

Curs 9

2019/2020

Programarea aplicațiilor web

- Programarea aplicațiilor web
 - An V RC
 - 2C/1L/1P

Nota

- An V
 - ~~33%~~ E: 40%
 - ~~66%~~ Aplicatii
 - ~~33%~~ L (0%)
 - ~~33%~~ P (60%)

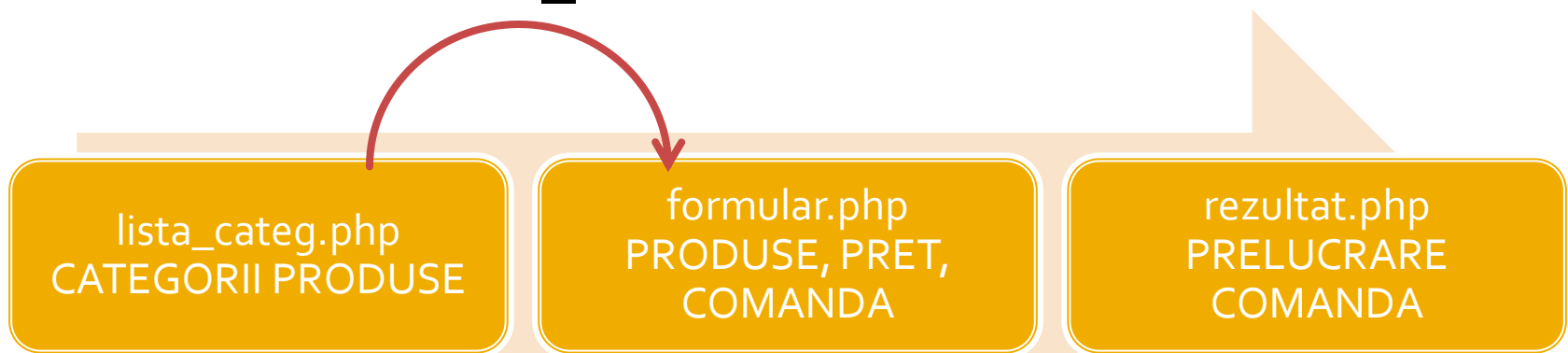
Link-uri active

Forma – 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

Link-uri active

- folosite pentru a transmite o **informatie**
- in `lista_categ.php`
 - `<a href="lista_prod.php?categ=<?php echo $cat;?>"> <?php echo $cat;?> `
- are efect in `formular.php`
 - `$_GET['categ']="valoarea $cat corespunzatoare"`
\$cat – \$_GET



Plan aplicatie

Aplicatie laborator

Categorii Produse

Alegeti categoria:

Nr.	Categorie	Total Produse
1	Papetarie	3
2	Instrumente	3
3	Audio-video	3
4	Calculatoare	3
5	Jucarii	2

Total produse: 14

Magazin online Firma X SRL

Realizati comanda

Nr.	Produs	Pret	Cantitate
1	Carti	100	<input type="text" value="1"/>
2	Caiete	50	<input type="text" value="2"/>
3	Penare	150	<input type="text" value="1"/>
4	Stilouri	125	<input type="text" value="0"/>
5	Creioane	25	<input type="text" value="0"/>

Trimite

Magazin online Firma X SRL

Rezultate comanda

Pret total (fara TVA): 350

Pret total (cu TVA): 416.5

Comanda receptionata la data: 17/03/2010 ora 08:24

Plan aplicatie – Cumparator

- Pe masura ce aplicatia paraseste un fir liniar de executie este necesara introducerea unui plan (graf) al aplicatiei
- Cumparator
 - citirea fisierului XML (accesarea bazei de date) se realizeaza in antet.php, comun pentru toate fisierele

lista_categ.php
CATEGORII PRODUSE

formular.php
PRODUSE, PRET,
COMANDA

rezultat.php
PRELUCRARE
COMANDA

Plan aplicatie – Vanzator

- Aparitia aplicatiei pentru vanzator
 - introduce un fir paralel de executie cu necesitatea alegerii initiale: cumparator/vanzator
 - aduce posibilitatea scrierii fisierului XML (completarea bazei de date)
 - diverse operatii de scriere
 - introducere categorie de produse
 - introducere produs nou intr-o categorie existenta
 - modificare produs existent
 - modificarea fisierului (completarea bazei de date) implica 2 actiuni:
 - colectare date
 - prelucrare

Rezultat (vanzator)

Magazin Firma X

[Inceput](#) | [Inapoi](#)

Magazin online Firma X SRL

Alegeti:

- [Cumparator](#)
- [Vanzator](#)

Categorii Produse

Alegeti categoria:

Nr.	Categorie	Total Produse
1	Papetarie	3
2	Instrumente	3
3	Audio-video	3
4	Calculatoare	3
5	Jucarii	2

Total produse: 14

Categorie noua de produse:

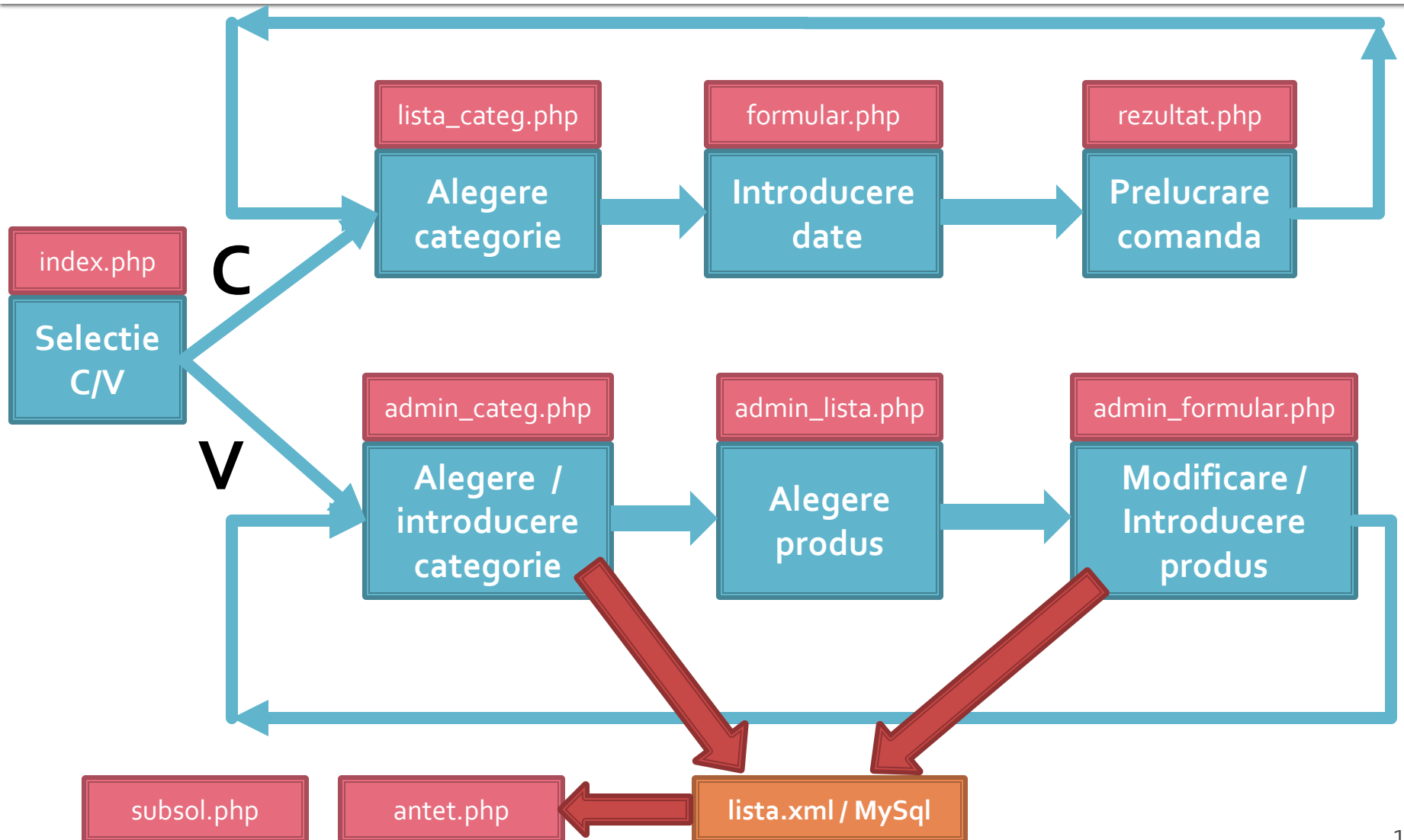
Lista produse in categoria Calculatoare

Nr.	Produs	Descriere	Pret	Cantitate	Actiuni
1	Laptop	calculator mic	2000	2	modifica
2	Desktop	calculator mare	1000	5	modifica
3	Imprimanta	prn	200	2	modifica
-	Produs nou				adauga

Produs in categoria Calculatoare

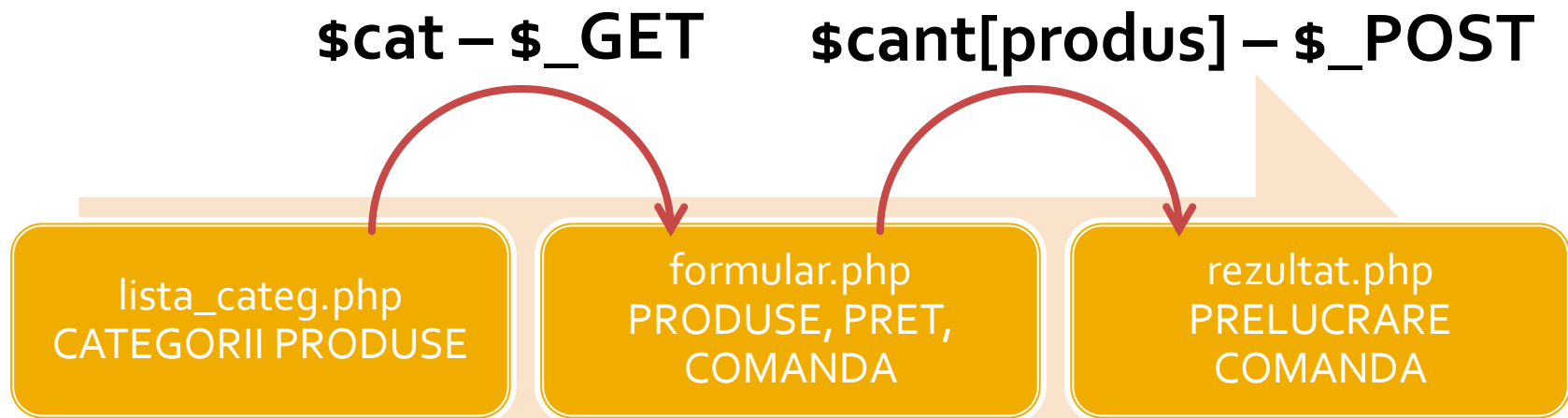
Produs	<input type="text" value="laptop"/>
Descriere	<input type="text" value="calculator mic"/>
Pret	<input type="text" value="2000"/>
Cantitate	<input type="text" value="2"/>
<input type="button" value="Trimite"/>	

Plan aplicatie



Plan aplicatie

- Planul aplicatiei trebuie sa cuprinda si informatii relative la:
 - **ce date** se transmit intre diferitele pagini
 - **cum** se transmit datele intre pagini

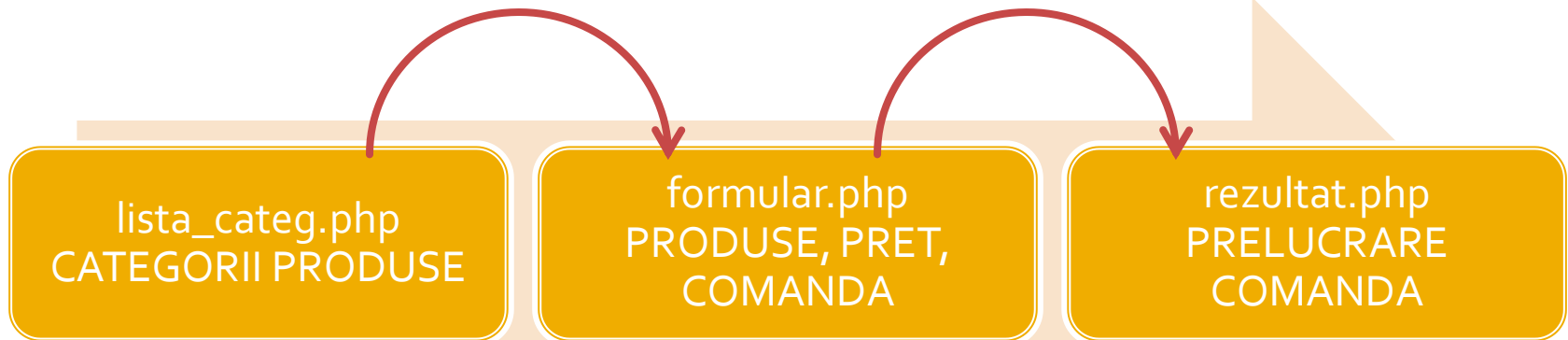


Plan aplicatie

- Planul aplicatiei – Exemplu
 - lista de categorii va contine “**link-uri active**” deci transmiterea unei singure variabile se face cu **\$_GET**
 - formularul de comanda transmite date multiple incluse intr-o forma deci transmiterea se face cu **\$_POST**
- Alegerea \$_GET/\$_POST are implicatii:
 - atat in pagina care transmite datele
 - cat si in pagina care le receptioneaza

\$cat – \$_GET

\$cant[produs] – \$_POST



Rezultat (comparator)

Categorii Produse

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4	Calculatoare	3
5	Jucarii	2

Total produse: 14

Magazin online Firma X SRL

Finalizati comanda

Nr.	Produs	Pret	Cantitate
1	Carti	100	<input type="text" value="1"/>
2	Caiete	50	<input type="text" value="2"/>
3	Penare	150	<input type="text" value="1"/>
4	Stilouri	125	<input type="text" value="0"/>
5	Creioane	25	<input type="text" value="0"/>

Magazin online Firma X SRL

Rezultate comanda

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Rezultat (vanzator)

Magazin Firma X

[Inceput](#) | [Inapoi](#)

Magazin online Firma X SRL

Alegeti:

- [Cumparator](#)
- [Vanzator](#)

Categorii Produse

Alegeti categoria:

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2	Desktop	calculator mare	1000	5	modifica
3	Imprimanta	prn	200	2	modifica
-	Produs nou				adauga

