CS3031 - Project 1

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February 7, 2019

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1 Specification

The objective of this project is to implement a proxy server with the following features:

1. Respond to HTTP and HTTPS requests, displaying them and the responses on a management console.

2. Handle websocket connections.

3. Block selected URLs via the console.

4. Cache requests locally ro save bandwidth.

5. Handle multiple requests simultaneously.

2 Implementation

I chose to implement the proxy server in Python 3, using the following modules:

1. `socket`: provides low-level access to the BSD socket interface

2. `threading`: provides higher-level threading interfaces based on the low-level `_thread` module

The following diagram outlines the design decisions I made.
Diagram

3 Code