Employee's Working Supervising Technique

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Abstract— In today's world, organization's success depends upon employees' performance; poor performance is detrimental to organization's success. Employee monitoring method is effective way to evaluate performance. Employee monitoring software can collect information on everything an organization-owned computer does, such as application used, websites visited, email attachments sent, , and chat conversation. However available software's are heavier in size and requires higher system configurations. In this paper, an attempt has been made for finding the solution for employee monitoring based on screen shots of employee computer.

Keywords—Administrator, Databases, Employee, Java, Reports, Screenshots.

I. INTRODUCTION

Monitoring is to some extent a routine part of the employer/employee relationship. Most employers make checks on the quantity and quality of work produced by their employers. Various techniques are being carried out by employers to monitor the work, one of the common ways is CCTV cameras but when employees are not on the same location then CCTV cameras installation is costly enough. Therefore, new ways of efficiently providing the monitoring are greatly needed. Various avenues has been explored to provide a solution like Internet usage monitoring[1], email monitoring[2], audio recording[3], key logging, File access, Computer location mapping[4], removable storage blocking[5] has been developed However software dealing with these type of feature requires advance system configuration's leading to more expenses to organization.

In this paper, the proposed application can take screen shots of the work which is being processes by various employees from the various locations. In this application, administrator has all the rights to manage various employees' information, he has also right to start the server or monitor the work by various employees. Whereas, employees has rights to manage their own profile. The screen shots process will automatically start after the login by the employee and they will be saved on the client machine. When employee want to sign out from the grabbing application then all the work will be uploaded to the server machine for monitoring. It is developed using Java technologies.

The objective of the application would be to keep the information of all the employees, get the employee activity information and generate various report s like employee activity etc.

II. TECHNOLOGIES TO BE USED

A. Java
Java is a computer programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that code that runs on one platform does not need to be recompiled to run on another. Java applications are typically compiled to bytecode (class file) that can run on any Java virtual machine (JVM) regardless of computer architecture. In short it is Platform Independent, Secure, Object Oriented, Scalable, and Robust programming language

B. JDBC
It is an API, which is used for the communication of java programs with different databases. It provides methods for querying and updating data in a database. JDBC is oriented towards relational databases. A JDBC-to-ODBC bridge enables connections to any ODBC-accessible data source in the JVM host environment. JDBC allows multiple implementations to exist and be used by the same application. The API provides a mechanism for dynamically loading the correct Java packages and registering them with the JDBC Driver Manager. The Driver Manager is used as a connection factory for creating JDBC connections.

C. Windows Programming
Swings in java is a rich set of components for building GUIs and adding interactivity to java applications. Swing was developed to provide a more sophisticated set of GUI components than the earlier Abstract Window Toolkit (AWT). Swing provides a native look and feel that emulates the look and feel of several platforms, and also supports a pluggable look and feel that allows applications to have a look and feel unrelated to the underlying platform. It has more powerful and flexible components than AWT. In addition to familiar components such as buttons, check boxes and labels, Swing provides several advanced components such as tabbed panel, scroll panes, trees, tables, and lists. Swing is a platform-independent, Model-View-Controller GUI framework for Java, which follows a single-threaded programming

model. Additionally, this framework provides a layer of abstraction between the code structure and graphic presentation of a Swing-based GUI.

D. *JasperReports*

It is an open source reporting engine. Using it reports can be generated in any type of application i.e. console application, desktop application, etc. The JasperReports[6] library is the world's most popular open source reporting engine. It is entirely written in Java and it is able to use data coming from any kind of data source and produce pixel-perfect documents that can be viewed, printed or exported in a variety of document formats including HTML, PDF, Excel, OpenOffice and Word. It is available under an open source license for use in conjunction with open source infrastructure such as MySQL and JBoss, or a commercial license for enterprise deployments involving commercial databases and application servers.

E. *MySQL*

It is used as database, used to store data. It is a relational database management system (RDBMS)[7], and ships with no GUI tools to administer MySQL databases or manage data contained within the databases. Users may use the included command line tools or use MySQL "front-ends", desktop software and web applications that create and manage MySQL databases, build database structures, back up data, inspect status, and work with data records. The official set of MySQL front-end tools, MySQL Workbench is actively developed by Oracle, and is freely available for us.

III. DEVELOPMENT

The user of this application will be the users of the organization. Application is developed with participation of users, which will help them to understand the application easily. Users will consist of administrator and employee. User of type administrator will manage the administration part of the application and he is allowed to manage all the users whereas a user of type employee is the user who will be under surveillance of user.

A. *Creating Database*

The database contains the information of all the users consisting of their ID's, username, password, name, user type (administrator or employee), user status (active or inactive), contact number and email.

B. *Login*

To access this application, users would be required to login through a login screen. After authentication user would be able to access only those areas for which permissions are given. Structure is shown in Fig 1. (a).

C. *User Maintenance*

This allows adding or updating the details of all users who are using this to their allocated rights. Structure is shown in Fig 1. (b).