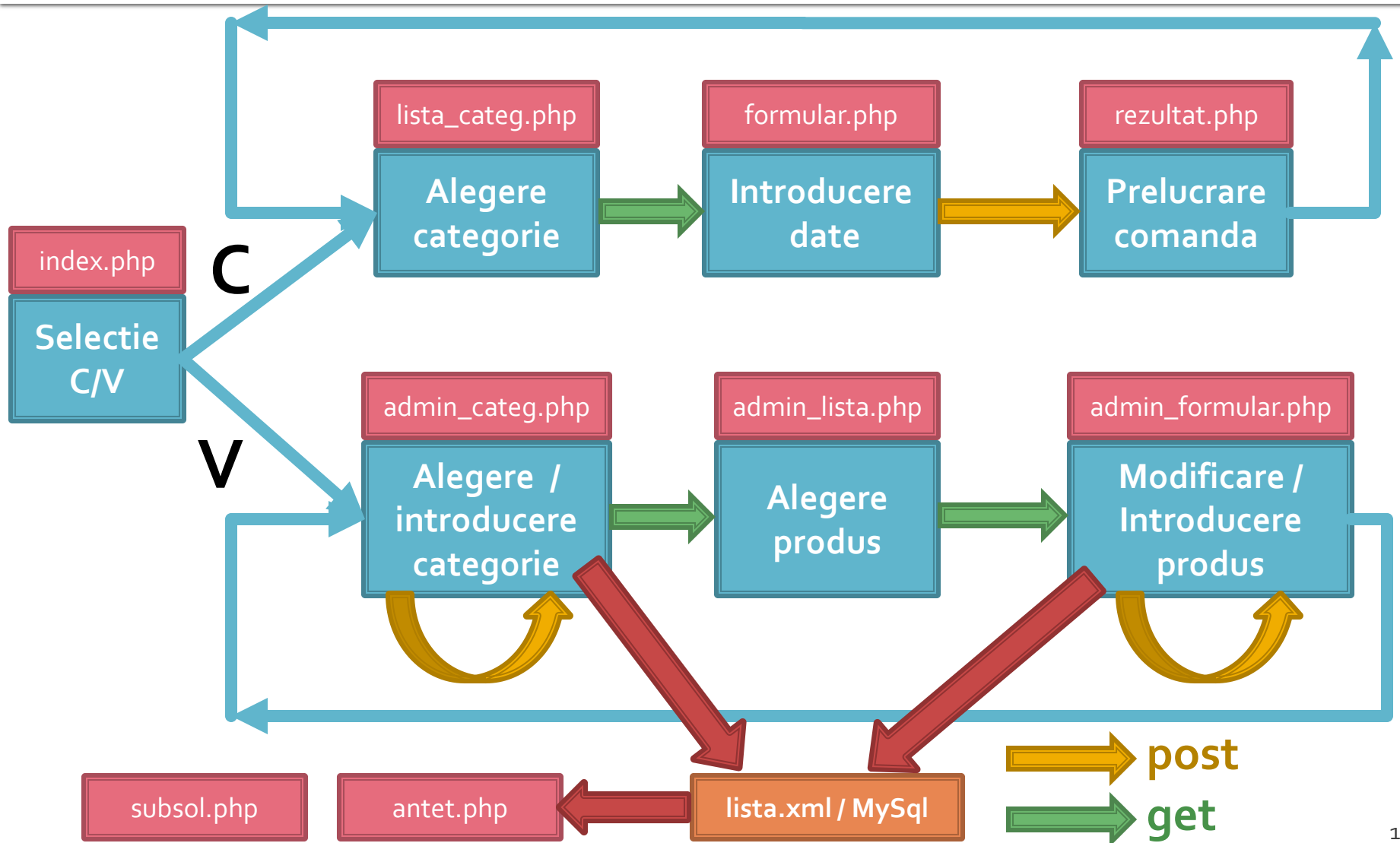
Produs in categoria Calculatoare

Produs	<input type="text" value="laptop"/>
Descriere	<input type="text" value="calculator mic"/>
Pret	<input type="text" value="2000"/>
Cantitate	<input type="text" value="2"/>



**Fisier unic pentru colectare SI
prelucrare date**

Plan aplicatie



Rezultat (vanzator)

Magazin Firma X

[Inceput](#) | [Inapoi](#)

Magazin online Firma X SRL

Alegeti:

- [Cumparator](#)
- [Vanzator](#)

Categorii Produse

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2	Desktop	calculator mare	1000	5	modifica
3	Imprimanta	prn	200	2	modifica
-	Produs nou				adauga

Produs in categoria Calculatoare

Produs	<input type="text" value="laptop"/>
Descriere	<input type="text" value="calculator mic"/>
Pret	<input type="text" value="2000"/>
Cantitate	<input type="text" value="2"/>



Fisier unic pentru colectare SI prelucrare date

- De multe ori se prefera aceasta varianta
- Permite pastrarea unitara a tuturor operatiilor pentru indeplinirea unei actiuni
 - acces mai simplu
 - usurinta la programare
 - evitarea erorilor: File does not exist: D:/Server/...
- Acelasi fisier e folosit initial pentru a colecta date si apoi, daca se detecteaza prezenta acestora, pentru prelucrarea lor

Fisier unic pentru colectare SI prelucrare date

- Fisierul de receptie pentru <form> va fi fisierul curent
- se recomanda utilizarea variabilei globale `$_SERVER['SCRIPT_NAME']`
 - flexibilitate la redenumirea fisierelor
- alternativ `$_SERVER['PHP_SELF']` nu este recomandata
 - probleme de securitate
- Sectiunea de colectare date se afiseaza numai in absenta datelor

```
<form action="<?php echo $_SERVER['SCRIPT_NAME'];?>" method="post">  
<p><input name="date_ok" type="submit" value="Trimite" /></p>  
</form>
```

Fisier unic pentru colectare SI prelucrare date

- Detectia existentei datelor se face prin verificarea existentei (isset(\$variabila)) valorilor introduse
 - eventual pentru un plus de protectie se poate verifica si continutul lor

```
if (isset($_POST[" date_ok "]))
{ //date trimise
  if ($_POST[" date_ok "]=="Trimite" )
    { //date trimise de fisierul curent
      //prelucrare
    }
}
else
{
  //colectare date
  <form action="<?php echo $_SERVER['SCRIPT_NAME '];?>" method="post">
  <p><input name="date_ok" type="submit" value="Trimite" /></p></form>
}
```

Includerea / controlul formei in fisierile PHP - Template

Analiza critica

- design?
 - in aplicatiile web forma este importanta
 - nu trebuie sa fie inovativa ci familiara
 - "Don't make me think!"
- ~~■ capacitatea de extindere?~~
 - ~~■ mai multe produse~~
 - ~~■ schimbare de pret~~

Template

- Sablon
- controlul simultan al formei pentru toate paginile din site
- separarea aplicatiei de forma

Lista produse

Magazin **Firma X SRL**

Magazin online Firma X SRL

Lista Produse

Nr.	Produs	Pret
1	Carti	100
2	Caiete	50
3	Penare	150
4	Stilouri	125
5	Creioane	25
Comanda		

```
<html>
<head>
<title>Magazin online Firma X
SRL</title>
</head>
<body bgcolor="#CCFFFF">
<table width="600" border="0"
align="center">
<tr><td></td></tr>
<tr><td height="600" valign="top"
bgcolor="#FFFFCC">
Continut
</td></tr>
</table>
</body>
</html>
```

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

Exemplu – design 2

- sectiunile repetabile pot fi mutate intr-un fisier separat si introduse cu require()
- se identifica zonele comune

```
<html>
<head>
<title>Magazin online Firma X SRL</title>
</head>
<body bgcolor="#CCFFFF">
<table width="600" border="0" align="center">
<tr><td></td></tr>
<tr><td height="600" valign="top"
bgcolor="#FFFFCC">
Continut
</td></tr>
</table>
</body>
</html>
```

Lista produse

```
<html>
<head>
<title>Magazin online Firma X
SRL</title>
</head>
<body bgcolor="#CCFFFF">
<table width="600" border="0"
align="center">
<tr><td></td></tr>
<tr><td height="600" valign="top"
bgcolor="#FFFFCC">
Continut
</td></tr>
</table>
</body>
</html>
```

antet.php

```
<html>
<head>
<title>Magazin online Firma X
SRL</title>
</head>
<body bgcolor="#CCFFFF"><?php
//orice cod comun PHP
?><table width="600" border="0"
align="center">
<tr><td></td></tr>
<tr><td height="600" valign="top"
bgcolor="#FFFFCC">
<h1>Magazin online Firma X SRL</h1>
```

subsol.php

```
</td></tr>
</table>
</body>
</html>
```

Utilizare template

- antet.php
 - orice cod de structura (HTML) comun
 - orice cod de aplicatie comun (PHP) – aproape toate paginile dintr-o aplicatie au nevoie de:
 - acces la date
 - verificare drepturi de acces
 - definitii constante
 - definire/incarcare date **din** sesiunea de lucru (\$_SESSION)
- subsol.php
 - orice cod de structura (HTML) comun
 - orice cod de aplicatie comun (PHP) – de obicei mai redus:
 - salvare date **in** sesiunea de lucru (\$_SESSION)

Lista produse

- Orice fisier php realizez in aplicatie:
 - `<?php require('antet.php');?>`
 - `<?php require('subsol.php');?>`
- si preia automat aceeasi forma

*.php

```
<?php require('antet.php');?>
```

```
<h2>Lista Produse</h2>
```

```
<table border="1">
```

```
...
```

```
</table>
```

```
<?php require('subsol.php');?>
```

Lista produse/template

Magazin **Firma X SRL**

Magazin online Firma X SRL

Lista Produse

Nr.	Produs	Pret
1	Carti	100
2	Caiete	50
3	Penare	150
4	Stilouri	125
5	Creioane	25

[Comanda](#)

Avantajul lucrului cu sabloane

- viteza de dezvoltare a aplicatiei
- separare clara a formei de aplicatie
- forma unitara
 - “don’t make me think”
- modificarea simultana a formei pentru toate paginile din site
- posibilitatea definirii datelor comune intr-un singur fisier
 - `define('PRET_CARTE',100);`

Depanare cod PHP

Faza de verificare/depanare

- Se recomanda utilizarea posibilitatii vizualizarii matricilor
 - In fisierul care receptioneaza datele
 - temporar pina la definitivarea codului
- utilizarea de cod "verbose" (manual) in etapele initiale de scriere a surselor PHP poate fi extinsa si la alte tipuri de date
 - singura (aproape) metoda de depanare(debug) in PHP
 - `<p>temp <?php echo "a=";echo $a; ?> </p>`

```
echo "<pre>";  
print_r($_POST);  
echo "</pre>";
```

Depanare

```
echo "<pre>";  
print_r($_POST);  
echo "</pre>";
```

```
<p>temp <?php echo  
"a=";echo $a; ?> </p>
```

```
echo "<pre>".print_r($_GET,true)."</pre>";
```

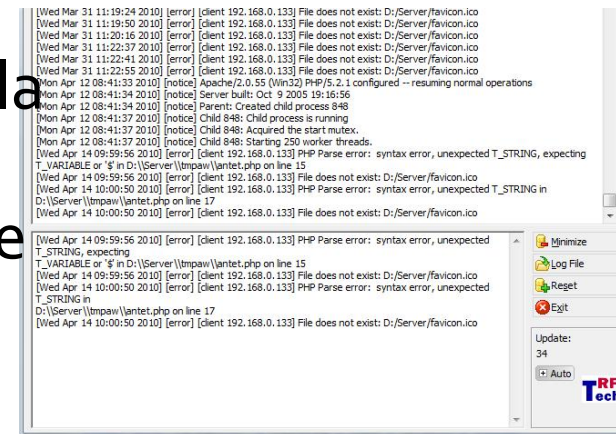
Aspecte practice recomandate in realizarea aplicatiilor web

Metode de lucru recomandate 1

- Daca nu aveti acces simplu la “log-urile” server-ului **MySQL** puteti vedea cum ajung efectiv interogariile la el afisand temporar textul interogarii
 - `$query = "SELECT * FROM `produse` AS p WHERE `id_categ` = ".$row_result_c['id_categ'];
echo $query; //util in perioada de testare`
 - Textul prelucrat de PHP al interogarii va fi afisat in clar pe pagina facand mai usoara depanarea programului
 - Aceste linii **trebuie** eliminate in forma finala a programului ca masura de securitate

