

Requirements

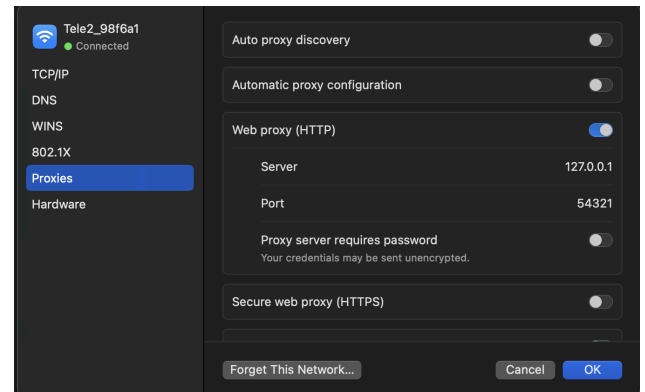
- Internet connection
- Python 3.x
- A browser capable of configuring a proxy
- Required modules: `socket`, `threading`, `re`

Initialize the program

Turn on the Web Proxy in System Settings (on Mac).
Set the following data

Server : 127.0.0.1

Port : 54321



After the web proxy has been set, initialize the directory of the files "Proxy.py" using "cd" commands. After directory to the folder that proxy.py has been located in, run the following commands.

```
python3 proxy.py
```

Then the program will run. After this, open the browser(Chrome), clear all the browsing history, and now it is able to make changes of all text changing from Stockholm to Linköping, and all mentioned Smiley to Trolly (smiley to trolly) including the picture.

```
Assignment 2 — Python proxy.py — 80x24
unknown option --proxy.py
usage: /Library/Developer/CommandLineTools/usr/bin/python3 [option] ... [-c cmd
| -m mod | file | -] [arg] ...
Try 'python -h' for more information.
waritsanant@waritsanantsmbp ~ % cd Documents
waritsanant@waritsanantsmbp Documents % cd Liu
waritsanant@waritsanantsmbp Liu % cd Study
waritsanant@waritsanantsmbp Study % cd TDTS06\ Computer\ Network
waritsanant@waritsanantsmbp TDTS06 Computer Network % cd TDTS06_ComputerNetwork_
Lab
waritsanant@waritsanantsmbp TDTS06_ComputerNetwork_Lab % cd Assignment\ 2
waritsanant@waritsanantsmbp Assignment 2 % python3 proxy.py
Connected to ('127.0.0.1', 62802)
Started new thread for browser, connection is active
Header:
GET http://zebroid.ida.liu.se/fakenews/test2.txt HTTP/1.1
Host: zebroid.ida.liu.se
Proxy-Connection: keep-alive
Cache-Control: max-age=0
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (
KHTML, like Gecko) Chrome/129.0.0.0 Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/w
ebp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
```

This code is 90% tested at home, this indicates that this code might not work on some public networks. By the latest testing, everything works according to the requirements, but there are just a few times that the code does not change the word or it takes quite long to reload the page; to fix this, a restart of the code is done, restart the page, clear all the history, and it will be back to their normal conditions.

This created proxy is able to make fake news in .txt files, .html files with the http connections, but not the https connection due to the security in the protocol.