

# Security Enhancement System Using Web Based

Ankit Chaturvedi<sup>1</sup>, Chirag Singh<sup>2</sup>, Dr.P Muthusamy<sup>3</sup>

<sup>1,2</sup>Master of Computer Application School of Computing Science and Engineering  
Galgotias University, Greater Noida, India

<sup>3</sup>Professor, (School Of computer Science Engineering), Galgotias University, Greater Noida, India

**Abstract—** In this competitive technology world, the impact of IT contributes a major role in all real-time systems. Various management systems were implemented for achieving the business organization towards profit, standards, and further business enhancement. The main aim of this research is to implement a web-based system that can secure the students that are staying under the university accommodation. The languages used to develop this system are Python and the scripting language is HTML and the database is MySQL. The authors of this paper used two types of data gathering techniques which are questionnaires and interviews. Nowadays most of the universities follow the manual system and still some of the standard universities follow automated systems for student accommodation. The special feature of this system is, it allowed the Visitor to give them an alarm or notification when their time is up. In the future, this system will help the management to provide easy accommodation.

**Index Terms:** Analysis, Implementation, Testing, Technical research.

## I. INTRODUCTION

Gaining information, being aware of new science, and contributing to society by consecutive sharing the experience and information we have no longer limited to the range of a classroom. In today's era, it is very vital to proctor, whether who is getting in and exiting premises for security reasons in order to protect and secure our students from a college campus or employees from a corporate office, security is a big concern. Protection in the workplace is often a safety measure that may stop criminals from targeting the business. These interruptions typically reduce the possibility of threats. Security in the workplace is also very important because it may reassure employees and make them feel safe with extra protection while getting in and exiting.

## II. STATEMENT OF THE PROBLEM

Most colleges publish yearly safety reports that paraphrase specific phenomena and trends for the previous year. These reports can cover safety efforts taken by campus protection, the university in usual, and associate faculty. however, do these reports comprehensively include the things students are extremely concerned about? The No. one type of guilt reported by colleges and universities was irruption. However, irruption and robberies were mentioned in only two percent of the reports that we looked at. Almost ten percent of the scholars who reported imagination as a safety concern at school identified that theft was their main concern.

## III. SIGNIFICANCE OF THE PROBLEM

In today's era, it is very important to proctor, whether who is entering and exiting premises for security reasons in order to protect our students from a college campus or employees from a corporate office, security is a big concern. Security encompasses fields such as security of the belongings itself, companies assets, employees and customers' personal goods and precious, life security, unique security etc. In all organizations, management specifies that it is not blameworthy for valuables and employees' personal property (their handbags, items kept in the personal security, etc.). Yet administration must take all possible measures to inhibit theft between employees and of employee goods through its hiring training and through the execution of effective management. Background scrutinize of selected petitioner: Policies related to employees' entry to, and escape from, the workplace, Spot scrutinize of locker rooms and lockers, Effective inspection supervision and control during the work circle Policies related to the quest of criminal records and wrongdoing among, and by,

employees command of people getting in and exiting the workplace

#### IV. RESEARCH METHODOLOGY

The main aim is to reduce the manual efforts of the staff security team for maintaining various records and other activities related to visitors.

This study aims to broaden our knowledge of awareness about security and security management.

- The primary objective is to reduce the manual efforts of the staff security team for maintaining various records and other activities respective to visitors.
- Allows the Guard access portal to check all the running activities, like who was came recently or came in between the time Span.
- Helps the registration of new visitors and also provide them with a Visitor Identity.
- Database stores the visitor and details information at a large dimension allowing convenient and effective interaction with all the data.

#### V. INVESTIGATION ANALYSIS

In this research, there are several investigations that has to be determined in order that the system is fulfilling its specified requirements. as an example, a comparison between the standard paper log method and therefore the integrated security enhancement system will be made. This comparison may be justifying through the time taken for the visitor registration process via the standard paper log method and integrated security enhancement.

#### VI. SYSTEM IMPLEMENTATION

At this stage of system implementation, the SES can be made after undergoes several steps of real-time testing. The planned venue to implement the SES will be implemented by using Django and Python. Therefore, it is important to ensure the SES is meets with the quality standard.

#### VII. LITERATURE REVIEW

In this project, we are visiting work on face recognition through open cv of the people that enter the organization to supply security. Face recognition technology Currently, the amount of thefts and identity fraud have frequently been reported and has become significant issues. Traditional ways for private identification require external elements, like a key, security password, RFID card, and ID card to possess access into a non-public asset or enter public space. Many processes like drawing out money from banks require passwords. Other such parking privately spaces would also need tickets. for a few houses, the house secret is vital. However, all this method also has several disadvantages like losing the key and forgetting passwords. When this happens, it will be a hassle to recover back. This method is slowly seized by biometric methods because it is that possible thanks to solving those problems. this method required use the of special hardware like the fingerprint scanner, palm print scanners, DNA analyzer to assemble information for the overwhelming majority of the biometric applications, and therefore the target objects should touch with the hardware to amass information. As biometric may be a technique that distinguishes physical highlights of individuals accordingly it's an in-depth type of utilization in security frameworks and it's viewed jointly of the foremost secure methods. Basically, biometrics are often classified into two categories which are physical and behavioral. currently, face recognition technology has engaged an amazing number of researchers and it's gradually replaced other biometric security frameworks. Face recognition is additionally referred to as image matching. it's a rapidly growing field where it's heading in a direction such it'll replace the normal method. Face recognition is more stable among others identity verification methods because it is using the face that ends up in high accuracy, lowest false recognition rate and it doesn't change in people's life. Thus, this method is way practical for plenty of usages, including face recognition for the unlocking house door.

The method used for face recognition in this new era, face recognition plays an important role in security and observation. hence, there is a need for a proficient and economical system. Face recognition is a technique that is able to identify and verify people. According to, face recognition, define as steps to

identify, distinguish and process face is compared with the images stored in the database to verify who the person is. This face recognition has become a valuable technique for consumer identification. There are many techniques that may be used for face recognition but the Principal Component Analysis (PCA) is one of the most famous techniques used for face recognition. This method involves a mathematical mechanism, to shift a number of possibly correlated variables into a number of uncorrelated variables known as principal components. commonly, the PCA technique for face recognition will make use of, use of Eigenfaces. It is an effective and efficient way to represent pictures into the Eigenfaces component as it can reduce the size of the database of the test image. Numerous methods are developed and deployed in order to improve the performance of face recognition technology.``

#### VIII. INSTITUTIONAL PORTAL

It has done a study on Shanghai Jiao Tong University Library aimed to assess its integrated services, functions, and coffers. to meet information requirements for scholars. They came out with a frame that summaries the places of the pupil portal and its significance in delivering demanded information and knowledge to scholars. The framework having four elements which are; Library services, Subject services, Feedback and unborn work, and Personalization services in which are the last ease for. Scholars to get information related to their study affairs similar as course administration and grades checking. In explaining this model, they regarded three main functions for the pupil portal. The first is the information gate where it enables scholars to access documents, papers, case studies, and external and internal databases. The alternate function is the apps portal which provides scholars with their information biographies. The third is the standby portal. Its ideal is to make scholars suitable to enhance the database.

Not each different located universities have the same amenability to have a pupil portal. Some of the universities don't have at all any pupil supporting system. A study was held to examine the operation of the pupil portal for the Southern African Development Community universities. The

discovered in this study was that every one out of ten universities has a student portal. The remaining universities have only general websites which aim at attracting new scholars to be enrolled in their universities. Still, the case is different in Malaysia where utmost of the universities have a scholar portal. It has specifically taken the The University of Technology MARA in Malaysia as a case study to estimate the effectiveness of library gate in furnishing the services for its scholars. The study conducted that library gate met the scholars' prospects in terms of furnishing accurate, dependable, timely, and comprehensive information.

It has held a study in Oman to probe the impacts of having commercial portal in academic institutions on their performance. The study's result grounded on questioners being distributed among the institutional academic preceptors. The experimenter had six suppositions which assumed that the portal operation will ultimately affect in enhancing effectiveness, effectiveness. invention, literacy, rigidity, and satisfaction of the literacy institutions. All of these suppositions were supported after conducting the exploration. On other the other hand, some studies have showed that having scholar portal doesn't inescapably. indicate the good performance of learning institutions. A relative study was conducted on three Iranian universities to assess the impact of using the pupil portal on the general university's performance. The study outcome was considered a shock for experimenters as they plant that the mindfulness of scholars in these three universities was lower than the average universities scholars' mindfulness in terms of using an integrated digital portal. Both factors, training scholars on how to duly use. supporting the system plus furnishing a proper pupil portal will contribute to enhancing the university performance.

#### IX. STUDENT SATISFACTION

Approaches to the use of security improvement developed considerably over time. The earliest security systems are basically slow and not up to the mark. In the presence of a security system, most of the time the unknown person cracks the security and damages the organization not only damaging the organization but also stealing the most important information. By considering these kinds of situations

we are trying to add more security protocols and also try to add new modules in the existing system. Basically, we add a face recognition feature through which guards recognize the person who wants to enter a college campus or in an organization. And if the new visitor wants to enter an organization, we stored all the information related to the visitor in a database for future safety.

#### X. CONCLUSION

This project is conducted with the objective of designing and developing an SES that is affordable for any organization's visitors. In this project, the overall cost of the proposed SES is cheaper than other existing SES in the market. Based on the analysis outcomes the proposed SES is able to shorten the time taken for the enrolment process for any organization visitors. Furthermore, the usage of the SES also greatly reduced the burden of the security officer as it could generate an overall report instantly. In fact, there is much that can be enhanced despite being out of project budget and approaching the deadline of the submission. SES developed in this project is lacks the verification tools to authenticate the visitor's identity. This may cause that visitors with bad intentions to embezzle others' information to enter the university area. Hence, the face recognition method also can be implemented on this visitor management system as it could provide a higher safety level compared to another biometric method. To succeed this, a higher quality camera should be used in order to obtain greater pixels of the visitor's face image. Last but not least, this project can be further improved from many aspects since it could always update and modify according to the user's need. Therefore, it can be seen that there are many possibilities to enhance this project from day to day which is not only limited to a certain aspect.

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