Metode de lucru recomandate 2

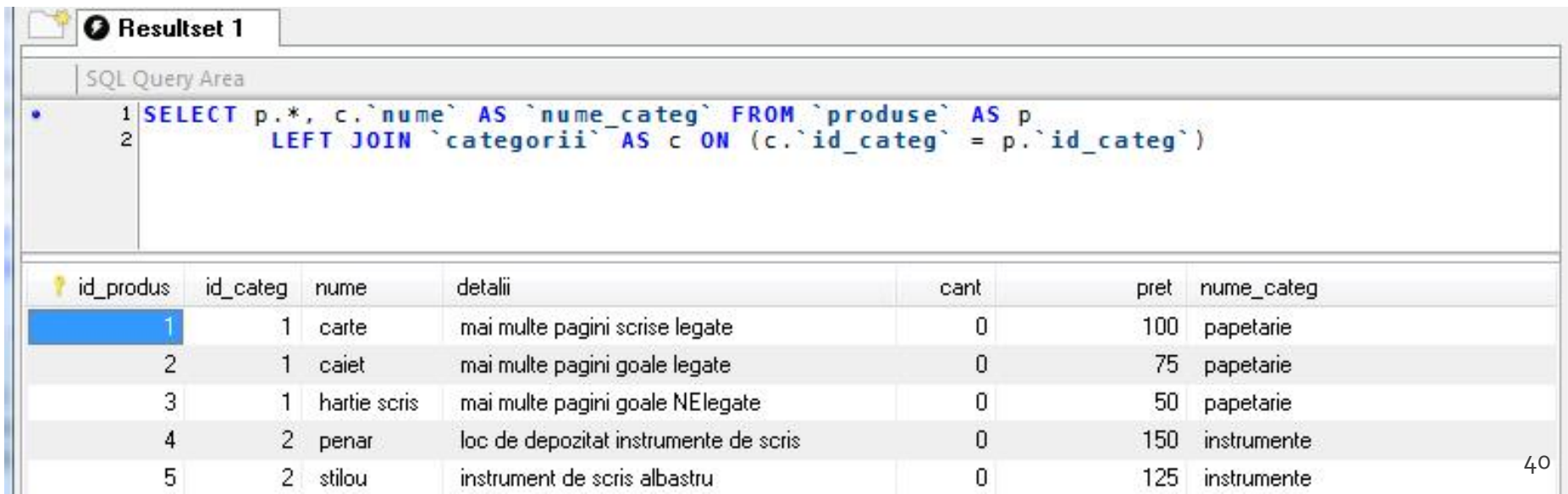
- Verificarea “log-ului” de erori al server-ului Apache ramane principala metoda de depanare a codului PHP.
 - W2000: Utilizarea aplicatiei prezentata la laborator este mai comoda datorita automatizarii dar orice alta varianta este utila
 - Centos 7.1:
 - putty → nano /var/log/httpd/error_log
 - <http://192.168.30.5/logfile.php> (nonstandard)
 - tema suplimentara (php.ini + log PHP **recomandat**)



```
[Wed Mar 31 11:19:50 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Mar 31 11:20:16 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Mar 31 11:22:37 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Mar 31 11:22:41 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Mar 31 11:22:55 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Mon Apr 12 08:41:33 2010] [notice] Apache/2.0.55 (Win32) PHP/5.2.1 configured --- resuming normal operations
[Mon Apr 12 08:41:34 2010] [notice] Server built: Oct 9 2005 19:16:56
[Mon Apr 12 08:41:34 2010] [notice] Parent: Created child process 848
[Mon Apr 12 08:41:37 2010] [notice] Child 848: Child process is running
[Mon Apr 12 08:41:37 2010] [notice] Child 848: Acquired the start mutex.
[Mon Apr 12 08:41:37 2010] [notice] Child 848: Starting 250 worker threads.
[Wed Apr 14 09:59:56 2010] [error] [client 192.168.0.133] PHP Parse error: syntax error, unexpected T_STRING, expecting
T_VARIABLE or '$' in D:/Server/Impaw/antet.php on line 15
[Wed Apr 14 10:00:50 2010] [error] [client 192.168.0.133] PHP Parse error: syntax error, unexpected T_STRING in
D:/Server/Impaw/antet.php on line 17
[Wed Apr 14 10:00:50 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Apr 14 09:59:56 2010] [error] [client 192.168.0.133] PHP Parse error: syntax error, unexpected
T_STRING, expecting
T_VARIABLE or '$' in D:/Server/Impaw/antet.php on line 15
[Wed Apr 14 09:59:56 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
[Wed Apr 14 10:00:50 2010] [error] [client 192.168.0.133] PHP Parse error: syntax error, unexpected
T_STRING in
D:/Server/Impaw/antet.php on line 17
[Wed Apr 14 10:00:50 2010] [error] [client 192.168.0.133] File does not exist: D:/Server/favicon.ico
```

Metode de lucru recomandate 3

- In perioada de definitivare a formei interogarilor MySql este de multe ori benefic sa se utilizeze mai intai **MySql Workbench/PhpMyAdmin** pentru incercarea interogarilor, urmand ca apoi, cand sunteti multumiti de rezultat, sa transferati interogarea SQL in codul PHP



The screenshot shows a MySQL Workbench interface. At the top, there is a tab labeled "Resultset 1". Below it is the "SQL Query Area" containing the following SQL query:

```
1 SELECT p.*, c.`nume` AS `nume_categ` FROM `produse` AS p
2 LEFT JOIN `categorii` AS c ON (c.`id_categ` = p.`id_categ`)
```

Below the query area, a table of results is displayed. The table has the following columns: id_produș, id_categ, nume, detalii, cant, pret, and nume_categ. The first row is highlighted in blue.

id_produș	id_categ	nume	detalii	cant	pret	nume_categ
1	1	carte	mai multe pagini scrise legate	0	100	papetarie
2	1	caiet	mai multe pagini goale legate	0	75	papetarie
3	1	hartie scris	mai multe pagini goale NElegate	0	50	papetarie
4	2	penar	loc de depozitat instrumente de scris	0	150	instrumente
5	2	stilou	instrument de scris albastru	0	125	instrumente

Metode de lucru recomandate 3

MySQL Query Browser - Connection: root@server / tmpaw

File Edit View Query Script Tools Window Help

Transaction Explain Compare

Resultset 1

SQL Query Area

```
1 SELECT p.*, c.`nume` AS `nume_categ` FROM `produse` AS p
2 LEFT JOIN `categorii` AS c ON (c.`id_categ` = p.`id_categ`)
```

id_produș	id_categ	nume	detalii	cant	pret	nume_categ
1	1	carte	mai multe pagini scrise legate	0	100	papetarie
2	1	caiet	mai multe pagini goale legate	0	75	papetarie
3	1	hartie scris	mai multe pagini goale NElegate	0	50	papetarie
4	2	penar	loc de depozitat instrumente de scris	0	150	instrumente
5	2	stilou	instrument de scris albastru	0	125	instrumente
6	2	creion	instrument de scris gri	0	25	instrumente
7	3	cd	canta	0	50	audio-video
8	3	dvd	vizual	0	100	audio-video
9	3	blue ray	vizual extrem	0	500	audio-video

9 rows fetched in 0.0035s (0.0016s)

Edit Apply Changes Discard Changes First Last Search

1: 1

Metode de lucru recomandate 4

- eficienta unei aplicatii web
 - 100% - **toate prelucrarile "mutate" in RDBMS**
 - PHP **doar** afisarea datelor
- eficienta unei aplicatii MySql
 - 25% **alegerea corecta a tipurilor de date**
 - 25% **crearea indecsilor necesari in aplicatii**
 - 25% **normalizarea corecta a bazei de date**
 - 20% **cresterea complexitatii interogarilor pentru a "muta" prelucrarile pe server-ul de baze de date**
 - 5% **scrierea corecta a interogarilor**

Metode de lucru recomandate 5

- La implementarea unei aplicatii noi (proiect)
 1. Imaginarea planului aplicatiei (ex: S18)
 - "cum as vrea eu sa lucrez cu o astfel de aplicatie"
 - hartie/creion/timp – esentiale
 2. Identificarea datelor/transmisia de date intre pagini
 - get/post/fisier unic colectare-prelucrare
 - baza de date read/write
 3. Identificarea structurii logice a datelor utilizate
 - "clase" de obiecte/fenomene tratate identic
 - se are in vedere scalabilitatea (posibilitatea de crestere a numarului de elemente dintr-o clasa)

Metode de lucru recomandate 5

- La implementarea unei aplicatii noi (proiect)
 4. Realizarea structurii bazei de date
 - In general un tabel pentru fiecare clasa logica distincta **DAR...**
 - se are in vedere scalabilitatea (daca aplicatia creste sa **NU** apara cresterea numarului de clase/tabele) **SI...**
 - normalizare
 5. Identificarea tipului de date necesar pentru coloane
 - de preferat numerele intregi in orice situatie care presupune ordonare
 - dimensiunea campurilor nu mai mare decat e necesar (poate fi fortata prin atributul "size" in eticheta HTML "input")
 6. Imaginarea formei fizice a paginilor
 - "am mai vazut asa si mi-a placut" (Don't make me think!)
 - investigarea posibilitatii de a introduce functionalitate template

Metode de lucru recomandate 5

- La implementarea unei aplicatii noi (proiect)
 7. Popularea manuala a bazei de date cu date initiale
 - MySql Query Browser (sau PhpMyAdmin) / automat / imprumut
 - programarea individuala a paginilor are nevoie de prezenta unor date
 8. Programare individuala a paginilor
 - In general in ordinea din planul aplicatiei (de multe ori o pagina asigura datele necesare pentru urmatoarea din plan)
 - modul "verbose" activ pentru PHP (adica: `echo $a; print_r($matr)`)
 9. Pregatirea pentru distributie/mutare
 - testare detaliata (eventual un "cobai")
 - eliminarea adaosurilor "verbose"
 - backup
 - generarea unui eventual install/setup

Tehnici PHP avansate

HTTP headers

- Permite transmiterea unor header-e specifice protocolului HTTP
- Structura mesajului
 - <initial line, different for request vs. response>
 - Header1: value1
 - Header2: value2
 - Header3: value3
 -
 - <optional message body goes here, like file contents or query data; it can be many lines long, or even binary data \$&*%@!^\$@>

HTTP headers

- header(string, code)

```
<?php header("HTTP/1.0 404 Not Found");?>
```

```
<?php header("Location: http://www.example.com/");  
/* Redirect browser */?>
```

```
<meta http-equiv="refresh" content="5;  
url=http://www.example.com/">
```


HTTP headers

- Header-ele HTTP se trimit inaintea oricaror alte date (HTML)
 - Inceput fisier: `<?php header("..."); ?><!DOCTYPE HTML PUBLIC ...
<html>...<body>...</body></html>`
 - Nici macar **un spatiu** nu trebuie sa apara inainte de primul `<?php`
 - Daca necesitatea de a trimite header-e poate aparea mai tarziu in script se foloseste obligatoriu `Buffer ieseire`

Buffer iesire

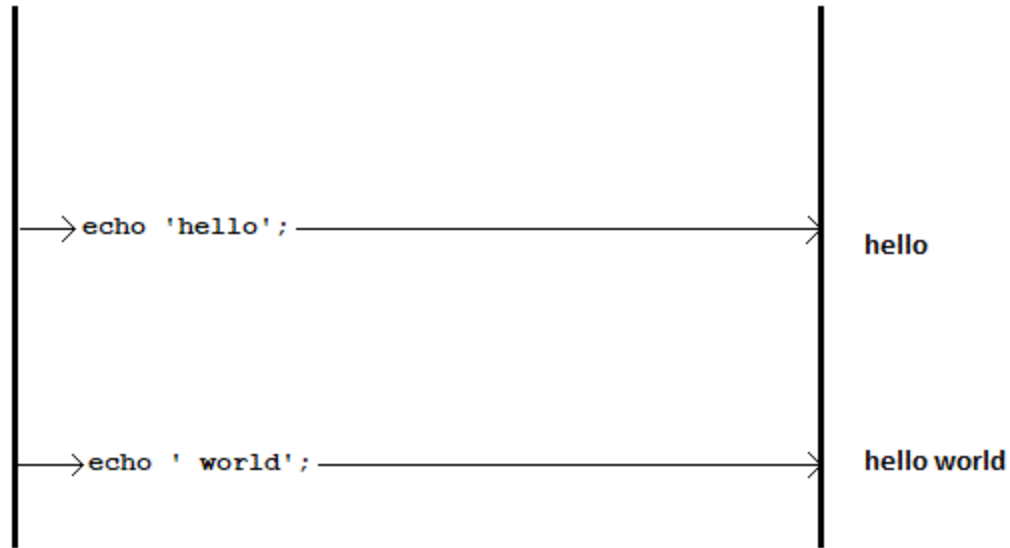
- Copie orice iesire a scriptului PHP intr-un buffer de memorie fara sa transmita nimic clientului
- Utilizat in general pentru conlucrarea cu header-e HTTP, evitarea generarii de HTML inainte de terminarea lucrului cu header-e
- `ob_start();`
- `ob_end_flush ();`
- `ob_end_clean ();`
- `ob_get_contents ()`

Buffer issue

No output buffering

PHP script

Client Browser

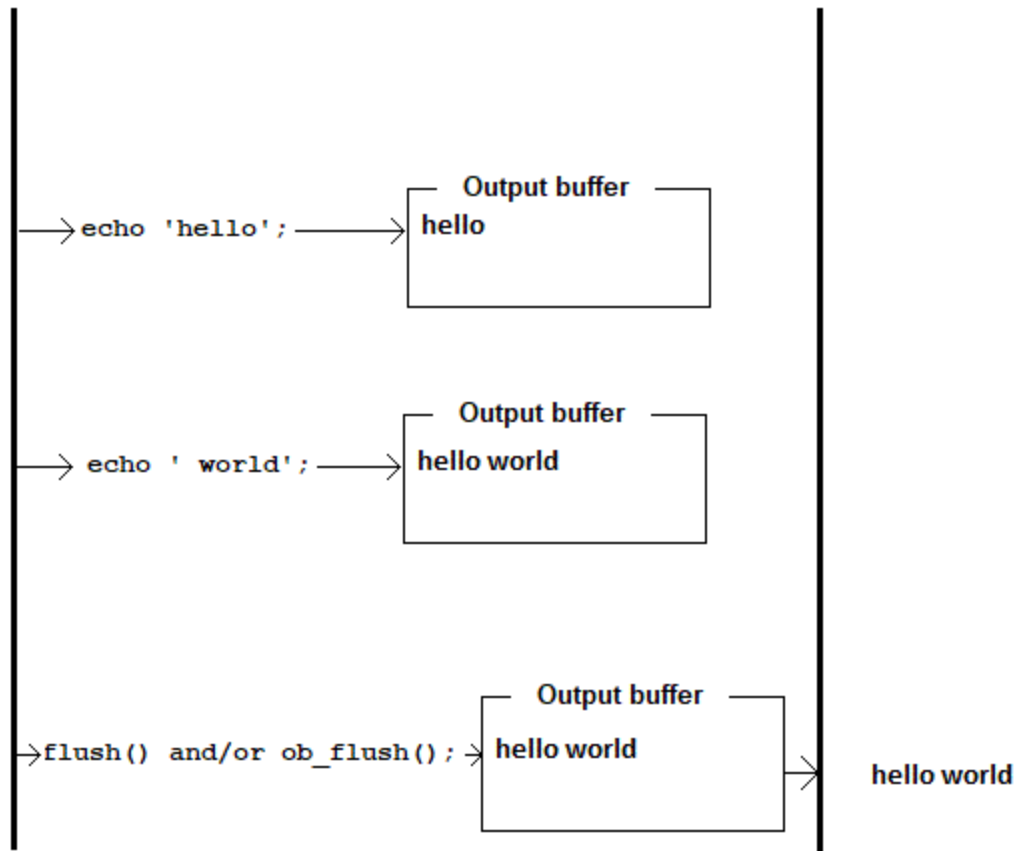


Buffer issues

Output buffering

PHP script

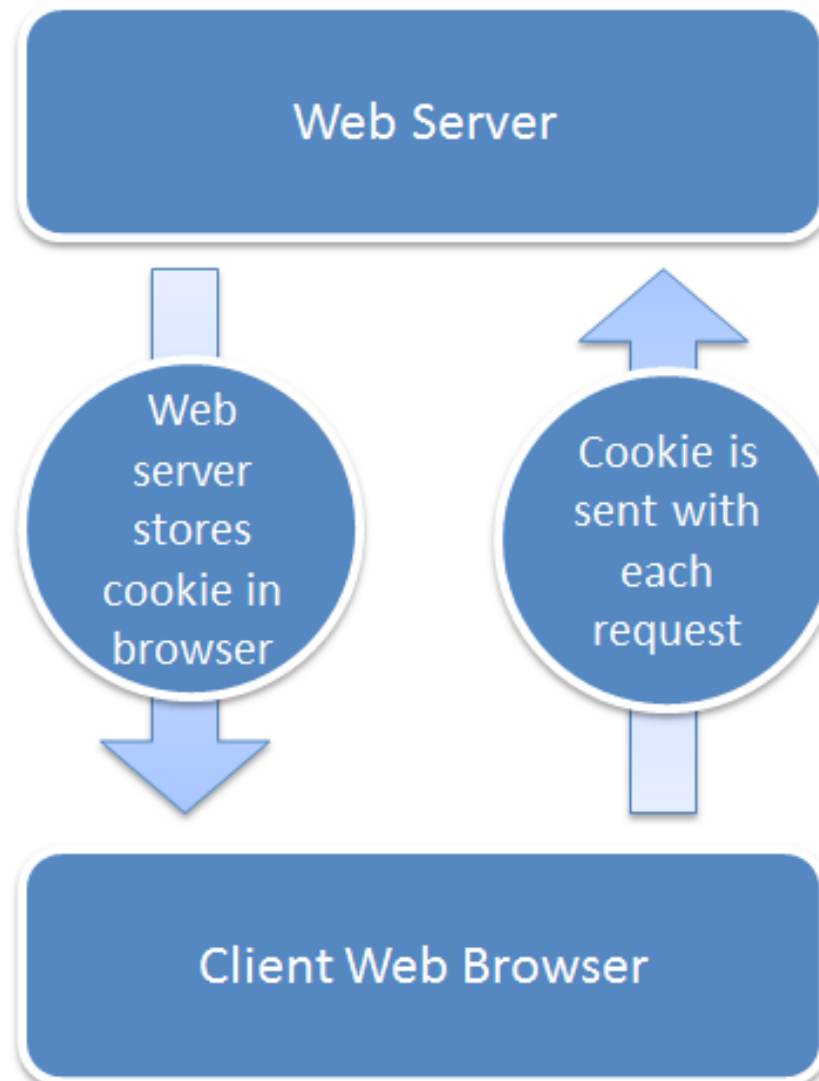
Client Browser



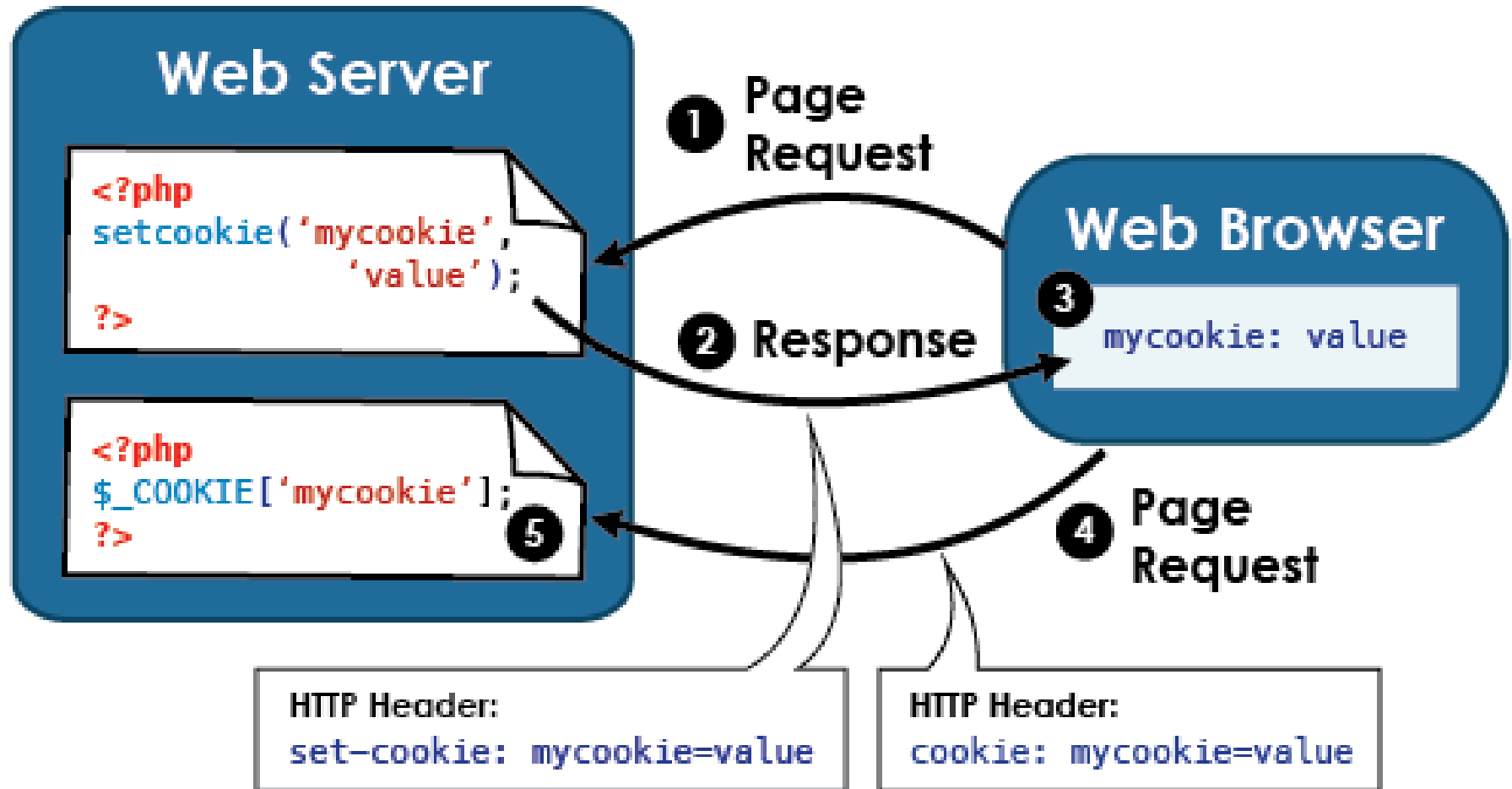
Cookies

- mici cantitati de date ce se stocheaza pe masina client (de obicei gestionat de browser)
- Circula impreuna cu (**este**) header HTTP
- setcookie (string name , string value , int expire , string path , string domain , bool secure , bool httponly)
 - nume (ptr. identificare)
 - value (valoarea/datele stocate)

Cookies



Cookies



Cookies

- `setcookie(string $name, string $value , int $expire = 0)`
 - `expire`: UNIX time stamp, nr. sec. din 1970
 - `time()+nr. sec. de viata dorite`
- datele se stocheaza pe client: probleme de securitate
- Se poate obtine valoarea memorata prin variabila globala `$_COOKIE['nume']`
 - **NU** in acelasi script
 - daca un script php trimite un cookie cu header-ele, de-abia **urmatorul** script accesat va primi acele cookie in header-e

Cookies

```
<?php
$value = 'something from somewhere';

setcookie("TestCookie", $value);
setcookie("TestCookie", $value, time()+3600); /* expire in 1
hour */
setcookie("TestCookie", $value, time()+3600, "/~rasmus/",
"example.com", 1);
?>
```

```
<?php
//Doar pe urmatoarele pagini !!!!

// Print an individual cookie
echo $_COOKIE["TestCookie"];

// Another way to debug/test is to view all cookies
print_r($_COOKIE);
?>
```

Cookies

```
<?php|
//Cookie arrays
// set the cookies
setcookie("cookie[three]", "cookiethree");
setcookie("cookie[two]", "cookietwo");
setcookie("cookie[one]", "cookieone");

// after the page reloads, print them out
if (isset($_COOKIE['cookie']))
{
    foreach ($_COOKIE['cookie'] as $name => $value)
    {
        $name = htmlspecialchars($name);
        $value = htmlspecialchars($value);
        echo "$name : $value <br />\n";
    }
}
?>
```

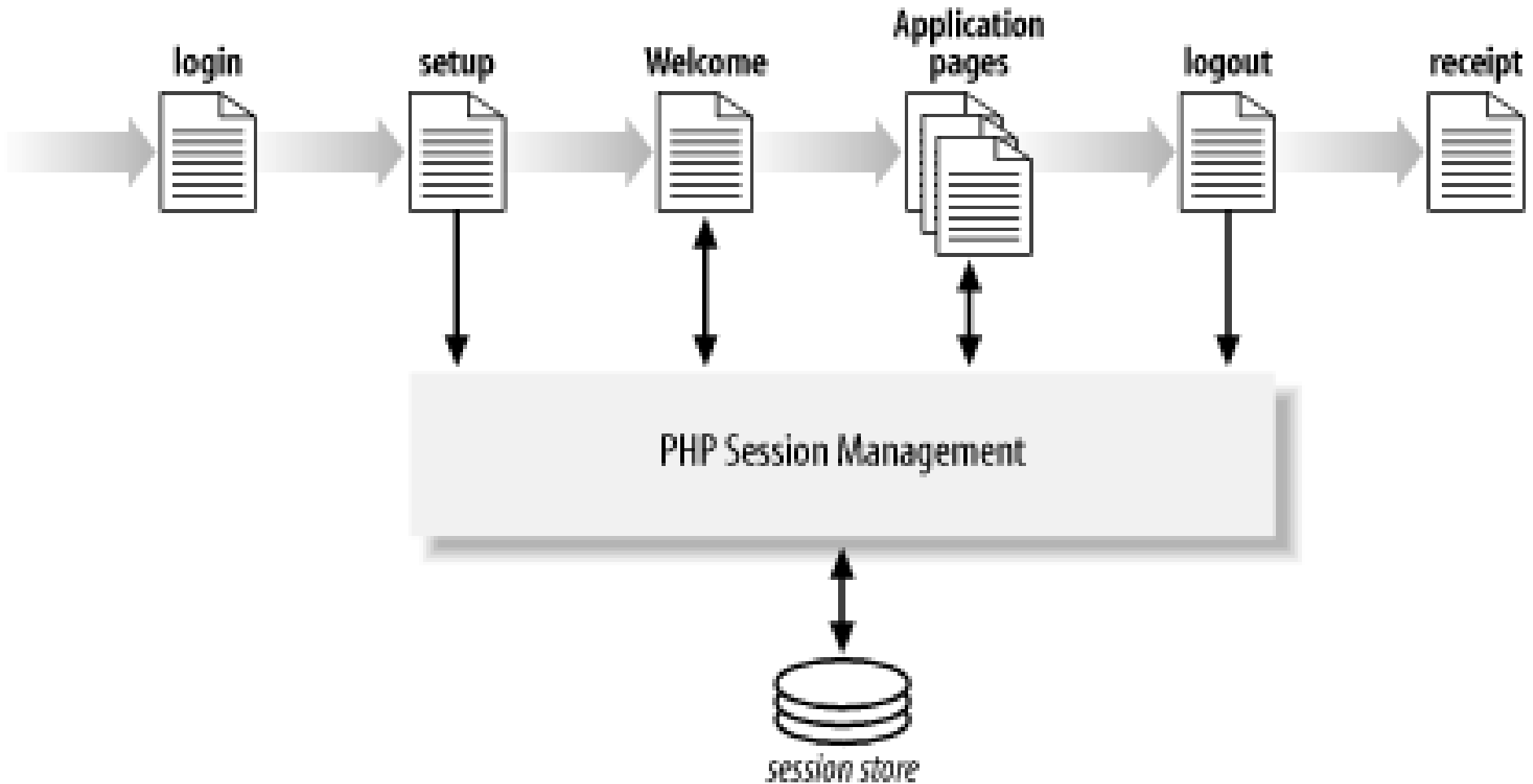
Sesiune

- cookie poate oferi "memorie" aplicatiilor web
- dezavantaje
 - datele se stocheaza la client, nu sunt in siguranta
 - nu se pot stoca oricate date (max. 20)
 - e posibil clientul sa nu accepte cookie
- Sesiunea pentru evitarea acestor dezavantaje
 - stocare pe server
 - oricat de mult date
 - daca clientul nu accepta cookie, "memoria" se realizeaza prin metoda "get"

Sesiune

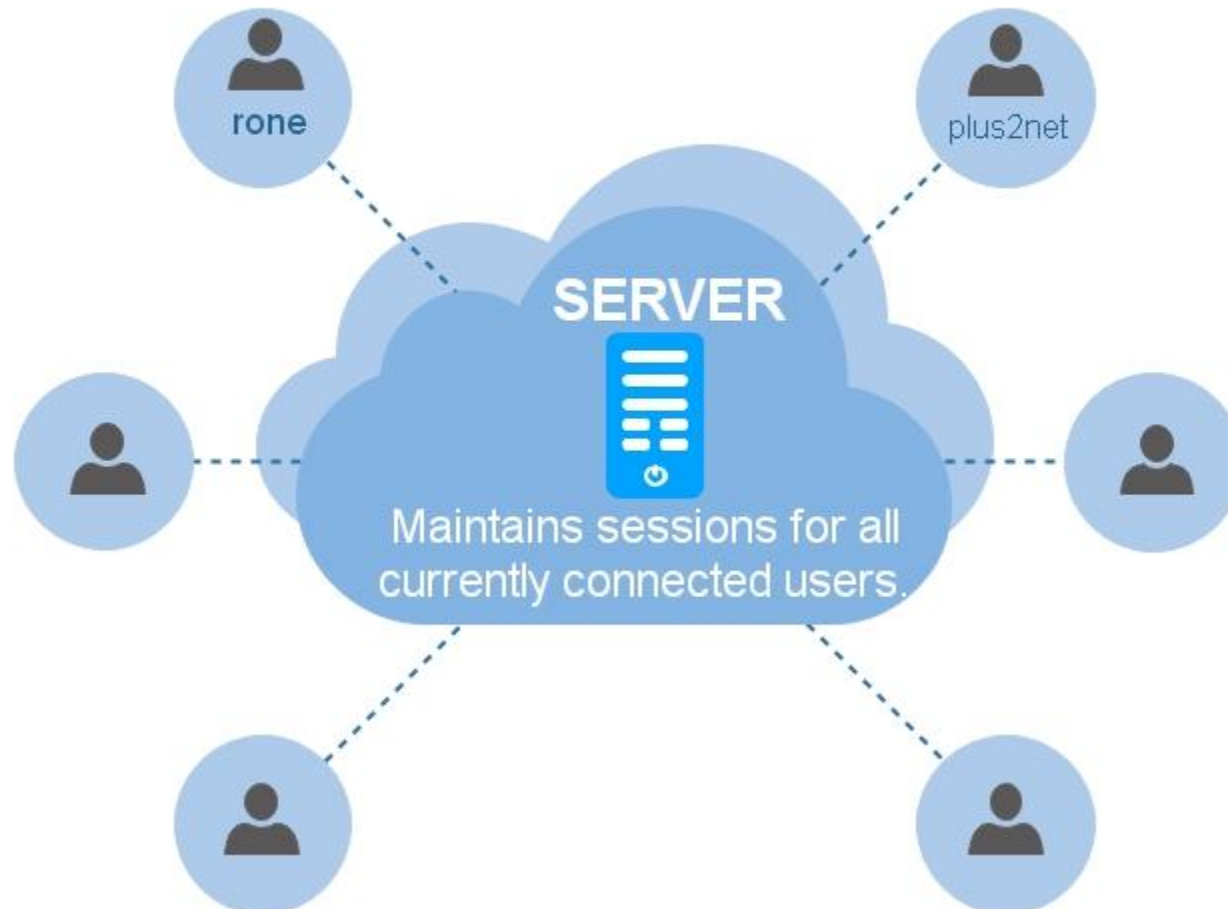
- `session_start()`; (session_ID din GET, POST, COOKIE)
- `session_write_close ()`;
- `session_id ([string id])`;
- datele se manipuleaza prin variabila globala `$_SESSION` care ofera acces la citirea/scrierea datelor

