

MULTIPURPOSE COMPUTER LABORATORY MANAGEMENT SYSTEM

ABDIQANI MUHUMED HERSI, N. GANAPATHI RAM

Abstract—The project “Multipurpose Computer Laboratory Management System” is designed using Microsoft Visual Studio.Net 2008 as front end and Microsoft SQL Server 2005 as back end which works in .Net framework version 3.5. The coding language used is Visual Basic .Net. The project is designed to monitor the processes running in the system, kill any unwanted process. Also the specified software process can be executed after getting the authorization. So the process can be controlled by the authorized person. The processed, duration the process ran, etc are the details that can be viewed. In addition, any process may be add/remove in/from the database and configured i.e., limited such as how many times the process would run in a day, at a time and maximum duration the process could run. Moreover, the application is capable of logoff, restart and shutdown the system. When the set the time in hibernation, the system hibernates and restarts after the given time. This project is Graphical User Interface (GUI) based system and is user friendly. This system combines features of file transfer, hardware control, system information retrieval and monitoring.

Keywords—Authorization, Graphical User Interface, Visual Studio .Net, SQL Server.

I. INTRODUCTION

The main theme of the project is to control and monitoring the process in the system. The project is developed in such a way that it is easy for user to control the process while running. This project is developed for “Ascentz Technologies” which is situated in Coimbatore.

Due to the running of many process at same time the problem started increasing. As all their work is done manually they are finding tough to keep track of information and data. They have decided to go computerizing the operations.

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They have decided to do it in module by module. This project is developed using VB.net as front-end and SQL server-2005 as Back-end tool.

II. SYSTEM STUDY

A. Feasibility Study:

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are

1. Economical feasibility
2. Technical feasibility
3. Social feasibility

1) Economical Feasibility:

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

2) Technical Feasibility:

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client.

3) Social Feasibility:

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

B. Existing System:

The task manager is the existing system that is using now for some of the options in process monitor control. By this task manager we can't set the time for opening or closing the running process. Also can't set the time for shut down, restart, logoff, hibernate the system. We cannot able to shown the number of process count, number of threads count and number of handles.

C. Drawbacks of existing system:

1. Time setting for closing or opening the process is not possible.
2. Time setting for shutdown, logoff, restart, & hibernate the system is not possible.
3. Cannot shown or view the number of process, threads, and handles.
4. Also, can't set the maximum instance per day.

D. Proposed System:

This project "Multipurpose Computer Laboratory Management System" is to maintain the client's details who are in the browsing and to monitor the client machine at each and every second. It is developed to provide the facility of monitoring the client machines from the server machine. It also provides the facility of chatting between the server and the clients. The server maintains the clients information such as in-time, out-time and time remaining etc., when time remaining reduces to zero the client will automatically closed.

E. Features:

By using this system the administrator can be able to:

