

CGI Scripts

GET

- Form data forms query string and is appended to the URL of the script
 - Can be accessed by using the environment variable `QUERY_STRING`
 - Browser or server may truncate data that exceeds an arbitrary number of characters

GET

- GET request by client

*GET /cgi-bin/prog.pl?name=
Bill+age=29 HTTP/1.0*

Accept: www/source

Accept: text/html

Accept: text/plain

User-Agent: Lynx/2.4 libwww/2.14

GET

- Can access CGI program with a query without using a form

`CGI program`

- Can also send extra path information
 - Usually file name

`CGI program`

POST

- Query length is unlimited
- Script reads from standard input
- Can't create canned queries

POST

POST /cgi-bin/prog.pl HTTP/1.0

Accept: www/source

Accept: text/html

Accept: text/plain

User-Agent: Lynx/2.4 libwww/2.14

Content-type: application/x-www-form-urlencoded

Content-length: 22

user=Larry+Bird&age=30

Decoding Form Data

- Determine request protocol by checking the `REQUEST_METHOD` environment variable
 - GET or POST
 - One script can work for both methods
- If the protocol is GET, read query string from `QUERY_STRING` and/or the extra path information from `PATH_INFO`

Decoding Form Data

- If the protocol is POST, determine the size of the request using `CONTENT_LENGTH` and read that amount of data from the standard input
- Split the query string on the `'&'` character, which separates key-value pairs
 - The format is `key=value&key=value...`

Decoding Form Data

- Decode the hexadecimal and '+' characters in each key-value pair
- Create a key-value table with the key as the index

Examples

- Using forms with POST
 - Plain text
- Guestbook
 - *<http://jupiter.cs.wayne.edu/~grosky/user-cgi/guestbook.pl?add>* using the GET method, will present a form for you to enter information

Examples

- Guestbook

- *<http://jupiter.cs.wayne.edu/~grosky/user-cgi/guestbook.pl>* using the GET method, will display the actual guestbook file [guestbook.htm]
- Can open guestbook file directly by accessing *<http://jupiter.cs.wayne.edu/~grosky/CSC691/CGIScripts/Guestbook/guestbook.htm>*

Examples

- Guestbook

- When form is submitted using the POST method, this program decodes the information and outputs a thank-you message

Examples

- Survey

- *<http://jupiter.cs.wayne.edu/~grosky/user-cgi/shopping.pl/start.htm>*
- *<http://jupiter.cs.wayne.edu/~grosky/CSC691/CGIScripts/HiddenFields/start.htm>*