

Universitatea Tehnică din Cluj-Napoca Facultatea de Inginerie Electrică

Cap.5

IMPLEMENTARE INTERFETE GRAFICE- FORMULARE HTML5





Curs: PIGMC, Master an II, sem I

CUPRINS

- 5.1. Introducere
- 5.2. Formulare web
- **5.3.** Elemente formulare
- 5.4. Instrumente on line pentru formulare web



5.1. Introducere

Exemple f	ormulare on line/web
	Fixed steps will apply in the input field. Quantity: 40 + Trimite
	Note:type="number" is not supported in IE9 and earlier.
Numeric restrictions will apply in the input fiel Quantity (between 1 and 5): Trimite Note: type="number" is not supported in IE9 a	ld: ind earlier.
Points:	ite
Note: type="range" is not support	ted in Internet Explorer 9 and earlier versions.



Instrumente pentru realizarea formularelor

Formulare web: documente web dinamice realizate utilizand limbaje de programare (scripting) sau instrumente on line.

- I. Instrumente de programare utilizand :
- a) CGI (Common Gateway Interface) scripts:
 - □ Perl, Phyton, C/C++/C#, Visual Basic, ASP, Unix Shell
- b) Limbaje pentru programarea web:
 - □ HTML, CSS
 - □ JavaScript, VBScript (client side)
 - D PHP, JSP, ASP, etc. (server side)
- II. Instrumente online



- 1 clientul completeaza campurile unui formular
- 2,3 serverul trimite formularul pentru procesare, catre un interpretor de scripturi
- 4 se acceseaza baza de date de pe discul serverului
- □ 5 se proceseaza datele din formular
- □ 6 CGI genereaza o pagina HTML cu raspunsul cererii
- □ 7,8 pagina web cu rezultatul formularului este afisata

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5.2. Formulare web

b) Limbaje pentru programarea web: presupune includerea unor

scripturi in interiorul paginilor HTML

Avantaje:

- mai simplu de realizat decat implementarea unui script CGI
- unele sunt open source, gratuite:
 - Server side: PHP , JSP
 - Client side: JavaScript



5.2. Formulare web

b) Limbaje pentru programarea web:

Limbaje de script:

- a) Scripturi care se execută la nivel de browser:
- □ JavaScript
- U VBScript
- b) Scripturi care se execută la nivel de server:
- PHP
- JSP
- ASP



5.3. Formulare in HTML & PHP

Caracteristici formulare:

- se creeaza cu Form si se pot include in orice document HTML
- contin elemente de control : Form Control/Elements
 (butoane, checkbox, text field, butoane radio, meniuri dropdown, etc.)
- □ informatiile sunt stocate in **campuri** : Field ca si Field Value.
- contin un buton Submit pentru trimiterea informatiilor din formular catre server

5.3. Formulare in HTML & PHP

Elemente formulare:

- □ Input Boxes : pentru date de tip text sau numerice
- Butoane selectie (butoane Radio): pentru selectarea unei singure optiuni dintr-o lista predefinita
- Lista selectie: pentru liste de optiuni tip Drop-Down List Box
- Check Boxes: specifica DA sau NU
- Casete text (Text Areas): pentru text pe mai multe linii



5.3. Formulare in HTML & PHP

Sintaxa formular HTML:

<form> - inceput formular

<input> - solicita informatie ce trebuie completata in formular

<input> - se pot include oricate <input>

</form> - inchidere formular HTML

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5 = new in HTML	5.	
Tag		Description
<u><form></form></u>		Defines an HTML form for user input
<u><input/></u>		Defines an input control
<textarea></textarea>		Defines a multiline input control (text area)
<label></label>		Defines a label for an <input/> element
<fieldset></fieldset>		Groups related elements in a form
<legend></legend>		Defines a caption for a <fieldset> element</fieldset>
<select></select>		Defines a drop-down list
<optgroup></optgroup>		Defines a group of related options in a drop-down list
<option></option>		Defines an option in a drop-down list
<u><button></button></u>		Defines a clickable button
<u><datalist></datalist></u>	9	Specifies a list of pre-defined options for input controls
<keygen/>	5	Defines a key-pair generator field (for forms)
<u><output></output></u>	Ð	Defines the result of a calculation

5.3. Elemente formulare

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Exemplu: Tipuri elemente formular





Element <input>

type "text", "radio" sau "submit"

Tipuri de baza <input>

Туре	Description
<input type="text"/>	Defines a one-line text input field
<input type="radio"/>	Defines a radio button (for selecting one of many choices)
<input type="submit"/>	Defines a submit button (for submitting the form)

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Sintaxa element <input>: "text"

<input type="text" name="textfield" size="value" value="initial value">

Obs.: implicit size =20 caractere, daca nu se specifica alt nr.