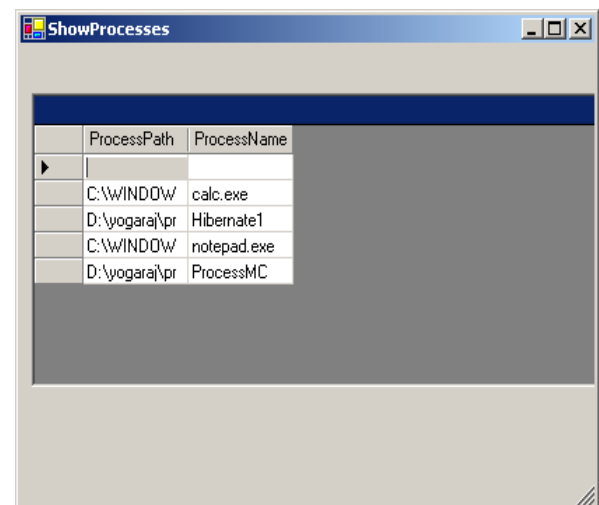
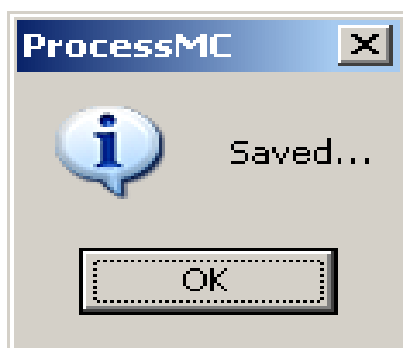
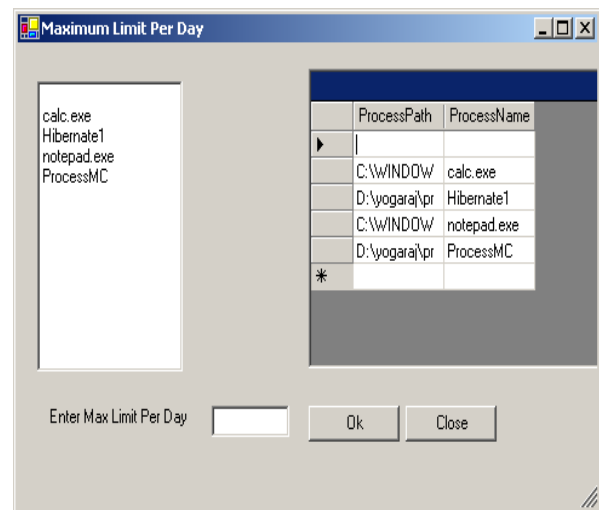
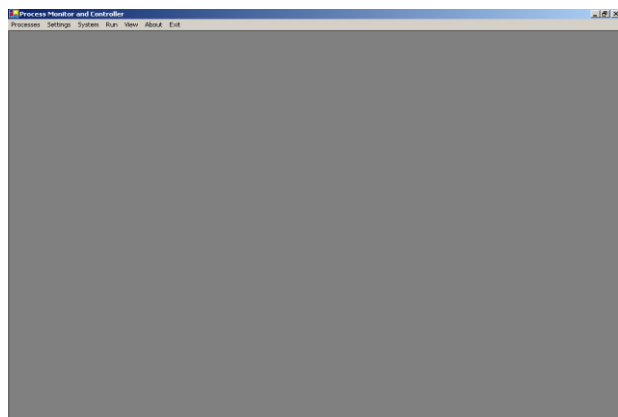
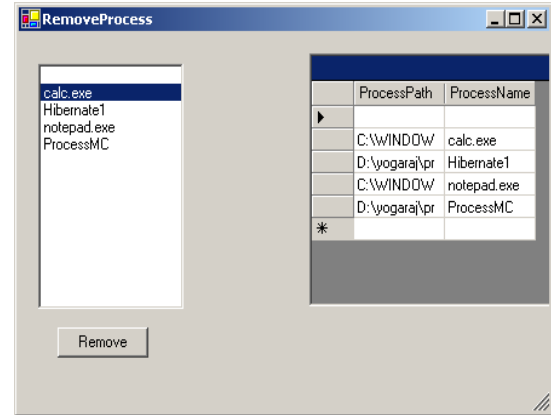
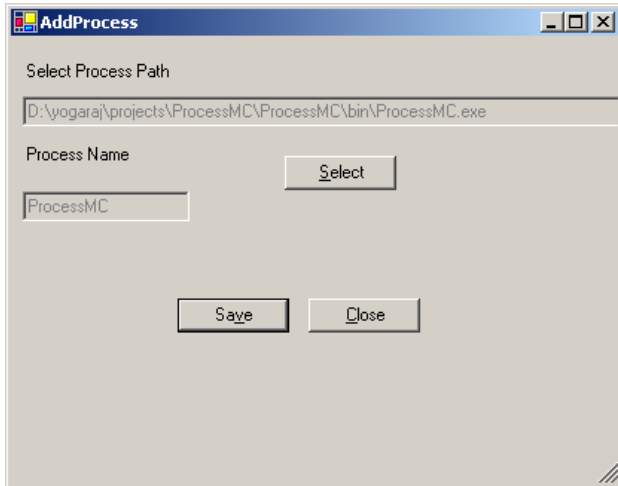
- Monitor the client's machine at each and every second
- Shutdown the clients machine from server itself
- Reboot the clients machine from the server itself
- Close the clients machine from the server itself
- Logoff the client's machine from the server itself.
- The existing system is considered as manual system or domestic means of communicating system. In the existing system there is no system for message transfer. Client control, File Transfer Protocol(FTP), communication between server and the client.
- Accounts are manually maintained. Another major thing in this existing system is that the person who is responsible for the centre is always watching the persons machine. Whether he is entered in prohibited area etc., its not possible for watching all the persons machines for each and every second.

