ZiaaiZ

WORKSHEET

This is our official http/1.1 web server worksheet.

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Description

A correct description of a web server would be the following sentence:

« A [computer program](http://en.wikipedia.org/wiki/Computer_program) that is responsible for **accepting** [**HTTP**](http://en.wikipedia.org/wiki/HTTP) **requests from** [**web**](http://en.wikipedia.org/wiki/World_Wide_Web) **clients**, which are known as [web browsers](http://en.wikipedia.org/wiki/Web_browser), and [serving](http://en.wikipedia.org/wiki/Server_%28computing%29) them HTTP responses along with optional data contents, which usually are web pages such as [HTML](http://en.wikipedia.org/wiki/Hypertext_Markup_Language) documents and linked objects (images, etc.). » *[Wikipedia]*

Among the serves that are most used, there is:

* Apache http Server (Apache Software Foundation)
* Internet Information Services ou ISS (Microsoft)
* Sun Java System Web Server (Sun Microsystems)

Our objective is to create an http server able to handle classic http documents and pages requests, common gateway interface execution (CGI), secure connections and with interoperable module support…

We develop our http server call Zia in order to offer at the users a server as reliable as those already present like Apache, … It will be supports the same functionality : interpretations of language, common gateway interface, an intuitive configuration system, …

Confines and recommendations

**1). Confines :**

To carry through our project, some of this confines are imposed, our server must:

* Be develop using c++.
* Handle secure connections through SSL or Perl interpreter.
* Be an exhaustive implementation of the http/1.1 protocol, strictly following the RFC 2616 (with exception of proxies support).
* Be fully configured by means of an XML configuration.
* Have to be portable to Windows, Linux/FreeBSD.
* Not use externs’ libraries (with exception of an XML library).
* Supporter the clients :
  + http/https : Netscape (>= 4.x), Internet Explorer (>= 4.x), Firefox (>= 1.5.\*) et Opera (>= 7)
  + http : Lynx (>= 2.8.\*) et Telnet

**1). Recommendations:**

In this sens, some of these confines are imposed:

* Using Threads is strongly recommended, (for both Unix and Win32 environments).
* Using the C++ STL is strongly advised, if not mandatory..
* Unit testing is strongly recommended.

Means and organization

Here is the different means and organization inside our group for the development of this project.

**1). Means :**

* Workstation :
  + Environment Windows (architecture i386)
  + Environment Linux (architecture i386)
  + Environment FreeBSD/NetBSD (architecture i386)
* Edition Tools:
  + Emacs
  + Microsoft Visual Studio 2008
* Compilation and debugger Tools:
  + Linux/FreeBSD :
    - g++ (GCC) version 3.4.2
    - GNU gdb version 6.6
  + Windows :
    - Visual c++
    - Windows debugger
* Control system version :
  + Linux/FreeBSD :
    - Subversion (svn) version 1.4.6
  + Windows :
    - TortoiseSVN version 1.5.0
* Office automation :
  + Microsoft Word, Open Office, Adobe Reader, PowerPoint.
* Daily environment:
  + Parc informatique Epitech (PIE)

About our communication within the group and with users, a website will be established. This site is create in order to inform users about update, our progress, news,…

**1). Organisation :**

* General group organigram :

Conclusion

**Toumi Majdi**

*XML Configuration*

*HTTP Responses*

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**Armand Morgan**

*Socket*

*Thread*

**Candan Caner**

*Parser*

*HTTP Request*

**Hochwelker Florent**

*HTTP Response*

*HTTP Request*

**1). Objectives :**

In view of our first term, our objective was to create a server that supports basic methods GET, HEAD, POST, CGI executions, browsing directories,…

**1). Résultats obtenus :**

Excluding the realization of the specification , implementation isn’t finish for this first deadline… However, our project ensures a certain quality of the technical skills of group members.

Team Zia.