

**DESIGN AND DEVELOPMENT OF A WEB BASED APPLICATION FOR  
HOSTEL MANAGEMENT SYSTEM**

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

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## APPROVAL

This Project/internship titled “**Design and Development of a Web Based Application for Hostel Management System**”, submitted by Md. Amin Khan, ID No: 161-15-7263, Mahathir Mohammad Arnab ID No:161-15-7330 and Kohinoor Haque, ID No: 161-15-6807 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06 December 2019.

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## DECLARATION

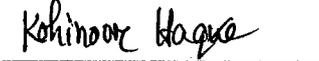
We hereby declare that, this project has been done by us under the supervision of **Mr. Abdus Sattar, Assistant Professor of CSE Department, Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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We really grateful and wish our profound our indebtedness to **Mr. Abdus Sattar, Assistant Professor of CSE Department, Daffodil International University.** Deep Knowledge & keen interest of our supervisor in the field of “*Web based Application Development*” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

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Finally, we must acknowledge with due respect the constant support and patients of our parents.

## **ABSTRACT**

Parents are always think about their children and try to make sure their future is safe and they can learn so many things new and meet with innovated things. For this reason, parents and children sacrifice their emotions to achieve proper education and higher education also. In our country better institutes, schools, colleges and universities are located in urban areas. So, the students who come from rural areas they must have left their home. All parents can't shift their home with children. For this reason, students need to find their residence. The main cause that parents can't stay with their children is higher cost, lots of family members, parents job/business location etc. In that case students stays in relative's house, shared house, mess and hostels. Hostel is the best and safest residence than others options. Hostel management website is important because it has ease of access, lasting value, easily accessible data center, Self-service support. This website will cover for students, employees and admin. It will very effective for students and hostel management authorities both. Recognition of the deficiency of the existing systems leads to the conspiring of digital system that will be suitable to the existing system which is more user friendly and GUI based.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

There has been a cosmic increment within the amount of instructional sector notably over the foremost recent four decades everywhere throughout the globe. This improvement has brought education to the threshold of people. Therefore, it's dilated info and helped produce a population of enlightened residents who will while not abundant of a stretch adjust to the principles of civilized society. An outsized portion of the recently established instructional establishments, area unit utilizing the recent normal procedures for managing all the record keeping and particularly for managing hostel facilities. This recent methodology of managing records thence has an adverse result on the potency of the establishment. The projected framework overcomes the disadvantages of ancient techniques for hostel administration; it's easier to use, graphical-UI destined. The Hostel Management system will cover different activities in the hostel. It can manage all information of a hostel. It manages student information, employee information, room allocation, bills, daily attendance, out pass, schedule, etc. It can also develop reports of student details.

It is very easy to use with a user-friendly GUI to automate, arrange and handle all the procedures of managing hostel offices. This is an online site which is developed using HTML, CSS and Bootstrap 4 for front end and PHP and Laravel framework for backend. The site is going to be a good relief to the employees. It's very helpful significantly in huge institutional organizations with an oversized vary of hostels.

### 1.2 Motivation

The world of internet has changed the pace at which the world normally used to work and now we can access multiple systems at a click or a touch of a screen. Online transaction for banks shopping at e-commerce sites and booking travel tickets is now possible from online itself. Keeping up the speed is the need of the hour in this fast paced environment for a student so what better than accessing the whole of the hostel management system in online.

### 1.3 Objectives

The hostel management system helps the user to access all the functionalities of the hostel without having to visit the hostel physically and to apply for leave. Major objective of the

planned system is to assist automating basic hostel management activities.

The fundamental hostel management activities comprise of activities like:

- Admin can send the approval notice to the students through mail system.
- Insert the student details and other records.
- Students can enroll their complaints in complaints page.
- Hostel employee can calculate the hostel accounts in an easy manner.
- Hostellers can check the status of their hostel fee.
- Room Allotment to the hostellers.
- Out pass application for the students.
- Providing data integrity of the student using approved login
- To display daily hostel schedule managed by the admin
- Mail notifications to the student, guardians, and other hostel worker.
- Providing simultaneousness access to the site.

