

SSN College of Engineering, Kalavakkam
Department of Computer Science and Engineering
V Semester - CSE 'A'
UCS1511 NETWORKS LAB

Exercise 7: HTTP web client program to download the webpage TCP

AIM: Implement a HTTP web client program to download the webpage using C socket programming.

Algorithm:

1. Read the name of the server as command line argument
(Ex: www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf)
2. Get the address of the server using `gethostbyname()` that returns the pointer to network data structure for given host
3. Create a TCP socket using `socket()`
4. Connect to remote server
5. Send request using a GET /path/filename HTTP/1.1\r\n request using either `send()` or `write()`.
(GET /wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf HTTP/1.1\r\nHost: www.ssn.edu.in \r\n\r\n)
6. Receive the response using either `recv()` or `read()`.
7. Parse the response to find out if the request succeeded and what format the file data is being sent as.
8. Receive the file data, if present, using either `recv()` or `read()` and write the downloaded page into file under a different name in a local folder.
9. Close the socket and the file.

Sample Output:

```
>> gcc webpagedownload.c -o download
>> ./download www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf
Enter the new file name: output.doc
Downloaded file saved under output.doc
```