Online Hostel Management System for Sanskrithi School of Engineering

P. Meghana[1], D. Jyothi[2], E. Jahanvi[2], E. Jeevana[2], J. Sunil[2]

[1]Department of Computer Science and Engineering, Sanskrithi School of Engineering, Puttaparthi, Andhra Pradesh, India

[2]B.Tech. Scholar, Department of Computer Science and Engineering, Sanskrithi School of Engineering, Puttaparthi, Andhra Pradesh, India

ABSTRACT

"HOSTEL MANAGEMENT SYSTEM" is software developed for managing various activities in the hostel. For the past few years the number of educational institutions are increasing rapidly. Thereby the number of hostels are increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who are running the hostel and the software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problem which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more users friendly and more GUI oriented.

Keywords : Hostel Management, Delphi, SQL server, Prospect, Booking, Receipt, Ledger.

I. INTRODUCTION

The hostel management system is developed for automating the activities of hostel. The software will be great relief to the admins. This software will help user in case of reporting, registration and searching the information about residents and rooms. The aim of the hostel management system is to carryout the activities of hostel in a efficient way. It will take the operations of hostel to an upper level by providing faster access to data and allowing addition, upgradation, modification, and deletion of data in a very systematic and reliable manner.

II. OBJECTIVE

This software product the hostel management system is to improve their services for all the students of the hostel. This also reduce the manual work of the persons in admin panel and the bundle of registers that were search when to find the information of a previous student, because through this system you can store the data of those students who had left the hostel. Through this you can check the personal profile of all the current students within few minutes the database of the system will help you to check the rent details of every student and the student's hostel

dues. The students of the hostel will be recognized from the ID number allocated at the room rental time. In the last this system will improve the management work in the hostel.

III. EXISTING SYSTEM

- ➢ The existing system is a manually maintained system. All the hostel records are maintained for the details of each student, room allocation manually.
- ➢ Requires a lot of time as well as manpower to manage register system.
- ➢ Student check-in details and student check-out details are maintained in registers.
- ➢ All the calculations regarding to students fee are done manually. This has led to inconsistency and inaccuracy in the maintenance of data.
- ➢ Due to manual nature, it is difficult to update, delete, add or view the data.

DRAWBACKS:

- ➢ Time Consuming
- ➢ More Human Error
- ➢ Low Security
- ➢ Difficult to update data
- ➢ Inaccuracy of data

PROPOSED SYSTEM:

The drawback of the existing system is that it is very difficult to retrieve data from records. It is difficult to handle the whole system manually and it is less accurate and to keep the data in records for future reference because it may get destroyed. Moreover it is very difficult to retrieve data. Redundancy of data may occur and this may lead to inconsistency. The manual system is so time consuming. The proposed system is very easy to operate. Speed and accuracy are the main advantages of the time. The proposed system. There is no redundancy of data. The data is stored in the computer secondary memories like hard disk, etc. it can be easily received and used at any time. The proposed system will easily handle all the data and the work done by the existing systems. The proposed system eliminates the drawbacks of the existing system to a great extent and it provides tight security to data.

ADVANTAGES:

- ➢ Speedy retrieval of data.
- ➢ Cost effective.
- ➢ High security.
- ➢ Easy to handle, update and keep record.

IV. LITERATURE SURVEY

The author of paper [1] proposed, E-registrations outlined was anything but difficult to streamline the student' undertakings/doormen's activity. The stages required with the registration procedure must be reduced to closest possible if the system needs to be fast and more efficient and convenient. Paper-based procedures of registration are tedious and costly. E-registration for hostel facility played a major part in the change and thus helped to achieve the following: ¬ Reduced the paper work and redundancy thereby improving productivity and lowering cost of printing and purchasing registration materials annually.

¬ Aid the hostel in data management and integration of students profiles. ¬ Provided the hostel's statistics on the need of students (e.g. tables, chairs, etc.).

¬ Aid the hostel to give account of student with ease at any time.

In the paper [2], author talks about security in this day is one of the major difficulties that individuals are confronting everywhere throughout the world in each part of their lives. Information to any association is a most valuable property. Security of sensitive information is dependably a major test for an association at any level. In the present technological

world, database is helpless against hosts of assaults. In this study, significant security issues confronted databases are recognized and some encryption strategies are talked about that can remove the assaults hazards and ensure the delicate information. To wipe out the security dangers each association must define a security approach and that security approach ought to be strictly enforced. A strong security strategy must contain very much characterized security features, access control, Inference Policy, User Identification/Authentication, and Encryption.