#### **1.4: Expected Outcome**

- It is a web based application by which admin can easily monitor their hostel management system.
- In this website students can register and login and access the relative information that they need.
- Students can update their profile, employees also can update.
- In this application Admin can add, edit, delete student information, employee information as well as rooms information.
- Employees can take attendance daily in online.
- Admin can see the hostel report of every person by one click.
- Admin can add any kind of routine/rules at any time and students can see that.
- Admin can post notice and students will notify.
- Students can apply for out pass in online to the warden. If warden grants the application then this site keep the going out time and getting in time via log system.
- Admin can view the due bills, paid bills month wise.

The proposed project is a great solution for keeping all records in database in a hostel management system. This will save time more than manual system and all data will be in a safe place.

## **1.5 Report Layout**

Layout three section -

- Initial matter
- Test
- Back matter

The Initial matter consists of the title page, approval page, abstract summary, Acknowledgements, table contents, list of tables, list of figures, other lists and the Preface etc. Initial pages are paginated independently from whatever remains of the content. Our report style is given below:

### **Chapter 2 Background**

Contain background details, related work, problem statement and challenges.

### **Chapter 3 Requirements Specification**

Contain project requirement Specification which we used in our project. Where also contain requirement collection and analysis, design requirements, use case, dfs diagram, relationship diagram and description.

### **Chapter 4 Design Specification**

Contain front-end design and back-end design.

### **Chapter 5 Implementation and Testing**

Examine the whole project and tested all part of the project and the project work perfectly fine.

### **Chapter 6 Conclusion and Future Scope**

We discussed about conclusion, limitation and future work of our project. Last of all we add reference related to our work and ensure that the report is must be correct.

## CHAPTER 2

### BACKGROUND

#### 2.1 Introduction

Technology makes our life so fast and easy. We want everything in our touch. In online world our home become office, company, study lecture room, theaters etc. Our online base project is the part of its. Using this Web application project admin with no trouble control and mange hostel work.

#### 2.2 Relate Works

##### Hostel Management (Real-time)



Figure 2.1.1: Hostel Management (Real-time) Application

The software gives you tools to count total students, numbers of student out of hostel, in hostel students also have late comers. Also have the masters list, device management, leave management, reports, Gps tracker etc.

## Hostel Management (ePG-Admin):

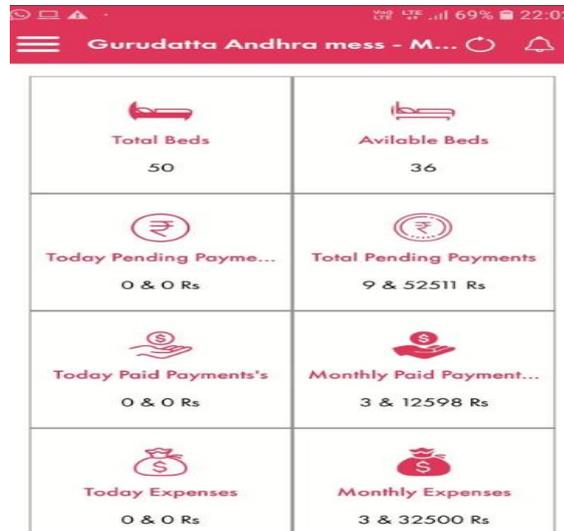


Figure 2.1.2: Hostel Management (ePG-Admin)

This is android application that make and Update All the Guests, ready to Track all Paying Guests offered in multiple location. Track the all Payments and unfinished from App. Facility Send SMS to Guests for Payment Reminders. Produce & manage all notifications. Track and Update all the Requests from Guests. Produce and manage all the Guest Checkout information's. Produce and manage all Expenses from ePG-Admin application. Determine and Track all the Vacancies in PG. One stop for All Paying Guest or Hostel management desires.

Basically, we didn't find any published website. We were studying about this and see many of the same related work but none of them published as a website. We have noticed that many hostel has their android application but none of them are in published website. In our country over 90% to 97% (approx.) handled their hostel management manually (retrieve by paperwork).

### 2.3 Comparative Studies

Hostel management system the web application is impressive and fancy application for every students and hostel authorities who needs to look at their hostel maintained when from any places. This application provides the all info a few hostel would like. This net application fulfills all sort of needs that handled antecedently manually become digital. This application is undergoing from volume- to value-based service, with a stress on quality.

