

A Project/Dissertation Final Report on  
Login Monitoring Software

Submitted in partial fulfillment of the  
requirement for the award of the degree of

**B.TECH (CSE)**



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

Under The Supervision  
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INDIA  
10, 2021

## CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, “ Login Monitoring Software Using Parental Control” in partial fulfillment of the requirements for the award of the BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of JULY-2021 to DECEMBER-2021, under the supervision of Mr.Rajkamal Kishor , Assistant Professor, Department of Computer Science and Engineering of School of Computing Science and Engineering , Galgotias University, Greater Noida.

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

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19SCSE1010589 - Santosh Kumar Gupta

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor

(Mr.RajkamalKishor )

## CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of 19SCSE101090 Ashish Raj ,  
19SCSE1010589 Santosh Kumar Gupta has been held on Galgotias University and his/her work  
is recommended for the award of BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE  
AND ENGINEERING.

Signature of Examiner(s)

Signature of Supervisor(s)

Signature of Project Coordinator

Signature of Dean

Date:

Place:

## **Abstract**

Due to the many problems facing with the system login security, difficult to know the information about the user logs in the system in the absence of Administrator of the system. To mitigate the issues of Login Monitoring I created a software Login Monitoring System that monitor the system in the absence of administrator and send the information of user logs in the system. The Login Monitoring System is a desktop-based software. The software would provide fundamental set of features for blocking sites, blocking programs, system information. Its development includes the maintenance of back-end database with MySQL and front-end application development aspects with JAVA.

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# CHAPTER-1

## Introduction

This project named 'Login Monitoring Software with Parental Controls', is for administrators of a computer system running Windows Operating System. It provides following facilities:-

**Login Monitoring :-** Whenever an user(admin or standard users or guest) signs in to the pc ,then the details of username and login time is taken by the software and then if there is internet connection ,then email is sent to the administrator of that pc and also get saved in the database .If there is no internet connection, then the details are saved in the system by the software, and the software automatically test for internet connection in the background at regular specified intervals . If internet connection is established then it sends all offline saved details to the admin via email and the details are also saved in the database.

**Site Blocker:-** The admin can block any number of websites from opening inside any web browser in the system or pc.

**Program blocker:-** The admin can block a number of programs from execution in the system . This prevents unwanted programs from running on the system by any user and ensures safety.

## 1.1 Formulation of Problem

The administrator didn't get any information about the users login into the system. Also they didn't get login time of the user. This software solve those problems by sending email at a time whenever any user logs in.

There is no any simple mechanism to block websites for free. This software provide s simple mechanism to block those websites on the system regardless of the browser.

The admin can block a number of programs from execution in the system .This prevents unwanted programs from running on the system by any user and ensures safety.

## 1.2 Tool and Technology Used

- Operating System:- Windows 7
- Back End:- MySQL
- Front End:- Java

- Database Driver:- JDBC
- RAM:- 1 GB
- Storage Capacity:- 100 MB

### 1.3 Key Features

- **Program blocking feature:-**  
Admin can block any program installed in the system from running. This ensures stopping unwanted access to important and confidential programs on the system promoting security.
- **Webcam feature :-**  
It is also there in the software which takes snapshot of the user who attempts to escalate or bypass the password authentication and security system of the software.
- **Other features** like email verification using OTP system and password authentication and security system also ensures authorized and secure use of the software by the system's admin.

### 1.4 Objective of the Project

Basically, the objective of this project is to act as a helper for administrator using Windows Operating System. It helps administrators by giving details about username who have logged in to the pc with the time at which they logged in. So, this software helps admin in system auditing. Also, if there is internet connection then email regarding the login details are sent to the admin using their registered email-id and the details are also saved in the database for further future reference. It also provides parental control features like website blocking, program blocking. The admin can add websites to block list by using this software and those websites will be blocked from access in that system via any web browsers. This can help admin, specially parents to control what websites their children can view or not view which ensure safety for the children. Various social media sites, pornographic sites can be blocked for childrens' safety. It can also be used by various institutes like schools or colleges or universities for putting restrictions on what websites the students can browse in the

organisation's system .This can help in ensuring good utilization of the resources available to the students in the institutions.

## **CHAPTER-2**

### **Literature Survey**

- **Survey of Login Monitoring System With Parental Controls**

We identify that Due to the many problems facing with the system login security, difficult to know the information about the user logs in the system in the absence of Administrator of the system. there has many software like login monitoring system but as we compare with my software with other is they didn't provide a simple mechanism to block website for free that's



why we introduce our software this will provide simple mechanism to block those website on the system regardless of the browser. Admin can block a number of program from execution in system. These prevent unwanted programs from running on the system by any user and ensure safety.

There has some Login Monitoring System like:-

- **ActivTrack:** - ActivTrak from Birch Grove Software is an employee monitoring solution that measures productivity, analyzes team behavior, streamlines operational efficiency, and hardens security.

Key Features

- Activity and email monitoring
- Screen activity recording
- Browsing history
- **EkranSystem :-** Ekran System tracks user activity on corporate servers, physical and virtual desktops, remote laptops, and jump servers.

Key Features

- Video replay of every session
- Realtime playback of live sessions
- Keystroke and clipboard recording
- USB device alerting and blocking
- **FamiSafe :-** FamiSafe is one of the most reliable, and best website blocker that empowers the users to block websites for the target device easily. With a variety of

features, this app can track all the activities of the target's device. Blocking inappropriate websites and tracking suspicious messages are two of the best features of this app.

#### Key Features

- Allows the user to blocks websites and restrict internet usage.
  - Provides real-time location of the kid's device and location history.
  - The web-filtering feature allows the user to filter inappropriate content from the target device.
  - The user can even set a screen time limit on the target phone
- Qustodio :- Qustodio is yet another excellent parental control app that features web blocking functionality. Being a user-friendly, reliable, and excellent solution for parental control, this app provides powerful monitoring tools including adult content, screen time, and games. With its easy to use admin panel, the user can block callers directly from the screen where they can review the same.

#### Key Features

- Users can set a time limit on devices, apps, and internet usage.
- Allows the user to monitor web search and search activities easily
- Can easily block inappropriate content and websites
- Can manage various devices for kids of multiple ages.

### **System Design :-**

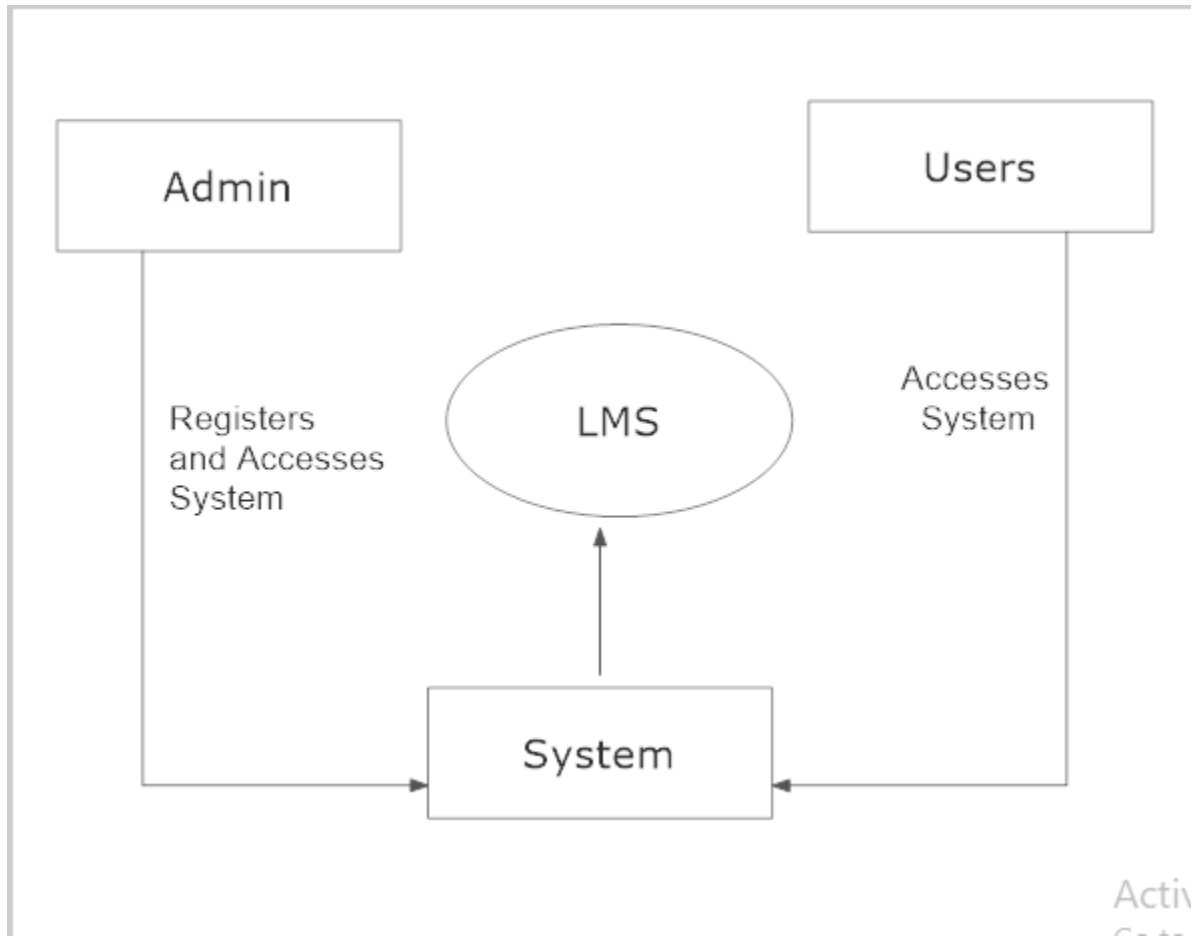
### **DATABASE DESIGN:**

The general theme behind a database is to handle information as an integrated whole. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and effectively. After designing input and output, the analyst must concentrate on database design or how data should be organized around user requirements. The general objective is to make information access, easy quick, inexpensive and flexible for other users.

During database design the following objectives are concerned:

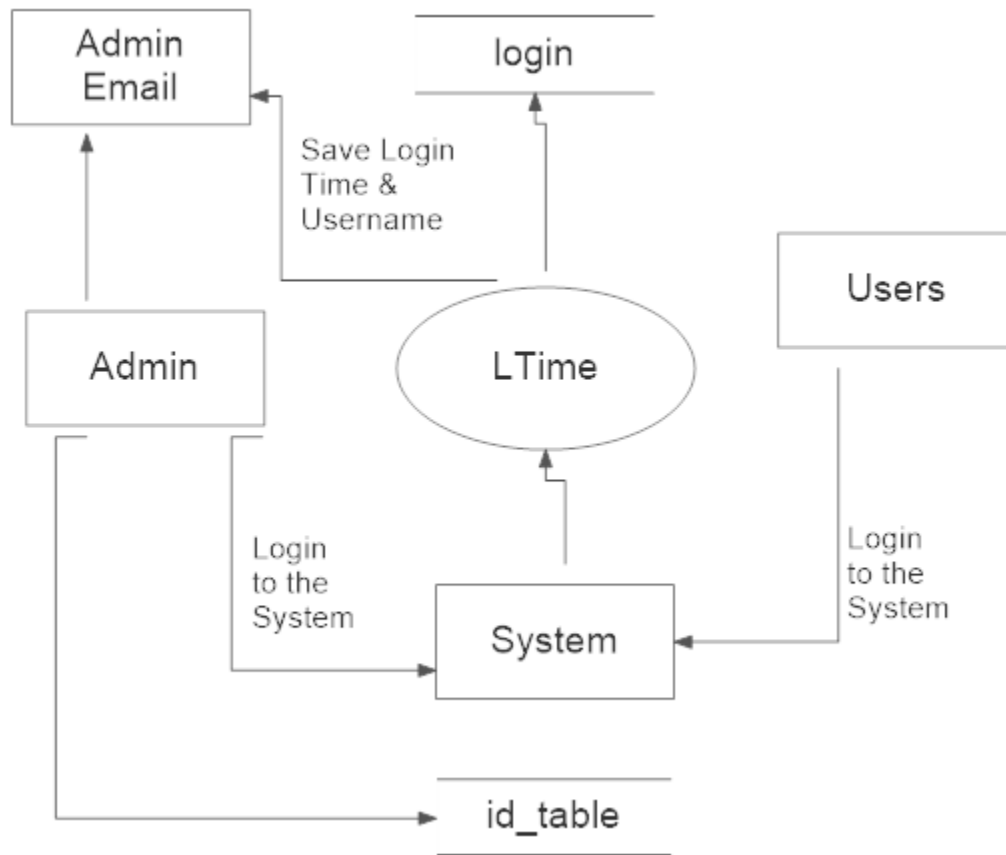
- Controlled Redundancy
- Data independence
- Accurate and integrating
- More information at low cost
- Recovery from failure
- Privacy and security
- **DFD (DATA FLOW DIGRAM)**

**CONCEPT OF LMS**



'0'LEVEL DFD: OVERALL CONCEPT OF LMS

Activ  
C++



‘1’LEVEL DFD: LMS

## DATABASE AND TABLES

There are two databases used by this software – ‘id’ and ‘login’ .

Id database contains table named ‘id\_table’. This table contains information about the users who are authorized to use this software.

It contains following details :-

### 1.TABLE NAME:-id\_table

ATTRIBUTE	DATA TYPE	SIZE	CONSTRAINT	MEANING
<b>Email</b>	Varchar	50	Primary key	Admin’s Email Id
<b>Password</b>	Varchar	25	Not Null	Password

<b>Name</b>	Varchar	50	Not Null	Name
<b>Hostname</b>	Varchar	50	Not Null	Host's Name

'login' database contains table for each authorized user. Each user has been allotted separate table, whose name is the user's email id(with special characters removed ).

