Computer Science 441: Assignment 3

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When shutdown () is called, the checker variable notshutdown is set to false so that in the while loop every so often the serverSocket is timed out for 500 msec so it becomes non blocking in order to check in the SocketTimeoutException if the checker variable notshutdown is set to false, once it is, it breaks out of the while loop and waits for the threadPool to shutdown.

If shutdown () is called while some worker threads are still executing, the server stops accepting new connection requests by breaking out of the while loop.

However since some threads might be still executing, threadPool.shutdown(); prevents the creation of any additional threads, then

threadPool.awaitTermination (60, TimeUnit.SECONDS); allows threads that are still running 60 seconds to complete their tasks. I set it to 60 seconds to allow large files to be transferred however, ServerDriver only allows 10 seconds before termination regardless of awaitTermination in WebServer. After 60 seconds, if any threads are still running somehow, shutdownNow(); forces the remaining threads to terminate and any tasks that were still awaiting execution are also terminated. After that the server socket is closed.