Ex. 1: Casuta text cu numele "text1" de lungime 30 caractere <input type="text" name="text1" size="30">

Ex. 2: Casuta text cu numele "text2" de lungime 30 caractere maxim 20 charactere introduse. <input type="text" name="text2" size="30" maxlength="20">

Ex 3: Casuta text cu numele "text3" de lungime 40 caractere cu valoare implicita completata "Cluj". <input type="text" name="text3" size="40" value="Cluj">

Exemplu element <input/> : "text"		
html <html></html>	HTML Forms	
<h2>HTML Forms</h2>	First name:	
<form> First name:</form>	Last name:	
<pre><input name="firstname" type="text"/></pre>	Submit	
<pre><input name="lastname" type="text"/></pre>		
<pre><input type="submit" value="Submit"/> </pre>		

!! Implicit size =20 caractere

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Exemplu element <input>: "text"

<pre><!DOCTYPE html> <html> <html></html></html></pre>	HTML Forms
<pre><htps: se<="" second="" td="" www.second.com=""><td>First name: Grindei Last name: Laura Trimite</td></htps:></pre>	First name: Grindei Last name: Laura Trimite

+text implicit (value)

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Exemplu element <input/> : "text"		
html <html> <body></body></html>	HTML Forms	
<h2>HTML Forms</h2>	First name: Grindei	
<pre><form> First name: <iout <="" name="firstname" pre="" type="text"></iout></form></pre>	Last name: Laura	
<pre>size="30" maxlength="20" value="Grindei"></pre>	Submit	
<pre>size="30" maxlength="20" value="Laura"></pre>		

+ size =30, +maxlength=20

Sinataxa element <input/> : "password"		
<input name="par</th><th>ola" type="password"/>		
html <html></html>	HTML Forms	
<h2>HTML Forms</h2>	Utilizator (email): Igrindei	
<form> Utilizator (email):</form>	Parola:	
<pre><input name="user" type="text"/> </pre>	Login	
<pre>raroia: <input name="parola" type="password"/> <input type="submit" value="Login"/> </pre>		



Sintaxa element <input>: "radio"

<input type="radio" name="radiobutton" value="myValue1" checked >

html <html> <body></body></html>	Radio Buttons
<h2>Radio Buttons</h2>	Masculin
<pre><input checked="" name="gender" type="radio" value="male"/> Masculin </pre>	 Alt gen
<pre><input name="gender" type="radio" value="female"/> Feminin </pre>	
<pre><input name="gender" type="radio" value="other"/> Alt gen</pre>	





Atribute formulare

Atributul action: defineste actiunea la Submit care implicit trimite datele din formular la server printr-un fisier care contine instructiuni (ex. De mai jos: "post.php")

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

Atributul Method : "get" (implicit) sau "post"

- General sector of the sector o
- "post": pentru nr nelimitat de date inclusiv date secrete(parole)

<form method="get" action="post.php">

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



Atribute formulare

Ex: Fisierul "login.html" si fisierul "post1.php" trebuie create si salvate pe server.