## **2.4 Challenges**

Without any powerful target no-one can reach the final destination. Our target is for fixed area using this smart and friendly application with data security. Hope it become so popular among them. It can reduce the time and paper, service quality is too much good.

This challenge aspires to define user-centered technologies that can enhance users.

Performance by monitoring and analyzing activity at home.

- Work with Laravel 6 framework,
- email verification, notification system and
- Making the user friendly interface.

## **CHAPTER 3**

### **REQUIREMENT SPECIFICATION**

#### **3.1 Requirement Collection and Analysis**

This web application is basically for android smart phone, laptop, desktop and other web browser user. For smooth work this application requires very simple configuration. It is very easy to use with a user-friendly GUI to automate, arrange and handle all the procedures of managing hostel offices.

##### **3.1.1 Minimum Hardware required:**

- Processor-i3
- Hard Disk-5GB
- Memory-1GB RAM

##### **3.1.2 Software required:**

- LAMP
- MAMP
- WAMP
- XAMP

##### **3.1.3 Platform:**

- Windows XP
- Windows 7
- Other latest Platform

##### **3.1.4 Programming Language/ Tools:**

- CSS
- PHP
- .LARAVEL6
- MYSQL
- HTML

### 3.2 Features

In the proposed system we have several feature here. These are the main feature.

- Registration by ROOM NO / PHONE NUMBER/Email
- Verify by code.
- Add student option.
- Add employee option.
- Show student when come and go
- Show fees both student and employee
- Update profile option.
- View fees
- Add database when student go to and in time date.
- Room booked or not.
- Food menu
- Sign out.

### 3.3 System Modules

Three modules are:

1. Administrator
2. Employee/warden
3. Student

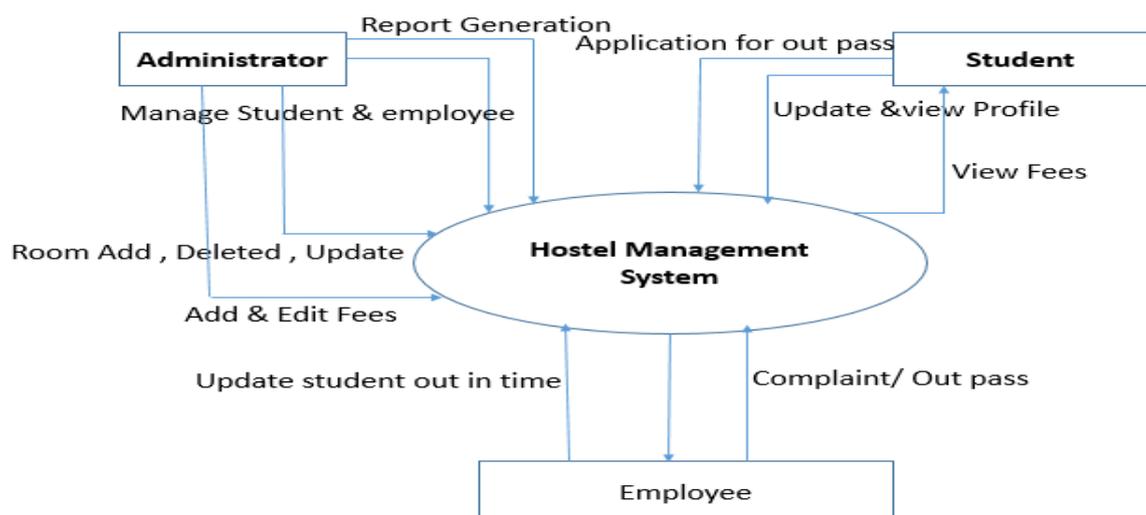


Figure 3.3: System Architecture

### 3.3.1 Administrator Module:

This module consists of following functionalities:

- **Login to administrator module:** Required valid email and password to login in our website.
- **Profile:** After login user can access all information.
- **Rooms:** This page has many functionalities. Here user can add rooms, allot rooms to the students, view room allotment and change or remove the rooms.
- **Students:** This page permits user to manage students. User will add students, update their details, add mess card for the scholars.
- **Employee:** Only administrator can add and manage employee.
- **Add Fees:** Only Administration can change, edit both student and employee fees.
- **Mess Schedule:** In this page Admin can update daily hostel routine which will be updated in the student profile also.

