CSCE 240, Section 001

Assignment 5 Report

The main objective of this assignment was to record and document the program's interactions and statistics when in use. When a chat session is initialized, a text file will be created which contains the user's queries and the system response to those queries. Each new session will create a new text file with the following naming format containing the current date and time at the start of the program: yyyy-MM-dd_HH-mm-ss. Since colons are not to be used in file names, I replaced them with dashes instead. A .csv file is also created which will have statistics on the chat session such as the number of user inputs, system responses, and the total session duration (the time from when the program starts to when the user terminates it by entering "Quit", "quit", or "q"). I created two new methods to write the previously mentioned files. The last type of documentation created was a log file which simply logs all user and system interactions. Every time the user gives an input to the console or the system outputs to the console it was documented to the log. In order to store all queries and responses, I created a list of type string for each. I chose to use a list rather than an array is because I only need to be able to add elements and print them out which doesn't require random access to indices. Also, since the number of inputs and outputs cannot be predetermined a list would be more practical since arrays must be initialized to a set size while lists can grow as much as it needs to.