SYSTEM REQUIREMENTS:

Software Requirements:

➢ Client User Interface: Delphi.net XE, Developer Express VCL
➢ Application Server: Delphi.net XE
➢ E-mail Communication: Gmail IMAP/POP3
➢ Data Access: ADO
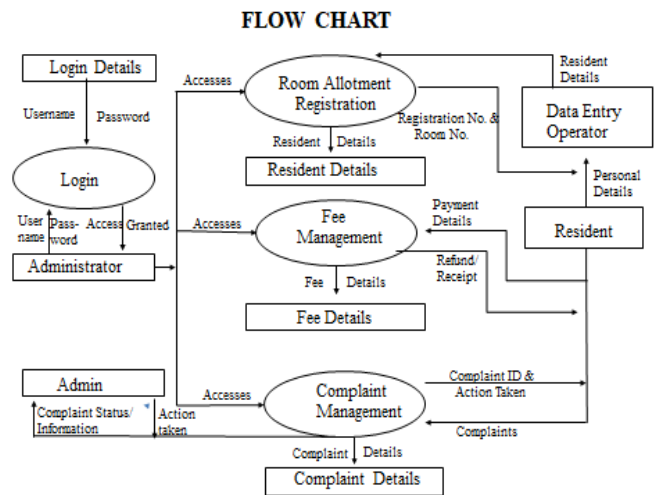➢ Database Server: Microsoft SQL Express

Hardware Requirements:

➢ Processor: Pentinum
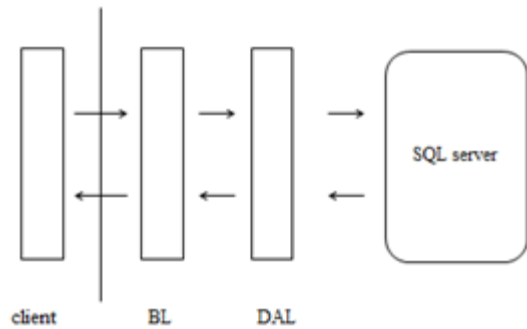➢ RAM:5GB
➢ Hard Disk:1GB

SYSTEM ARCHITECTURE:
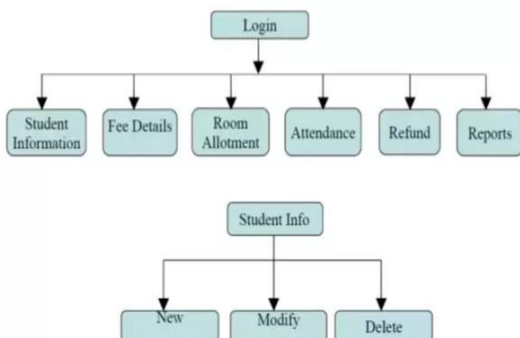

FLOW DIAGRAM:

N-TIER ARCHITECTURE:

The N-Tier Architecture discus about the three layers that is client, Business Logic (BL) and Data Access Logic (DAL). And also
We can see that SQL server which stores the data. The working principle of this architecture explains as follows:
The layer Business Logic (BL) is used to do the calculations part that is done in the hostel management system project. The layers Data Access Logic (DAL) access the information from BL and transfers to the SQL server. So it acts as an interface between the BL and the SQL server. The client acts as a user interface. The client is the user interface which we can see and the BL and DAL will run in the background.

CLIENT ARCHITECTURE:

Visual form Inheritance
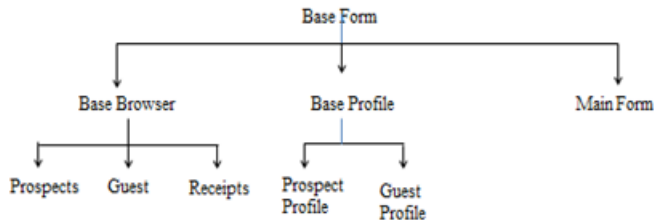
BLOCK DIAGRAM:
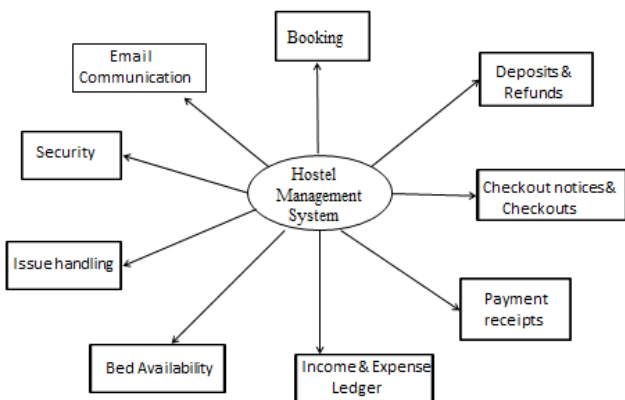
DESCRIPTION:

The following one shows the description of the buttons present in the Hostel Management System.

Prospects:

This button gives the information regarding to the students those who are about to join to the hostel.

Booking:

In this button, after the student can book his/her bed and enter his details.

Deposits & Refunds

In this button, the student can deposit the money. If in case the student want to check-out from the hostel then the money is refunded.

Checkout notices & checkouts:

If the student wanted to checkout from the hostel then he/she should give the notice before one month and when the notice period is completed then he can check-out from the hostel.

Payment receipts:

Once the payment is done by the student then he can get the receipt of that payment through mail.

Income &Expense ledger:

In this button the admin who is managing this software will maintain a ledger in which he can know about the income and expense.

Bed availability:

In this button the admin can see the number of beds available. Based upon this he will allot the beds for the students.

Issue handling:

In this button the issues which are facing by the students are handled and once
the issues are cleared then the notification will be send for the students.

Security:

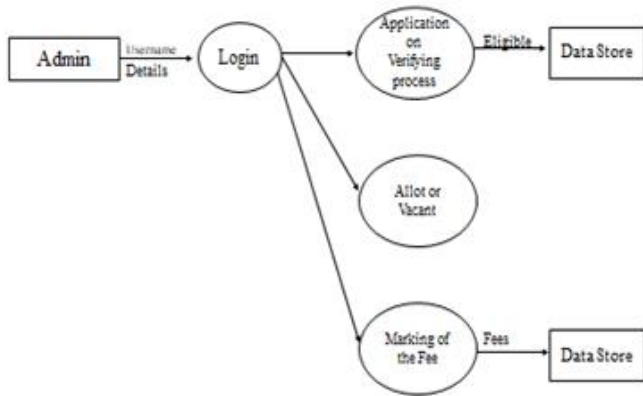Multi user system with user based security is maintained.

Email communication:

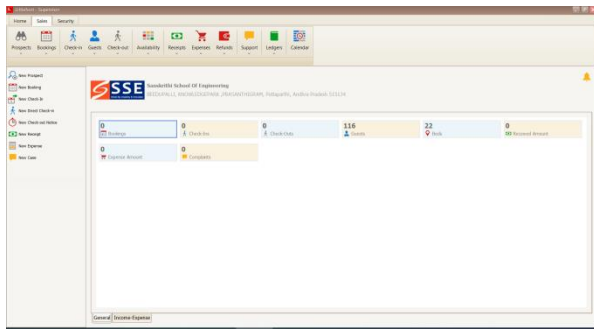The communication between the student and admin is done through Email by sending notifications.
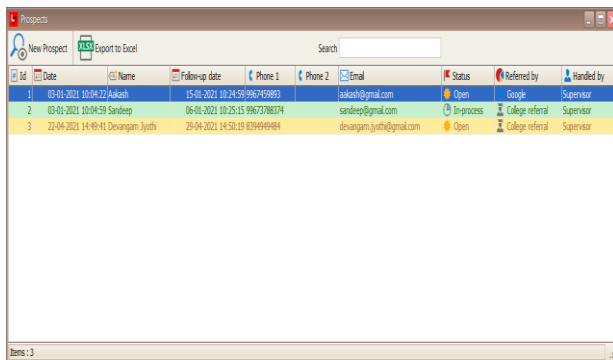
MODULE:

- Admin Module

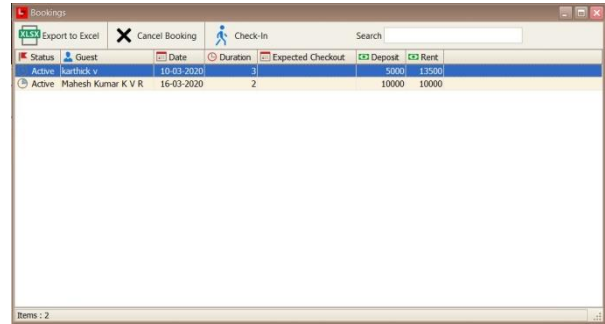## ADMIN MODULE:

V. OUTPUT SCREENSHOTS

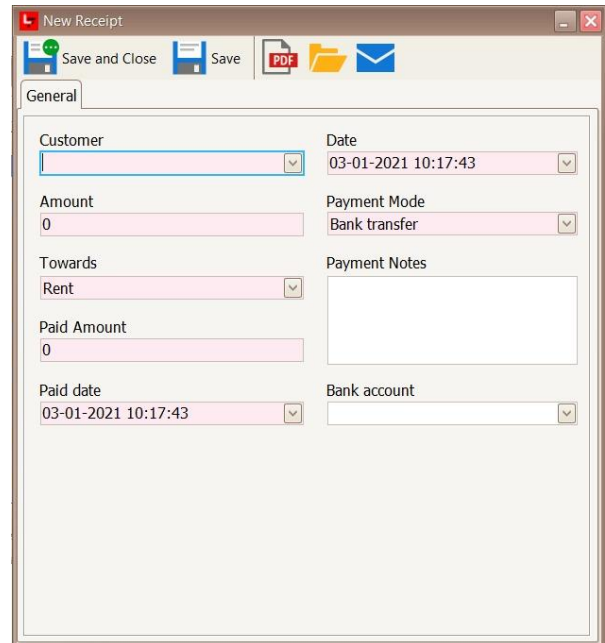## MAIN SCREEN:
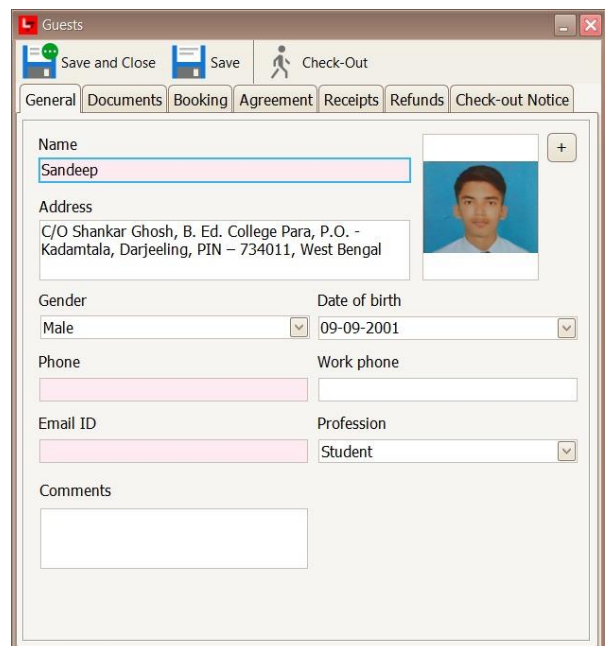

PROSPECTS:

BOOKING:

NEW RECEIPT:

GUESTS:

RENTAL RECEIPT:

SANSKRITHI SCHOOL OF ENGINEERING
Rental Receipt
Puttaparthi, Andhra Pradesh - 515134

Receipt No : 2590		Date : 09-06-2021 20:08:08
Received from :	jyothi	Payment mode : Bank Transfer
Address :	Gorantla	For the month of June 2021
Sum of rupees :	Three Thousand	
Bed No :	B2	

Rupees: 3000	Towards: Rent	[Owner Signature]

VI. CONCLUSION

In our proposed work, we created the web based application which includes the buttons in which the admin can keep track the student information. Hostel Management System is a Customize and user-friendly software for Hostel. It has been designed to manage and look after the overall processing of even very large hostel. It is capable of managing prospects, Student Details, Payment Details, Bookings, Check-in and Check-out details etc. The receipts will be generated and sent to students via notifications. Hostel Management System is a Customize and user-friendly software for Hostel which provides hostel information, hostel room information, and hostel accounts information. Hostel Management Software System is offering a maximum of stability, cost-effectiveness and usability. It provides the most flexible and adaptable standards management system software solutions for hostel.

VII. FUTURE ENHANCEMENT

In the future work, we can extend our work to implement the information about the fees dew and also about issuing the fine when the student will cross the payment date.

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