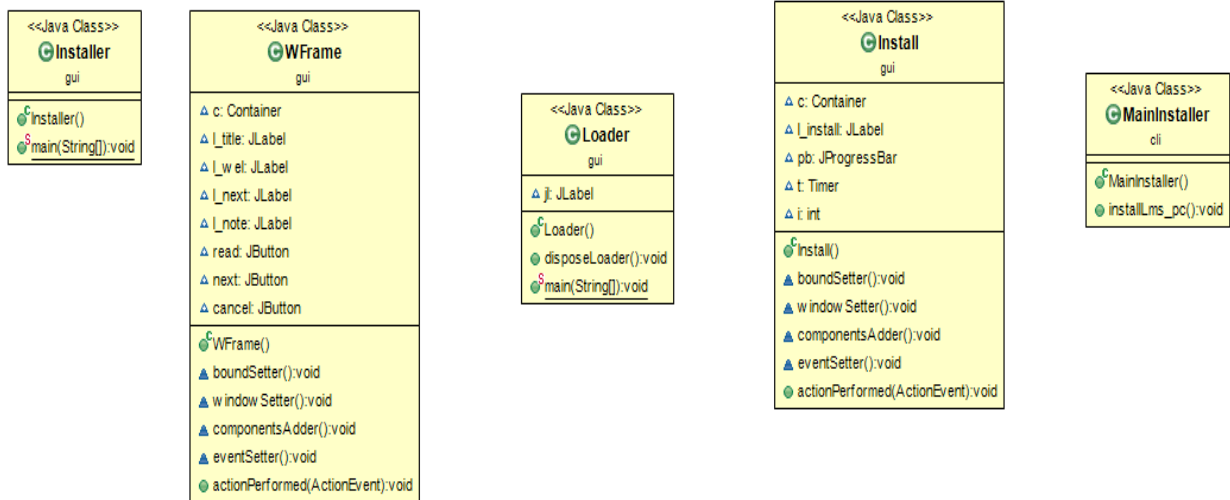
It contains following details :-

<b>ATTRIBUTE</b>	<b>DATA TYPE</b>	<b>SIZE</b>	<b>COSTRAINT</b>	<b>MEANING</b>
<b>User</b>	Varchar	20	Not Null	User who logged in into the system.
<b>Login_time</b>	Varchar	20	Not Null	Date and time at which the user logged in into the system.

