ErrorAlert

Assumptions:

- This will be a service which starts once and keeps running like a daemon.

- The error log file has a timestamp for each entry and error details.

- We can append a new record to the log file for the email event. This event, as well as the error one, will have the timestamp in which it was executed.

- If this email event could not be added to the error log (because it’s not an actual error), a new log for this kind of event would be generated.

In general terms, the ErrorAlert process wil

At the beginning, the process reads the error log file and gets the entries from the last minute (it could be done by reading each line from the moment the process starts to read the file until the timestamp completes one minute between the lines).

The process counts the errors, if there are more than ten error entries, first it checks if the email was already sent at the last minute. If so, it's not necessary to send it again since the process continues. Otherwise, the information should be obtained and parsed from the error logs and an email should be sent. After that, the process adds a new entry to the log file with its timestamp for the email event.

The process keeps the error amount, the last email’s and the last error’s timestamp in memory. Every time a new error occurs, the process checks if the time difference is lower than 1 minute between the lines. If the condition is met, the amount increases by 1 and the last error timestamp is updated.

When more than ten errors occur at the last minute, the process checks if the email was already sent at the last minute. If not, the email is sent and the event is logged into the log file. Once the above-mentioned process is done, the error counter is set to zero and keeps waiting for new errors to check out the timestamp and count how many of them there are. The process starts counting all over again.

On the other hand, if the time difference from the last error and the new entry is greater than one minute, the error counter is set to zero and starts counting all over again.

\* Note: If it is not possible to log the email events into the error log or the email event, a variable in memory can be created. However, one of the cons is that if the process is down just after sending the email, the email reference could get lost. Consequently, we will not be able to check if the email was sent within the last minute so it will be sent again.