

CN Assignment - Proxy Server

Simple Proxy server using python2 sockets and SimpleHTTPServer

Introduction

This is a basic implementation of a proxy server with `python2` and `sockets`. This proxy server does cache management as well taking into account the modified times and refreshing the cache accordingly. Binary files are obviously not cached.

How to run

- For the proxy server:

```
./proxy_server <proxy_port> <master_port>*
```

- For the master server

```
./server.py <master_port>
```

These ports are options and default to *12345* for the proxy server and *20000* for the main server. The project is done under assumption that the file is present on the server.

Results

```
Server started at Port 8080 | 127.0.0.1
File time : Wed Feb 14 21:12:43 2018
127.0.0.1 - - [14/Feb/2018 21:23:35] "code 404, message File not found"
127.0.0.1 - - [14/Feb/2018 21:23:35] "GET /1.txt HTTP/1.1" 404
File time : Wed Feb 14 20:03:13 2018
127.0.0.1 - - [14/Feb/2018 21:23:53] "code 404, message File not found"
127.0.0.1 - - [14/Feb/2018 21:23:53] "GET /2.binary HTTP/1.1" 404
File time : Wed Feb 14 20:03:13 2018
127.0.0.1 - - [14/Feb/2018 21:24:08] "code 404, message File not found"
127.0.0.1 - - [14/Feb/2018 21:24:08] "GET /2.binary HTTP/1.1" 404
File time : Wed Feb 14 21:12:43 2018
127.0.0.1 - - [14/Feb/2018 21:25:19] "code 404, message File not found"
127.0.0.1 - - [14/Feb/2018 21:25:19] "GET /1.txt HTTP/1.1" 404
File time : Wed Feb 14 21:12:43 2018
127.0.0.1 - - [14/Feb/2018 21:25:19] "code 404, message File not found"
127.0.0.1 - - [14/Feb/2018 21:25:19] "GET /1.txt HTTP/1.1" 404
127.0.0.1 - - [14/Feb/2018 21:12:43] "GET /1.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:12:43] "GET /1.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:14:53] "GET /1.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:15:03] "GET /1.txt HTTP/1.1" 304
127.0.0.1 - - [14/Feb/2018 21:15:03] "GET /1.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:23:35] "GET /1.txt HTTP/1.1" 304
127.0.0.1 - - [14/Feb/2018 21:23:35] "GET /1.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:23:53] "GET /2.binary HTTP/1.1" 304
127.0.0.1 - - [14/Feb/2018 21:23:53] "GET /2.binary HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:24:08] "GET /2.binary HTTP/1.1" 304
127.0.0.1 - - [14/Feb/2018 21:24:08] "GET /2.binary HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:25:19] "GET /1.txt HTTP/1.1" 304
127.0.0.1 - - [14/Feb/2018 21:25:19] "GET /1.txt HTTP/1.1" 304
```

Figure 1: