

HOSTEL MANAGEMENT SYSTEM USING ENSEMBLE LEARNING

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Abstract - There is an unprecedented increase in the no. of educational institutions founded throughout the world in particular during the last decade. The growth has taken education to people's doorstep. As a result, it is increasing education and helped to create the number of educated citizens who can easily accept rules of society which is civilized and make a meaningful contribution. However, the majority of newly established educational institutions use the old traditional techniques to manage their properties, particularly hostel facilities. Such old techniques with their inherent limitations have had a negative impact on this educational system's overall operational performance. This paper proposes the creation of an integrated system for managing hostel accommodation. The algorithms for the automated system is developed using Visual Basic, and the underlying database was developed with Microsoft Access. It also has authentication algorithm built in to prevent unauthorized access. The developed framework overcomes the drawbacks of conventional hostel management methods; with access control systems, it is more user-friendly, graphical-user-oriented, robust, efficient, and safe.

Keywords - Video, Surveillance, A.I, Footages, Machine Learning, Programs, Humans.

1. INTRODUCTION

Basic economic theories argue that an organization's success depends on how well it will harness and optimizes the production factors to achieve its organizational goals. We say the logical resources by the means of money. Physical resources are property, labor / machine, money, and entrepreneurship while knowledge is the intellectual tool. Regardless of the amount of fund that could has gone to a project, if efforts / resources are not properly orchestrated, the whole investment will be wasted and the dream of the people will not be accomplished. Thus management is one of the major factors evaluating an organization's performance index in its attempt to achieve its corporate goals. Furthermore, research has shown that the standard of initiative implemented in management is what matters. Through programs we meet the models, theories, scientifically validated.

Keywords: Hostel management visual basic context level DFD access management mechanism approach or algorithm applied to the management of resources. Once applied to physical and logical resources allocation and management, appropriate, programming rule etc have well-tried terribly helpful. Our analysis work mentioned here is proscribed to academic establishments. In an endeavor to satisfy the

challenges facing the growing population in countries round the world, government and personal investors have joined the academic sector to line up higher learning establishments.

An integral a part of facility created on the market in such establishments area unit hostel accommodation areas for college students to form an educational community which is able to facilitate efficient refinement and development of scholars.

Clearly, the normal method of running and maintaining host el in institution is not successful as it looks due to the following challenges: difficulty in record keeping data retention, difficulty in data updating; difficulty in data recovery; difficulty in producing information about the students who left the hostel, to manipulation / human error; difficulty in manipulation / data recovery. The entire exercise is time-consuming and a waste of resources, both human and material. The system proposed provides a solution to the traditional method of handling the hostel facilities. The system is trying to develop the hostel facilities of institutions for stakeholders the hostel administrator, management and students. This automates the administrative processes and reduces the stress associated with finding information in a set of registers about a student / facility. It is designed specifically for centrally allocating and controlling accommodation spaces in a complex student hostel. The device owner has the details of students who left the hostel and search from the database of all the current students within few seconds. At the time of room allocation, the student staying in the hostel will be identified by the SID number given to him. This program will calculate the bills and issues updates automatically to the students. It also keeps records and produce letters to discipline the students who do not follow regulations and rules.

The program has a special approach to information collection that is critical. That makes the system proposed more stable, more effective and more efficient. The system's entire range includes multiple modules, transport scheduling and other administrative tasks.

Tracking output in the application of hostel accommodation framework may be well described. The program uses a mono central database to address the complexities of management of the student hostels and all admin functions.

The hostel management facility software is a user-friendly technology kit specially designed to simplify, organize and

take care of all the hostel management processes. It is particularly useful in huge institutions

with hostels. Hostel management software can easily manage all the functions it involves.

2. LITERATURE REVIEW

In an effort to review existing literature on this application-Hostel management software, we came across a no.of tools which are running in many universities around the world. Some of them are listed below: the store / inventory module, the inquiry module and the monitoring module for visitors. It features building detail, rooms and students. Microbes Hostel management system is another s/w product which automates the exercise of management. It has several persuasive tools such as efficient booking management, device synchronization, account statistics and reports. Loventis booking program is yet another Loventis product breakthrough (2005).

3. MATERIALS AND MINDS

3.1 Framework Analysis and Design

Framework analysis is a method to collect factual data, recognizing the process involved, identifies problems for improving the system's functionality. This includes researching the business processes, gathering operational data from the company relationships, understanding the information graph, identifying bottlenecks and designing ways to solve the system's shortcomings to achieve the organization objectives. Process Analysis also involves the decoupling of dynamic process that construct the whole system, data store detection and processes.

System design is a preliminary to create a new system. This process is geared towards comprehensive system implementation. There are two stages of system design: conceptual design and structural design. The analyst defines sources, destinations, data sores, and data flows during the conceptual design phase, in a pattern that meets the requirements of the uses. The analyst often describes the user requirements and to a degree that essentially defines the flow of information. Consequently, the conceptual design is carried out using dataflow diagrams and database design.

Digital design, or coding, fits the conceptual concept. Through specifying the architecture specifications, physical design creates the real system, which shows the programmers precisely. The developers write the necessary programs that accept user input, perform the necessary processing through call on approved data, and generate the requested report on a hard copy, or show it on the computer.

3.2 Existing System

The number of students admitted to higher institutions grows annually. This puts huge pressure on the infrastructure within these institutions. The usual practice in

organizations here in the developing world is to follow the traditional scheduling methods into the management job. This approach is described by various drawbacks, management difficulty, data maintenance difficulty, record-keeping difficulty, disaster recovery difficulty etc. Therefore, to improve effective methods of optimization and scheduling algorithms need to be implemented. The proposed system fixes existing system limitations and guarantees the integrity of the data. The framework is simpler to use and is more GUI-oriented.

4. RESULTS AND DISCUSSION

4.1 Software Functions:

The main options of this application computer code area unit the automation of all booking platforms with technology. For a mean hostel manager, this program is deemed cheap, economical and straightforward to work.

Few special features: the subsequent special options may be seen regarding hostel management computer code for entry into the hostel. There area unit automatically allocation of areas, storing the knowledge of the inmates to be used, monetary management, and every one the opposite benefits that the inmates expect.

This computer code is capable of managing details of school members, payment details and therefore the like. The special options of this computer code area unit administration questionnaire, data questionnaire, hostel account questionnaire, hostel account questionnaire, student questionnaire, hostel mess, food questionnaire and a lot of. The computer code has the capability of managing academic establishment with ease. With this program, the administration can cut back staff in addition as paper work and keep records of the scholars and alternative hostel inmates on the desired facilities within the rooms, the upkeep of discipline, the keeping of visitant records, the care of safety aspects and alternative vital facilities.

Students square measure is able to maintain separate hostel account with the help of hostel management system computer code, and areas square measure allotted by class and call on the quantity in every room, roaster maintenance, issuing if receipts for collected fees and a lot of.

5. CONCLUSION

Although rule-based video analytics worked for lots of security programs economically and efficiently, there are numerous circumstances where it can not work. For an indoor or outdoor place where at some stage no man or woman belongs in certain times of day, as an example in an unmarried day, or for places where no person at any time belongs collectively with a cell tower, traditional rule-based fully analytics are perfectly suitable. In the case of a cell tower, the uncommon time a service technician might also want to be added to the region may involve calling in with a

skip-code to area the monitoring reaction "on check" or inactivated for the fast time the approved character has arrived. For vibrant settings, however, there are many wishes for safeguards in which dozens or hundreds of human beings still belong everywhere in the vicinity. A college campus, an active production unit, a sanatorium, or any animated running facility, for example. Creating laws that could differentiate between legitimate human beings and offenders or wrong-doers is not feasible.

Overcomes the issue of advanced lively environments through the crew led by Dr. Wes Cobb of Behavioral Popularity Systems, Inc., (BRS Labs), this self-gaining knowledge of, non-ruling A.I. Software takes the data from the video cameras and classifies the objects and things that it sees continuously. The instrument is called AI Sight (as in "A.I. Sight"). It has been distributed across governments, transportation systems, police departments and rolls into commercial use. As an example, one classification is a person crossing a road. The class is some group of people.

A car is one type, but with persevering study of a public bus from a small truck and that from a motorbike could be discriminated towards. The method identifies patterns of human behavior, with increasing complexity. As an example, it could look at people skipping through a regulated door admission one after the other. The door opens, the person provides his / her proximity card or tag, the character passes through and the door closes. This sample of hobby, repeatedly put paperwork as a basis for what is ordinary within the view of the scene seeking digital camera. Now if a licensed individual opens the door but a second unauthorized "tail-gating" character catches the door before it closes and passes through, this is the kind of phenomenon that would trigger an alarm. This method of assessment is much more complex than the thumb-primarily dependent analytics guideline. While the guideline-based completely analytical artwork clearly aims at identifying intruders in regions where no individual is generally a gift at defined occasions of the day, behavioral analytics works where people are enthusiastic in seeking topics that might be out of the ordinary.

A fire breaking out from the outside would be an unusual event and could warn like a rising smoke cloud. Automobiles using the wrong way right into a one-way driveway could further typify the type of event that has a clear noticeable signature and deviate from the repeatedly located sample of vehicles using a suitable one-way driveway in the street. A person thrown down to the floor with an attacker's assistance is definitely an unusual occurrence that would likely cause an alarm. That's unique to case. Therefore, if the digital camera takes into account a gymnasium in which wrestling has transformed into performing the A.I. Might consider that tossing a few different ones to the floor is common for one person, in which case in this remark it would not warn.

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