D. *Manage Profile*

This allows user to manage their own details

E. *Activity Grabber*

This allows capturing the activities in the form of images

F. *Zip/unzip folder*

This allows compressing the captured images into a single zip file. Also decompressing a zipped file
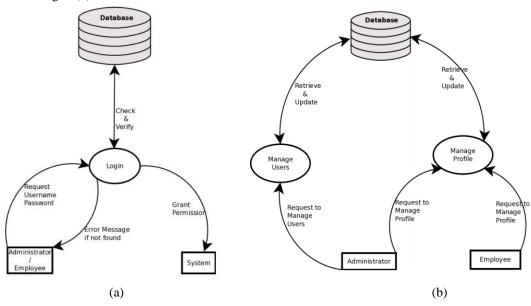
G. *File Uploader*

This allows uploading captured activity filed to the central server. Structure is shown in Fig 1. (c).

H. *FTP Server*

To accept the captured activity files sent for client machines.

I. *Reports*

This allows users to generate various reports like user account report or user activity report or user activity report etc. Structure is shown in Fig 1. (d).
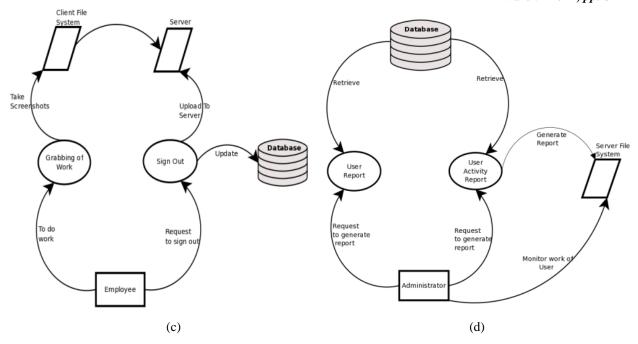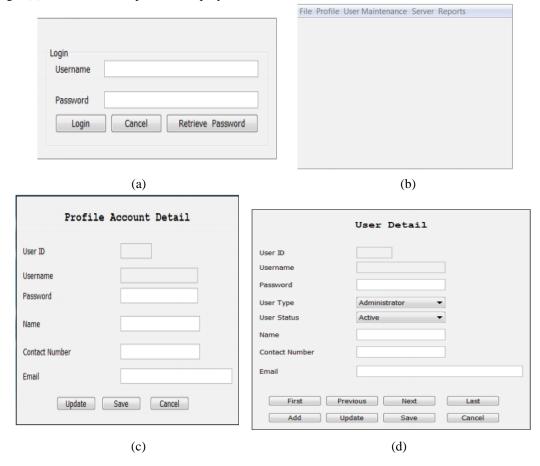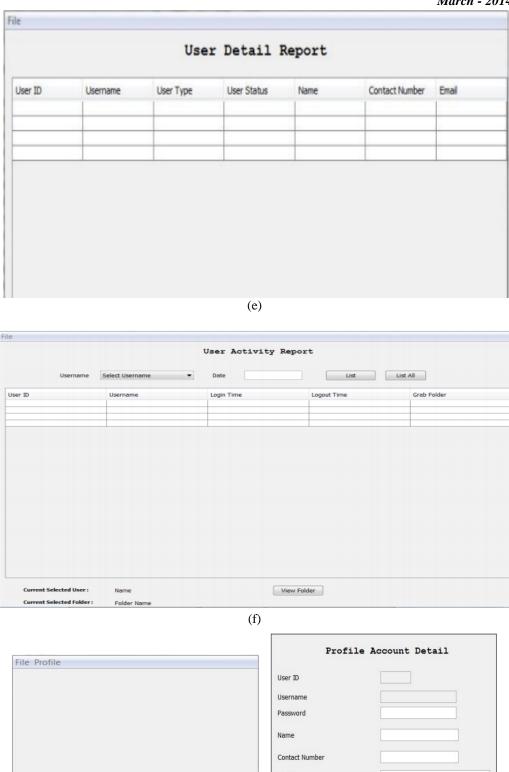

(a)   (b)

Fig. 1. Development: (a) Login; (b) User Maintenance; (c) File Uploader; (d) Reports.

IV. RESULT

This proposed work was simulated using JDK 1.7(NetBeans 7.2.1)[8], MySQL Database Server 5.5, JasperReports 4.7, mysql-connector-java-5.1.22-bin.jar and Windows 7. The preliminary simulation work represented in Fig 2. (a) as Login frame. After getting authenticated information from the user, then the system goes to for next stage depending on user type shown in Fig. 2 (b) and Fig. 2(g) as Administrator mainframe and Employee mainframe Administrator can his own account and employees account as shown in Fig. 2 (c) and Fig. 2 (d) as Profile Detail panel and User Detail panel respectively. . Administrator can see employee reports and activity reports as shown in Fig. 2(e) and Fig. 2(f) as User Report frame and User Activity Report frame respectively. If user is of type employee he can manage his account as shown in Fig. 2(h) as Profile Detail panel in Employee mainframe.

(e)

(f)

| (g) | (h) |

Fig. 2.Result: (a) Login Frame; (b) Administrator mainframe; (c) Profile Detail panel; (d) User Detail panel; (e) User Report frame; (f) User Activity frame; (g) Employee mainframe; (h) Profile Detail panel

V. CONCLUSIONS

The designed application has an aim to make intelligent relationship between employer and employee and allows organization administrators to monitor and supervise all the employee computers from a central location. It can easily deployed over a business network and allows for easy centralized log viewing via one centrally network pc It is clearly concluded that this employee working supervising techniques is very user friendly, robust, less computational cost based system and easily useful for various organizations

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