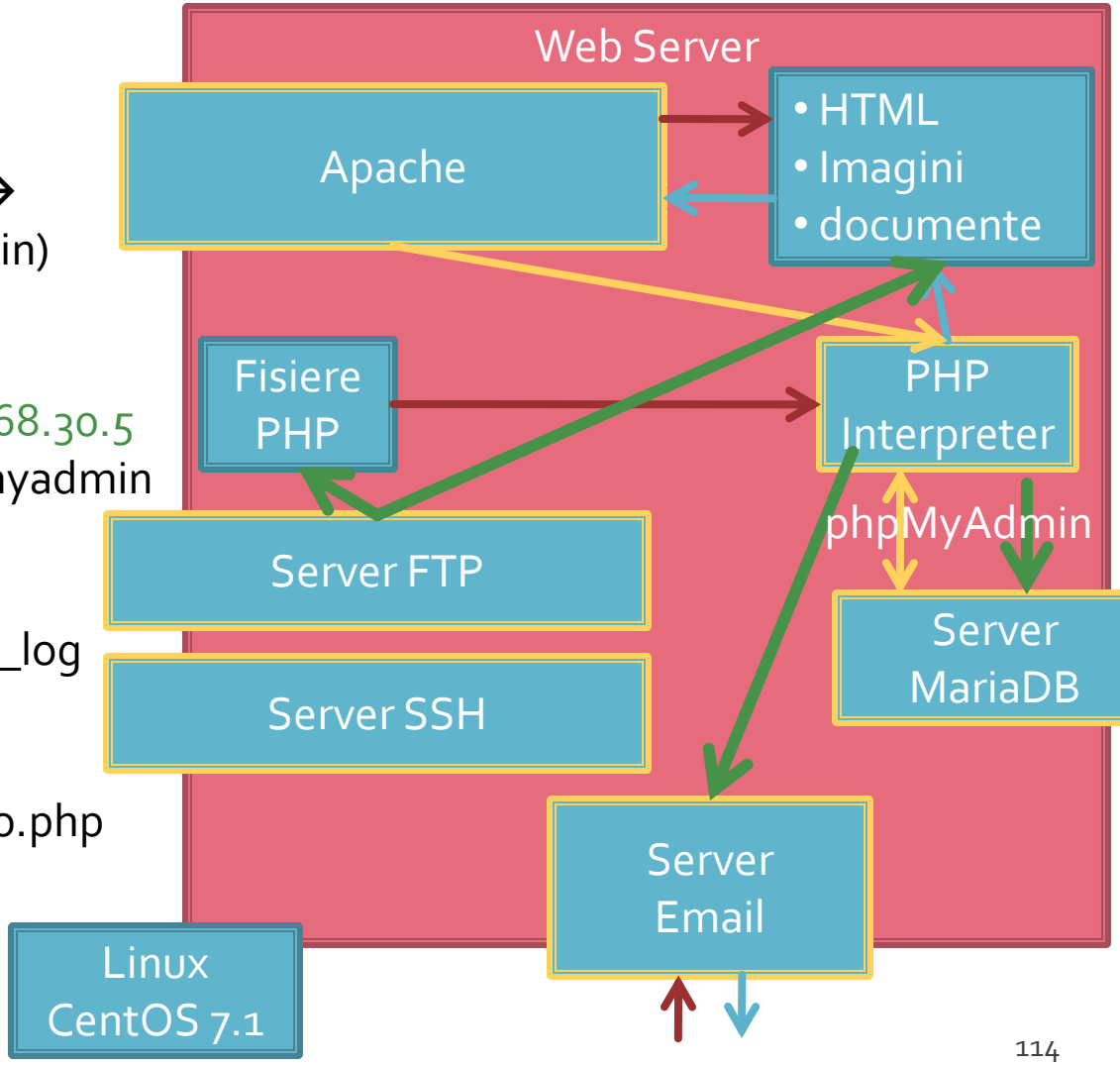
Exemplu

Utilizare LAMP



Utilizare LAMP

1. login → root:masterrc/masteretti
2. ifconfig → 192.168.30.5
3. putty.exe → 192.168.30.5 → SSH → root:masterrc/masteretti (remote login)
4. [alte comenzi linux dorite]
5. FTP → Winscp → SFTP → student:masterrc/masteretti @192.168.30.5
6. MySql → http://192.168.30.5/phpmyadmin → root:masterrc/masteretti
7. Apache Error Log →
7a. putty → nano /var/log/httpd/error_log
7b. http://192.168.30.5/logfile.php (nonstandard)
8. PHP info → http://192.168.30.5/info.php



Server referinta LAMP 2026

- 3 variante acceptate
  - CentOS 7.1
  - Ubuntu 20.04
  - Debian 12.5

Server referinta LAMP

- Centos 7.1
  - PHP 5.4.16
  - MariaDB 5.5.44 / root:masterrc
  - Apache 2.4.6
  - PhpMyAdmin/4.4.15
  - **root**/student:masterrc
  - Python 2.7.5
  - creat: Workstation Player 12.x (**12**)

Server referinta LAMP

- Ubuntu 20.04
  - PHP 7.4.3
  - MariaDB 10.3.31 / root:masteretti
  - Apache 2.4.41
  - **paw**/student:masteretti
  - necesar suplimentar pentru **acces FTP user paw**:
    - sudo usermod -a -G upload paw
    - sudo chmod -R 775 /var/www
  - Python 3.8.10
  - creat: Workstation Player 15.x (**16**)

Server referinta LAMP

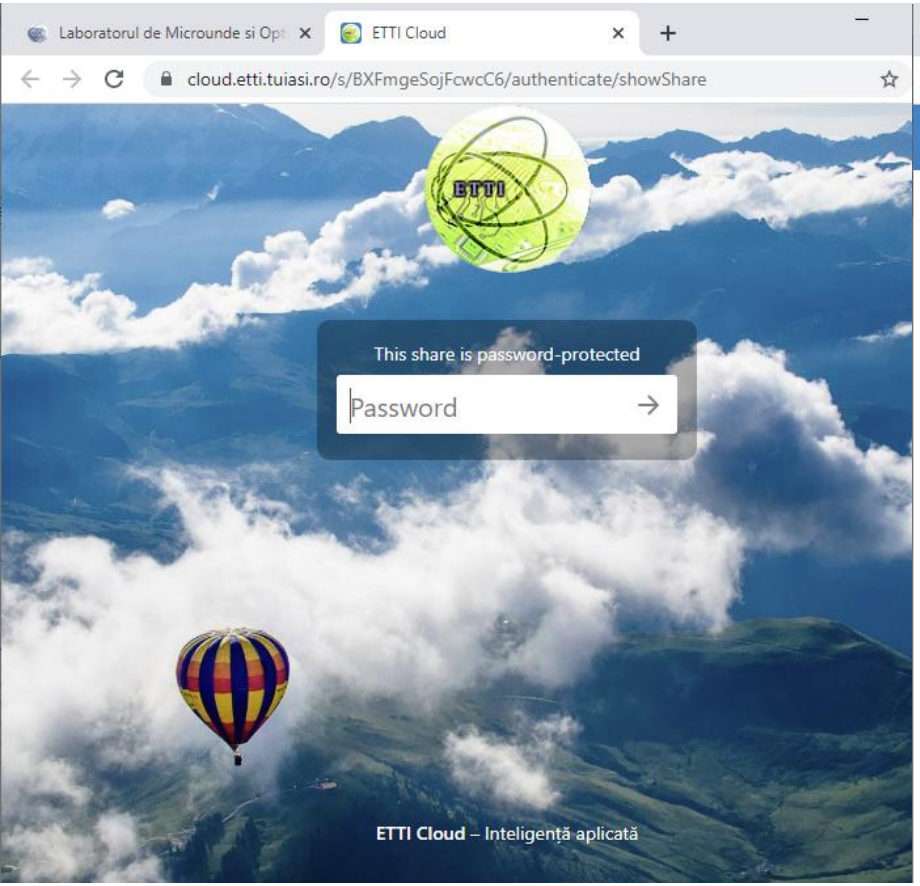
- Debian 12.5
  - PHP 8.2.7
  - MariaDB 10.11.6 / root:masteretti
  - Apache 2.4.57
  - PhpMyAdmin/5.2.1 deb
  - **root**/paw/student:masteretti
  - Python 3.11.2
  - creat: Workstation Player 17.5 (**21**)

