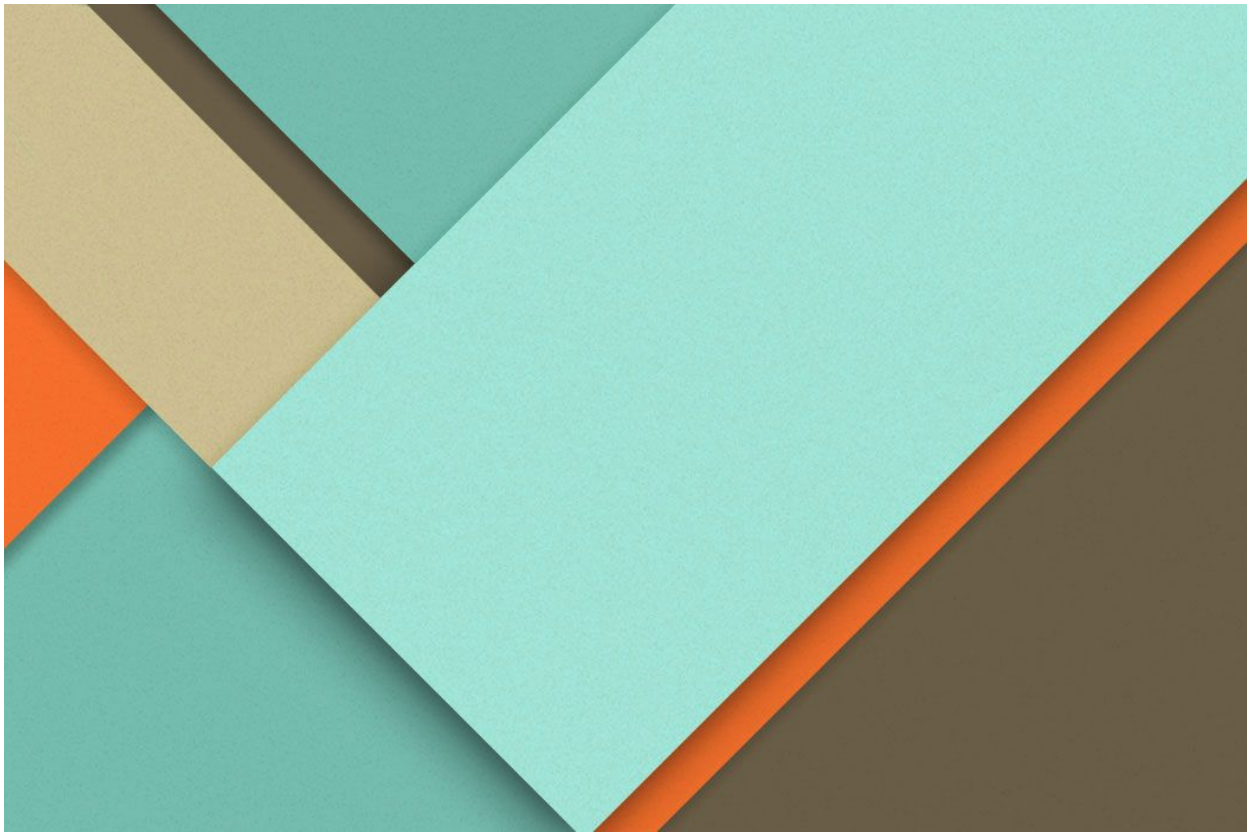

Proxy Web Server

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Overview

Proxy server is an intermediary server between client and the internet. Proxy servers offers the following basic functionalities:

- Firewall and network data filtering.
- Network connection sharing
- Data caching

Goals

1. Run the proxy and the browser on the same computer without any problem. With this approach, to get a webpage or a file using the proxy server, you simply provide the URL of the page or file you want.
2. When the proxy server gets a request, it checks if the requested object is cached (i.e. server already has the request webpage or file), and if yes, it returns the object from the cache, without contacting the server.
3. Keep up to only 3 responses in the cache.
4. Use If Modified Since header to check if file has been modified in origin server since caching.

Specifications

I am building a proxy web server using python to handle browser or curl requests. This means I am allowing a client to send me requests for files which I collect through a client socket. Then I am checking whether

the requested file is in the cache, if it is, then I am returning the file directly, else I am redirecting the request to the origin server provided. Now I act as a client and receive a HTTP response from the origin server, and then I receive data if the requested file is present in that server. Else I receive a 404 error message. On receiving data, I write it in a file in my cache and also forward it to the client. I am storing the cached files in a queue.

How To Run

Run the server by : python server.py

Runs on port 20000

Run the web proxy : python proxy.py

Runs on port 8888