

## WEB CACHE USING PROXY SERVER

### Server code :

- 1) First we create a server socket and bind a socket with a given port.
- 2) Enable the socket to listen to any message from the proxy.
- 3) Create a file pointer which points to a file containing all the URLs and the last modified date.
- 4) Do the following steps 5-9 until it receives an exit message.
- 5) Read message from proxy (file name from client) and exit if the message is exit.
- 6) Else check for each and every line in the server file and compare with message from server.
- 7) If both match, then return 'Date matches' to proxy.
- 8) If dates does not match, then return 'Data does not match' to proxy.
- 9) If URL is not present in cache, but present in server return 'URL not in cache' to proxy.
- 10) close the socket.

## Proxy code :

- 1) First we create a proxy socket and bind it to same port as server by connecting to it.
- 2) Create a file pointer pointing to the URLs and date present in cache.
- 3) Create a connection between proxy and client by binding it to same port as client.
- 4) Enable the socket to listen to client and server for messages.
- 5) Repeat the steps until you receive an exit message from the client. (Steps 6-11)
- 6) Read the message from the client.
- 7) Check if given URL is present in the cache.
- 8) If it is present in cache, then send the file name to server and check if date matches or not and print the same.
- 9) If date does not match, then update the date for the given URL in the cache.
- 10) If URL is not found in cache, then we get the details from the server and add it to the cache.
- 11) Return the response from server back to the client.
- 12) Close the socket.

## Client code :

- 1) First we create a client socket and bind it to the port.
- 2) create a connection between the proxy and client.
- 3) Repeat the steps 4-5 till it receives 'exit' as input.
- 4) Receive input URL from the user and send it to proxy.
- 5) Receive the response from the proxy and print the same.
- 6) close the socket.