Sesiune



Sesiune

SESSIONS Management



Sesiune

```
<?php
// Initialize the session.
// If you are using session_name("something"), don't forget it now!
session_start();

// Unset all of the session variables.
$_SESSION = array();

// If it's desired to kill the session, also delete the session cookie.
// Note: This will destroy the session, and not just the session data!
if (isset($_COOKIE[session_name()]))
{
    setcookie(session_name(), '', time()-42000, '/');
}

// Finally, destroy the session.
session_destroy();?>
```

Sesiune

```
<?php
// page1.php

session_start();

echo 'Welcome to page #1';

$_SESSION['favcolor'] = 'green';
$_SESSION['animal'] = 'cat';
$_SESSION['time'] = time();

// Works if session cookie was accepted
echo '<br /><a href="page2.php">page 2</a>';

// Or maybe pass along the session id, if needed
//echo '<br /><a href="page2.php?' . SID . '">page 2</a>';
echo '<a href="page2.php?' . session_name() . ' = ' .
session_id() . '">page2</a>' ;
?>
```


Sesiune

```
<?php|
// page2.php

session_start();

echo 'Welcome to page #2<br />';

echo $_SESSION['favcolor']; // green
echo $_SESSION['animal'];   // cat
echo date('Y m d H:i:s', $_SESSION['time']);

// You may want to use SID here, like we did in page1.php
echo '<br /><a href="page1.php">page 1</a>';
?>
```

MySql – Server Windows 2000

Mini – Indrumar practic

Lucru cu bazele de date

Realizarea bazei de date

- Se recomanda utilizarea utilitarului **MySQL Query Browser** sau un altul echivalent pentru crearea scheletului de baza de date (detalii – laborator 1)
- Se initializeaza aplicatia cu drepturi depline (“root” si parola)
 - se creaza o noua baza de date:
 - in lista “Schemata” – Right click – Create New Schema
 - se activeaza ca baza de date curenta noua “schema” – Dublu click pe numele ales

Introducere tabele

- Introducere tabel – Click dreapta pe numele bazei de date aleasa – Create New Table
- se defineste structura tabelului
 - nume coloane
 - tip de date
 - NOT NULL – daca se accepta ca acea coloana sa ramana fara date (NULL) sau nu
 - AUTOINC – daca acea coloana va fi de tip intreg si va fi incrementata automat de server (util pentru crearea cheilor primare)
 - Default value – valoarea implicita care va fi inserata daca la introducerea unei linii noi nu se mentioneaza valoare pentru acea coloana (legat de optiunea NOT NULL)

Tabel Categorii

The screenshot shows the MySQL Table Editor interface for a table named 'categorii' in the 'tmpaw' database. The table has three columns: 'id_categ' (INT(10), UNSIGNED, NOT NULL, AUTO INCREMENT), 'nume' (VARCHAR(45), NOT NULL), and 'detalii' (VARCHAR(150), NOT NULL). A primary index is defined on the 'id_categ' column, named 'PRIMARY', with a BTREE index type.

Table Name: categorii Database: tmpaw Comment: InnoDB free: 11264 kB

Columns and Indices Table Options Advanced Options

Column Name	Datatype	NOT NULL	AUTO INC	Flags	Default Value	Comment
id_categ	INT(10)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> UNSIGNED <input type="checkbox"/> ZEROFILL	NULL	
nume	VARCHAR(45)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BINARY		
detalii	VARCHAR(150)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BINARY	NULL	

Indices Foreign Keys Column Details

PRIMARY

Index Settings

Index Name: PRIMARY

Index Kind: PRIMARY

Index Type: BTREE

Index Columns (Use Drag'n'Drop)

id_categ

Apply Changes Discard Changes Close

Tabel Prognose

The screenshot shows the MySQL Table Editor interface for a table named 'produse' in the 'tmpaw' database. The table is currently empty. The editor displays the table's structure, including column names, data types, and flags. A primary index is defined on the 'id_produ' column.

Table Name: produse **Database:** tmpaw **Comment:** InnoDB free: 11264 kB

Columns and Indices

Column Name	Datatype	NOT NULL	AUTO INC	Flags	Default Value	Comment
id_produ	INT(10)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> UNSIGNED <input type="checkbox"/> ZEROFILL	NULL	
id_categ	INT(10)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> UNSIGNED <input type="checkbox"/> ZEROFILL		
nume	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> BINARY		
detalii	VARCHAR(150)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BINARY	NULL	
cant	INT(10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> UNSIGNED <input type="checkbox"/> ZEROFILL	NULL	
pret	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> UNSIGNED <input type="checkbox"/> ZEROFILL	NULL	

Indices

PRIMARY

Index Settings


Index Name: PRIMARY
Index Kind: PRIMARY
Index Type: BTREE

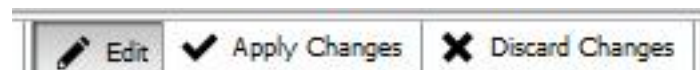
Index Columns (Use Drag'n'Drop)

id_produ

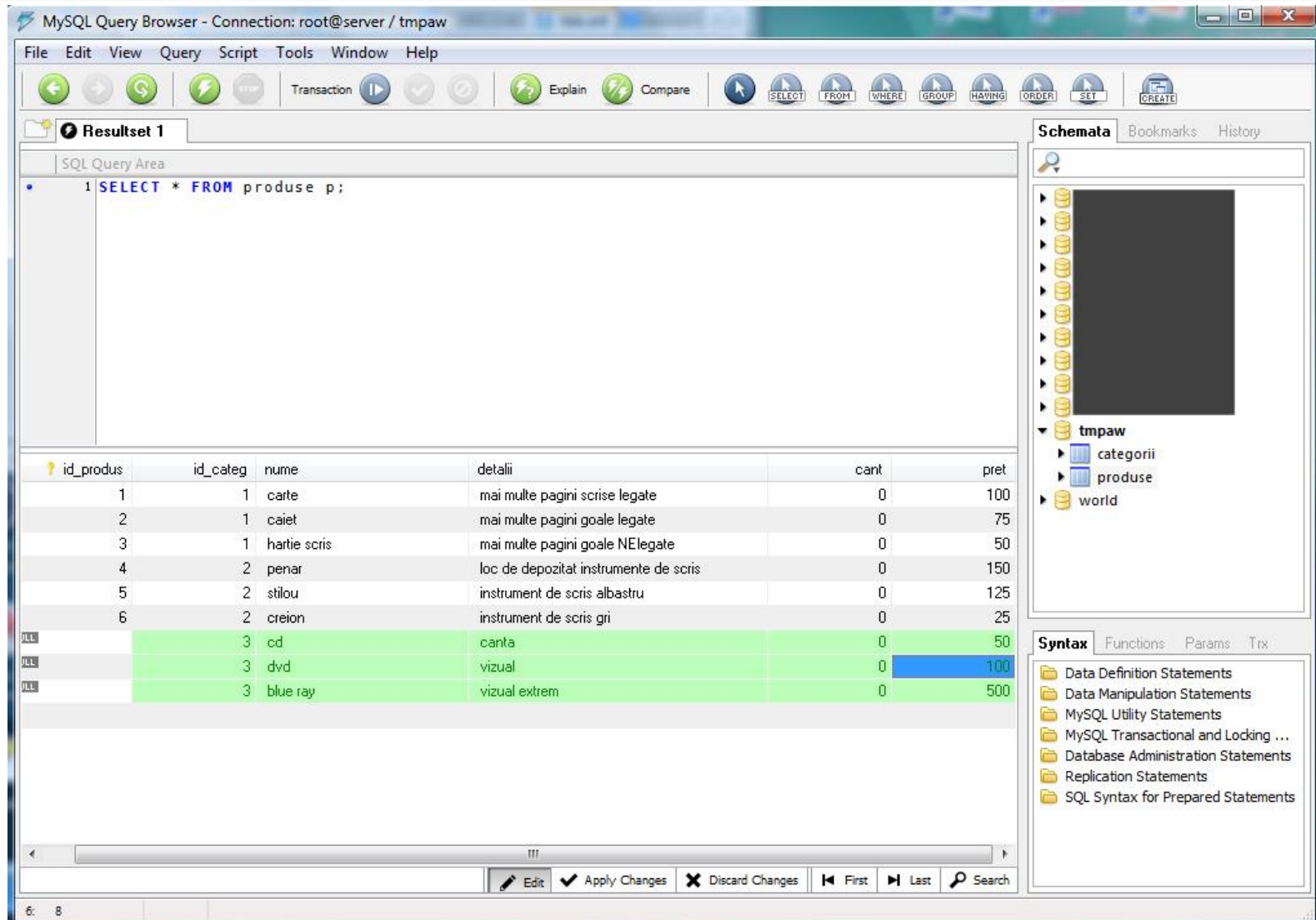
Buttons: Apply Changes, Discard Changes, Close

Introducere date initiale

- Dublu click pe tabel → In zona “SQL Query Area” se completeaza interogarea de selectie totala
 - SELECT * FROM produse p;
- Executia interogarii SQL
 - Meniu → Query → Execute
 - Bara de butoane 
- Lista rezultata
 - initial vida
 - poate fi editata – butoanele “Edit”, “Apply Changes”, “Discard Changes” din partea de jos a listei



Introducere date initiale



The screenshot displays the MySQL Query Browser interface. The main window shows the SQL Query Area with the query: `1 SELECT * FROM produse p;`. Below the query area, the Resultset 1 is displayed as a table with the following data:

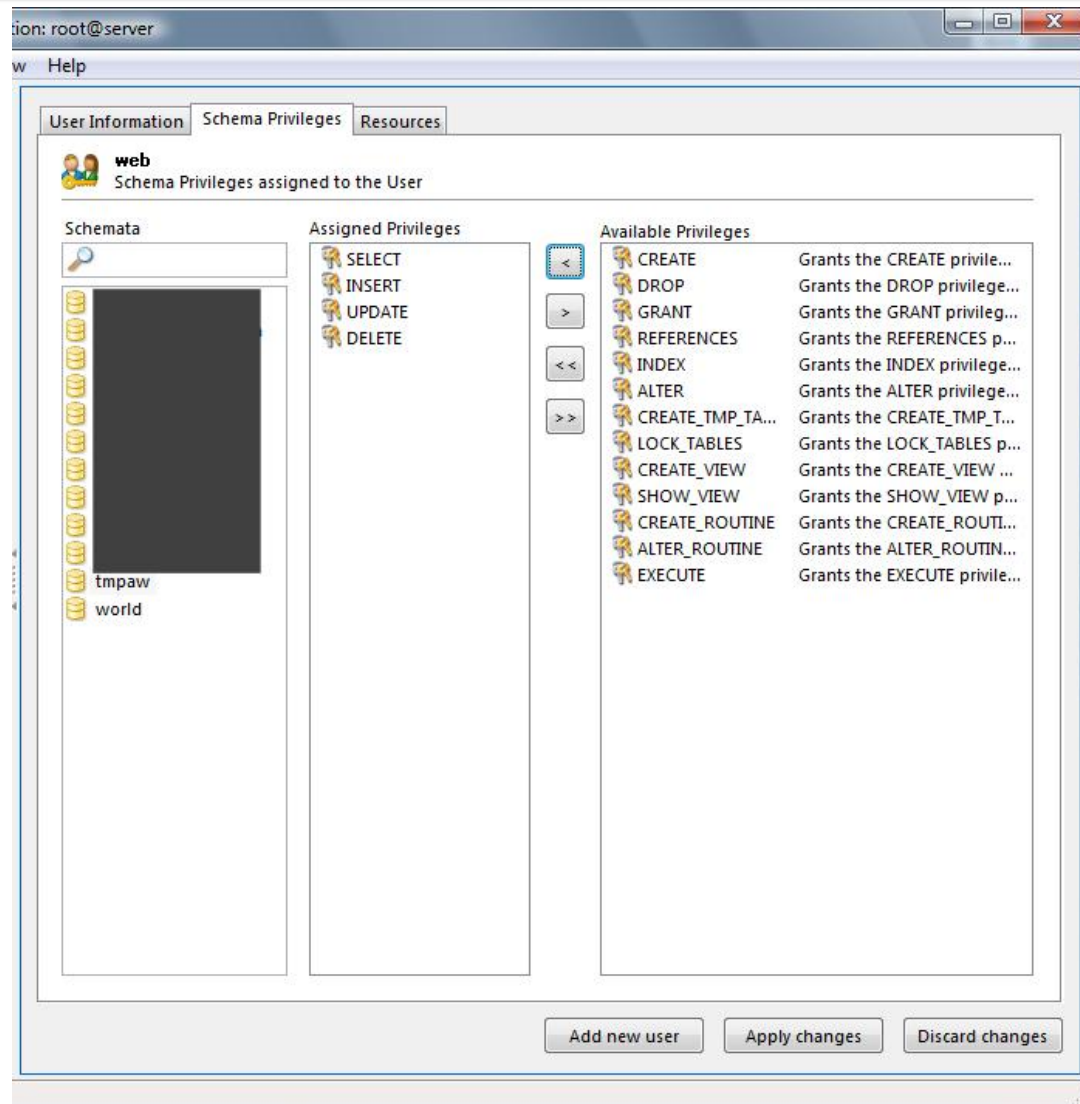
id_produș	id_categ	nume	detalii	cant	pret
1	1	carte	mai multe pagini scrise legate	0	100
2	1	caiet	mai multe pagini goale legate	0	75
3	1	hartie scris	mai multe pagini goale NElegate	0	50
4	2	penar	loc de depozitat instrumente de scris	0	150
5	2	stilou	instrument de scris albastru	0	125
6	2	creion	instrument de scris gri	0	25
ALL	3	cd	canta	0	50
ALL	3	dvd	vizual	0	100
ALL	3	blue ray	vizual extrem	0	500

The interface also includes a Schemata panel on the right showing the database structure, including the 'tmpaw' database with tables 'categorii' and 'produse', and a 'world' database. The Syntax panel at the bottom right lists various SQL statement categories.

Backup, Restore, drepturi de acces

- Se recomanda utilizarea utilitarului **MySql Administrator** sau un altul echivalent (detalii – laborator 1)
- Se initializeaza aplicatia cu drepturi depline (“root” si parola)
- Se creaza un utilizator limitat (detalii – laborator 1)
- Se aloca drepturile “SELECT” + “INSERT” + “UPDATE” asupra bazei de date create (sau mai multe daca aplicatia o cere)

Drepturi de acces



Backup

The screenshot shows the MySQL Administrator interface for configuring a backup project. The window title is "MySQL Administrator - Connection: root@server". The main area is titled "Backup Project" and has three tabs: "Backup Project", "Advanced Options", and "Schedule".

General

Project Name: Name for this backup project.

Schemata

The Schemata list on the left includes: school, tmpaw, and world. The tmpaw schema is selected and highlighted in blue.


Backup Content

Data directory	Obj...	Rows	Data ...	Last update
<input checked="" type="checkbox"/> tmpaw				
<input checked="" type="checkbox"/> categorii	Inno...	3	16384	
<input checked="" type="checkbox"/> produse	Inno...	9	16384	

At the bottom of the window, there are three buttons: "New Project", "Save Project", and "Execute Backup Now".

Yellow arrows indicate the workflow: one arrow points from the "Backup" icon in the left sidebar to the "Backup Project" tab; a second arrow points from the "tmpaw" schema in the Schemata list to the "Backup Content" table; and a third arrow points from the "Execute Backup Now" button to the right side of the window.

Restaurarea bazei de date

- Din **MySql Administrator**
 - Sectiunea Restore → "Open Backup File"
- Din **MySql Query Browser**
 - Meniu → File → Open Script
 - Executie script SQL
 - Meniu → Script → Execute
 - Bara de butoane 
- Scriptul SQL rezultat contine comenzile/interogariile SQL necesare pentru crearea bazei de date si popularea ei cu date

Script SQL Backup - utilitate

- Poate fi folosit ca un model extrem de bun pentru comenzile necesare pentru crearea programatica (din PHP de exemplu) a bazei de date

```
CREATE DATABASE IF NOT EXISTS tmpaw;  
USE tmpaw;
```

```
DROP TABLE IF EXISTS `categorii`;  
CREATE TABLE `categorii` (  
  `id_categ` int(10) unsigned NOT NULL auto_increment,  
  `nume` varchar(45) NOT NULL,  
  `detalii` varchar(150) default NULL,  
  PRIMARY KEY (`id_categ`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
INSERT INTO `categorii` (`id_categ`,`nume`,`detalii`) VALUES  
(1,'papetarie',NULL),  
(2,'instrumente',NULL),  
(3,'audio-video',NULL);
```

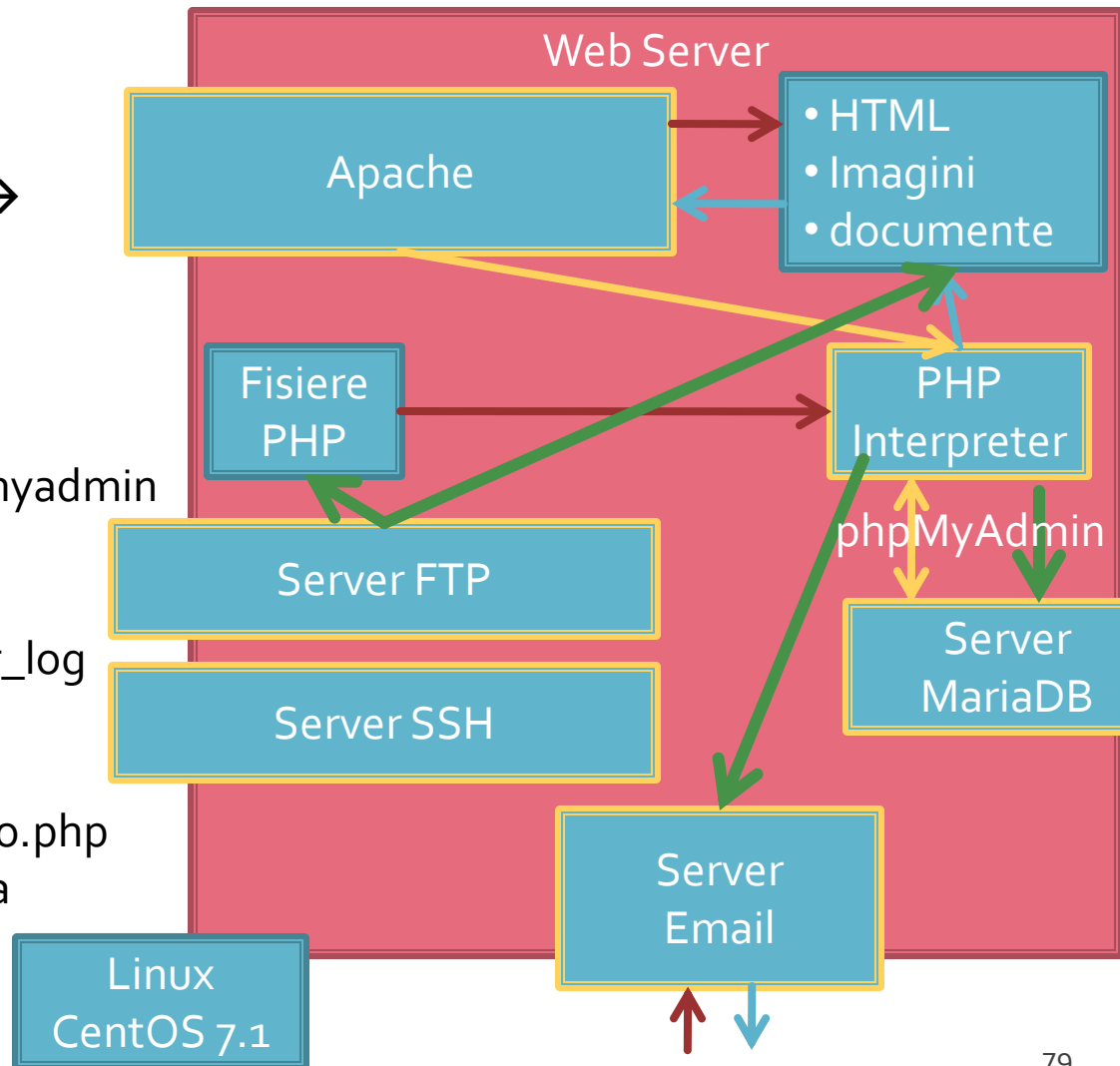
MySql – Server Centos 7.1

Mini – Indrumar practic

Lucru cu bazele de date

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`



PhpMyAdmin

- <http://192.168.30.5/phpmyadmin>
 - root
 - parola administrator **MySql/MariaDB** (masterrc)



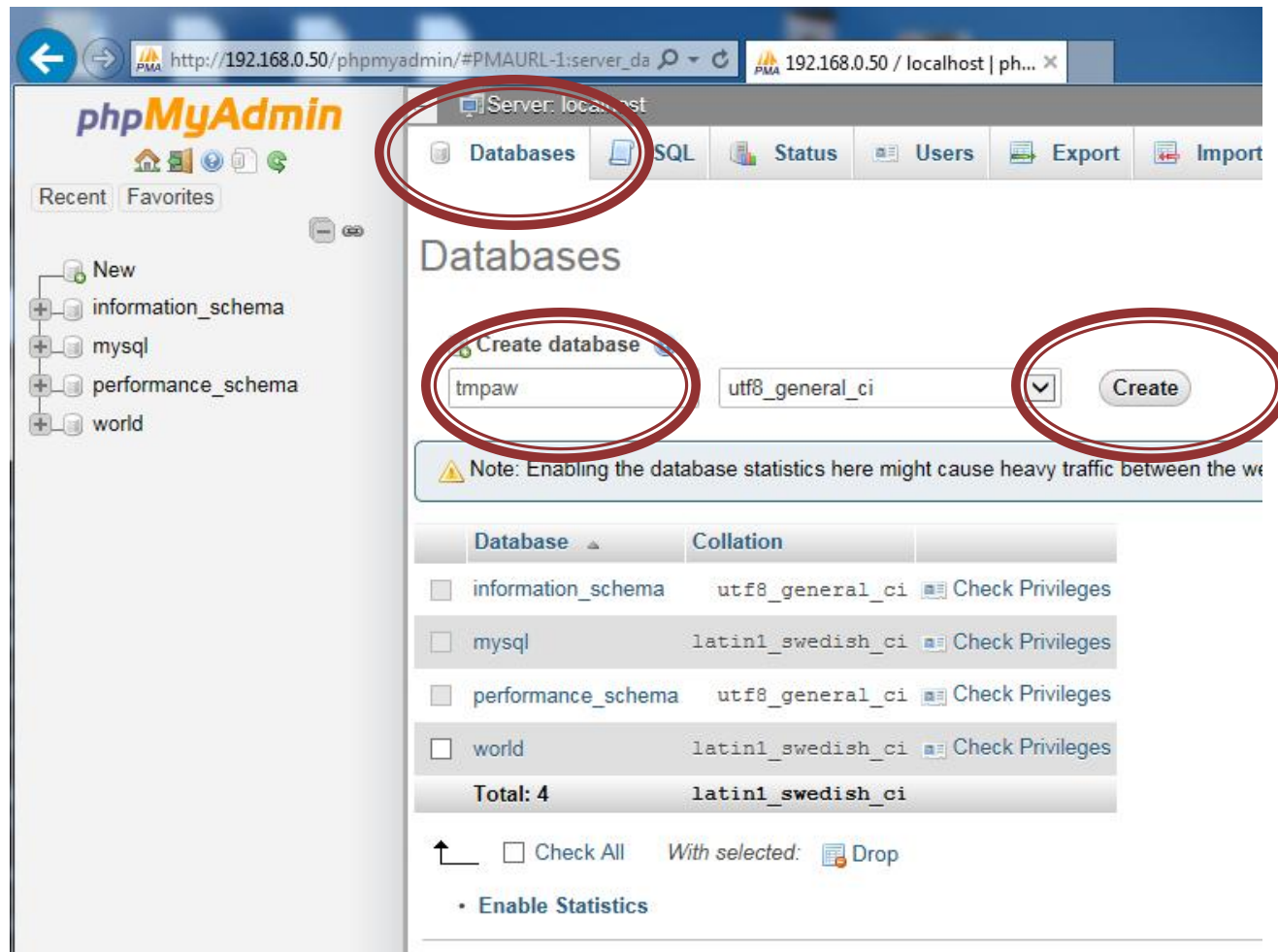
PhpMyAdmin

The screenshot displays the PhpMyAdmin web interface in a browser window. The address bar shows the URL `http://192.168.0.50/phpmyadmin/#PMAURL-0:index.php`. The interface includes a navigation menu on the left with options like 'Databases', 'SQL', 'Status', 'Users', 'Export', 'Import', 'Settings', 'Replication', 'Variables', 'Charsets', and 'Engines'. The main content area is divided into several panels:

- General Settings:** Includes a 'Change password' link and a 'Server connection collation' dropdown set to 'utf8mb4_unicode_ci'.
- Appearance Settings:** Includes a 'Language' dropdown set to 'English', a 'Theme' dropdown set to 'pmahomme', and a 'Font size' dropdown set to '82%'. A 'More settings' link is also present.
- Database server:** Lists server details: Server: Localhost via UNIX socket, Server type: MariaDB, Server version: 5.5.44-MariaDB - MariaDB Server, Protocol version: 10, User: root@localhost, and Server charset: UTF-8 Unicode (utf8).
- Web server:** Lists web server details: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips mod_fcgid/2.3.9, PHP/5.4.16 mod_python/3.5.0- Python/2.7.5, Database client version: libmysql - 5.5.44-MariaDB, PHP extension: mysqli, and PHP version: 5.4.16.
- phpMyAdmin:** Lists version information: 4.4.15.1, and links to Documentation, Wiki, Official Homepage, Contribute, Get support, and List of changes.

Creare Baza de Date

- Databases → "nume" → Create



The screenshot shows the phpMyAdmin interface. The 'Databases' tab is selected and circled in red. Below it, the 'Create database' form is visible, with the database name 'tmpaw' and collation 'utf8_general_ci' entered, and the 'Create' button circled in red. A table below the form lists existing databases and their collations.

Database	Collation	
<input type="checkbox"/> information_schema	utf8_general_ci	Check Privileges
<input type="checkbox"/> mysql	latin1_swedish_ci	Check Privileges
<input type="checkbox"/> performance_schema	utf8_general_ci	Check Privileges
<input type="checkbox"/> world	latin1_swedish_ci	Check Privileges
Total: 4	latin1_swedish_ci	

↑ Check All With selected: [Drop](#)

• [Enable Statistics](#)

Creare tabelle in baza de date

- Baza de date (in lista) → Structure → div Create Table → nume/coloane → Go

The screenshot displays the phpMyAdmin web interface. The browser address bar shows the URL `http://192.168.0.50/php`. The interface includes a navigation menu on the left with a tree view of databases: `New`, `information_schema`, `mysql`, `performance_schema`, `tmpaw`, and `world`. The `tmpaw` database is selected and highlighted. The main content area shows the `Structure` tab for the `tmpaw` database, with a message: `No tables found in database.` Below this, the `Create table` option is selected. The `Name` field contains the text `categorii`, and the `Number of columns` field contains the number `3`. A `Go` button is located at the bottom right of the form. Red circles are drawn around the `Structure` tab, the `Create table` option, the `categorii` text, the `3` in the `Number of columns` field, and the `Go` button, illustrating the steps mentioned in the text above.

Introducere coloane, tabel categorii

- (eventual) Adaugare coloane / Stabilire nume
- Name / Type / Length / Default

The screenshot shows the phpMyAdmin interface for creating a table named 'categorii'. The table name is circled in red. Below it, the 'Add 1 column(s) Go' button is also circled in red. The table structure is displayed in a table with columns: Name, Type, Length/Values, Default, and Collation. The first row is circled in red, showing 'id_categ' with type 'INT' and default 'None'. The second row is also circled in red, showing 'nume' with type 'VARCHAR', length '45', and default 'None'. The third row shows 'detalii' with type 'VARCHAR' and length '150'. The interface includes a sidebar with database navigation, a top navigation bar with 'Browse', 'Structure', 'SQL', 'Search', 'Import', and 'Privileges', and a bottom section for 'Table comments', 'Collation', and 'Storage Engine'.

