Crime Investigation with Cybernetic Protector

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Abstract— Cybernetic Protectors is to provide a secure way of communication and transferring evidences in Secret Intelligence Agency of defence system which always uses undercover agents to solve complex cases and dismantle criminal organizations. We are conceptualizing this software as a solution so that Secret Intelligence Agencies and their agent can communicate through this Software for the exchange of evidences in a secure way, and maintain the details of main officer. The Cybernetics Protector software is concerned with the security of the country and thus proper care has to be taken that confidential data from within the database is not leaked out. Every country requires a Secret Agency who undertakes cases which are a threat to the national security. These agencies operate with the help of undercover agents who help solve these cases. Since these cases deal with the nation's security, the communication and data transfer between the agents and higher authorities need to be protected.

Key Words: **Secret Intelligence Agency, Security**

1. INTRODUCTION

The Secret Intelligence Agency is the nation's first line of defence. It accomplishes what others cannot accomplish and go where others cannot go. It carries out the mission by collecting information that reveals the plans, intentions and capabilities of the adversaries and provides the basis for decision and action. The Cybernetics Protector is software which allows a security agency to handle various confidential missions in a secured way[8]. The Cybernetics Protector software is concerned with the security of the country and thus proper care has to be taken that confidential data from within the database is not leaked out. Every country requires a Secret Agency who undertakes cases which are a threat to the national security. These agencies operate with the help of undercover agents who help solve these cases. Since these cases deal with the nation's security, the communication and data transfer between the agents and higher authorities need to be protected. Hence developing such a system is necessary to help these agencies operate in a secret and secured way. The system will be used by a set of five different users. These users are Defence Ministry, Chief, Agents, employees and Citizens of the country[9].

2. SYSTEM FUNCTIONALITY

Figure 1 explains overall functionality of the system along with different set of users involved. In the information systems development field, requirements form the foundation for the rest of the software development process. since building a high-quality requirements specification is essential to ensure that the product satisfies the users.
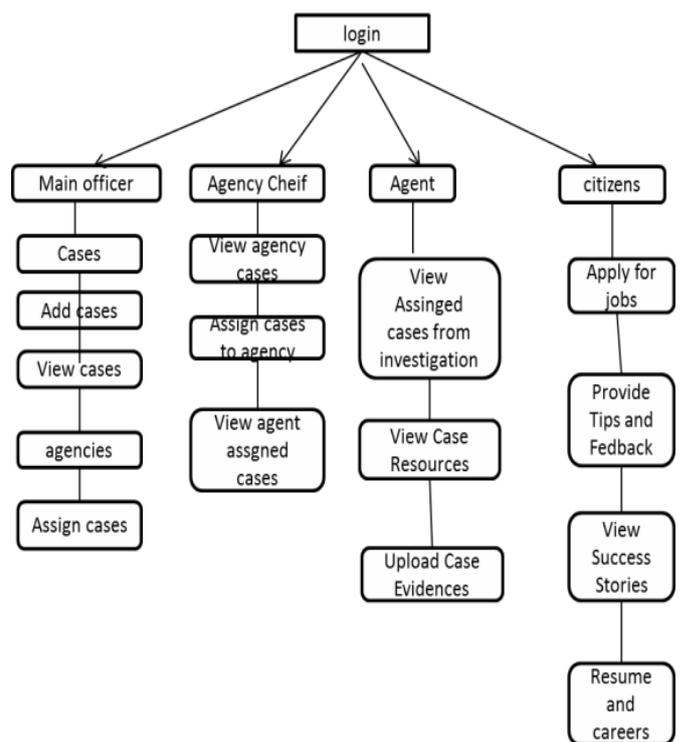

Figure 1 Cybernetics Protector Users

2.1 The Defense Ministry
The Defense Ministry assigns cases to the Secret Agency and allocates resources to it. It should be able to receive reports regarding the cases.

2.2 The Security Chief

The Chief of the Secret Agency has the highest powers. He can administer the agents, assign cases and resources. Also he has right to view the database.

