

# HTTP CLIENT REPORT

A simple HTTP client in Python

Developed a web client that requests file from any web server in the Internet. The client connects to the server using a TCP connection, sends a HTTP GET request to the server and downloads all the linked pages from the .html page. Client takes command line arguments specifying the server IP address or host name, port (standard HTTP port number), and the path from which the requested objects are to be downloaded.

Execution Flow:

-GET(host, port, file\_path, write\_file)

-parse(filename)

GET and parse set up a mutually recursive front.

Implementation details:

- Establish a TCP connection with host
- Generate a HTTP request message with the proper headers and the file requested appended to the headers

- Write the received packet into a file
- Parse the file and extract all the linked pages
- For each linked page, change the path appropriately and apply GET() on it
- Store all HTML files on a local directory

```

22  html = open(filename, 'r')
23  for line in html:
24      if "href" in line:
25          get
26  lin Sreekars-MacBook-Pro:Desktop hunter$ python Assgn02-client.py www.cse.iitk.ac.in
27  lin 80 /users/dheeraj/cs425//index.html
28  lin Main file read
29  lin Links obtained
30  return linkLinks successfully downloaded
31
32  def parse(html):
33      """
34      For each li
35      """
36      L = catch_l
37      for link in
38          next_li
39          #print
40          GET(hos
41
42
43
44  def GET(server,
45      """
46      Get the htm
47
48      1. Establish
49      2. Send a G
50      3. Write th

```

Desktop — bash — 80x24

Sreekars-MacBook-Pro:Desktop hunter\$ python Assgn02-client.py www.cse.iitk.ac.in

80 /users/dheeraj/cs425//index.html

Main file read

Links obtained

Links successfully downloaded

Exiting...

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