Professional Diploma in Commercial Web Design

Lesson 4

PHP

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Overview

- What is a form

- How to create a form

- Getting input from users

- Generate a result

What is a form

- It's a section of a document containing normal content, markup, special elements called controls (checkboxes, radio buttons, menus, etc.), and labels on those controls

- Users "complete" a form by modifying its controls before submitting the form to an agent for processing

Client side (html)

- Obtain information from a web user

- Whole web page or part web page, but not a form in a form

- For this course, put form in html only, don't combine in one PHP.

- JavaScript (jQuery)

- No need to save data in local machine

Security

- Secure data by encryption
- MD5(32), sha1(40), sha256(64)
- HTTPS (SSL)
- Cert
- RSA
- hsbc.com, paypal.com
- gmail.com, mail.yahoo.com, hotmail.com, zaturday.com/mail
- hkpl.gov.hk, edit.php.net

Encryption

- MD5 is considered cryptographically broken and is unsuitable for further use.

- The SHA1 algorithm might not be secure enough for ongoing use. It is recommended not to use SHA1.

- SHA224: SHA224 produces a 224-bit (28-byte) hash value, typically rendered as a hexadecimal number, 56 digits long.

- SHA256: SHA256 produces a 256-bit (32-byte) hash value, typically rendered as a hexadecimal number, 64 digits long.

Encryption

- SHA384: SHA384 produces a 384-bit (48-byte) hash value, typically rendered as a hexadecimal number, 96 digits long.

- SHA512: SHA512 produces a 512-bit (64-byte) hash value, typically rendered as a hexadecimal number, 128 digits long.

- RIPEMD160: RIPEMD160 produces a 160-bit (20-byte) hash value, typically rendered as a hexadecimal number, 40 digits long.

hash

- 雜湊(Hash)演算法越來越多，PHP 直接做了 hash() 來用，直接指定要用哪個雜湊演算法即可。
- hash.php

Password

- Strong password
- PassPhase

Server side programming

- PHP
- CGI (Perl)
- ASP / ASPX
- JSP
- Node.js
- Ruby
- Python
- Cold Fusion

Server side (PHP)

- Save data – server side

- Database (MySQL)

- ?name=ray&password=123

Usage

- Usually used for collecting data
- Registration
- Login
- Search
- Guest book
- Research
- Vote

Form components

- Fieldset

- Fields

- Radio buttons

- Check boxes

- List/menus

- Buttons

- Hidden

The First Step

- Tell your computer what to do with your form

- Insert -> Form -> Form

Fieldset

- To group all our details of the form, we add a fieldset first.
- Usually add a legend for this group.
- <fieldset>
- <legend>Form Title</legend>
- </fieldset>

Text box

- If we do not know what is the availability of the result, we insert a textbox for user to input the data.

- EG. Username, Address, etc..

- Insert -> Form -> Text box

- Set the field name same as the left-hand-side. EG. username   (lowercase)

- <input name="username" type="text" id="username" size="20" maxlength="10" />

Password

- Since what we typed will be shown on the screen, so we better hide the characters.

- EG. Yahoo mail.

- Insert -> Form -> Text box

- Type: password

- Set the field name same as the left-hand-side. EG. password (lowercase)

- <input name="password" type="password" id="password" size="20" maxlength="10" />

Text Area - comment

- two types of controls that allow users to input text. INPUT element creates a single-line input control and the TEXTAREA element creates a multi-line input control

- <textarea name="comment" rows=6 cols=40>default words </textarea>

Radio buttons

- They are on/off circle switches that may be toggled by the user

- They are mutually exclusive: when one is switched "on", all others with the same name are switched "off"

- Since user usually select from more than one,

- <input type="radio" name="radio group name" value="button name">

Radio buttons story

- But why are they called radio buttons?!

- The reason is that they act as the radio buttons used in older car radios. When you pushed one, the dial moved. When you pushed another, the first choice was dropped and the dial moved again.

Checkboxes

- They are on/off square switches that may be toggled by the user

- Only "on" checkbox controls can become successful

- Allow users to select several values for the same property

- <input type="checkbox" name="name" value="button name">

Select (Menu/List)

- Menus offer users options from which to choose where the choices are too long to display in a browser

- Two types of menus – pull down menu, list menu

- Pull down menu – select one from a drop list

- List menu – select one or multiple items from a list menu. By pressing Ctrl key, you can select multiple selection

Menu example

- `<select name="country" id="country">`
- `<option selected="selected"> </option>`
- `<option value="hk">Hong Kong</option>`
- `<option value="us">United State</option>`
- `<option value="tw">Taiwan</option>`
- `<option value="cn">China</option>`
- `<option value="kr">Korea</option>`
- `<option value="jp">Japan</option>`
- `<option value="mo">Macau</option>`
- `</select>`

Buttons

- three types of buttons – submit, reset, push

- Submit button - when activated, it submits a form

- Reset button - when activated, it resets all controls to their initial values

- Push button - each push button may have client-side scripts associated with the element's event attributes

Buttons example

- `<input type="submit" name="submit" id="submit" value="Submit" />`

- `<input type="reset" name="reset" id="reset" value="Reset" />`

Hidden controls

- controls that are not rendered but whose values are submitted with a form

- <input name="from" type="hidden" value="web" />

Finally!

- To send the input data back to server, make sure have an action.

- <form action="file.php">

- Make sure you end your page with this:

- </form>

Style

- You can add a table to tidy a form.

- Or use <dt>left</dt><dd>right</dd> + CSS

Create a birthday form

- Let user input the data from a form
- Name each field with the name
- Insert a submit button and a reset button
- Save as bday.htm
- Set the form action to the same filename.php
- Eg. <form action="bday.php">

Getting input from users

- Download birthday.php from ftp
- Open birthday.php and save as bday.php
- All the results are stored in variables
- Change the constant variable to user's input

$birthday="19900427";

change to=>

$birthday = $_POST['year'].$_POST['month'].$_POST['day'];

Generate a result

- In IE, open http://localhost/bday.html

- Testing it by input some data

- Result will be displayed by bday.php

Get and Post

- Get data is displayed in the location bar

- Get is used for requesting information, like a particular record from a database or the results of a search. (search always use get)

- Post usually handle large data

- Post is used when an action is required, as when a database record will be updated or email should be sent

- Post is usually used in nowadays

Variable

- $username – short form, not recommended in PHP4 since register_globals is turned off in /etc/php.ini

- $HTTP_GET_VARS["username"], $HTTP_POST_VARS["username"]

- $_GET["username"], $_POST["username"]

Exercise 6

- Try to write out a form in html for user to input a number

- Save as square.html

- Create a new php file

- Find the square of the number

- Save as square.php and test the page

Exercise 7

- Try to write out a form in html for user to input two numbers

- Save as multiple.html

- Create a new php file

- Find the product of the numbers

- Save as multiple.php and test the page

Exercise 8 – Body Mass Index

- Find the bmi for yourself

- bmi = weight(kg)/height(m)/height(m)

- If I am 70kg and 1.74m, what is my bmi?

- <18.5 underweight, 18.5-25.0 normal, >25.0 overweight

- Write a form that can let user to input his/her height and weight

- See bmi.php

Getting info from a web page

Please fill in the information

Username:	raymond	(max. 8 characters)
Password:	••••••••	(max. 8 characters)
Confirm Password:	••••••••	(max. 8 characters)

First Name: Raymond

Last Name: Tsang

Sex: ● Male ○ Female

Birthday: Year 1975 ▼ Month 12 ▼ Day 31 ▼

Email: raymondtsang@fevaworks.com

[Submit] [Reset]

Getting correct information

Thank you for registering.

Username:	raymond
Password:	****
First Name:	Raymond
Last Name:	Tsang
Sex:	M
Birthday:	1975年 12月 31日
Email:	raymondtsang@fevaworks.com

Error in a web page

Thank you for registering.

Username: Please go back and fill in the information.

Password: Please go back and fill in the information.

First Name: Please go back and fill in the information.

Last Name: Please go back and fill in the information.

Sex: Please go back and enter the information.

Birthday: Please go back and enter the year.

                     Please go back and enter the month.

                     Please go back and enter the day.

Email: Please go back and fill in the information.

Getting info from a web page

- Create a form by Dreamweaver to collect username and password for login

- Send the information to the php

- Create a php page

- Test the html page

- Result can be seen by the php page

- login.html

- login.php

Homework

- www.zaturday.com/homework/login.html

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- If username is blank, display "Please input your username".
- If password is blank, display "Please input your password".
- If password is wrong, display "wrong password".
- If password is correct, display " welcome, username ".

QUESTIONS