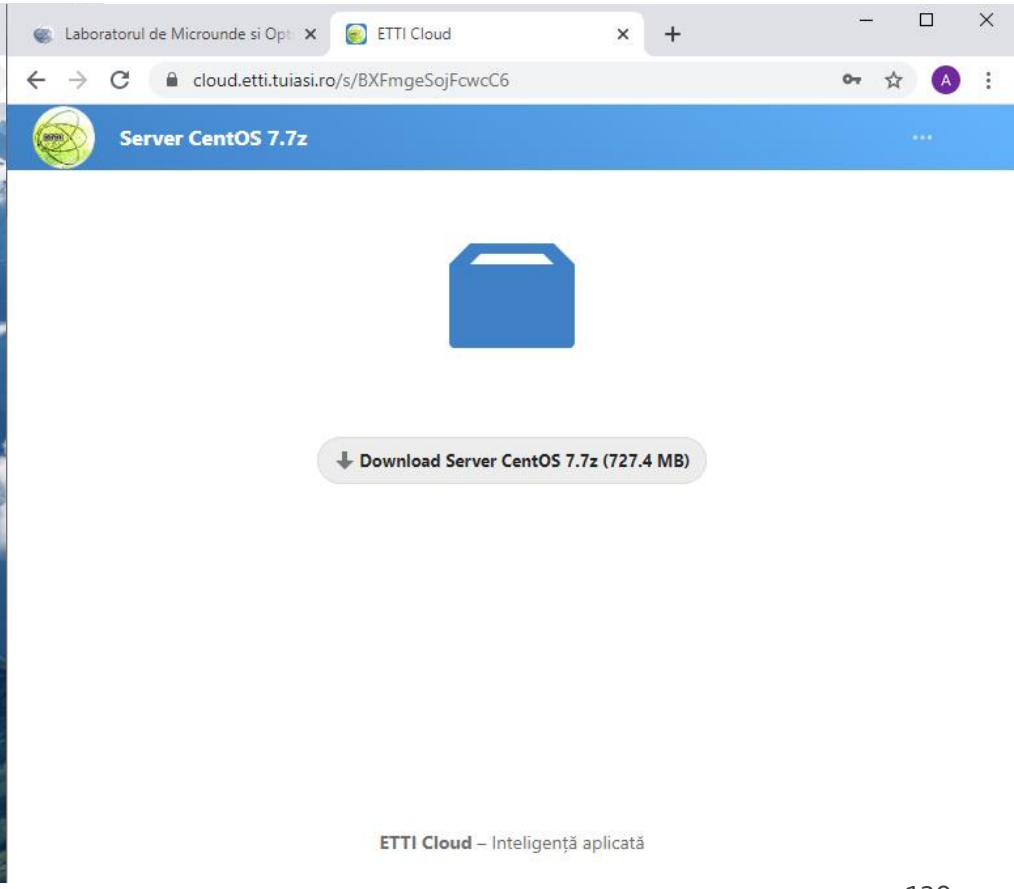
Server referinta

- rf-opto.etti.tuiasi.ro > Master > Web Design

Server referinta

- Cloud ETTI: **RF-opto3#**



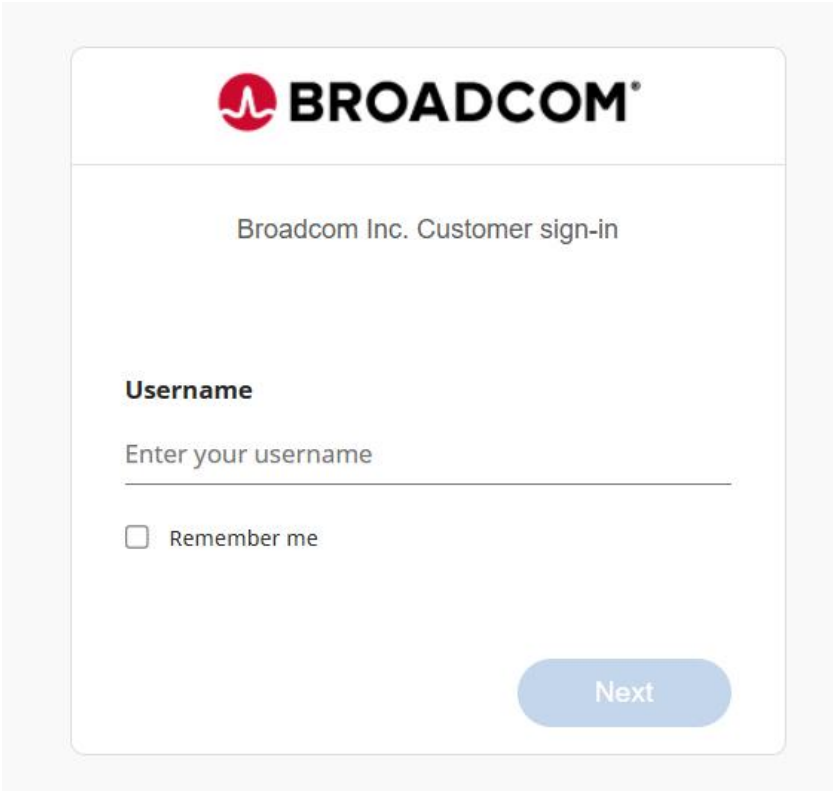


Server referinta

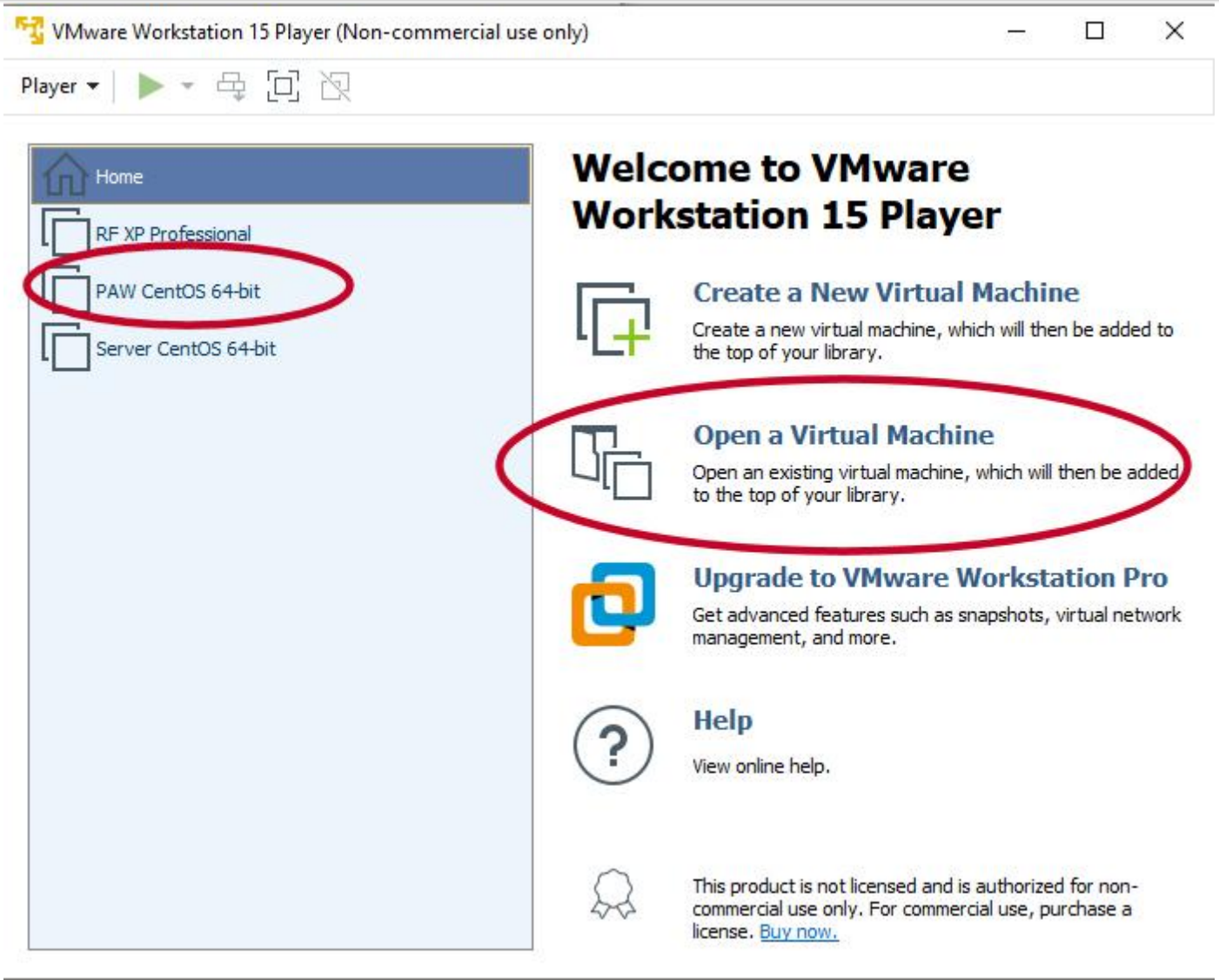
- Masina virtuala
- VMware Workstation Player
  - Gratuit (non-comercial)
  - https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html
- Inlocuit de VMware Workstation Pro

Server referinta

- Masina virtuala
- VMware Workstation Pro (Broadcom)



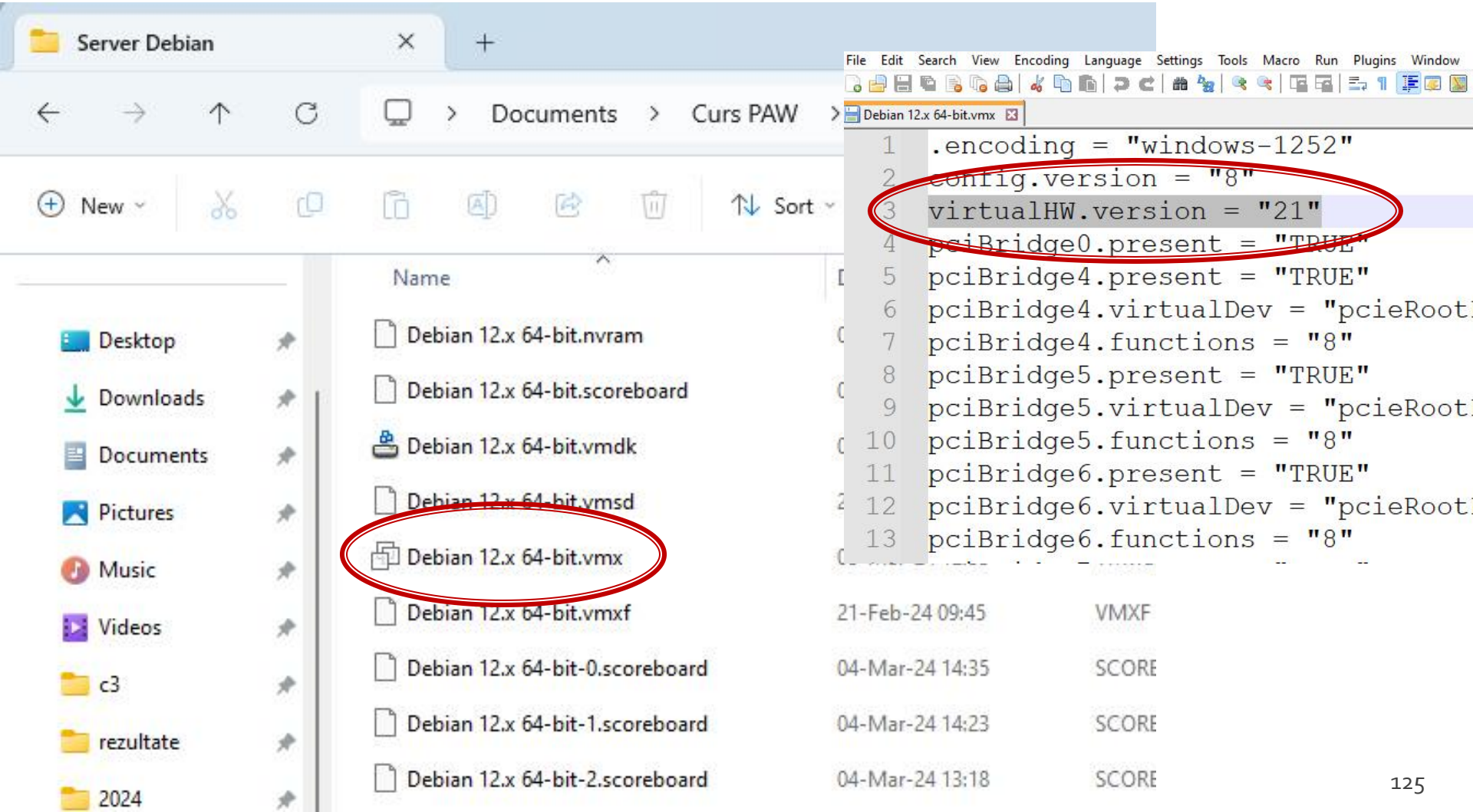
Server referinta



Server referinta

- Pentru rularea unui server pe o versiune VMware Player **anterioara**:
  - se localizeaza fisierul "*.vmx" a server-ului
  - se modifica virtualHW.version = "**21**" la o valoare mai mica (anterioara)
    - in 2.13 -> **18?**

Server referinta



Aplicatii suport

- WinSCP (client FTP, gratuit)
  - https://winscp.net/eng/download.php
- Notepad ++ (editor, avansat, gratuit)
  - https://notepad-plus-plus.org/downloads/
- Putty (remote access)
  - https://www.putty.org/
- MySQL Workbench (gratuit, cont Oracle)
  - https://www.mysql.com/products/workbench/
- Visual Studio Code (gratuit, Microsoft)
  - https://code.visualstudio.com/download

