**LAZY OPTIMIZER**

**Abstract:**

An analysis of various memory management software applications available and the application of Machine Learning in this field.

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There are various memory managers available in the market that are either paid or free. These apps are used to clean and reduce the memory usage in a computer device. But these apps work mostly manually. And those which claim to be automatic cleaning apps, only keep cleaning on a set timing and only work on a set data.

As per my research until now, there are no memory management applications that remove the manual inclusion of human beings in the process of boosting the performance of a computer. Instead these software programs bring the user into their application interface and then the user needs to select what to clean and what he/she should not.

Also, many general computer users do not know the importance of keeping the memory of their computers clean and managed. Whenever their computers start to lag in performance, or they have speed related issues, they visit a service person, who in turn only cleans their computer of the various temporary files, auto-start apps, disk defragmentation, etc.

This results in the users paying money to the service person time and again for doing the tasks that can be performed with the help of a program itself.

My project i.e. Lazy Optimizer is an application that is aimed at saving the recursive expenditure by general computer users, and to reduce the human participation the process up to 98%. Humans cannot be excluded completely as there are certain applications and files that the user does not access for a long time, yet intends to keep the applications or files on the computer.

This application will use the Lazy Learning approach from Machine Learning to reduce human effort. The application will monitor user activity on a daily basis and generate a data set for the model.

The temp files will be cleaned on a daily basis and the disk will be defragmented according the usage data generated by the user activity. The activity data will be used to keep an eye on the applications on the device. The applications that have not been used for 30 days will be compressed and kept as a backup file on the local hard disk. This reduces the file size and hence clears dome amount of memory.

When these apps are not used for more than 60 days, the user will be asked for permission to delete the application from the system. The private files of the user will not be damaged in this process.

Thus, the application will do the majority of memory management without any human efforts and will only ask for human participation when deleting any application or file permanently. The application will be sold at a one time price and hence the user will not have to spend any money once he/she pays for the Lazy Otimizer.