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CSE 130

Writeup for Assignment 3

Testing:

In order to thoroughly test my program I tested all functionality. I tested if it could handle normal functions from assignment 1 and 2 (GET, PUT, HEAD). I then tested if it could complete health checks. I then made the healthcheck function and made sure it also worked. Once I had completed testing I went on to test the given functions on gitlab.

Questions:

1. For this assignment, your load balancer distributed load based on the number of requests the servers had already serviced, and how many failed. A more realistic implementation would consider performance attributes from the machine running the server. Why was this not used for this assignment?

We are running all of the requests on our machine, so this is a constant between all the requests. We cannot change machines unless we have another computer, which is not expected of the students. Additionally, the main purpose was just making sure we could code a load balancer that could make the decisions given a specific set of rules.

2. This load balancer does no processing of the client request. What improvements could you achieve by removing that restriction? What would be the cost of those improvements?

We could improve the load balancer by breaking down how much needs to be sent over the socket. One thing we could do is start to break down the header so that

only the relevant information was sent to the server. This would take more time to do and as the load balancer is already a funnel, it would probably not be a good idea.

3. My server couldn't run 400MiB files so I lowered it to 4MB files. I got it to run in 0.017 seconds.
4. Doing the same small files, it seemed to run at about the same speed.