### 3.3.2 Warden Module

This module will contain the following functionalities:

- **Login to Warden Module:** if admin add a warden profile then he/she can login.
- **Profile:** User can view and update their profile to make any changes. They can also change their password which requires old password.
- **Rooms:** This page has many functionalities. Here user can add rooms, allot rooms to the students, view room allotment and change or remove the rooms.
- **Students:** This page allows user to manage students. User can add students, update their details, add mess card for the students.
- **Reports:** In reports user can approve or reject the applications of the students regarding the complaints, out-pass. Also, they can generate reports on mess bill, mess cards, hostel bills.
- **Mess Schedule:** In this page user can update daily mess routine which will be updated in the student profile.

### 3.2.3 Student Module

This module will contain the following functionalities:

- **Login to Student Profile:** Only authorized students are allowed to access the information to the website once he/she verifies themselves by providing user account

and password.

- **View Profile:** Students can only view their profile and are not allowed to make any changes. If any changes they want to make, they must approach to administrator or warden.
- **Change Password:** Students can change or update their password by entering old and new password.
- **Complaint Registration:** Students can make register complaints regarding various hostel facilities like furniture, electrical, plumbing, others. Once confirmed student will get a mail notification from warden or administrator.
- **Out-pass Application:** Students can also apply for out-pass required to go for outing from the college.
- **Out-pass Log:** In this function student can view their logs regarding out-pass status.
- **Complaint Log:** students can complain about any problem or can give suggestion.
- **View Mess Schedule:** Student can view daily mess schedule through this page.

### 3.4 Data Flow Diagram (DFD)

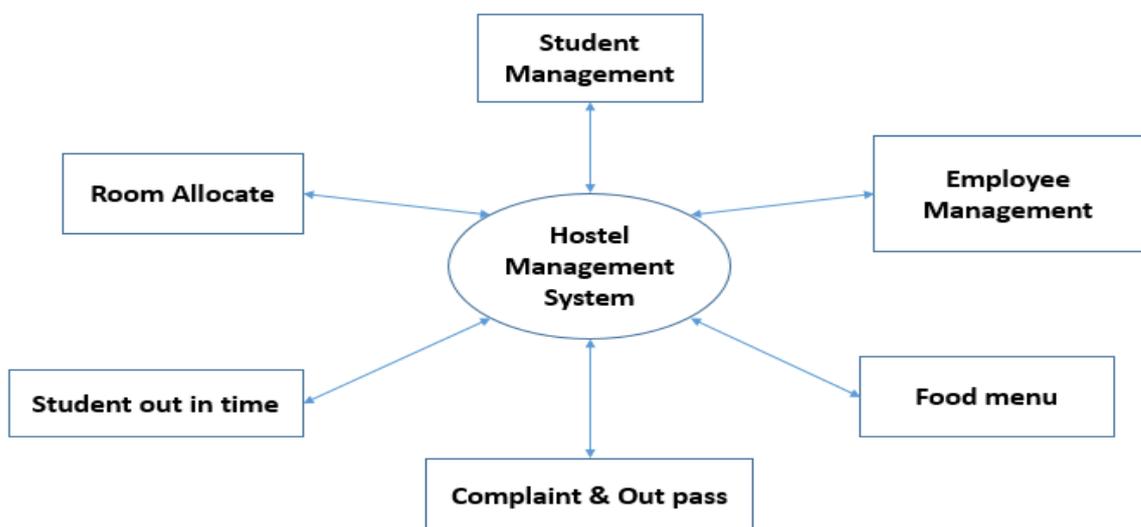


Figure 3.4: DFD Diagram of Hostel Management System

### 3.5 Use Case Diagram of Hostel Management System

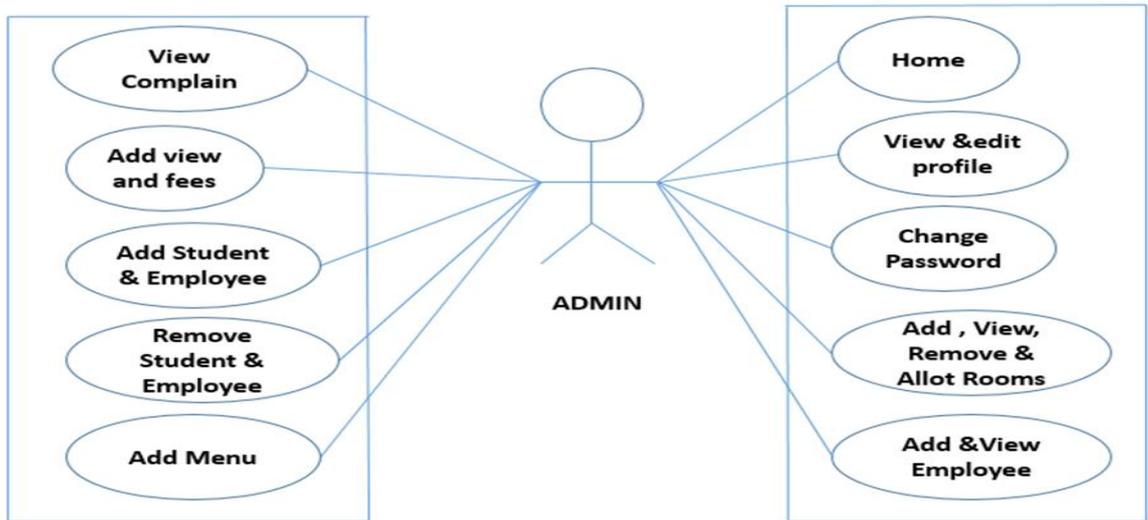


Figure 3.5.1: Admin Use Case Diagram

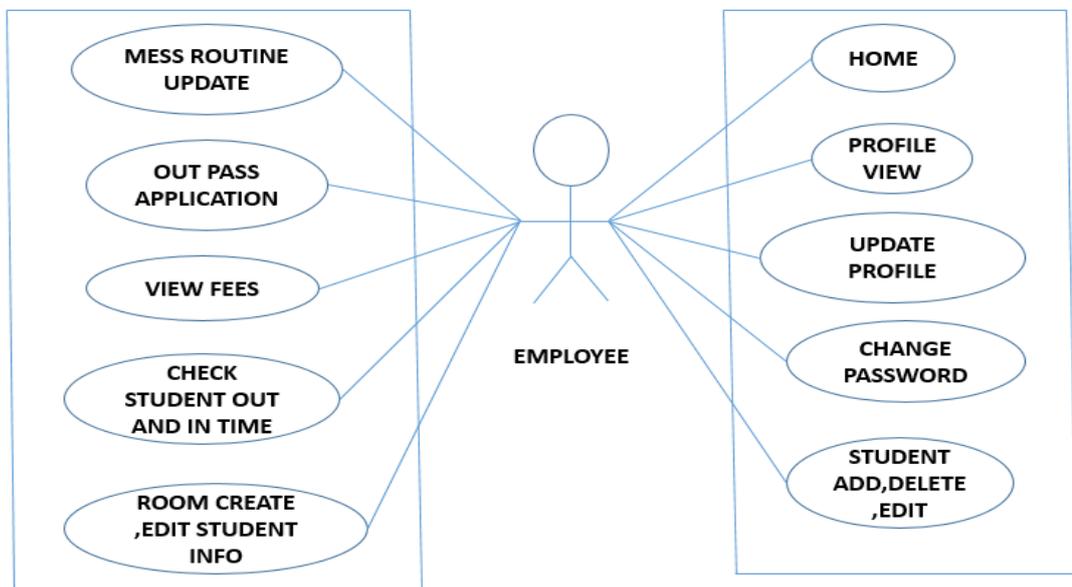


Figure 3.5.2: Employee Use Case Diagram

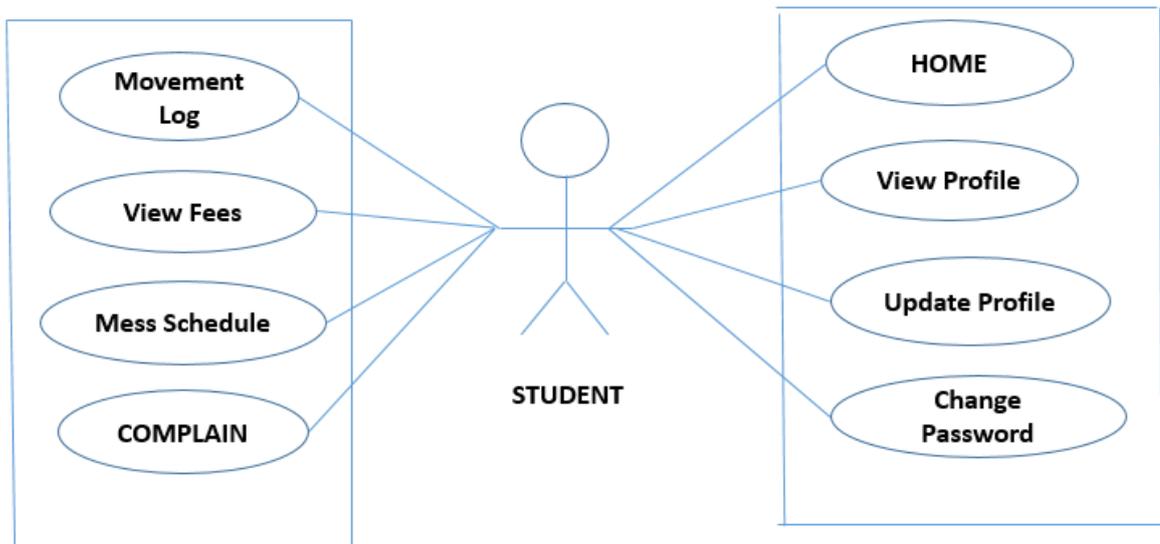


Figure 3.5.3: Student Use Case Diagram

### 3.6 Use Case Description

➤ **Administration:**

Admin Can control the full system even deleted the web site if need.

Table 3.6.1: Use Case description for Login

Use Case	Login
Scenario	Student: Need admitted first in this hostel. Employee: selected candidate for job Admin: Owner of the hostel
Primary Actor	Student/ Users ,Employee, Hostel author
Secondary Actor	Null
Pre-Condition	Need Admitted student ,selected staff
Post-Condition	Log in home page Edit profile

Table 3.6.2: Use Case description for Hostel Schedule (Weekly Food Menu)

Use Case	Hostel Schedule ( weekly Food Menu )
Scenario	Only student Can see Saturday, Sunday, Monday, Tuesday ,Thursday and Friday food menu for 3 times breakfast, lunch and dinner. Other hand Admin or Employee add food or deleted any item .
Primary Actor	Student/Users, Employee, Admin
Secondary Actor	Null
Pre-Condition	Login successfully by valid email and password.
Post-Condition	View the food menu.

Table 3.6.3: Use Case description for Hostel Bill

Use Case	Hostel Bill
Scenario	How much due or payment date Student and Employee only see it can't edit. Only Admin can change or delete it.
Primary Actor	Student, Employee and admin
Secondary Actor	Null