Aplicatii suport

- Variante portabile

Laboratory

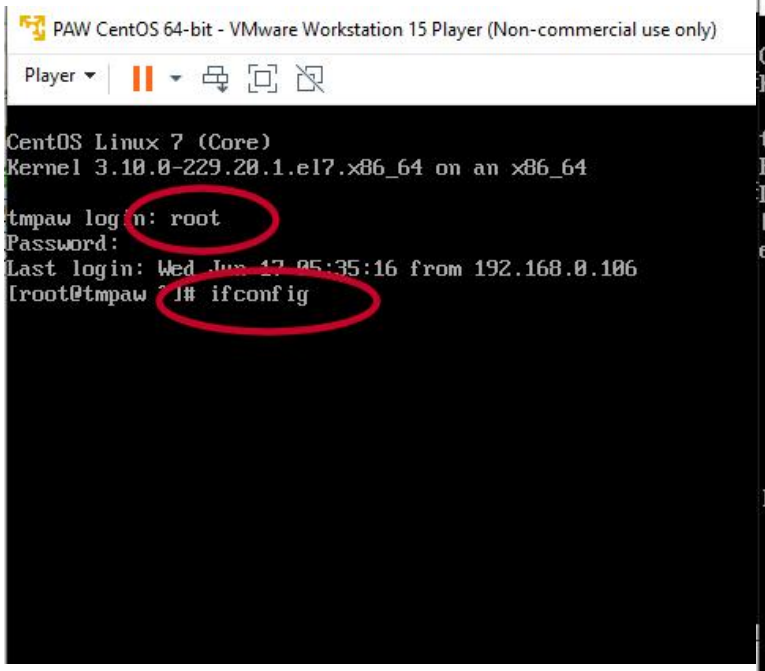
Laborator 1 (pdf, 1.48 MB, ro,)
Server Win2000 pentru VMWare Player - lab 1 (cloud) (link, 0 Bytes, en,)
Accesorii laborator (x32 - partial) (zip, 28.92 MB, en,)
Accesorii laborator (x64 - complet) (zip, 133.58 MB, en,)

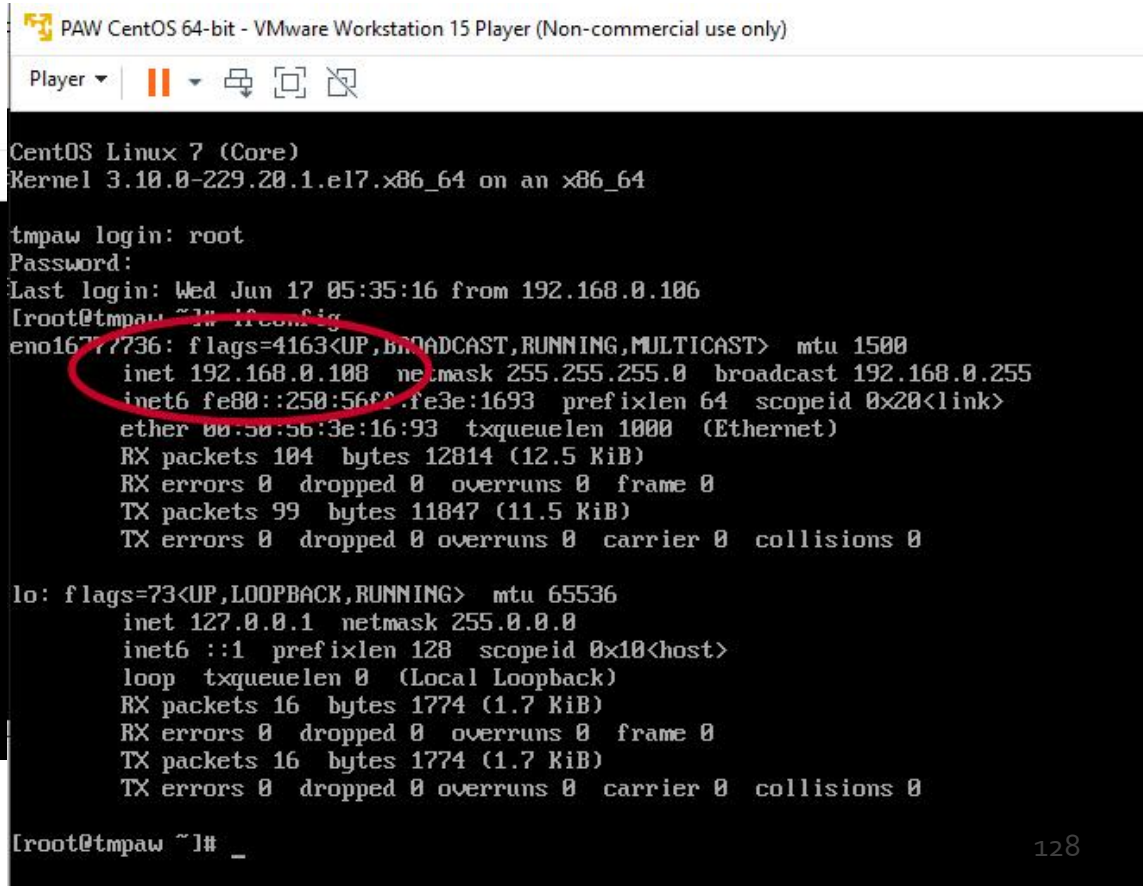
Project/Design

VMware Workstation Player (link, 0 Bytes, en,)
Server CentOS pentru VMWare Player (cloud) (link, 0 Bytes, en,)
Instalare Centos (pdf, 2.54 MB, en,)
Server Ubuntu pentru VMWare Player (cloud) (link, 0 Bytes, en,)
Instalare Ubuntu (pdf, 1.83 MB, en,)

