

Files included:

- | | |
|-------------|---|
| 1. proxy.py | - contains code for the proxy server |
| 2. cache.py | - classes for managing caches of proxy server |
| 3. parse.py | - functions to parse simple raw http request |

Instructions for running the proxy server:

1. Make sure all the above mentioned files are in the same directory
2. run the proxy.py file as "python proxy.py"

Other Information:

1. The server and other supplementary files were written in Python 2 and are not compatible with Python 3

Features implemented:

1. Unblocking parallel processing for multiple requests using thread.
2. Caching
3. Proxy server

Screenshots:

COMMAND LINE:

1. Proxy server outputs.

2. Corresponding curl commands and outputs.

```
[➔ Server python proxy.py

file:1.txt
server:127.0.0.1:20000
port:20000
not cached

file:1.txt
server:127.0.0.1:20000
port:20000
sending from cache

file:1.txt
server:127.0.0.1:20000
port:20000
sending from cache

file:1.txt
server:127.0.0.1:20000
port:20000
modified since cached

file:1asd.txtg
server:127.0.0.1:20000
port:20000
not cached
```

```
[➔ ~ curl -x http://127.0.0.1:12345 http://127.0.0.1:20000/1.txt
Hello world.

Lorem ipsum.

File 1adsf
[➔ ~ curl -x http://127.0.0.1:12345 http://127.0.0.1:20000/1.txt
Hello world.

Lorem ipsum.

File 1adsf
[➔ ~ curl -x http://127.0.0.1:12345 http://127.0.0.1:20000/1.txt
Hello world.

Lorem ipsum.

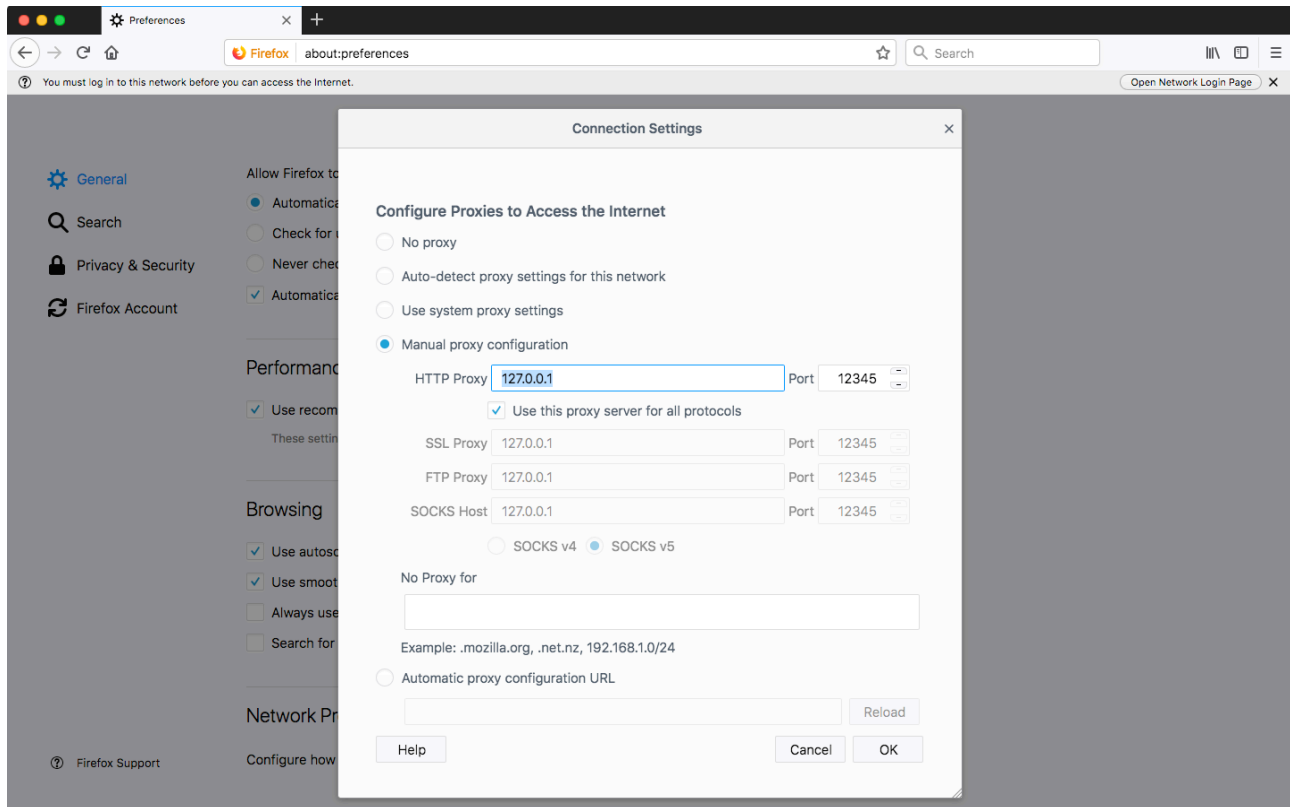
File 1adsf
[➔ ~ curl -x http://127.0.0.1:12345 http://127.0.0.1:20000/1.txt
Hello world.

Lorem ipsum.

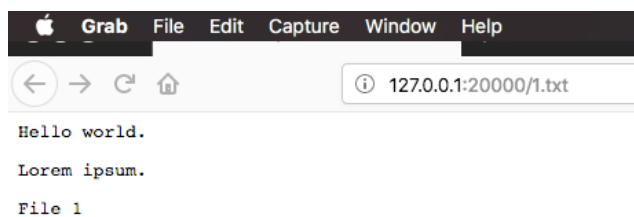
File 1
[➔ ~ curl -x http://127.0.0.1:12345 http://127.0.0.1:20000/1asd.txtg
<head>
<title>Error response</title>
</head>
<body>
<h1>Error response</h1>
<p>Error code 404.
<p>Message: File not found.
<p>Error code explanation: 404 = Nothing matches the given URI.
</body>
[➔ ~
```

BROWSER:

1. Browser proxy settings:



2. Browser output:(when proxy server is running)



3. Browser output:(when proxy server is not running)

