

Smart Hostel Management System for Smart City College Management

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Abstract— In an era institutes are increasing rapidly. So for accommodation, hostels are increasing day by day. Still, there is the problem of the many of the hotels are using manual entry for the manage it. Parents are also not aware about their ward every day and their problems in hostels. This is the time of digitization and converted all the manual work to the online. So the solution is provided in the hostel. In that some module is added to the facility to the management module is an attendance module for the student every day and update their parent about their ward. Module of the rector, warden and student registration module and fee due module. Room allotment module for student. Another online leave application module in this module information goes to the warden it will be approved by him and the information goes to the main gate guard about confirmation. So this software improves the efficiency for hostel management.

Key words: Digitization, Room Allotment Module

I. INTRODUCTION

Recent scenario is based on the digital India. Every work of Government, companies even though the small Kirana store also becomes online to their product. By using the internet every product or any new things become generalized and approachable to everyone.

Recently education system has become the compulsory to everyone and every parent of a child wants to his ward get a good education and mostly institute even though coaching institute are in the city area. The many of student belong to the remote area. Every parent sends his ward to city get education and get jobs there. So they need to settle their ward in private hostel or government hostel by that they aren't worried of their ward. But still is problematic for the parent when they ward come to the city hostel, they can't know that their ward is safe in a hostel or not. They can't know that their ward is at night in a hostel or not. Every day they can't get information about the ward. These days the hostel is managed by the manual by that every work related hostel is managed by manual. Even though the parent can't know about the hostel which is best for their children. Registration verification are is done manually. The hostel management website helps the caretaker to manage the information on the system for managing the asset information and the student informed of the hostel. The system will become the user friendly for the caretaker if used the online hostel management information. By this it will overcome the existing system drawbacks. This system is designed for the college management system. If the city is smarter than the hostel would be smart to get the information of the student living in the hostel. This system automatically calculates the fee information of student and issued the notice if student do some mischief in the hostel premises. In this automated system the parent can get the information about his ward by getting message to their cell phone. If the student takes leave from hostel the automated leave management system used by this the faculty, warden, rector and guard got the information automatically that he/ she is on leave so and so date. Here parent can get a monthly record about taking leave of the ward. By registration form get the information about students who are in hostel and which room was allotted him/her. This system track the student and his ID give the authenticity about the student.

II. LITERATURE REVIEW

Till now there some paper only published on hostel management most of the project is developed by the student in his/her B Tech, MCA, and BCA time. So this is not a new for the people [1]. This paper developed automated system this is more user friendly, graphical-user-interface oriented, reliable and secured mechanism. Many of the colleges are using this product worldwide to describe below [2]: Initio describe his six modules that college hostel management module, the inventory /store module, the inquiry module, visitor tracking module etc. It provides information on building, rooms and students [3].

The Microbes hostel system software includes many features like powerful reservation management, reception and cash box administration, statistics and reports etc [4]. Loventis booking system it has property management system, channel manager, booking engine etc. Indocon micro engineers develop the hostel management system that include features such as customizing technology, revenue management, integrated web booking engine etc[5].

III. PROPOSED WORK

Following module are here:

- 1) Registration Module.
- 2) Hostel Allotment module.
- 3) Fee Details module.

- 4) Attendance module.
- 5) Leave Detail module.

A. Registration Module

In this form it gives the information about the hierarchy by which, if any complaints of student is. There if one of them is present the student can complain about his problem.

Warden Registration Form

Name:

Warden Id:

Age:

DOB:

Gender: Male Female

Contact No:

Blood Group:

State:

City:

Address:

Email Id:

Hostel No.:

Seater:

Hostel Name:

Username:

Password:

Choose File: No file chosen

March 2017

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	26	27	28	1	2	3	4	
	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	31	1	
	2	3	4	5	6	7	8	

Fig. 1: Warden Registration form

Student Registration Form

Student Information

Name:

Roll No.:

DOB:

Gender: Male Female

Any Serious Illness:

Blood Group:

Username:

Password:

Contact Information

Contact Number:

E-Mail:

State:

City:

Address:

Parents Information

Father Name:

Mother Name:

Father Contact No:

Mother Contact No:

Emergency Contact Person

Name:

Contact No:

Relationship with student:

Education Details

10th Percentage:

12th Percentage:

Submit

Fig. 2: Student Registration form

Rector Registration Form

Name:

Rector Id:

Age:

DOB:

Gender: Male Female

Contact No:

Blood Group:

State:

City:

Address:

Email Id:

Username:

Password:

Choose File: No file chosen

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<	Sun	Mon	Tue	Wed	Thu	Fri	Sat	>
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	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	31	1	
	2	3	4	5	6	7	8	

Register

Fig. 3: Rector Registration form

B. Hostel Allotment Module

Warden is click on that room that is not fully occupied, in which warden enter the student roll number and then, after enter get all details of student and she approve that room to the student .And that is update automatically in student and room database. If any student wants to leave the room than warden click on delete button then room and student detail will update.

And Warden can also see the detail of student by their select roll number and also by select their room number.

Fig. 4: Student Hostel allotment form

Fig. 5: 2-Seater hostel allotment

C. Fee Details Module

After student login student name and roll number will be automatically shown he/she will enter only fee details like receipt number, amount paid, date of paid and image of fee receipt. On top of this page the list of receipt numbers of particular student will generate on page loaded. So a student can prevent from the re-entered their same fee detail.

1) Warden

On this page the list of students will be loaded if warden wants to confirm the receipt number, then click on leave with the particular receipt number process to another page, here image of that particular receipt number will be open so from this warden can conform the receipt number which is entered by the student. After confirmation of receipt, number warden will send the amount details to the student's parents.

2) Rector

On click on hostel number than generate the fee detail of the student which is belong to that hostel.

Fig. 6: Fee Detail form for student

S.No.	Student Name	Receipt No.	Date	Amount Paid	Amount Due	Actions
1	Bhuwita	1245	01/02/2017	50000	20000	Edit Delete
2	Vaidehi	1247	02/03/2017	40000	10000	Edit Delete
3	sami	1342	21/02/2017	30000	20000	Edit Delete
4	pooja	1389	22/02/2017	30000	20000	Edit Delete
5	pavati	1225	02/02/2017	50000	0	Edit Delete

Fig. 7: Warden fee-detail form.

D. Attendance Details Module

Through Biometric machine the attendance list will save into database and from here this is shown on the warden and the rector attendance detail page. If a student is not present without permission, then the message will send by warden to the student's parent.

E. Leave Detail Module

After student login on this page the student detail will automatically come from the database he/she only enters leave on from this date to this date, reason for the leave and the number of days.

1) Warden

Here the list of those student will be open who applied for a leave form. If warden wants to approve, then click on approving and this is automatic, save in the database and from here the student can get that her application form has been approved by the warden or not. This will show on student leave detail page.

Fig. 8: Leave Form

S.No	Register Number	Student Name	Father Name	Hostel Name	Hostel Number	Leaving To	From	Reason	Student Contact Number	Parent Contact Number	Actions
1	13EBCS105	Sami	Mr. Ramamurthy	Hostel 1	2	Home	24/02/2017/05/02/2017	Home	9876543210	9876543210	Delete
2	13EBCS104	Pooja	Mr. Sankar	Hostel 1	2	Home	24/02/2017/05/02/2017	Home	9876543210	9876543210	Delete
3	13EBCS106	Pavati	Mr. Sankar	Hostel 1	2	Home	24/02/2017/05/02/2017	Home	9876543210	9876543210	Delete
4	13EBCS103	Bhuwita	Mr. Ramamurthy	Hostel 1	2	Home	24/02/2017/05/02/2017	Home	9876543210	9876543210	Delete
5	13EBCS102	Vaidehi	Mr. Ramamurthy	Hostel 1	2	Home	24/02/2017/05/02/2017	Home	9876543210	9876543210	Delete

Fig. 9: Student leave detail form

IV. CONCLUSION AND FUTURE WORK

Smart online hostel management system is very useful for hostel allotment, online application approval. Here by the numbers of hostels are also increasing for the accommodation of the students studying in any institutions, hence there is a lot of strain on the person who is running the hostel. This particular project deals with the problems on managing hostels and avoids the problems which occurred when carried manually. Identification of the drawbacks of the existing system leads to the designing of a computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. It is reached in a matter of the leave management system, it will apply by the student and accepted by the faculty or warden online. In this system most important module can be implemented that using IOT it become very rich in working that automated message goes to the parent about the attendance of students.

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