Adresa IP

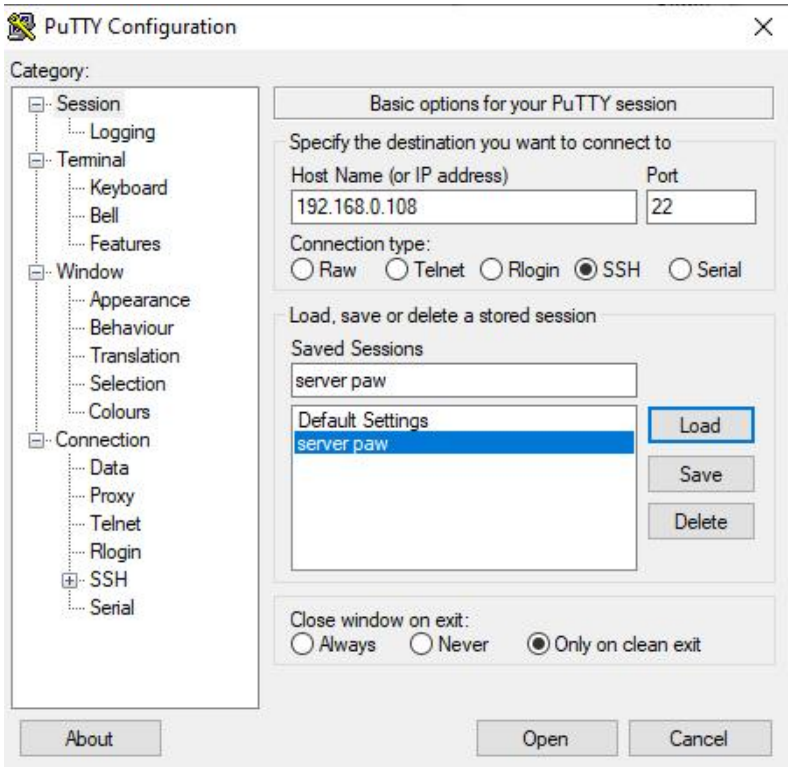
- login, ifconfig
- Ctrl + Alt + mouse

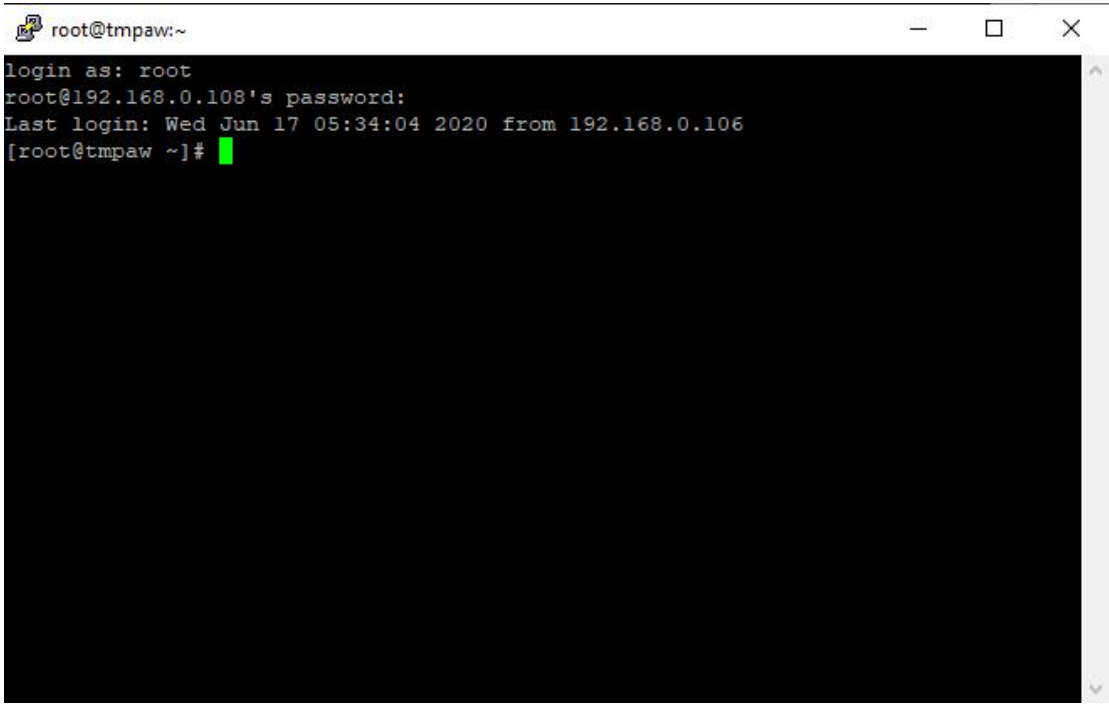




Putty

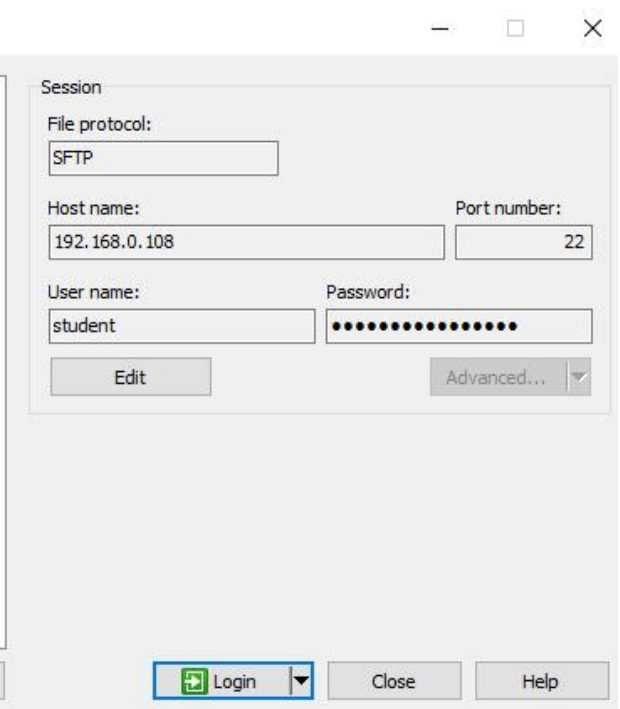
- putty.exe
- evitare captura mouse, copy/paste etc.

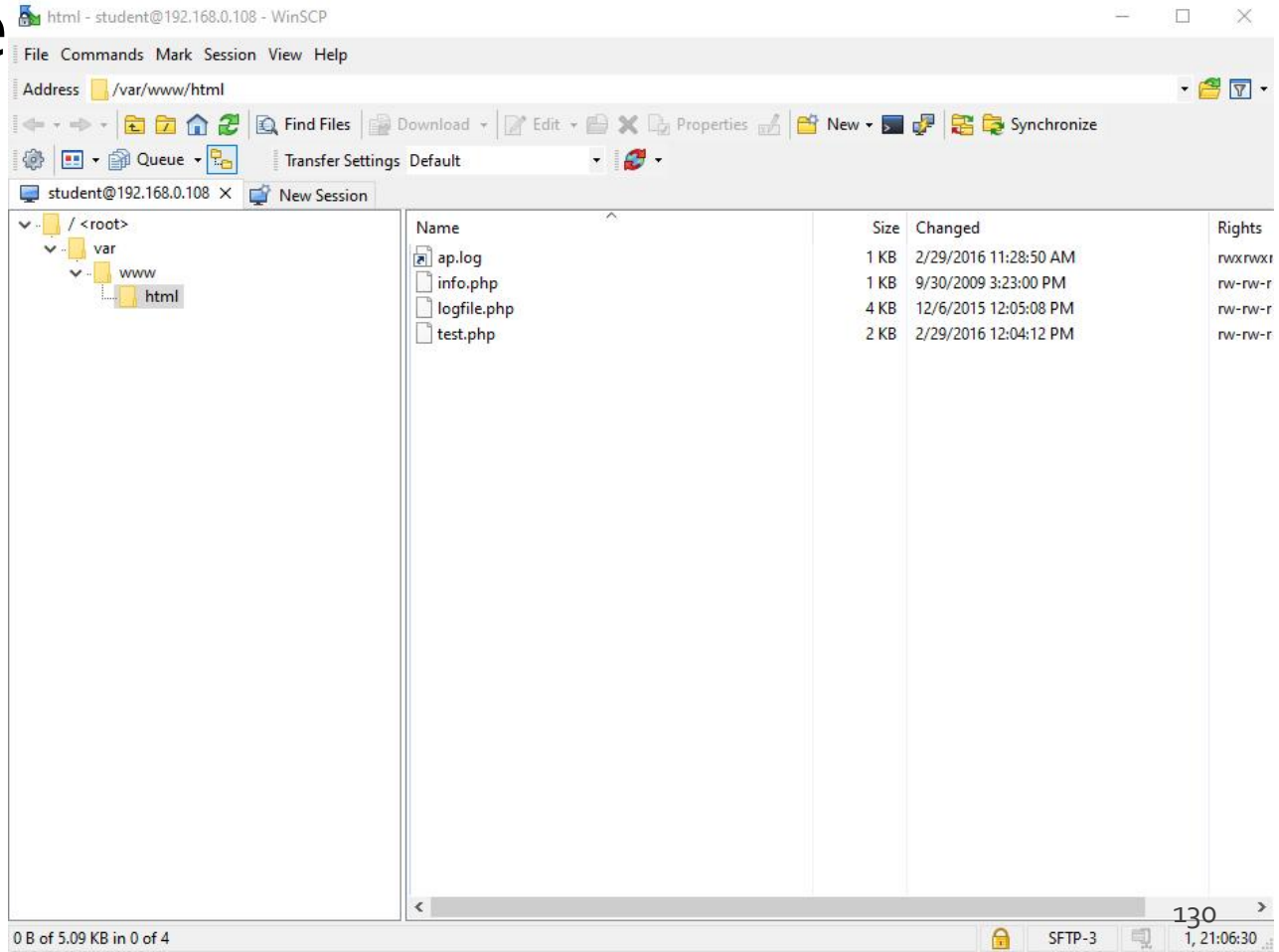




WinSCP

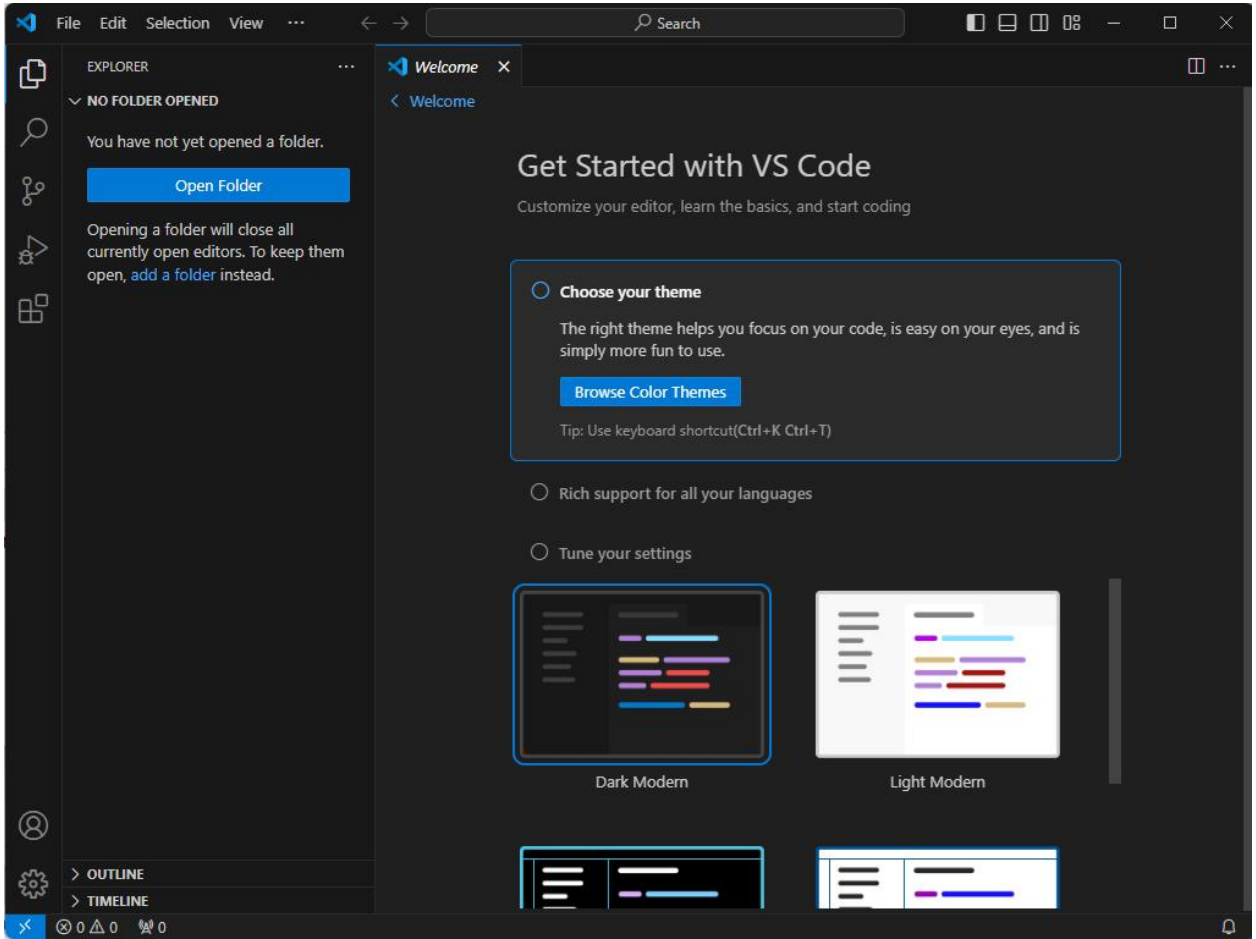
- client FTP
- upload fisiere





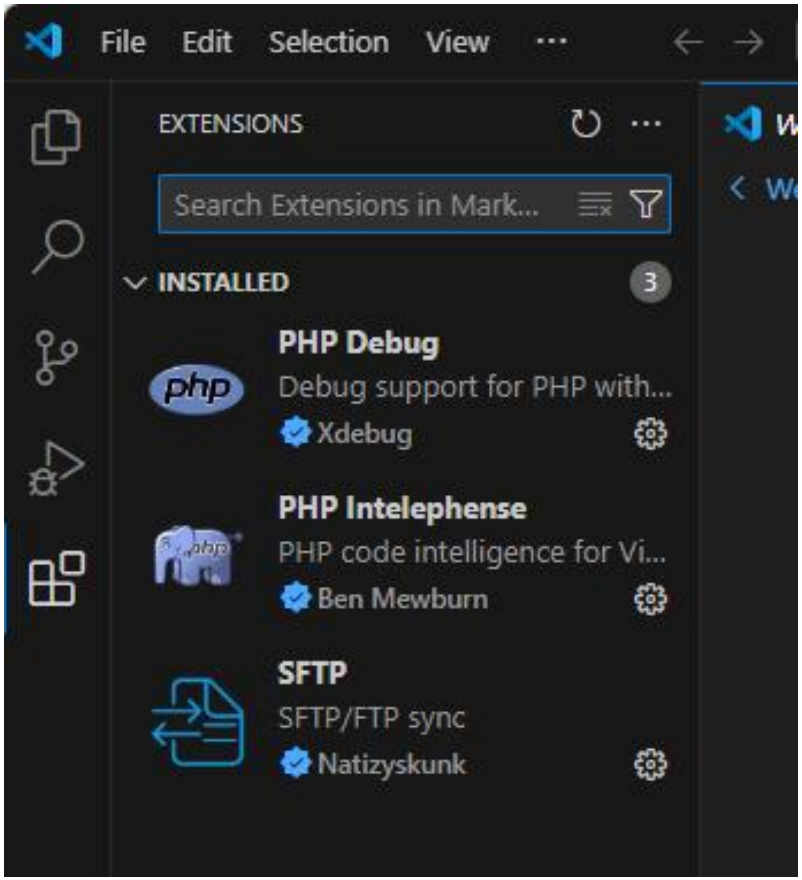
Visual Studio Code

- 1.87 Portabil (curent 1.97.2)

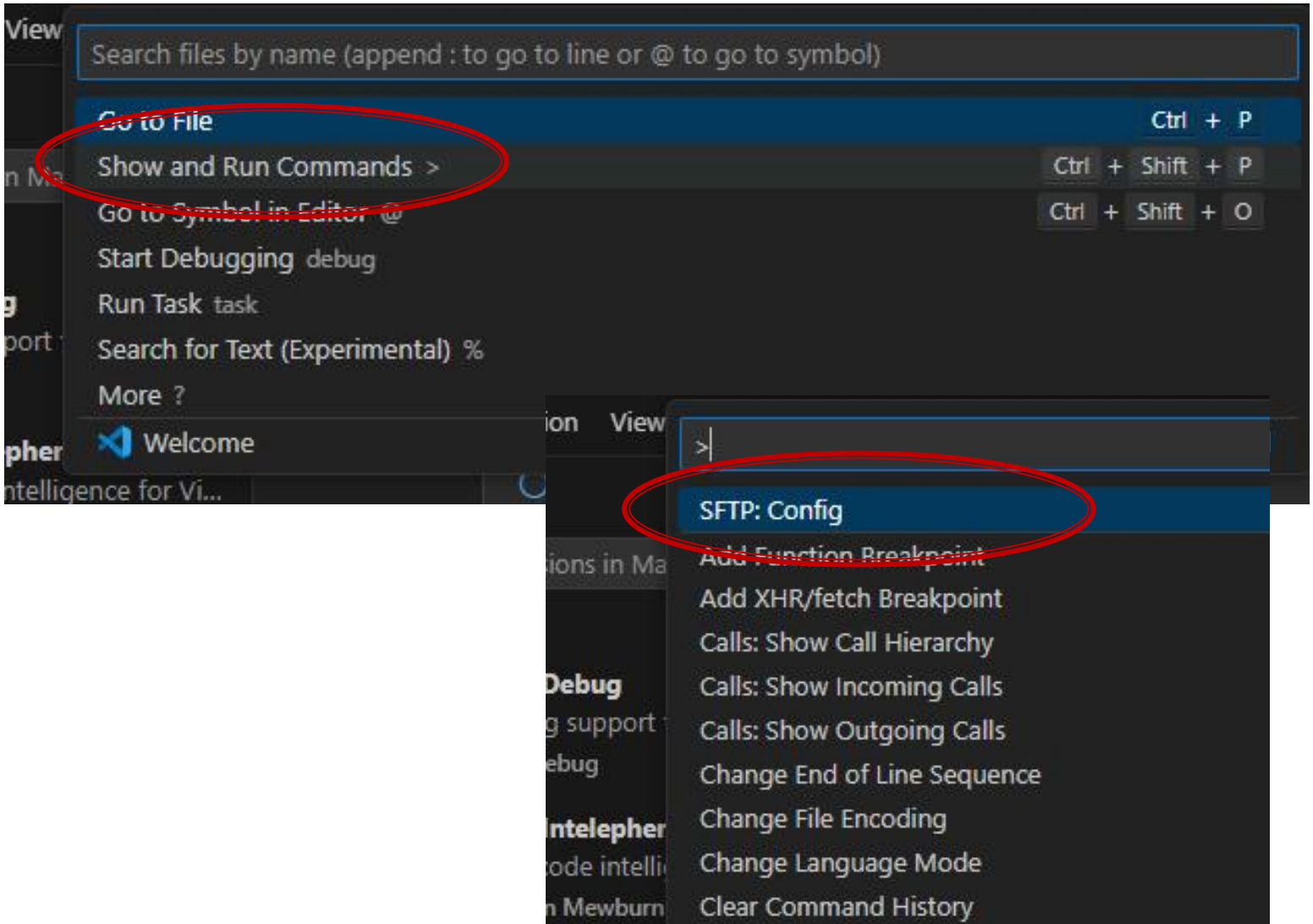


Visual Studio Code

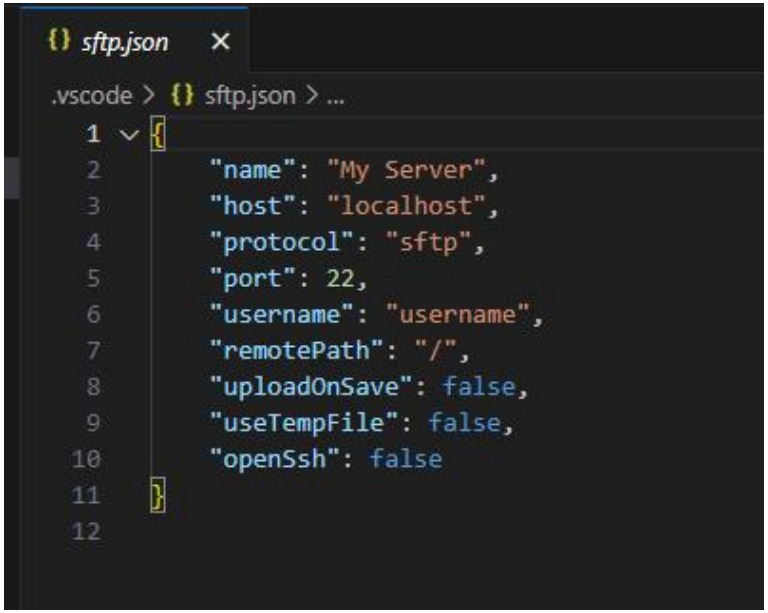
- Extensii instalate
  - PHP Intelephense
    - PHP 8 -> Debian
  - PHP Debug (inactiv momentan)
  - SFTP – salvare automata pe un server

