CSL 202 - Programming Language and Paradigm

ASSIGNMENT 4

Functioning:

File Part to Store Historical Data and Save status if Programme Restart

In this programme the Top commands runs every 10 seconds and update the topData.txt file. There is a token named NEWTOP and in the next line there is time of running the top command appended in the file in order to help in reading the textfile. The date stored after NEWTOP token is used to get difference of the current time and the time at which the top command output was stored, If this time is greater than the threshold time for deleting previous inputs.

Overall Functioning:

A hashMap named map store the current status of the running programme. Whenever top command runs it stores all the pid as key and their details. There is a time_use variable in the data class which store the time upto which there is a rise in the cpu or the Memory usage. Also there is a procData Array List which store the top command data. The pidArr stores all the pid for a top command. After updating the pidArr we check if all the pid's are in the Hashmap, If any of them are not present then i add it to the Hashmap. After that i check if the each time_use field in the hashMap. If it is greater than the delay 2 then i add it in the Violaters arrList . If the size of the violaters is greater than zero then i send a mail to the saved email address.

The second runnable in the code is used to delete some part from the files perodically. The assumptions made by me are listed in the readme file.

If there is any problem then please mail me

Rishabh singh

2016csb1054@iitrpr.ac.in