🥮 login - Notepad	🗐 post1 - Notepad
File Edit Format View Help	File Edit Format View Help
html <html> <body> kform method="post" action="post1.php"></body></html>	php<br echo "user:", \$_POST['user']; echo " ; echo "parola:", \$_POST['parola']; ?>
<pre><input name="user" type="text"/> <input name="parola" type="password"/> <input type="submit" value="Login"/> </pre>	Utilizator (email): aura Parola:
 	Login user:laura parola:laura2018



Atributul name: se specifica pentru fiecare element <input>. Daca lipseste=>datele corespunzatoare acelui element nu se afiseaza/trimit la server

🗐 formsimplu - Notepad	Nume:
File Edit Format View Help	Prenume:
HTML	
<html></html>	Trimite
<body></body>	Dupa completare
<form></form>	Nume: Popa
Nume: <input name="nume" type="text"/>	
	Prenume: Mircea
Prenume: <input name="prenume" type="text"/>	Trimba
	Trimite
<input type="submit" value="Trimite"/>	Dupa click Trimite
← → C ① Fișier D:/laura/cursuri/CursPIGMC/2017-2019/Lab/FORM	5/formsimplu.html?nume=Popa&prenume=Mircea
🏥 Aplicații 🍨 🍿 Universitatea Tehni 🎯 community.articulat 🌒 Scopus - Docu	ment \bigotimes Talking LabQuest > 📀 STEM Lexdis 2.0
Nume:	
Prenume:	
Trimite	

Element <input type=""/> : "reset"		
<pre><!DOCTYPE html> <html> <html> <body> <h2>Butonul reset </h2> reseteaza toate valorile formularului chorm> first name: <input name="firstname" type="text" value="Grindei"/> <input name="firstname" type="text" value="Grindei"/> <input name="lastname" type="text" value="Laura"/> <input name="lastname" type="text" value="Laura"/> <input name="lastname" type="text" value="Laura"/> </br></body></html></html></pre>	Butonul reset reseteaza toate valorile formularuluu la valorile implicite First name: Grindei Last name: Laura Submit Reset	



Trimite

Element <textarea>

defineste o caseta formata din mai multe linii text

		Dupa completare
html <html></html>	Textarea	Textarea
 	Cursuri:	Currenti
<nz>lextarea</nz>		-PCLP
<pre><textarea cols="30" name="message" rows="5"></textarea></pre>	1	-ICE -BDIE
Cursuri:	Trimite	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>		Inmite
	Raspuns ir	n browser:
← → C ☆ ③ Fișier D:/laura/cursuri/CursPIGMC/2017-2019/Lab/F0	DRMS/textarea.html?message=++Cu	rsuri%3A%0D%0A-PCLP%0D%0A-TCE%0D%0A-BDIE
	Description of Telline Lab Quest a	🚱 STEM Lexdis 2.0 🚭 SWOT Anaylisis for 🔤 Art
🏢 Aplicații 🍨 😈 Universitatea Tehni 🔞 community.articulat 🌘 Scopus -	Document 🔊 laiking LabQuest >	- · · ·





</fieldset> </form> </body> </html>

Element <input type>: "checkbox" checked

permite selectarea simultana a mai multor optiuni definite

<input type="checkbox" name="nume" value="optiune" checked>

Checkbox - Notepad	Masini agreate pentru inchiriere
File Edit Format View Help html <html> <body> <h2>Masini agreate pentru inchiriere</h2></body></html>	Volvo Renault BMW Ø Dacia Trimite
<pre><input name="vehicle1" type="checkbox" value="Volvo"/>Volv <input name="vehicle2" type="checkbox" value="Renault"/>Re</pre>	vo enault
<pre> <input name="vehicle3" type="checkbox" value="BMW"/>BMW <input checkbox"="" checkbox"<="" name="vehicle4" pre="" type="checkbox" value="Dacia"/></pre>	Dupa completare
 <input type="submit"/>	Masini agreate pentru inchiriere Volvo Renault BMW Dacia Trimite

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Elemente < <mark>field</mark>	lset> si <legend></legend>
<fieldset> permite grupa <legend> adauga un</legend></fieldset>	rea datelor intr-o caseta n titlu datelor grupate
<pre><!DOCTYPE html> <html> <body> <form> <fieldset> <legend>Date Personale:</legend> Nume: <input type="text"/> > Prenume: <input type="text"/> > Adresa: <input type="text"/> > </fieldset></form></body></html></pre>	Date Personale: Nume: Prenume: Adresa: Trimite Dupa completare

Date Personale:
Nume: Grindei
Prenume: Laura
Adresa: Str. Baritiu 26, Cluj Napoca Trimite

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Element <select></select>	
defineste o lista expandabila (dr	op-down list)
<pre><!DOCTYPE html> <html> <body> <h2>Exemplu de lista de selectie</h2> Selectati un curs din lista: <form> <<u>select name="cursuri"> </u></form></body></html></pre>	Exemplu de lista de selectie Selectati un curs din lista: Teoria Circuitelor Trimite Teoria Circuitelor Matematica Chimie Rezistenta Materialelor
Exemplu de lista de selectie	rsuri/CursPIGMC/2017-2019/Lab/FORMS/dropdownlist.html?cursuri=MAT 9 community.articulat 🌒 Scopus - Document 🛞 Talking LabQuest > 🕻
Selectati un curs din lista:	
Matematica Selectati un curs din lista:	
Trimite Trimite	



Elemente preselectate cu selected in <select>: defineste elementul preselectat dintr-o lista expandabila (drop-down list)

html <html></html>	Exemplu de lista de selectie
<pre><h2>Exemplu de lista de selectie</h2> Selectati un curs din lista: <form></form></pre>	Selectati un curs din lista: Matematica
<pre><select name="cursuri"> <option value="TC">Teoria Circuitelor </option> <option selected="" value="MAT">Matematica</option> <option value="CHI">Chimie</option> <option value="RM">Rezistenta Materialelor</option> </select> </pre>	Trimite

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Elemente <input lis<="" th=""/> <th>it> <datalist></datalist></th>	it> <datalist></datalist>
specifica o lista de optiuni predefinit	e pentru un element <input/>
html <html> <body></body></html>	▼ Trimite
<form></form>	Teoria Circuitelor
< <u>input list</u> ="cursuri" name="cursuri"> < <u>datalist</u> id="cursuri"> <contion value="Teoria (incuitelor"></contion>	PCLP1
<pre><option value="PCLP1"> </option></pre>	PCLP2
<pre><option value="Matematica"></option></pre>	Matematica
<pre><option value="Fizica"> </option></pre>	Fizica
<pre><input type="submit"/> </pre>	Coloctio
	Selectie
	PCLP2 Trimite
Dupa selectie	
← → C ☆ ③ Fișier D:/laura/cursuri/CursPIGMC/2017	-2019/Lab/FORMS/inputlist.html?cursuri=PCLP2
🏢 Aplicații 🍁 😈 Universitatea Tehni 🎯 community.articulat	Scopus - Document X Talking LabQuest >
Trimite	



Element
button>

defineste un buton actionat cu click

html <html> <body></body></html>	The Button Element
<h2>The Button Element</h2> <button <br="" type="button">onclick="alert('Buna seara dragi studenti!')">Click Me!</button> 	Click Me!

Raspuns dupa click pe butonul "Click Me!": afisarea unei ferestre pop-up

Buna seara dragi studenti!	
	ок

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Element <input> <keygen>

ofera posibilitatea de a autentifica utilizatorii specificand un camp cu o pereche de chei(una privata memorata local si una publica trimisa la server)



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Tipuri noi <input> in HTML 5:

- color
- date
- datetime
- datetime-local
- email
- month
- number
- range
- search
- tel
- time
- url
- week





Element <input>: "date"

defineste un camp de tip data calendaristica





Element <input>: "number" "min" "max"

defineste un camp de tip numeric cu o restrictie tip interval

html	
<html></html>	Input numeric intr-un interval
<body></body>	input numerie intr un inter tur
<h2>Input numeric intr-un interval</h2>	Cantitate (intra 1 and 5):
<form></form>	Cantitate (intre 1 and 5).
Cantitate (intre 1 and 5):	101
<pre><input <="" min="1" name="quantity" pre="" type="number"/></pre>	max="5">
<pre><input type="submit"/> </pre>	
Input numeric intr-un interval	
Cantitate (intre 1 and 5): 3 Trimite	selectare
← → C 🏠 🕕 Fișier D:/laura/cursur	i/CursPIGMC/2017-2019/Lab/FORMS/interval.html?quantity=3
🏥 Aplicații 🔩 🎹 Universitatea Tehni 🎯 co	ommunity.articulat 🌘 Scopus - Document 🔉 Talking LabQuest
Input numeric intr-un interva	1
Cantitate (intre 1 and 5): Trimite	



