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

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  found
27.0.0.1 - - [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
                                                                                                                                                             <nead>
<title>Error response</title>
  found
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127.0.0.1 - - [14/Feb/2018 21:24:08] "GET /2.binary HTTP/1.1" 4
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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
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File time : Wed Feb 14 21:12:43 2018 The connection object 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
 /l.txt
127.0.0.1 - - [14/Feb/2018 21:12:43] "GET /1.txt HTTP/1.1" 200
127.6.6.1 - - [14/Feb/2018 21:14:53] "GET /l.txt HTTP/1.1" 200
127.0.0.1 - - [14/Feb/2018 21:14:53] "GET /l.txt HTTP/1.1" 200
  l.txt
127.0.0.1 - - [14/Feb/2018 21:15:03] "GET 1.txt HTTP/1.1" 304 -
  /1.txt
| 127.0.0.1 - - [14/Feb/2018 21:15:03] "GET /1.txt HTTP/1.1" 200 -
    l.txt
27.0.0.1 - - [14/Feb/2018 21:23:35] "GET /1.txt HTTP/1.1" 200 -
    binary
77.0.0.1 - - [14/Feb/2018 21:23:53] "GET 2.binary HTTP/1.1" 304 -
     .binary
7.0.0.1 - - [14/Feb/2018 21:23:53] "GET /2.binary HTTP/1.1" 200 -
  .27.0.0.1 - [14/Feb/2018 21:23:33] Get /2.binary HTTP/1.1 200 - .
.binary
127.0.0.1 - [14/Feb/2018 21:24:08] "GET 2.binary HTTP/1.1" 304 - .
2.binary
127.0.0.1 - [14/Feb/2018 21:24:08] "GET /2.binary HTTP/1.1" 200 - .
.txt
127.0.0.1 - [14/Feb/2018 21:25:19] "GET 1.txt HTTP/1.1" 304 - .
 l.txt
127.0.0.1 - - [14/Feb/2018 21:25:19] "GET 1.txt HTTP/1.1" 304 -
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```

Figure 1: