

Comp 112 Assignment 5 Final Report

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1 Implementation

Source code and documentation can be found on our Github repository at the following link:

<https://github.com/jmao01/COMP112-Assignment-5>

All browsers, including Google Chrome and Mozilla Firefox, have the ability to incorporate a proxy into its Web browsing capabilities. A proxy is the server that sits in between the client and the server and attempts to fulfill the request for the client. If it can, the proxy sends the response to the client. If not, the proxy forwards the request to the server. The proxy is able to filter and content that the user requests, providing faster content delivery and security.

LRU Cache stands for Least Recently Used Cache. This enables the cache to make a best-effort attempt to store only the most recent data when the cache has reached maximum capacity. The least recently used data is gradually replaced, increasing the effectiveness of the cache. The user can adjust the cache size to hold any number of items based on how much available space they are willing to use for the cache on their local machine.

The user can customize to block any site that he or she desires by providing the URL or server that the user does not wish to visit.

2 Update Since Demo on April 24, 2015

We created a Config file for the configurable components of the proxy, including cache size, blocked hosts/IP addresses, backlog size, and maximum data retrieval size. Originally, we only blocked IP addresses by hostname, but we added a feature to block requests sent to the IP address associated with those hostnames. In addition, we performed two large downloads of Linux kernels simultaneously and were able to completely download them while continuing to service other incoming HTTP requests.