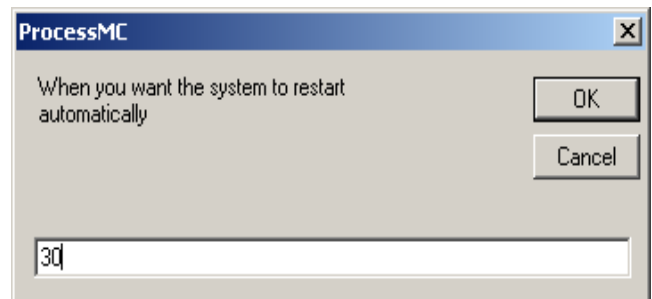
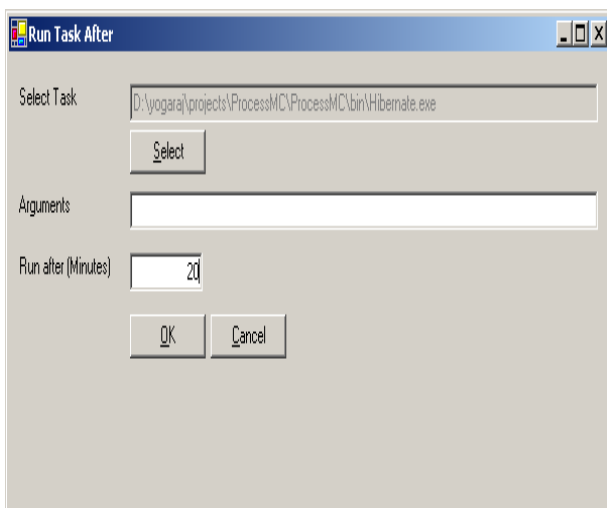
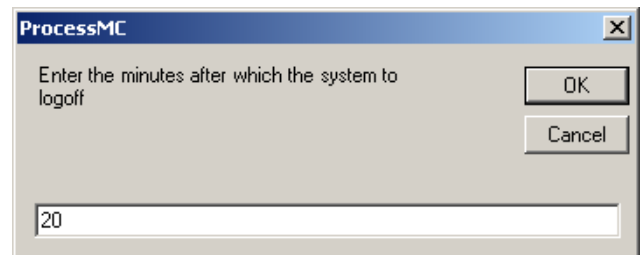
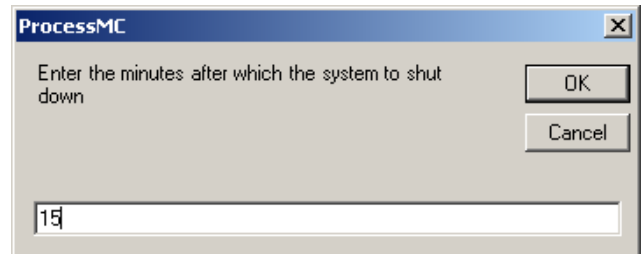
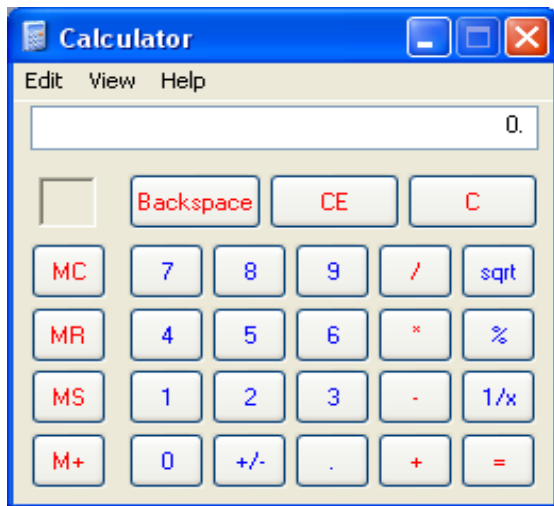
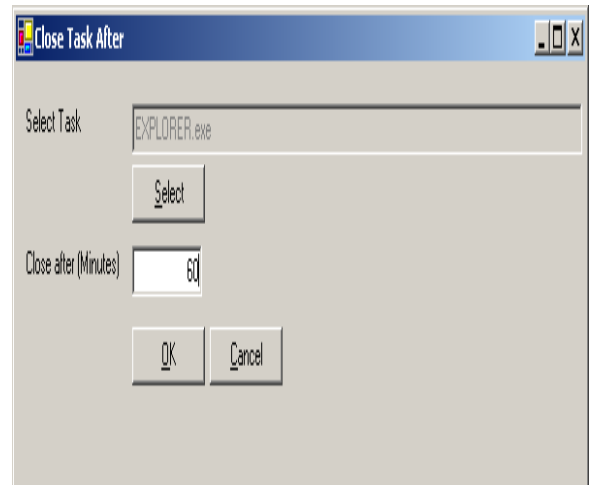
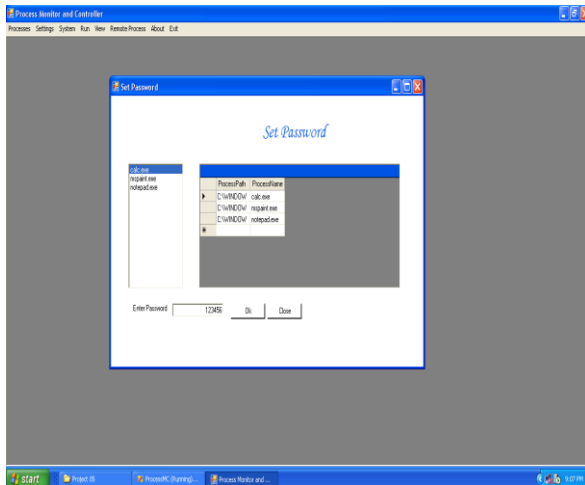
III. EXPERIMENTAL RESULTS

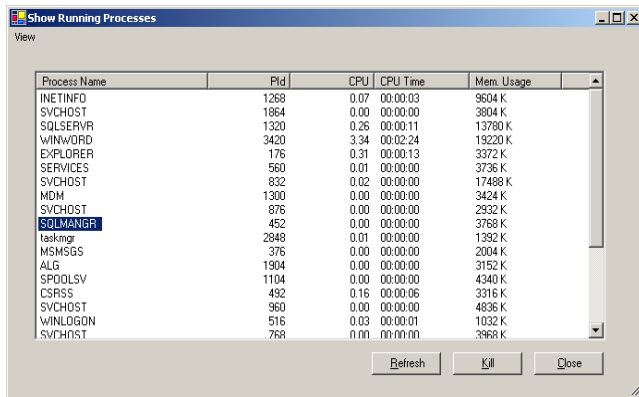
Login Page



The screenshot shows a standard Windows-style login dialog box. The title bar reads 'Login'. The main area is light blue and contains the word 'LOGIN' in a large, blue, sans-serif font. Below this, there are two text input fields. The first is labeled 'Username' and contains the text 'process'. The second is labeled 'Password' and contains a series of asterisks. At the bottom of the dialog, there are two buttons: 'Login' and 'Cancel', both with a blue border and white background.



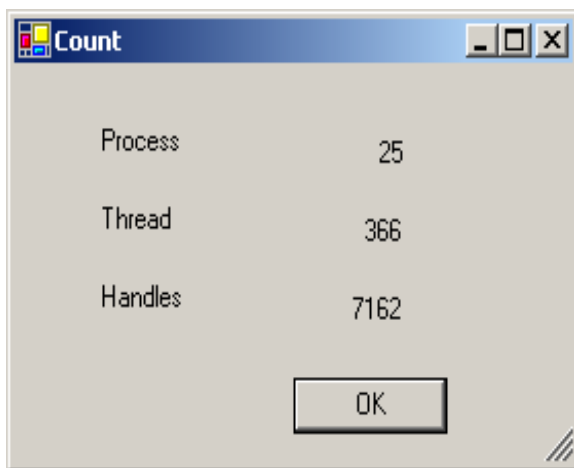




transfer, hardware control, system information retrieval and monitoring.

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IV. CONCLUSION

It is concluded that the application works well and satisfy the needs. The application is tested very well and errors are properly debugged. It is designed to monitor the processes running in the system, Kill any unwanted process.The processed, duration the process ran, etc are the details that can be viewed. In addition, any process may be add/remove in/from the database and configured i.e., limited such as how many times the process would run in a day, at a time and maximum duration the process could run. Moreover, the application is capable of logoff, restart and shutdown the system. When the set the time in hibernation, the system hibernates and restarts after the given time. In Internet and networking there are programs for file transfer, remote login. But these programs are textual based and there is know project combining file transfer, monitoring and hardware control. This project is Graphical User Interface (GUI) based system and is user friendly. This system combines features of file