Pre -Condition	Login web page successfully
Post-Condition	View hostel bill.

Table 3.6.4: Use Case description for Report/Complain

Use Case	Report/Complain
Scenario	Student/User can complain their problem to admin or employee .Employee and admin can see the problem and solve it.
Primary Actor	Student/Users, Employee and Admin.
Secondary Actor	Null
Pre-Condition	Login web page
Post-Condition	Student or Employee can complain and admin can take action.

Table 3.6.5: Use Case Description for Out-Pass

Use Case	Out-pass
Scenario	<p><b>Students/users details info:</b></p> <ul style="list-style-type: none"> <li>➤ Out Date Out Time Return Date Return Time Details status.</li> <li>➤ If admin approve their out-pass then they can go out .if rejected then can't.</li> </ul>
Primary Actors	Student, Admin
Secondary Actors	Null
Pre-Condition	Need detail info / reason
Post-Condition	Out-pass Approve or Rejected.

Table 3.6.6: Use Case Description for Room

Use Case	Room
Scenario	<ul style="list-style-type: none"> <li>➤ Function of room add, deleted or change.</li> <li>➤ Room rent.</li> </ul>
Primary Actors	Admin
Secondary Actors	Null
Pre-Condition	Admin panel login
Post-Condition	Allocate Room

## CHAPTER 4

### DESIGN SPECIFICATION

#### 4.1 Front-end or UI Design

User Interface is the front-end design of a website application by which user can interact with the server of the application. The front-end design makes an application more attractive to the users. This design is the development of the application for users. It should be attractive and users should not feel uneasy or annoyed in time of using the application.