Element <input>: "number" "min" "max"

defineste un camp de tip numeric cu o restrictie tip interval

Daca se introduce o valoare invalida se afiseaza :

Input numeric intr-un interval	
Cantitate (intre 1 and 5): 6 Trimite	
Valoarea trebuie să fie mai mică sau egală cu 5.	
<pre><!DOCTYPE html> <html> <body> <h2>Input numeric intr-un interval</h2> <form> Cantitate (intre 1 and 5):</form></body></html></pre>	

Cu min , max si s	step (pas)
<pre></pre> /locTYPE html> /html> /body> Pas=10, interval (0,100), implicit 30 <pre>(antitate: <input max="100" min="0" name="quantity" step="10" type="number" value="30"/> <input type="submit" value="Trimite"/> </pre>	Numeric Steps Pas=10, interval (0,100), implicit 30 Cantitate: 40 Trimite
	17-2019/Lab/FORMS/numericsteps.html?quantity=4
← → C ☆ ③ Fișier D:/laura/cursuri/CursPIGMC/20	



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Element <input>: "email"

defineste un camp de tip email

	The second second
html <html> <body></body></html>	Input adresa email
<h2>Input adresa email</h2> <form> E-mail: <input name="email" type="email"/></form>	E-mail: laura.grindei@ethm.utcluj.ro
<pre><input type="submit" value="Trimite"/> </pre>	

Dupa selectare+ click Trimite





Selecteaza ora curenta: 17:30 × 🗘 Trimite

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Element <input/> : "search" defineste un camp de cautare Google		
html <html> <body> <form> Search Google: <input name<br="" type="search"/><input type="submit" value="Trimite"/> </form> </body> </html>	Search Google: Trimite ="q">	
Dupa selectare+ click Trimite		
Search Google: Romanian flag Trimite		
← → C ☆ ③ Fişier D:/laura/cursuri/CursPIGMC/2	017-2019/Lab/FORMS/googlesearch.html?q=Romanian+flag	
🏥 Aplicații 🍨 🈈 Universitatea Tehni 🄞 community.articula	t 🌒 Scopus - Document 🔬 Talking LabQuest > 🚱 STE	
Search Google: Romanian flag ×		

Curs: PIGMC, Master an II, sem I		
Element <input/> : "file" Upload un fisier		
<lr><ld>CTYPE html><hody><hody>Selecteaza fisierul: <input name="myFile" type="file"/> <input type="submit" value="Trimite"/></hody></hody></ld></lr>	Input fisier (upload) Un singur fisier Selecteaza fisierul: Alege fişierul forminscriere docx Trimite	
<pre><lpre><lpre>(lDOCTYPE html> <html> <body> <h1>Input fisiere (upload)</h1> <h3>Mai multe fisiere</h3> <form> Selecteaza mai multe fisiere: <input multiple="" name="myFile" type="file"/> <input type="submit"/> </form> </body> </html></lpre></lpre></pre>	Input fisiere (upload) Mai multe fisiere Selecteaza mai multe fisiere: Alege fisierele 2 fisiere Trimite	

Restrictii pentru elementele <input>:

Attribute	Description
disabled	Specifies that an input field should be disabled
max	Specifies the maximum value for an input field
maxlength	Specifies the maximum number of character for an input field
min	Specifies the minimum value for an input field
pattern	Specifies a regular expression to check the input value against
readonly	Specifies that an input field is read only (cannot be changed)
required	Specifies that an input field is required (must be filled out)
size	Specifies the width (in characters) of an input field
step	Specifies the legal number intervals for an input field
value	Specifies the default value for an input field

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5.4. Instrumente on line pentru formulare web

- <u>https://www.google.com/drive/ (formulare on line)</u>
- <u>http://www.formulareonline.ro/</u> (formular de contact, chestionar, formular de comanda)
- <u>http://smartworks.3x.ro/cv/index.php</u> (CV)
- <u>http://www.surveymonkey.com</u> (chestionare)
- <u>http://freeonlinesurveys.com/previewsurvey.asp#0</u> (chestionare)
- <u>http://www.smart-survey.co.uk/sample-surveys.aspx</u> (chestionare)