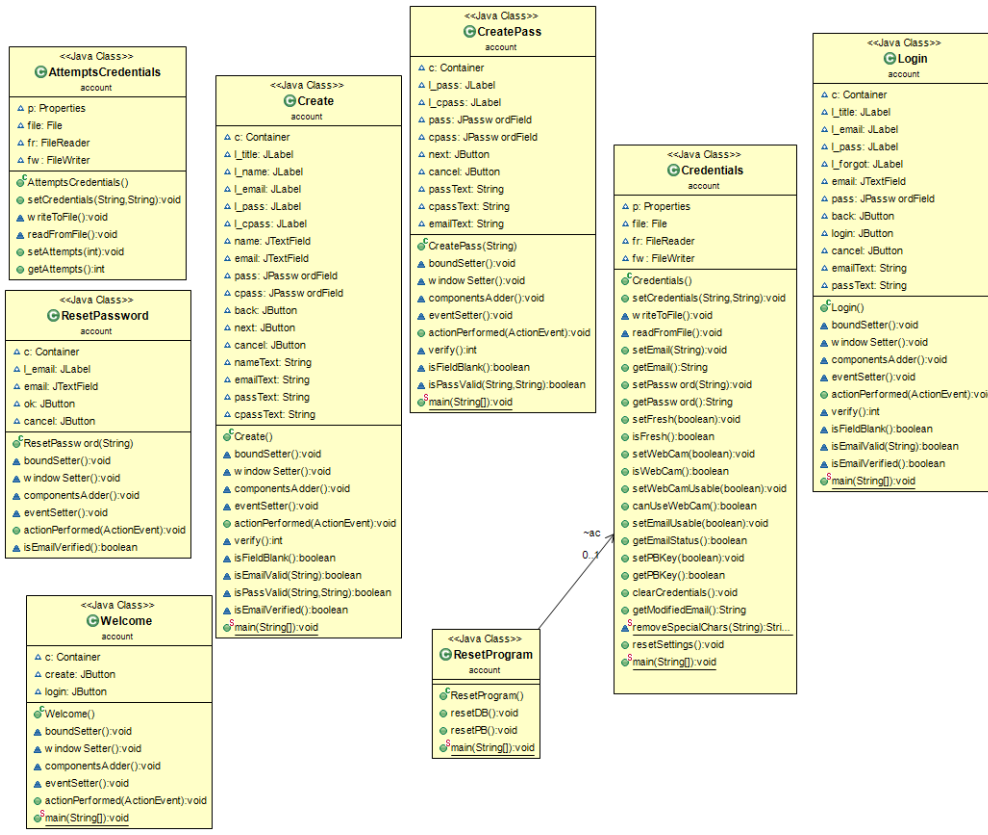
# CHAPTER-3

## Class Diagram

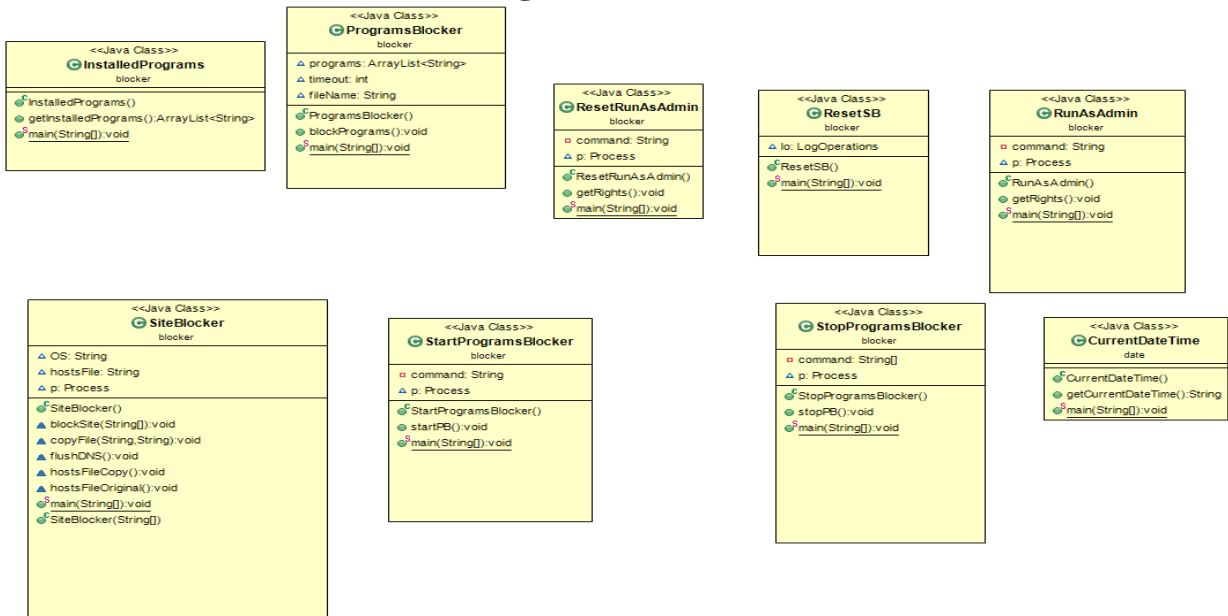
### Package – gui



## Package – account

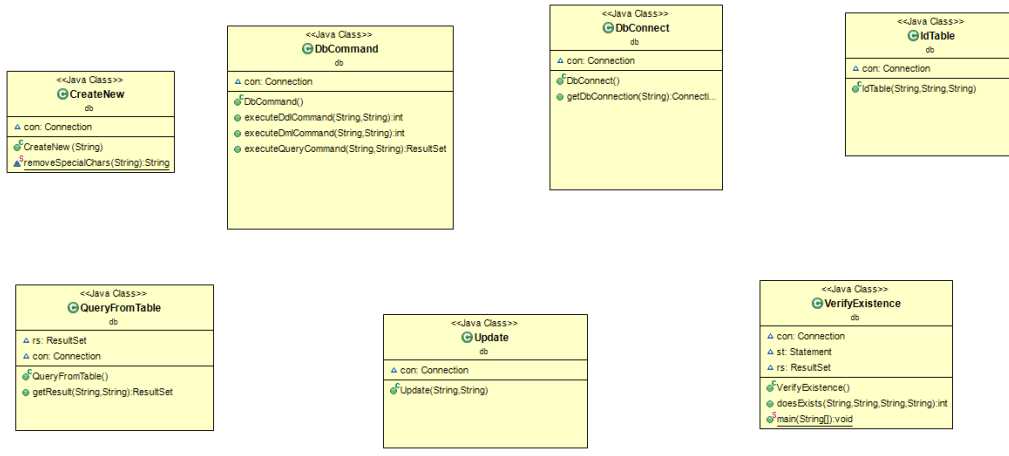


## Package – blocker\_date

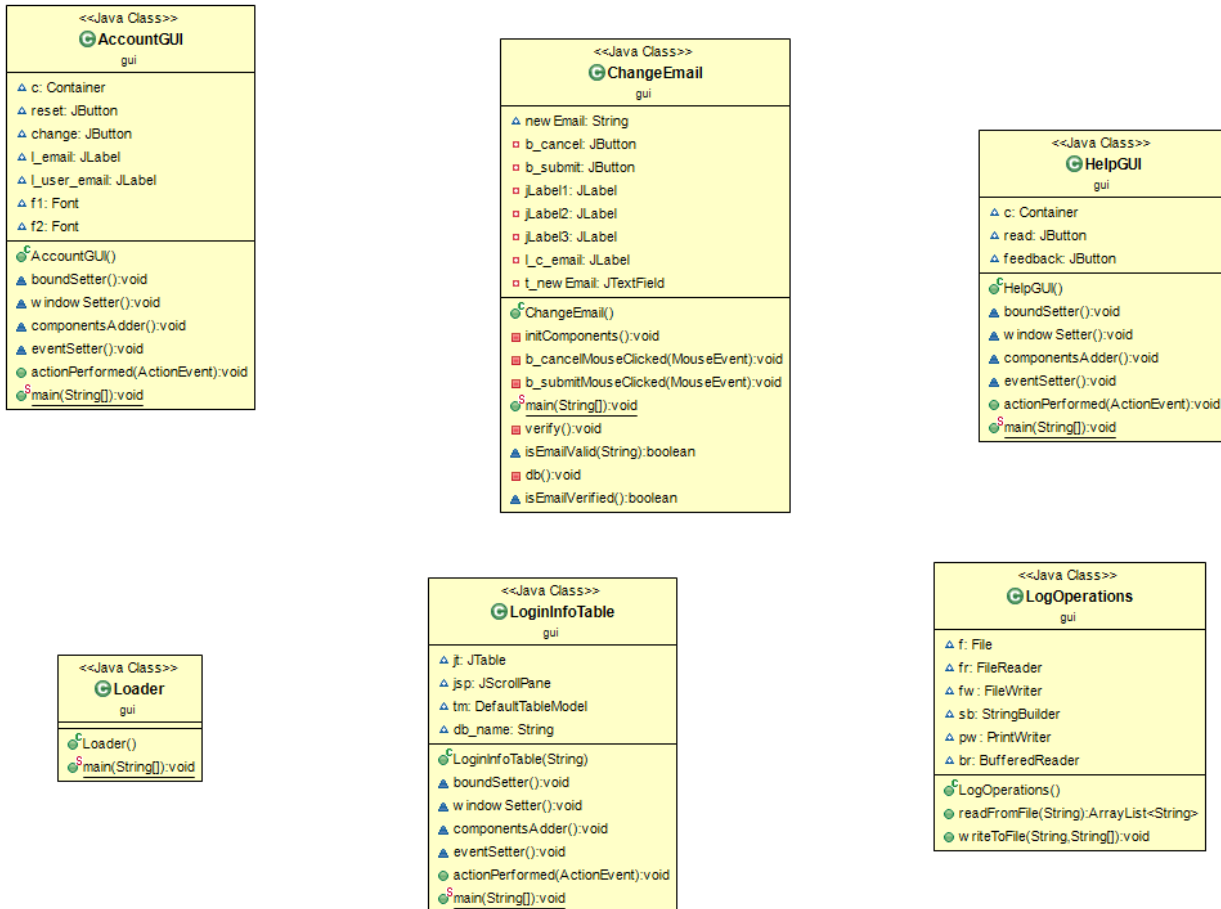




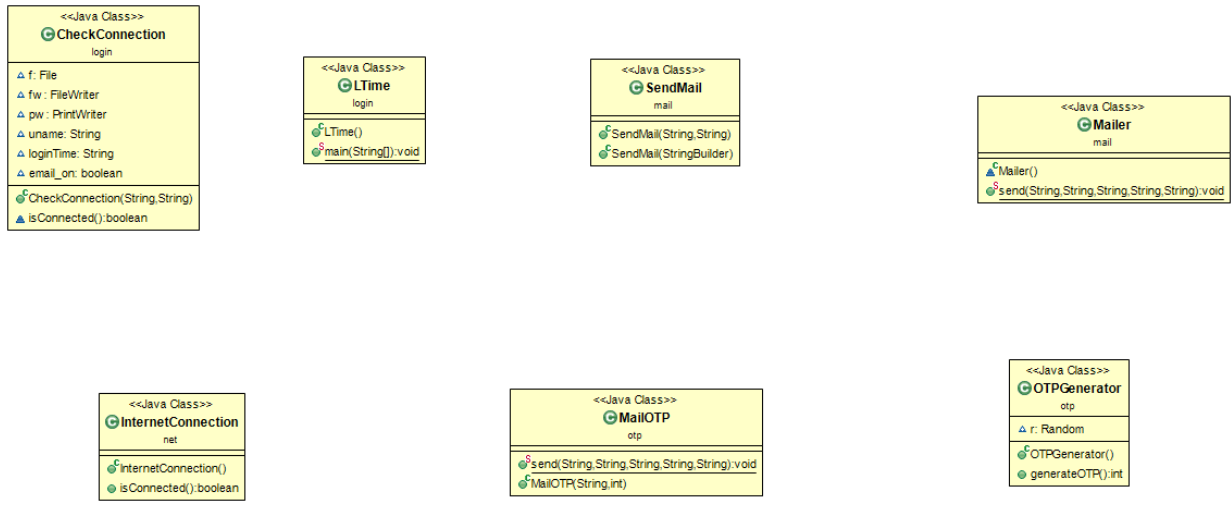
## Package –db



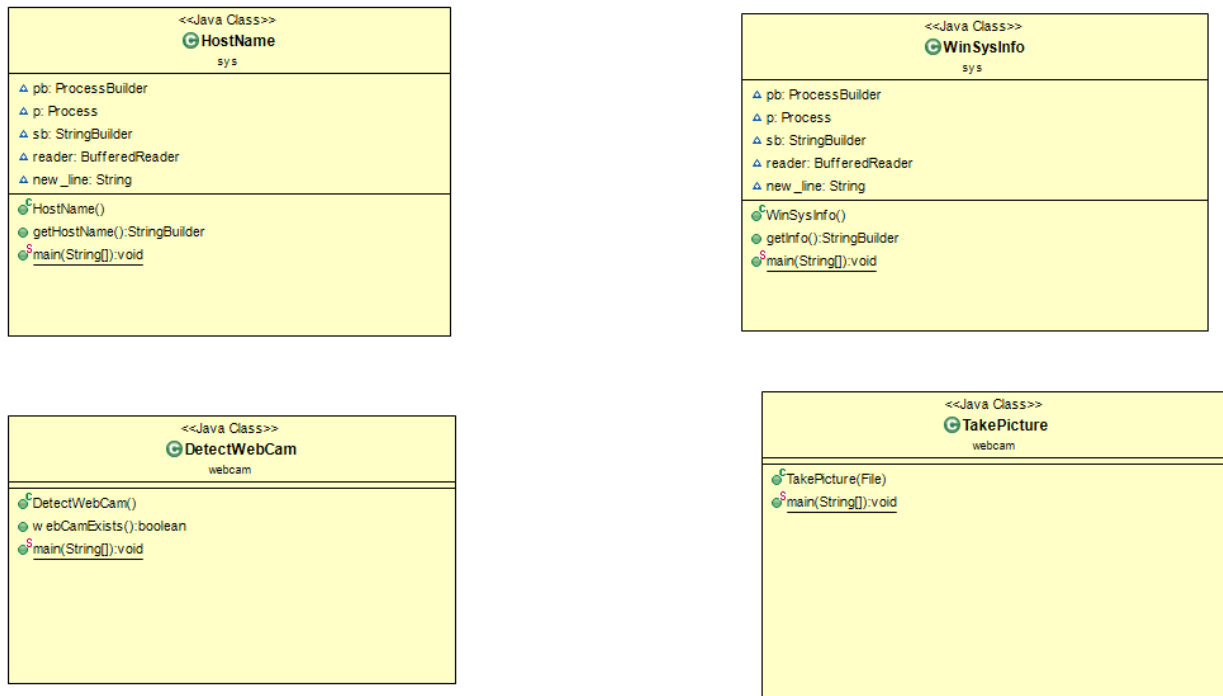
## Package –gui



## Package –login\_mail\_otp\_net



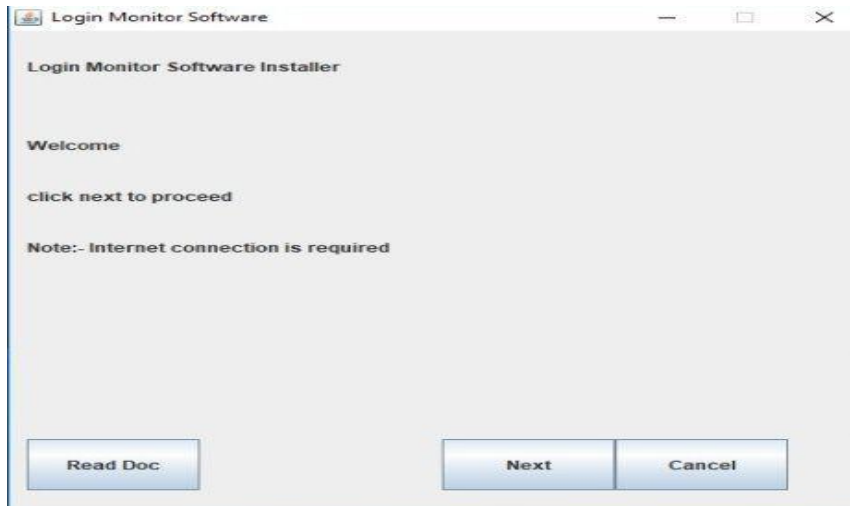