Name	Type	Length/Values	Default	Collation
id_categ	INT		None	
nume	VARCHAR	45	None	
detalii	VARCHAR	150	None	

Introducere coloane

- (eventual) NOT NULL / Index / Auto Increment
 - in functie de “necesitatile” coloanei respective

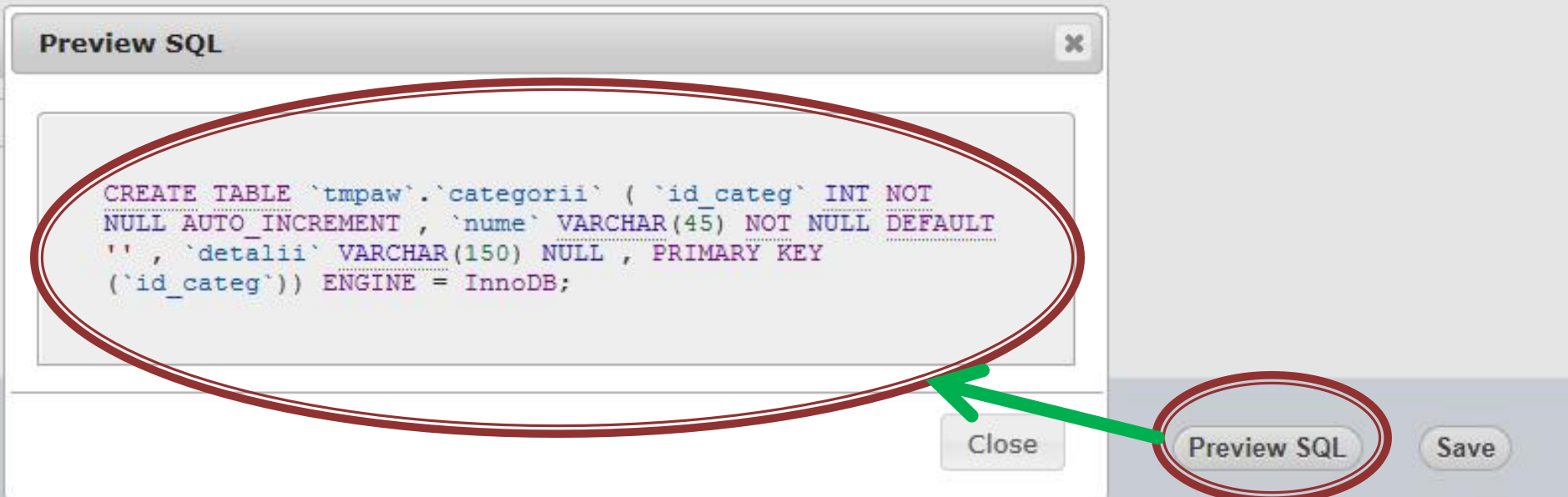
Table name: Add column(s)

Structure

Name	Type	Length/Values	Default	Collation	Attributes	Null	Index	A_I	Comments
id_categ	INT		None			<input type="checkbox"/>	PRIMARY	<input checked="" type="checkbox"/>	
nume	VARCHAR	45	As defined:			<input type="checkbox"/>	---	<input type="checkbox"/>	
detalii	VARCHAR	150	None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>	

Preview SQL

- in aproape toate etapele in PhpMyAdmin
 - exemplu de cod SQL/schelet utilizabil (copy/paste) in aplicatia PHP
 - modificari de finete absente din interfata
 - copy → Sectiune "SQL" in interfata → paste → modificare



Introducere coloane, tabel produse

- New → Nume → Add Columns → ...

The screenshot shows the phpMyAdmin interface for a database named 'tmpaw'. The 'Table name' field is set to 'produse'. The 'Add' button is highlighted with a red circle, and the 'Go' button is also highlighted with a red circle. The 'Structure' tab is active, showing a table with columns: id_produs (INT, PRIMARY), id_categ (INT), nume (VARCHAR, 45), detalii (VARCHAR, 150), cant (INT), and pret (FLOAT). The 'New' button in the left sidebar is also highlighted with a red circle.

Name	Type	Length/Values	Default	Collation	Attributes	Null	Index	A_I	C
id_produs	INT		None			<input type="checkbox"/>	PRIMARY	<input checked="" type="checkbox"/>	
id_categ	INT		None			<input type="checkbox"/>	---	<input type="checkbox"/>	
nume	VARCHAR	45	As defined:			<input type="checkbox"/>	---	<input type="checkbox"/>	
detalii	VARCHAR	150	None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>	
cant	INT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>	
pret	FLOAT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>	

Introducere date initiale (interfata)

- Tabel → Insert → Completare → Go

The screenshot displays the phpMyAdmin interface for a MySQL database named 'tmpaw'. The 'categorii' table is selected, and the 'Insert' tab is active. The table structure is shown with columns: 'id_categ' (int(11)), 'nume' (varchar(45)), and 'detalii' (varchar(150)). The 'nume' field is filled with 'papetarie'. The 'Go' button is highlighted. Below the table structure, the 'insert as new row' option is selected, and the 'Continue insertion with' dropdown is set to '1' row.

Column	Type	Function	Null	Value
id_categ	int(11)			
nume	varchar(45)			papetarie
detalii	varchar(150)		☑	

Continue insertion with row

Vizualizare date existente

- Tabel → Browse → salt la pagina (numar de linii pe pagina)

The screenshot shows the phpMyAdmin interface for a MySQL database named 'tmpaw'. The 'categoriasii' table is selected, and the 'Browse' view is active. The table contains three rows of data. The 'Browse' button in the top navigation bar, the 'categoriasii' table name in the breadcrumb, and the table data itself are circled in red. The SQL query shown is 'SELECT * FROM `categoriasii`'. The table has columns 'id_categ', 'nume', and 'detalii'.

id_categ	nume	detalii
1	papetarie	NULL
2	instrumente	NULL
3	audio-video	NULL

Introducere date initiale (SQL)

- Tabel → SQL → completare → Go

The screenshot shows the phpMyAdmin interface with the following elements:

- Navigation:** The left sidebar shows a tree view of databases. The 'tmpaw' database is selected, and the 'produse' table is highlighted. The 'SQL' tab is active in the top navigation bar.
- SQL Query:** The main area contains an SQL query to insert data into the 'produse' table. The query is:

```
1 INSERT INTO `produse` (`id_produs`, `id_categ`, `nume`, `detalii`, `cant`, `pret`)
2 VALUES
3 (1,1,'carte','mai multe pagini scrise legate',0,100),
4 (2,1,'caiet','mai multe pagini goale legate',0,75),
5 (3,1,'hartie scris','mai multe pagini goale NElegate',0,50),
6 (4,2,'penar','loc de depozitat instrumente de scris',0,150),
7 (5,2,'stilou','instrument de scris albastru',0,125),
8 (6,2,'creion','instrument de scris gri',0,25),
9 (7,3,'cd','canta',0,50),
10 (8,3,'dvd','vizual',0,100),
11 (9,3,'blue ray','vizual extrem',0,500);
```
- Execution:** Below the query, there are buttons for 'SELECT *', 'SELECT', 'INSERT', 'UPDATE', 'DELETE', 'Clear', and 'Format'. The 'INSERT' button is highlighted. At the bottom right, there is a 'Go' button.
- Columns:** On the right side, a 'Columns' list shows the table structure: id_produs, id_categ, nume, detalii, cant, pret.

Tabel produse

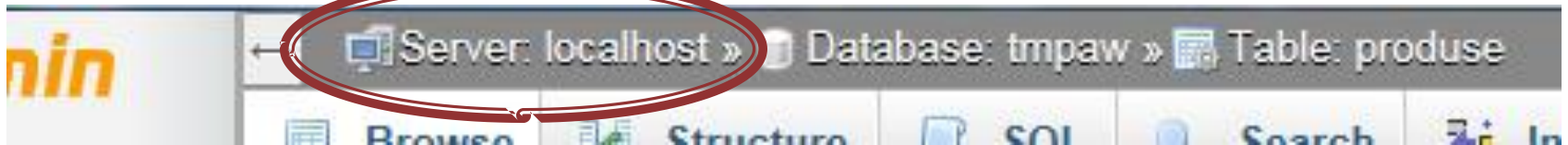
The screenshot shows the phpMyAdmin interface for a database named 'tmpaw'. The 'produse' table is selected in the left sidebar and highlighted in the main content area. The 'Browse' tab is active, displaying a table with 9 rows. The table columns are: id_produs, id_categ, nume, detalii, cant, and pret. The data rows are as follows:

	id_produs	id_categ	nume	detalii	cant	pret
<input type="checkbox"/>	1	1	carte	mai multe pagini scrise legate	0	100
<input type="checkbox"/>	2	1	caiet	mai multe pagini goale legate	0	75
<input type="checkbox"/>	3	1	hartie scris	mai multe pagini goale NElegate	0	50
<input type="checkbox"/>	4	2	penar	loc de depozitat instrumente de scris	0	150
<input type="checkbox"/>	5	2	stilou	instrument de scris albastru	0	125
<input type="checkbox"/>	6	2	creion	instrument de scris gri	0	25
<input type="checkbox"/>	7	3	cd	canta	0	50
<input type="checkbox"/>	8	3	dvd	vizual	0	100
<input type="checkbox"/>	9	3	blue ray	vizual extrem	0	500

At the bottom of the interface, there are options to 'Check All', 'With selected:', 'Edit', 'Delete', and 'Export'.

Adaugare utilizator

- Server → Users → Add user



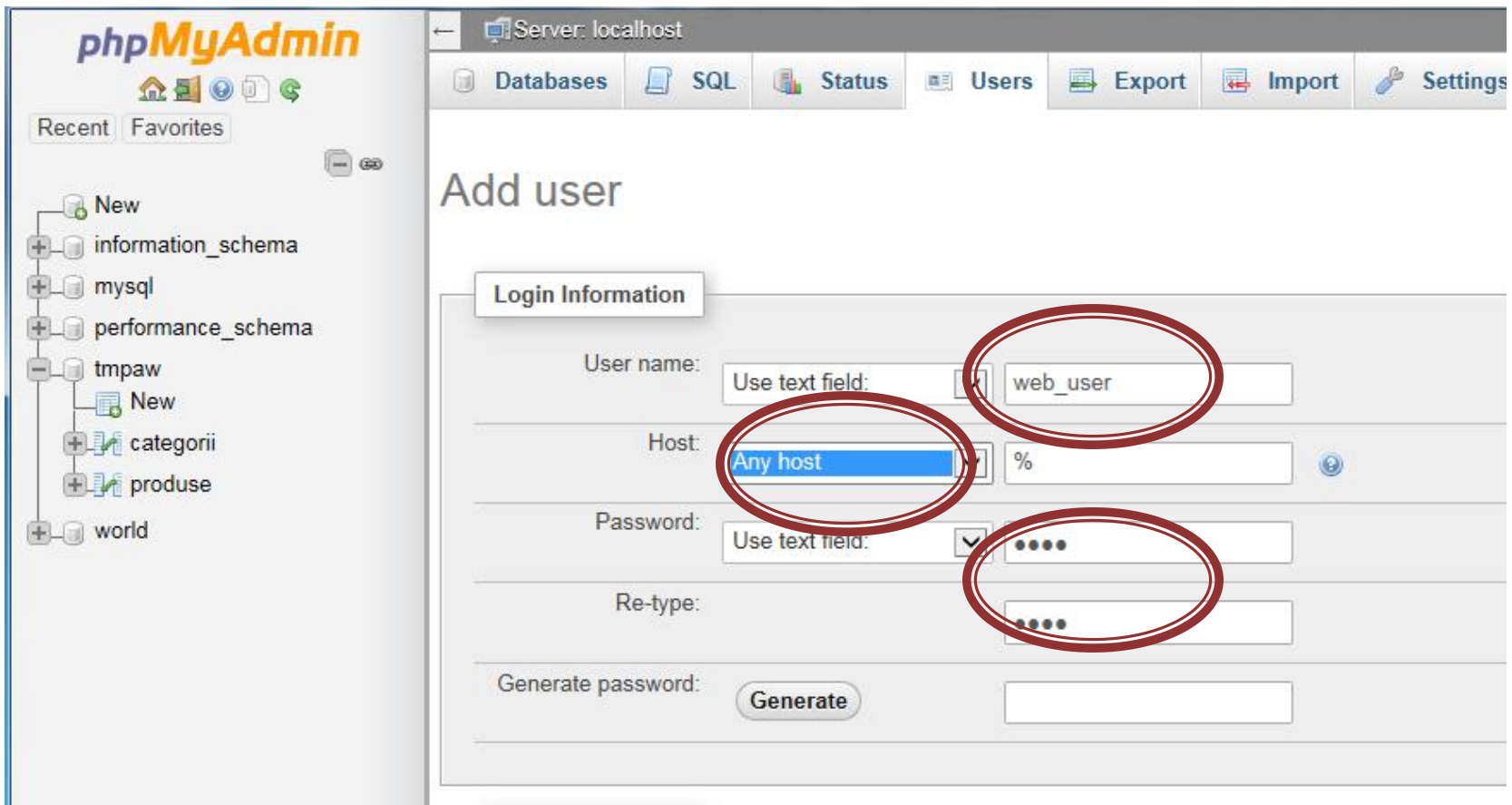
A screenshot of the phpMyAdmin 'Users overview' page. The breadcrumb 'Server: localhost' is circled in red. The 'Users' menu item in the top navigation bar is also circled in red. At the bottom of the page, the 'New' button and the 'Add user' link are circled in red. The left sidebar shows a tree view of databases, with 'tmpaw' expanded to show 'New', 'categorii', and 'produse'. The main content area displays a table of users.

	User name	Host	Password	Global privileges	Grant	Action
<input type="checkbox"/>	root	127.0.0.1	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	:::1	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	localhost	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	tmpaw.etti	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	web	%	Yes	USAGE	No	Edit Privileges Export

↑ Check All With selected: Export

Adaugare utilizator

- Nu e recomandabil/**posibil** sa se utilizeze user-ul MySql "root" pentru aplicatii



The screenshot shows the phpMyAdmin interface for adding a new user. The 'Login Information' section is visible, with the following fields:

- User name: web_user
- Host: Any host
- Password: [masked]
- Re-type: [masked]

Red circles highlight the 'User name', 'Host', 'Password', and 'Re-type' fields, indicating the required information for creating a new user.

