Webforms : Overview

* Web sites obtain internet users information through webforms. To be fully functional a web form needs the common gateway Interface (CGI) program which processes and stores the received information.

* a single webform can have several fields to collect various types of information from the user of a website. For example, a webform may have fields that collect information about a users name address and credit card number.

* after the internet user enters the required data and presses the submit button, the information is uploaded or e-mailed to the receiving server. where it is stored and may also be processed.

* In addition to the submit button, many forms provide a reset button. Selecting the reset button clears the data entered in the fields of a web form and resets the fields to their default values.

* To be fully functional, a web form needs a program to process its script. A CGI is a program that processes data submitted by users. on user request, CGI allows a web server to hand over control to a software application that receives, organizes and returns data in a consistent form.

* CGI programs employ a server side script whereas client side script is executed on client computers.

* Server side scripting
This resides on a server. It is a set of instructions that help you to process web form input. Server side scripts are generally written in the PERL (Practical Extraction and REPORT Language) programming language.

* Clientside scripting
This resides on the client and helps the users process web form input. It is a set of instructions that is embedded into HTML pages and is downloaded by users. Programming languages, such as Javascript and VBScript are commonly employed for client-side scripting

* A CGI SCRIPT that resides on a server performs two important functions. First the server needs the CGI script to receive the web form data from the web browser. Secondly, the CGI script processes this data to remove extraneous information and then format it

* Various scripts, servers and utilities available for Unix, Macintosh and Windows OSs simplify the process of receiving, processing and formatting data from a web form. These scripting utilities are available either commercially, or as freeware or shareware.

* A CGI interpreter stores information, such as bank a/c updates in databases. It also searches databases for products. For example, a CGI interpreter will search for and locate a book or DVD at amazon.com.

* In addition a CGI interpreter sends processed information back to the end user. For Example, it can provide an end user with a new bank a/c balance or a confirmation that a book has been shipped.

* A web browser, a CGI script, a web form and a web-server with a CGI interpreter are the elements necessary for a CGI session

* A CGI script resides on a web server. web forms allow users to upload information to their web servers. This information is then processed and acted upon by the web server and CGI interpreter

* The web server and the CGI interpreter store information in databases, search databases for required products and send processed information back to the end user.

* A basic script processes Web form data through name=value pairs and parsing
When a user submits the information, the browser sends this information from the form to the webserver as a Raw ~~text~~ string.
a name = value pair is the basic element of a Raw text string

* The name attribute of the <form> element organizes input information or values into name = value pairs.
For example, if you have entered your name and email address, they form the values in the name = value pairs.
The browser creates the Raw text string based on name attribute values, such as 'Name', 'E-mail' or any suitable name values

* The Raw text string received by a server comprises name = value pairs seperated by ampersands (&)
Spaces in the name = value pair are replaced by plus signs.
For an empty form field, only the name attribute value of the name = value pair is returned
The CGI script can now parse and format the received data string into human readable form.

* Formail is an example of a CGI script. It receives information from a PERL interpreter, inputted from a webform, and sends it to you through email.
It is available for free at Matt's Script Archive (MSA) on www.scriptarchive.com. Because it is written in PERL, developers can obtain a free CGI interpreter from many places, such as www.cpan.org

* Most modern OSs support the PERL interpreter. The free, well written Formmail script, combined with the powerful PERL interpreter, is responsible for the popularity of Formmail.
A developer can easily modify a few portions of the script and customize Formmail to perform specific tasks for a webform.

* After downloading the formmail script, you need to install Perl on your web server. It is already installed on most servers. Thereafter, you must define the formmail variables so that the script is able to receive information and send it to you.

* You need to provide the formmail or formmail.pl script on your web server with executable permissions. You must then refer to the formmail.pl script in your web form

* Now, you need to wait for users to visit your website. You will receive the corresponding results through email messages. You need to check your email account for these results.
Many organizations and businesses employ the Formmail script for profit through web based sales and for charitable causes.

* Older versions of formail could be fooled into sending email messages to anyone. This feature was employed by unscrupulous individuals to generate SPAM.
Some sysadmins use these older versions or improperly configure the newer formail script, leading to more SPAM. You need to use the latest FormMail version, which does not invite SPAM.

* Besides the orgenal Perl Formmail script, alternative versions of Form mail are available. These include formail for Active Server Pages (ASP) at
WWW.braunjar.com/ASP/formail
and for PHP
www.dtheatre.com/scripts/formmail.php