## Package –sys\_webcam



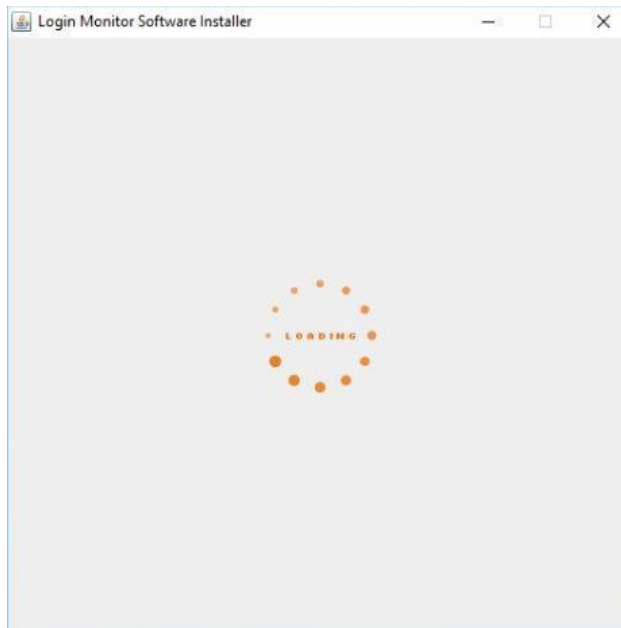
## UI Design

Package- gui

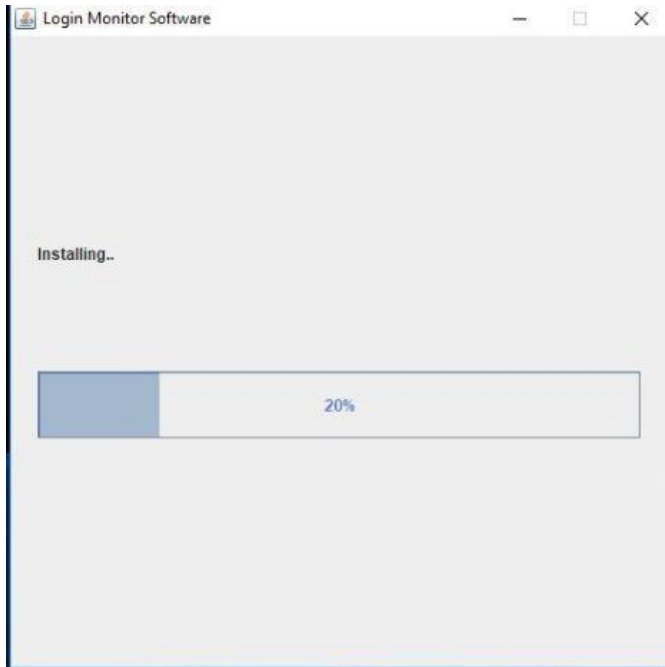
### Installer



### Loader

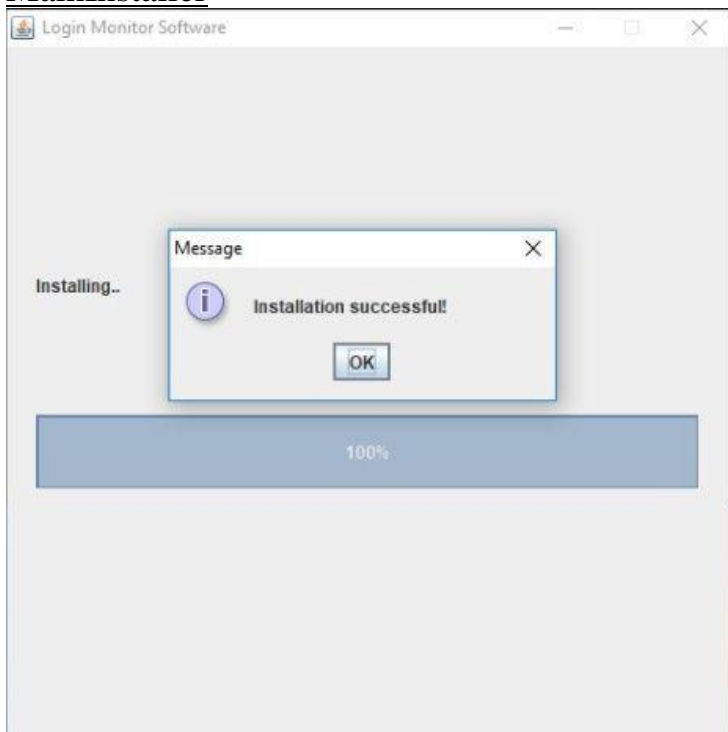


### Install



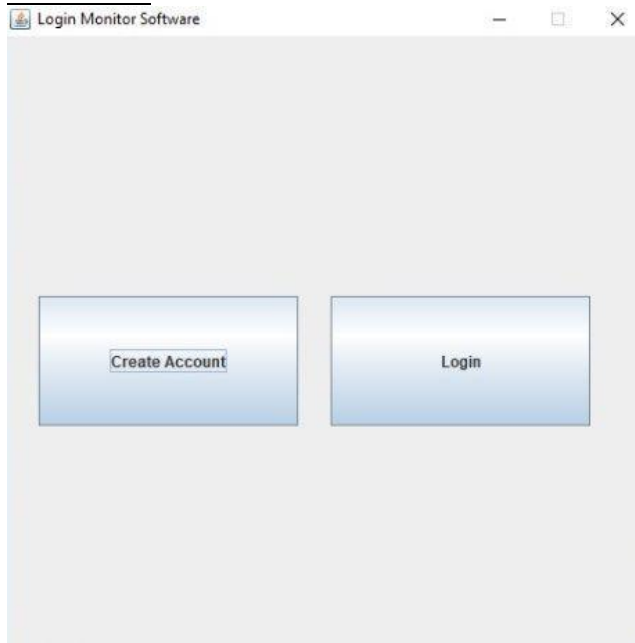
**Package – cli**

MainInstaller



**Package – account**

# Welcome



# Create Account

A screenshot of a software window titled "Create Account" from "Login Monitor Software". The window has a light gray background and contains the text "Create your account" at the top. Below this are four input fields labeled "Name", "Email", "Create Password", and "Confirm Password". At the bottom of the window are three blue buttons with white text: "Back", "Next", and "Cancel". The window title bar includes standard minimize, maximize, and close icons.

# Login

Login Monitor Software

Login

Enter your Email

Enter Password

[Forgot Password?](#)