Drepturi de acces

- Server → Users → Edit Privileges

The screenshot shows the phpMyAdmin interface. The top navigation bar includes 'Databases', 'SQL', 'Status', 'Users', 'Export', 'Import', and 'Settings'. The 'Users' menu item is circled in red. Below the navigation bar, the 'Users overview' page is displayed. It contains a table with the following columns: 'User name', 'Host', 'Password', 'Global privileges', 'Grant', and 'Action'. The table lists several users, including 'root' and 'web_user'. The 'Edit Privileges' link for the 'web_user' row is circled in red.

	User name	Host	Password	Global privileges	Grant	Action
<input type="checkbox"/>	root	127.0.0.1	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	:::1	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	localhost	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	root	tmpaw.etti	Yes	ALL PRIVILEGES	Yes	Edit Privileges Export
<input type="checkbox"/>	web	%	Yes	USAGE	No	Edit Privileges Export
<input type="checkbox"/>	web_user	%	Yes	USAGE	No	<u>Edit Privileges</u> Export

Drepturi de acces

- Database → nume → Go

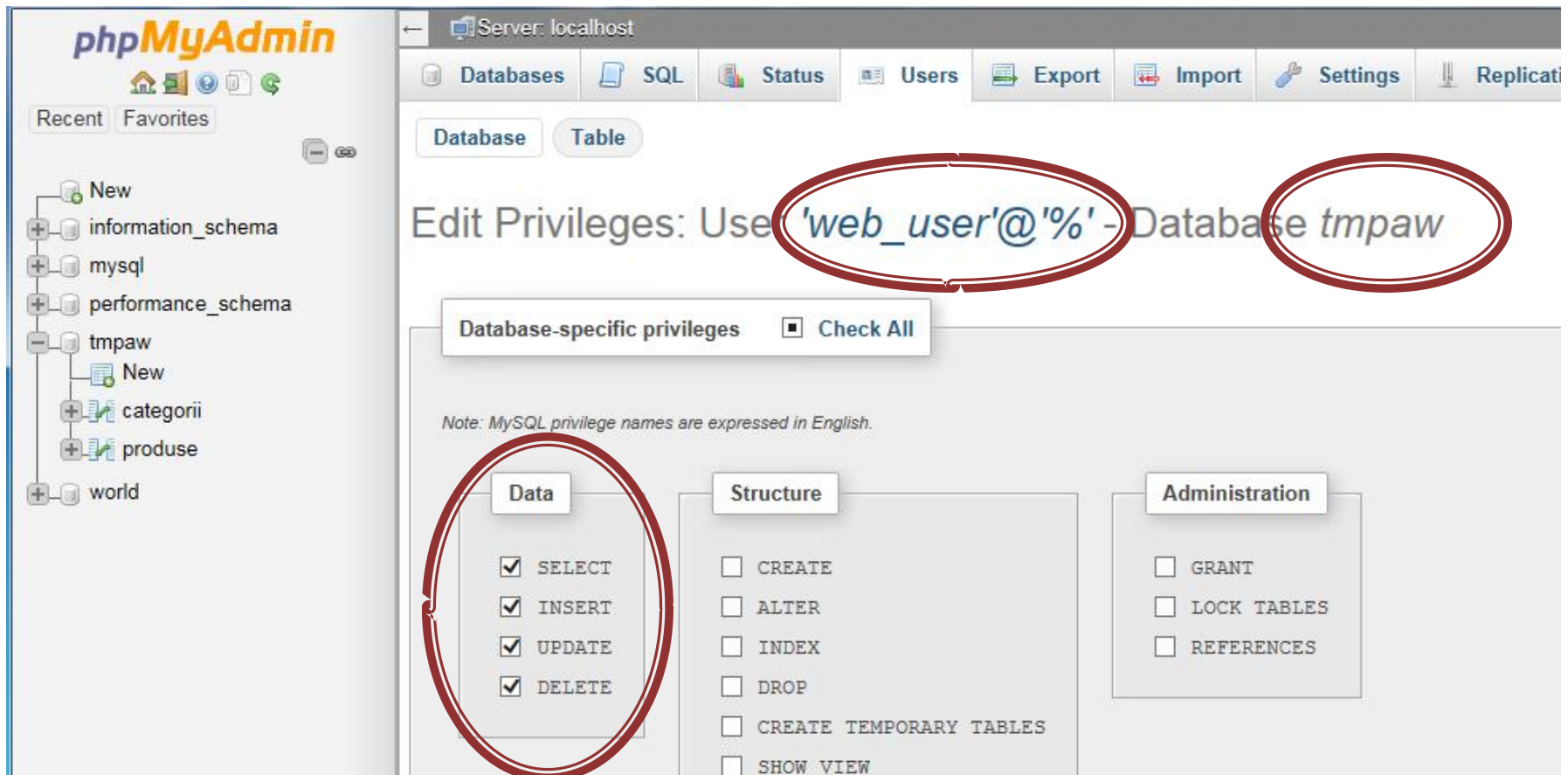
The screenshot shows the phpMyAdmin interface for a MySQL server on localhost. The 'Database' tab is selected in the navigation menu. The main content area displays the 'Edit Privileges: User 'web_user'@'%' page. Under the 'Database-specific privileges' section, there is a table with the following structure:

Database	Privileges	Grant	Table-specific privileges	Action
None				
mysql				
tmpaw				
world				

Below the table, there is a text input field labeled 'Add privileges on the following database(s):' with a dropdown menu containing the selected databases: mysql, tmpaw, and world.

Drepturi de acces

- Se aloca drepturile SELECT + INSERT + UPDATE + DELETE asupra bazei de date create



The screenshot shows the phpMyAdmin interface for editing privileges. The user is 'web_user'@'%' and the database is 'tmpaw'. The 'Data' section is selected, and the following privileges are checked:

Category	Privilege	Status
Data	SELECT	<input checked="" type="checkbox"/>
	INSERT	<input checked="" type="checkbox"/>
	UPDATE	<input checked="" type="checkbox"/>
	DELETE	<input checked="" type="checkbox"/>
Structure	CREATE	<input type="checkbox"/>
	ALTER	<input type="checkbox"/>
	INDEX	<input type="checkbox"/>
	DROP	<input type="checkbox"/>
	CREATE TEMPORARY TABLES	<input type="checkbox"/>
	SHOW VIEW	<input type="checkbox"/>
Administration	GRANT	<input type="checkbox"/>
	LOCK TABLES	<input type="checkbox"/>
	REFERENCES	<input type="checkbox"/>

The 'Data' section and the 'web_user'@'%' user name are circled in red in the original image.

Drepturi de acces, verificare

- Nume → Privileges
- Marea majoritate a aplicatiilor **nu** au nevoie de drepturi de acces la structura/administrare

Server: localhost » Database: tmpaw

Structure SQL Search Query Export Import Operations **Privileges** Routes

Users having access to "tmpaw"

User	Host	Type	Privileges	Grant	Action	
<input type="checkbox"/>	root	127.0.0.1	global	ALL PRIVILEGES	Yes	Edit Privileges
<input type="checkbox"/>	root	:::1	global	ALL PRIVILEGES	Yes	Edit Privileges
<input type="checkbox"/>	root	localhost	global	ALL PRIVILEGES	Yes	Edit Privileges
<input type="checkbox"/>	root	tmpaw.etti	global	ALL PRIVILEGES	Yes	Edit Privileges
<input type="checkbox"/>	web_user	%	database-specific	SELECT, INSERT, UPDATE, DELETE	No	Edit Privileges

Check All With selected: Export

Index

- Adaugare index e esentiala pentru viteza
 - exemplu, produse grupate pe categorii, selectia produselor dintr-o categorie se face cu :
 - `SELECT * FROM `produse` WHERE `id_categ` = 1`
- Tabel → Structure → Index / Selectare + Index

The screenshot shows the phpMyAdmin interface for a database named 'tmpaw'. The 'Table: produse' structure is displayed. The table has six columns: id_produs, id_categ, nume, detalii, cant, and pret. The 'id_categ' column is highlighted with a green circle, and the 'Index' button for this column is circled in red. The 'Structure' tab is also circled in red. The 'categorii' and 'produse' tables in the left sidebar are also circled in red. The 'Index' button at the bottom of the interface is circled in green.

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	id_produs	int(11)			No	None	AUTO_INCREMENT	Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	id_categ	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	nume	varchar(45)	utf8_general_ci		No			Change Drop Primary Unique Index Spatial Fulltext Distinct values
4	detalii	varchar(150)	utf8_general_ci		Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values
5	cant	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values
6	pret	float			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Verificare/Stergere index

- Apasare +Indexes, se deschide lista de indecsi
- Apasare -Indexes, se inchide lista de indecsi

- Indexes

Indexes ⓘ

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop PRIMARY		BTREE	Yes	No	id_produ	9	A	No	
Edit Drop id_categ		BTREE	No	No	id_categ	9	A	No	

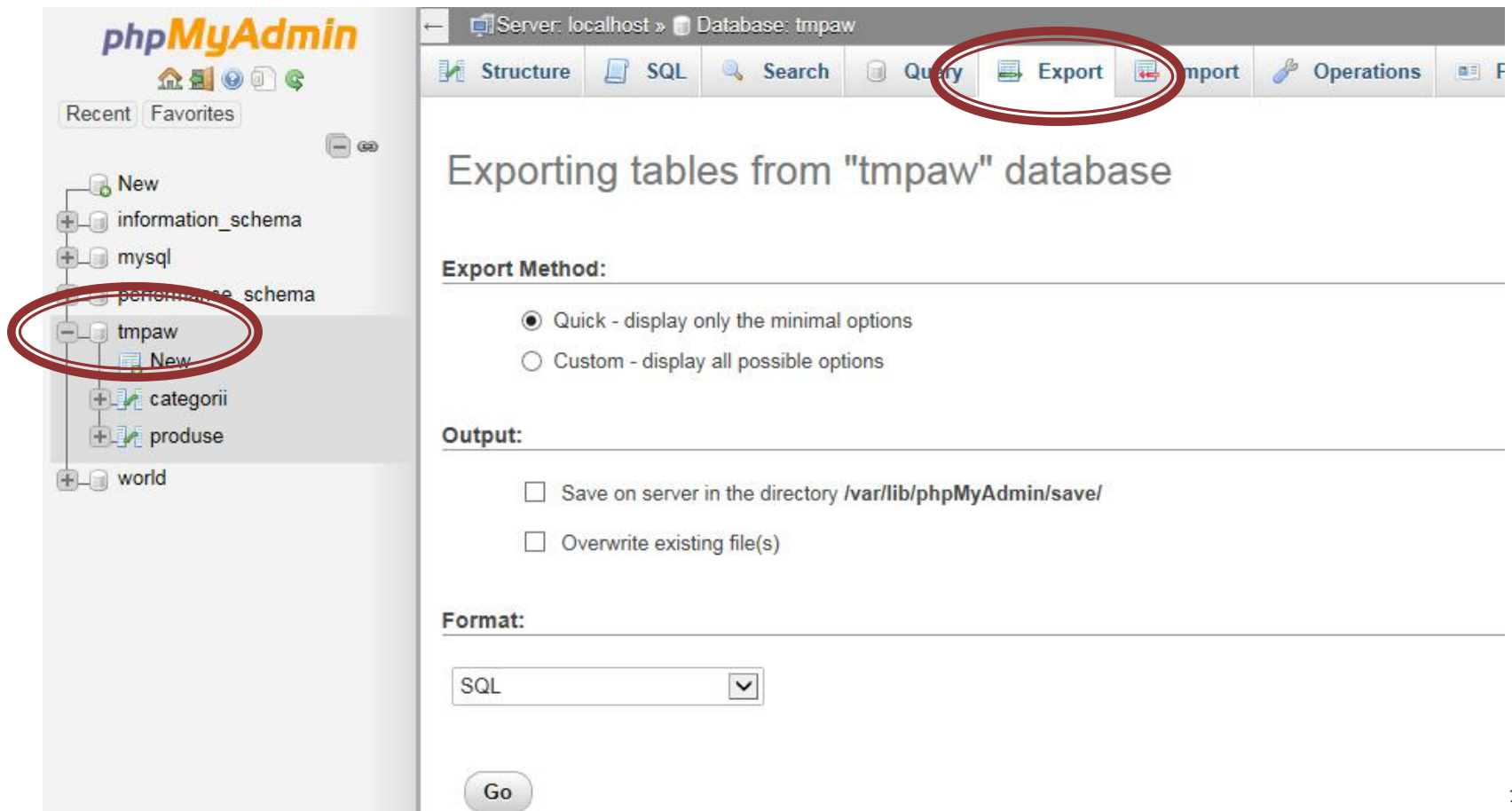
Create an index on columns

Backup, Restore

- Ca și în cazul Windows 2000 facilitatea de Backup realizează un script SQL care conține structura și datele exprimate sub forma de interogări SQL
- O deosebire între PhpMyAdmin și aplicațiile specifice MySQL (aceleși de pe Windows 2000 sau MySQL Workbench) este absența liniilor de creare a bazei de date
 - CREATE DATABASE IF NOT EXISTS tmpaw;
 - USE tmpaw;
- La utilizarea PhpMyAdmin trebuie să se creeze manual înaintea restaurării baza de date

Backup

- Nume (tabel sau baza de date) → Export



The screenshot displays the phpMyAdmin interface for a database named 'tmpaw' on a localhost server. The left sidebar shows a tree view of databases, with 'tmpaw' selected and circled in red. The main content area shows the 'Export' tab selected in the top navigation bar, also circled in red. Below the navigation bar, the page title is 'Exporting tables from "tmpaw" database'. The 'Export Method' section has two options: 'Quick - display only the minimal options' (selected) and 'Custom - display all possible options'. The 'Output' section has two checkboxes: 'Save on server in the directory /var/lib/phpMyAdmin/save/' (unchecked) and 'Overwrite existing file(s)' (unchecked). The 'Format' section has a dropdown menu set to 'SQL'. A 'Go' button is located at the bottom of the form.

Restore

- Se creaza in avans baza de date
- Nume → Import → Browse (alegere fisier backup)
- fisierele SQL pot fi compresate gzip, bzip2, zip

The screenshot shows the phpMyAdmin interface. On the left sidebar, the database 'tmpaw' is selected and circled in red. The main content area is titled 'Importing into the database "tmpaw"'. The 'Import' button in the top navigation bar is also circled in red. Under the 'File to Import:' section, the 'Browse...' button is circled in red. The 'Character set of the file:' is set to 'utf-8'. The 'Partial Import:' section has the checkbox 'Allow the interruption of an import...' checked. The 'Skip this number of queries...' field is set to 0.

Examen

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 (S5)
- 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

Contact

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