

Yes there is a difference when using just the standard asgn1 code compared to my asgn2 code. Asgn2 is faster as it can handle all four requests at the same time where as asgn1 just does 1 GET request at a time.

The bottleneck in my system is that it takes time to process requests coming in. Processes can keep coming in and in at a faster rate than my program can handle. The program has to figure which worker thread is available, determine and parse the headers if it's a GET or PUT, then process the GET or PUT and log all of the info on top of it if logging has been requested. And all of this stuff takes time whereas a client sending a request to the server takes significantly less time than the server actually processing everything. In terms of concurrency, the dispatcher can only hand off requests one at a time, because if two requests were to come in at the same time, it's going to try to give two requests to one thread which isn't good. Workers can work concurrently as long as they aren't writing to the same file at the same time. And logging must be done separately. Editing the log file at the same time can lead to some weird looking output. To increase concurrency of the dispatcher I have no idea, but for workers you can allow them to read at the same time to increase concurrency there. And as for logging I'm not too sure here either but maybe you can have the threads write to their own logs and then concatenate the log files together to avoid weird output.