Back Login Cancel

## CreatePassword

Login Monitor Software

Create Password

Confirm Password

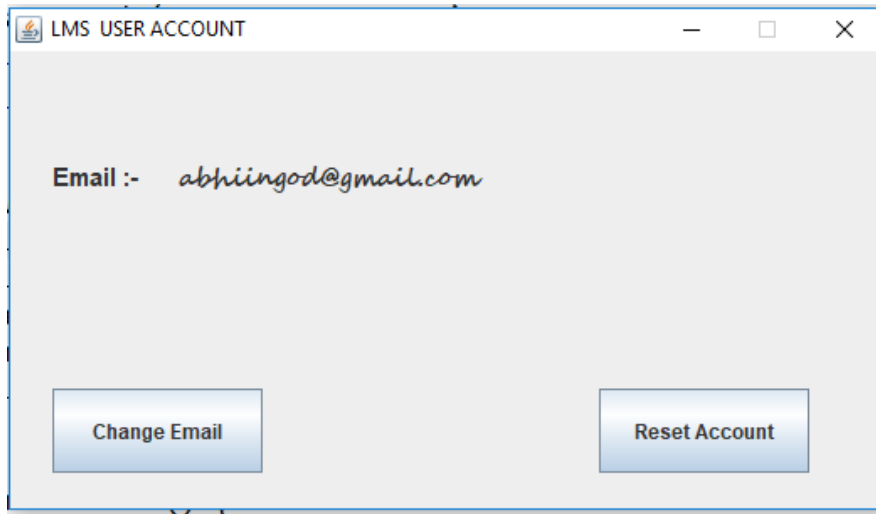
Next Cancel

**Package – gui**

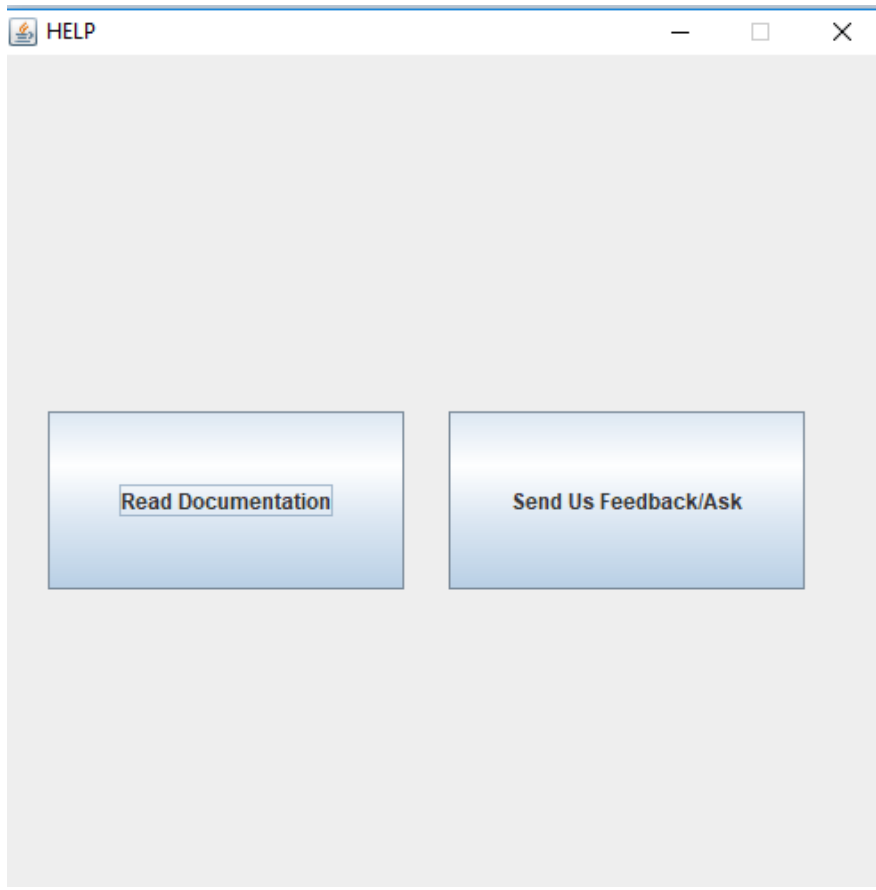
## MainWindows



## AccountGUI

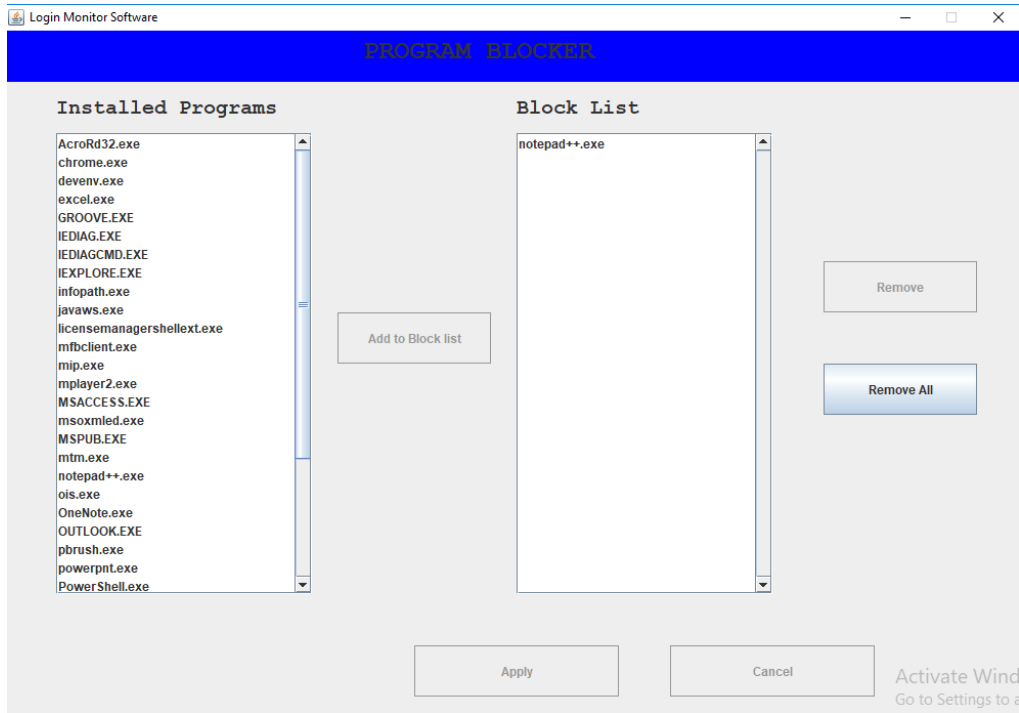


## HelpGUI

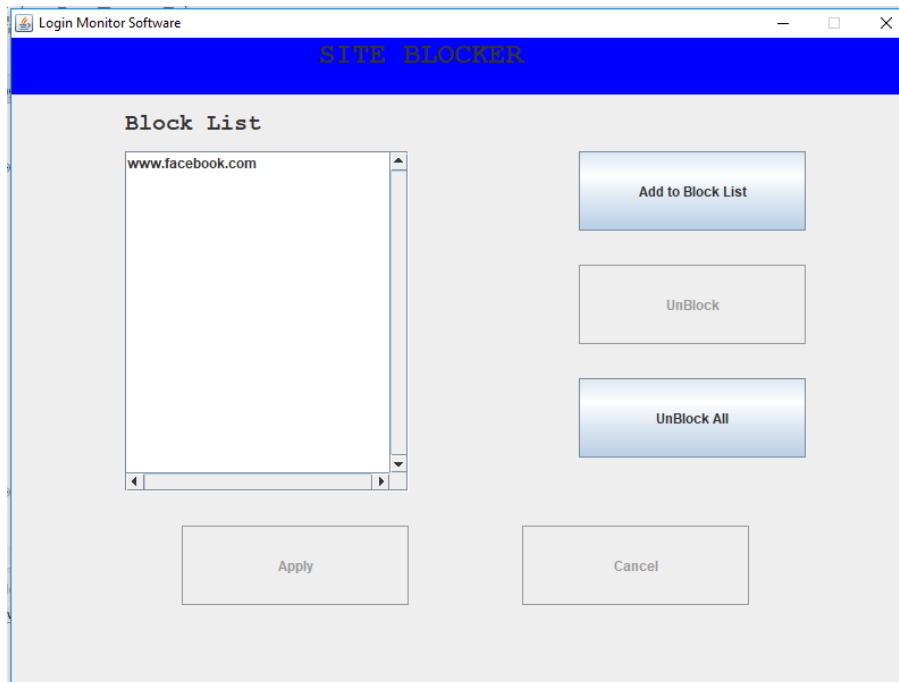


## PBWindow

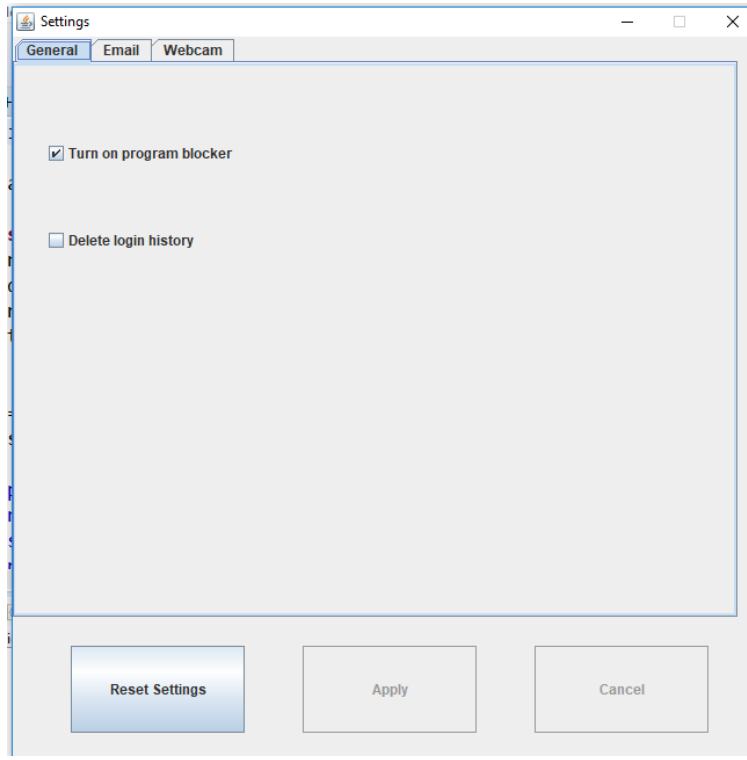




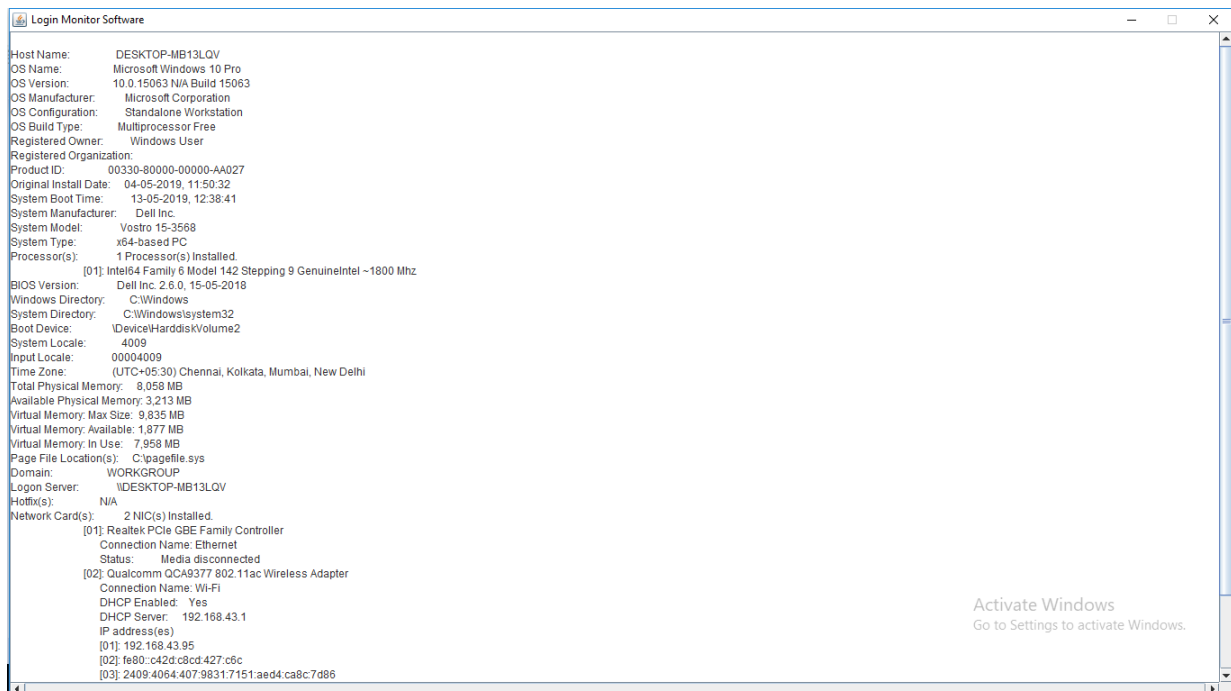
## SBWindow



## SettingsGUI



## SystemInfoGUI



## **CHAPTER-4**

### **SYSTEM IMPLEMENTATION**

Implementation is the stage in the project where the theoretical design is turned into a working system. The implementation phase constructs, installs and operates the new system. The most crucial stage in achieving a new successful system is that it will work efficiently and effectively.

There are several activities involved while implementing a new project they are

- End user training
- End user Education
- Training on the application software
- System Design
- Parallel Run and To New System
- Post implementation Review

End user Training:

The successful implementation of the new system will purely upon the involvement of the officers working in that department. The officers will be imparted the necessary training on the new technology.

## SOFTWARE MAINTENANCE

Software maintenance is defined as the modification of a software product after delivery to correct faults, to improve performance or other attributes, or to adapt the product to a modified environment. The standard also addresses maintenance activities prior to delivery of the software product, but only in an information appendix of the standard.

### ❖ Need for Maintenance

Maintenance is needed to ensure that the software continues to satisfy user requirements. Maintenance is applicable to software developed using any software life cycle model (for example, spiral). The system changes due to corrective and non-corrective software actions. Maintenance must be performed in order to:

- Correct faults
- Improve the design
- Implement enhancements
- Interface with other systems
- Adapt programs so that different hardware, software, system features, and telecommunications facilities can be used