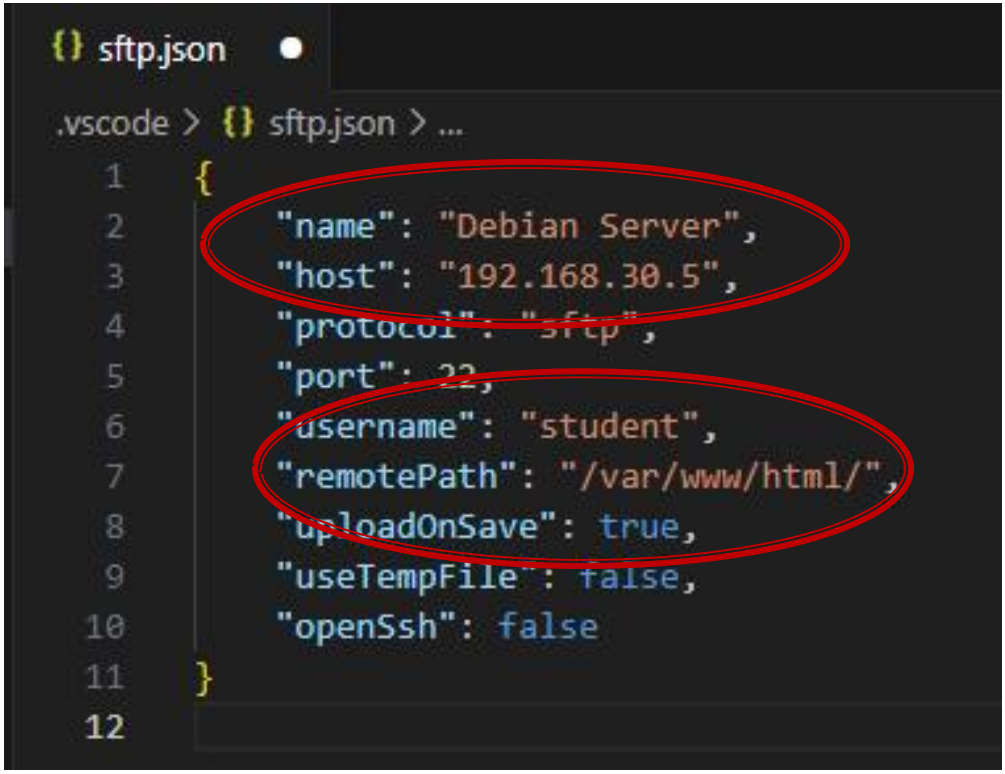


Visual Studio Code

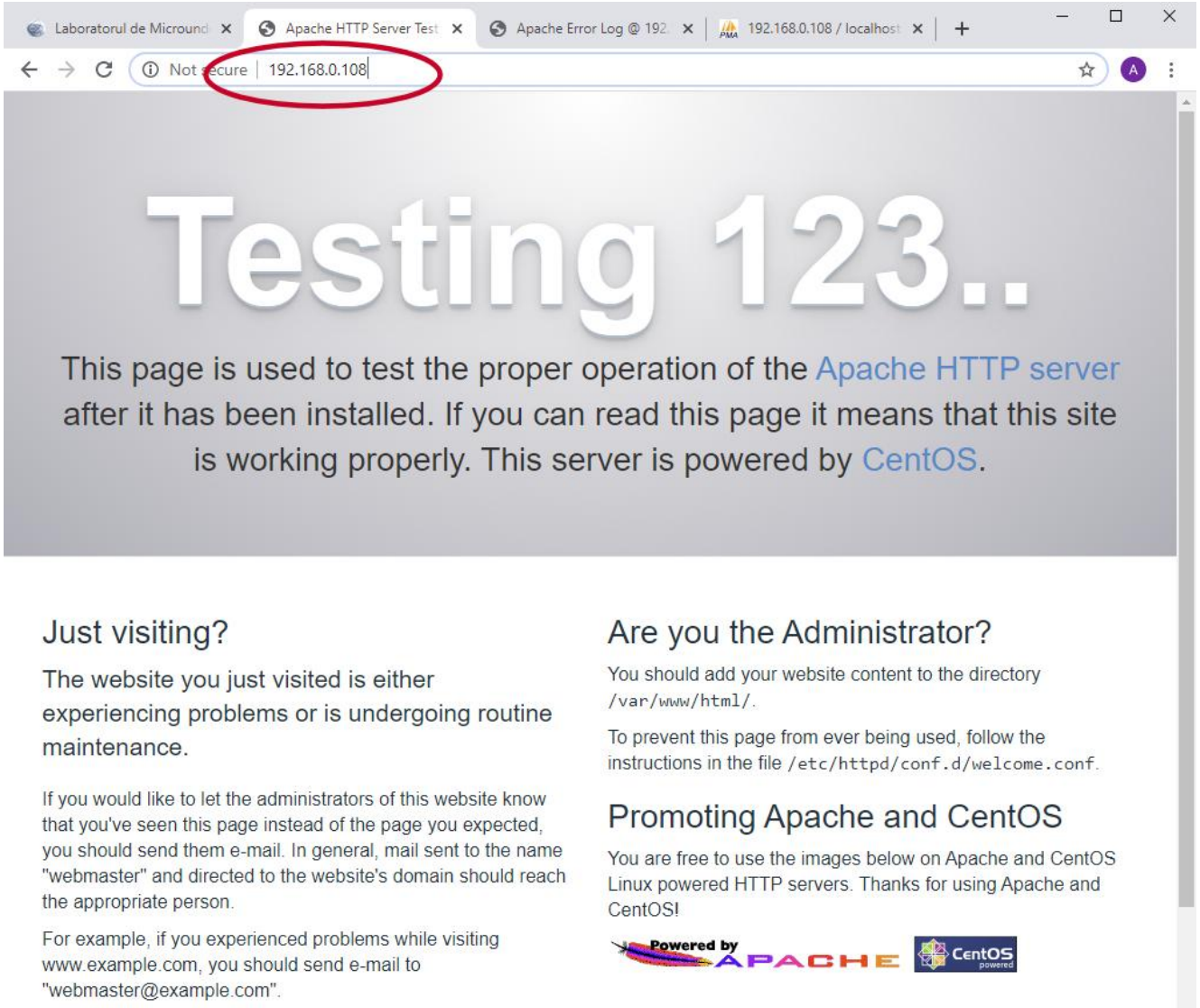


Visual Studio Code

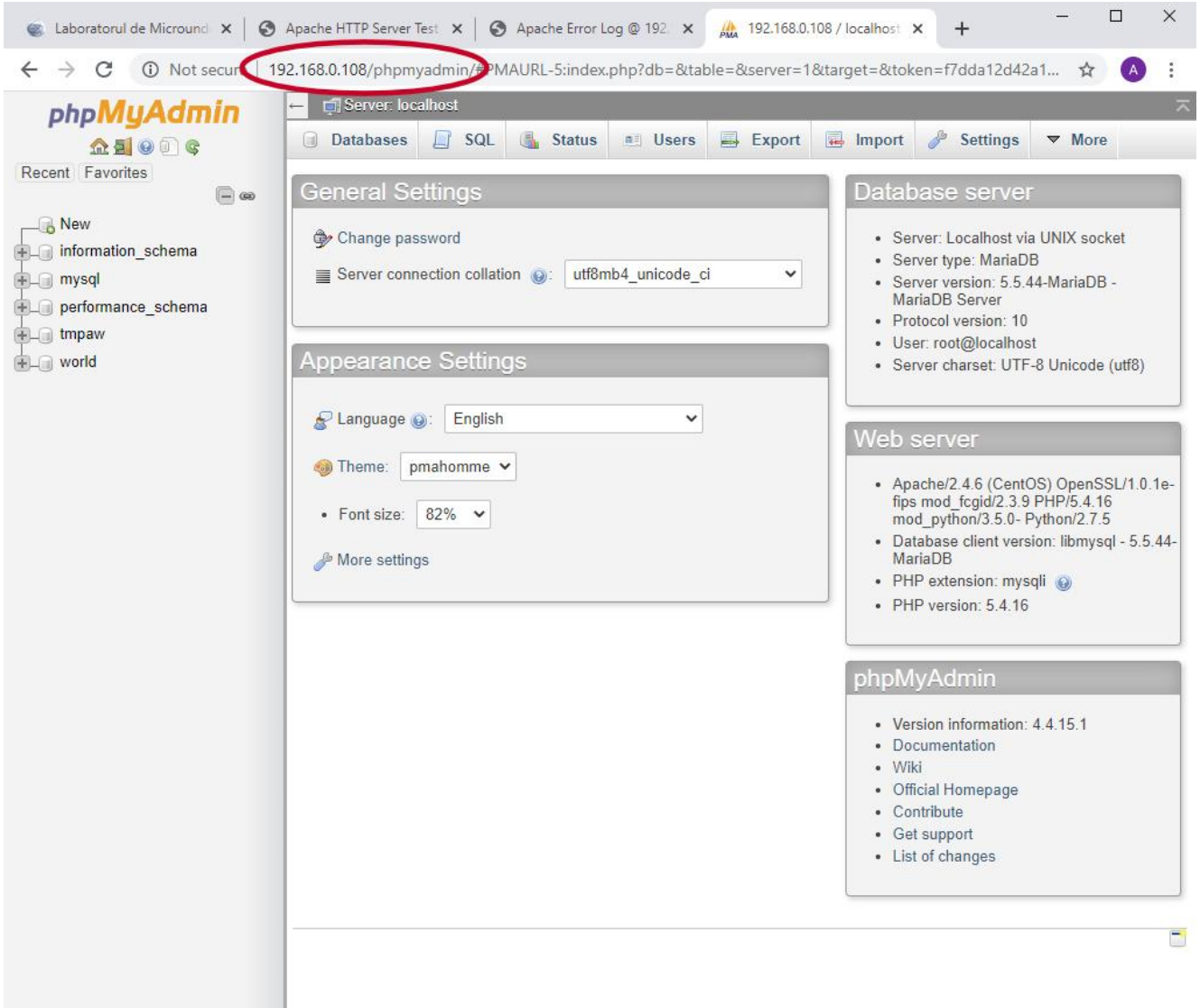




Browser


Laboratorul de Microunde
Apache HTTP Server Test
Apache Error Log @ 192.
192.168.0.108 / localhost
Not secure
192.168.0.108
Testing 123..
This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page it means that this site is working properly. This server is powered by CentOS.
Just visiting?
The website you just visited is either experiencing problems or is undergoing routine maintenance.
If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.
For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".
Are you the Administrator?
You should add your website content to the directory /var/www/html/.
To prevent this page from ever being used, follow the instructions in the file /etc/httpd/conf.d/welcome.conf.
Promoting Apache and CentOS
You are free to use the images below on Apache and CentOS Linux powered HTTP servers. Thanks for using Apache and CentOS!
Powered by APACHE
CentOS powered

Server MySQL/MariaDB



Contact

- Laboratorul de microunde si optoelectronica
- https://rf-opto.etti.tuiasi.ro
- rdamian@etti.tuiasi.ro