2.3 The Agent

The undercover agent can send the evidence and data collected in an encrypted fashion so that the data cannot be intercepted.

2.4 Citizen

A citizen has the lowest access rights. A citizen can only view the success stories of the agency and chat with the officials.

This feature is provided to the Chief of Security, Agent and the Defense Ministry. This feature basically enhances the security of the software.

3. PROBLEM DEFINITION

The main objective of Crime Investigation With Cybernetic Protectors is to provide a secure way of communication and transferring evidences in Secret Intelligence Agency of defence system which has always uses undercover agents to solve complex cases and dismantle criminal organizations. We are conceptualizing this software as a solution so that Secret Intelligence Agencies and their agents can communicate through this Software for the exchange of evidences in a secure way And maintain the details of Defence Minister.

4. LITERATURE SURVEY

"Knowledge-Based Intelligent System Advancements" written by Jerzy J.[1], states that this existing system is not providing secure registration and profile management of all the users properly. This manual system gives us very less security for saving data and some data may be lost due to mismanagement.

"A Cybernetic Approach to Resolving International Conflicts" written by Chestnut, H. (1986)[2] specifies the system is giving only less memory usage for the users. The system doesn't provide facility to track all the activities of Agency-Chief and under working Agents.

"Cybernetic Safety And Security" written by A. G. Hessami[3] specifies the development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. This system maintains user's personal, address, and contact details.

"An Introduction to Cybernetics" written by Ashby, W. R. (1956) [4] specifies the user friendliness is provided in the application with various controls provided by system rich user interface. This system makes the overall project management much easier and flexible.

"Cybernetics and Management" written by Beer S.(1960) [5]" specifies the various classes have been used for maintain the details of all the users and catalog. Authentication is provided for this application only registered users can access. Report generation features is provided using to generate different kind of reports.

5. RELATED WORK

"A Cybernetic Approach to Resolving International Conflicts" written by Chestnut, H. (1986)[6] specifies the system provides facilities to track the all activities of Agency-Chief and Agents. System also tracks the tips and suggestion online.

"Anticipating Critical Reconfiguration in World Societal Fields System" written by De Greene, K. B. (1982)[7] provides facility to recruit Agents in online. System also provides facility to upload evidences in encrypted format and view cases, related resources. This system is providing more memory for the users to maintain data.

"Eck-Introduction to Programming using java, Sixth Edition" written by David J.[8] states that the system doesn't provide any functionality to upload evidences in encrypted format. This system doesn't provide recruitment of agents through online. The system doesn't provide any functionality to Defense Minister/Secrete Agency-Chief/Agents for online chatting.

6. PROPOSED SCHEME

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. This system maintains user's personal, address, and contact details. User friendliness is provided in the application with various controls provided by system rich user interface. This system makes the overall project management much easier and flexible.

Our project crime investigation with cybernetic protector basically consist of five modules are as follows

   i.   Defense Ministry
  ii.   Secret Intelligence agency chief

iii. Undercover Agent
iv. Security and Authentication Module
v. Citizen

6.1 Defense Ministry

Defense ministry is the main module in our project. Defense Ministry able to send resources to secret agency and it also receive report from agency chief. Secret Intelligence agency chief work under defence ministry. Defense ministry is like a head of department. Defence ministry distribute all the cases to the respective agency chief of intelligence system.
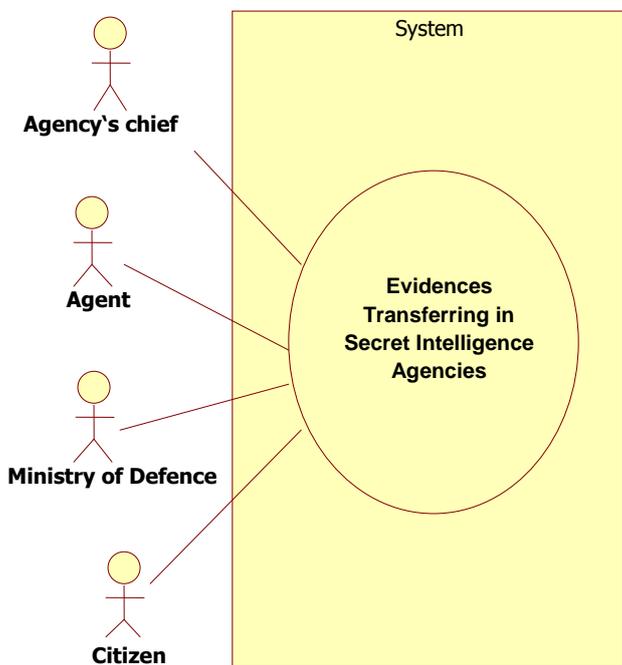
Figure 2. Defense Ministry

6.2 Secret intelligence agency chief
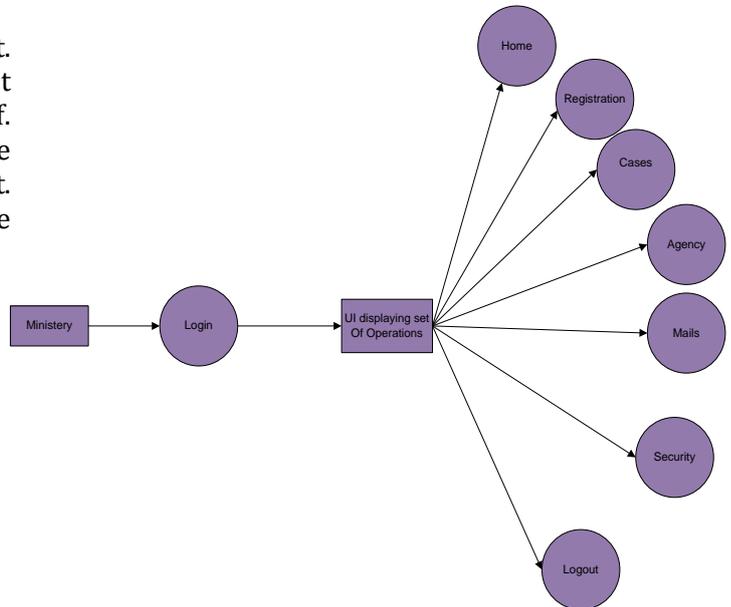
Figure 3. Secret intelligence agency chief

Secret intelligent agency chief receives cases from defence ministry and distribute that cases to respective undercover agent for collecting evidences of that case. Undercover agent works under secret intelligence agency chief and seret intelligence agency chief assign different undercover agent for different cases. Secret intelligent agency chief should be able to create, edit and views undercover agent profile.

6.3 Undercover Agent
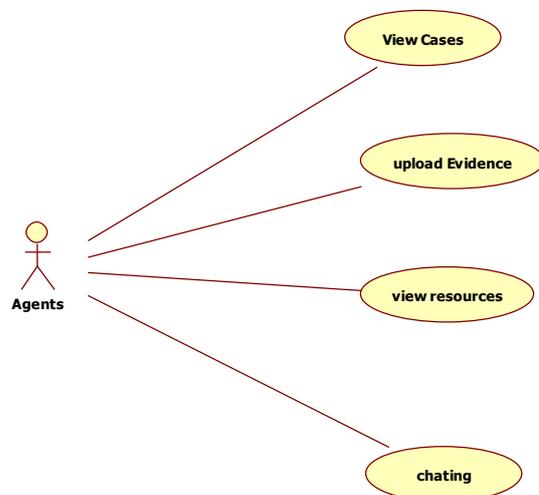
Figure 4. Undercover Agent

Undercover agent able to view case details which is distributed by secret intelligent agency chief. Undercover agent encrypt and upload evidence or data to database. In addition to that undercover agent able to view resources from ministry or chief of secret intelligence agency . Main task of undercover agent is to investigate on case which is given by chief, collect all evidences related to case and generate report and at last it submitted to the agency chief.

6.4 Security and Authentication module
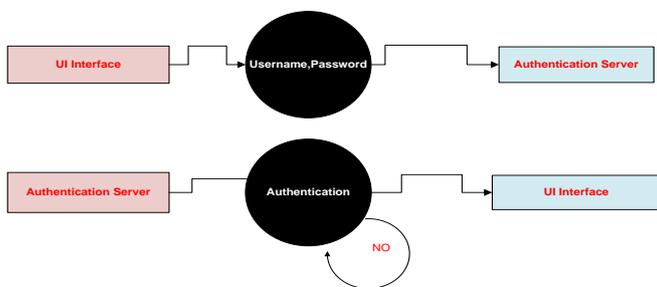
Figure 5. Security and authentication module

The users details should be verified against the details in the user tables and if it is valid user they should be enter into the syste. The main task of undercover agent is to investigate on which case given by chief, collect all evidences related to case and generate report and at last it submitted to the agency chief. Undercover agent it works under secret intelligent chief as a undercover agent while transferring an evidences from undercover agent to agency chief and agency chief to defence ministry we need to provide security on it by using RSA Algorithm for transfer evidences secure way to the ministry.

6.5 Citizen
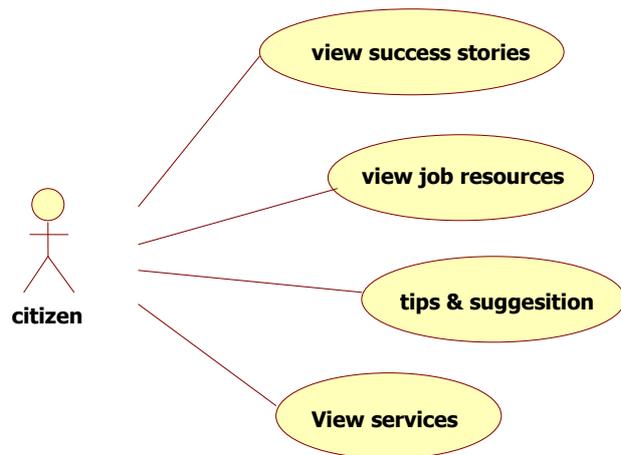
Figure 6. Citizen module

Citizen can able to see success stories. Chat assistance from intelligence agency. Ability to apply for a job in secret intelligent agency. Ability to give tips and suggestions.

## 7. EXPERIMENTAL RESULT
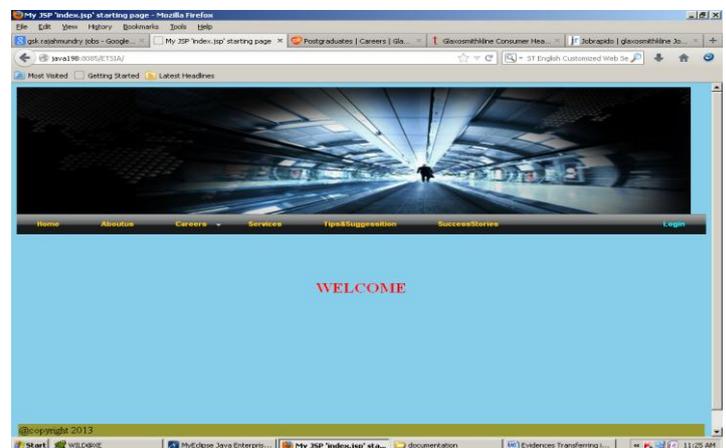
Figure 7. Home page

This is the home page of crime investigation with cybernetic protector. Here user is valid then he can do login with our secret intelligence agency, if can see the success stories about us as well as he can search job in our agency so that they can sent there resume to our agency .
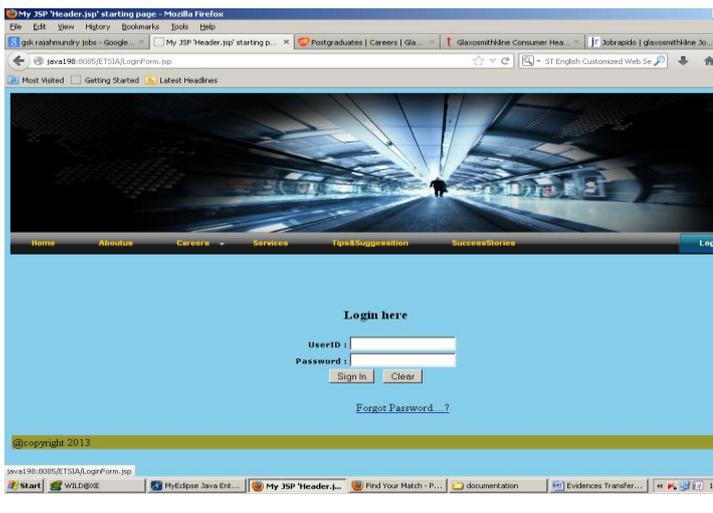
Figure 8. Login Page

Only valid user can do login in our secret intelligence agency, if user is not valid then firstly they have to register themselves for assign cases to our agency.
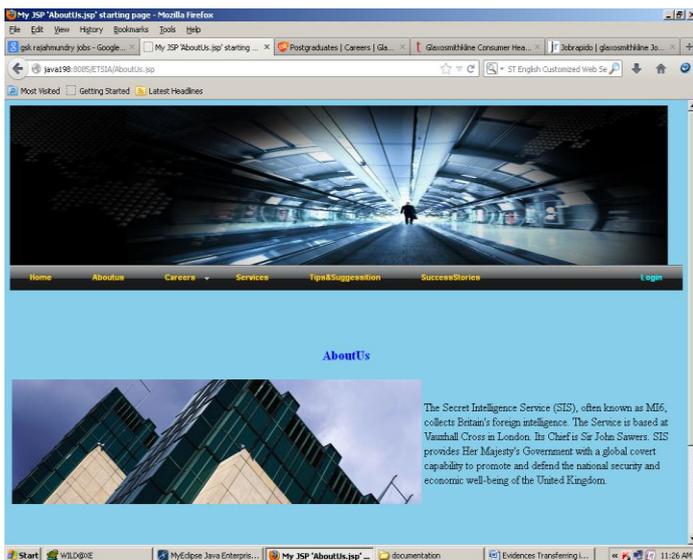

Figure 9. About us page

About us which gives the information about our secret intelligence agency. Here the citizen or user can see the career record of our intelligence agency. And also they can view the record of our agency in different-different locations all over the country.
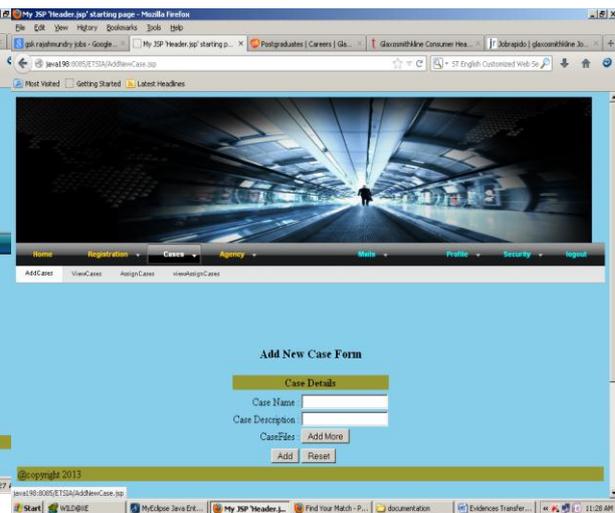

Figure 10. Add new cases page

In add new agency page user can add their cases for the investigation with our intelligence agency.

For the further investigation we a]handover that evidences to the Defense Ministry of an intelligence agency.

8. CONCLUSION

The Crime Investigation With Cybernetic Protectors was successfully designed and is tested for accuracy and quality. During this project we have accomplished all the objectives and this project meets the needs of the organization. The developed will be used in searching, retrieving and generating information for the concerned requests.

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