- Migrate legacy software
- Retire software

Maintenance is necessary to eliminate errors in the system during its working life and to tune the system to any variations in its working environment. It has been seen that there are always some errors found in the system that must be noted and corrected. It also means the review of the system from time to time. The review of the system is done for:

- knowing the full capabilities of the system
- knowing the required changes or the additional requirements
- studying the performance

If a major change to a system is needed, a new project may have to be set up to carry out the change. The new project will then proceed through all the above life cycle phases.

## **CHAPTER-5**

### **CONCLUSION**

Our project is a humble venture to satisfy the needs of an administrator of pc. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the Admin.

The objective of software planning is to provide a frame work that enables the Admin to get information of the users using the system along with their login time. The software project should be updated regularly as the project progresses. Last but not least it is no the work that played the ways to success but ALMIGHTY.

#### **Scope of the project**

Due to the many problems facing with the system logging security, difficult to know the the information about the user logs in the system in the absence of Administrator of the system.

To mitigate the issues of Logging Monitoring I created a software Login Monitoring System that monitor the system in the absence of administrator and send the information of user logs in the system. The Login Monitoring System is a desktop-based software . The software would provide fundamental set of features for blocking sites, blocking programs, system information. Its development includes the maintenance of back-end database with MySQL and front-end application development aspects with JAVA.

#### Reference

1. <https://famisafe.wondershare.com/internet-filter/5-best-website-blocker-softwares-for-web-protection.html>
2. <https://www.business.com/categories/employee-monitoring-software>

# Publication