##### 4.1.1 Starting Page

Here is the starting page of the website. This design is different for admin/employee and students to identify the website.

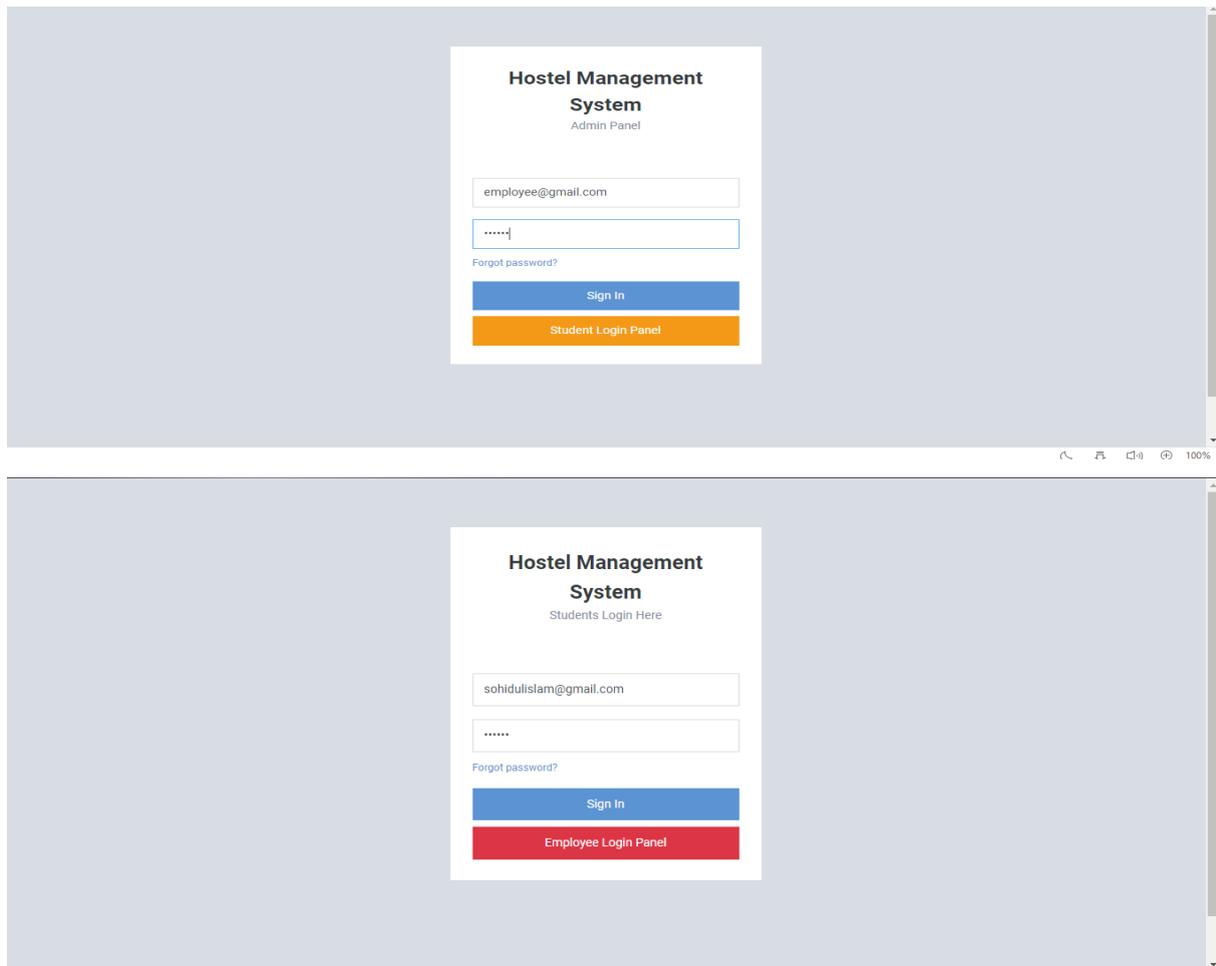


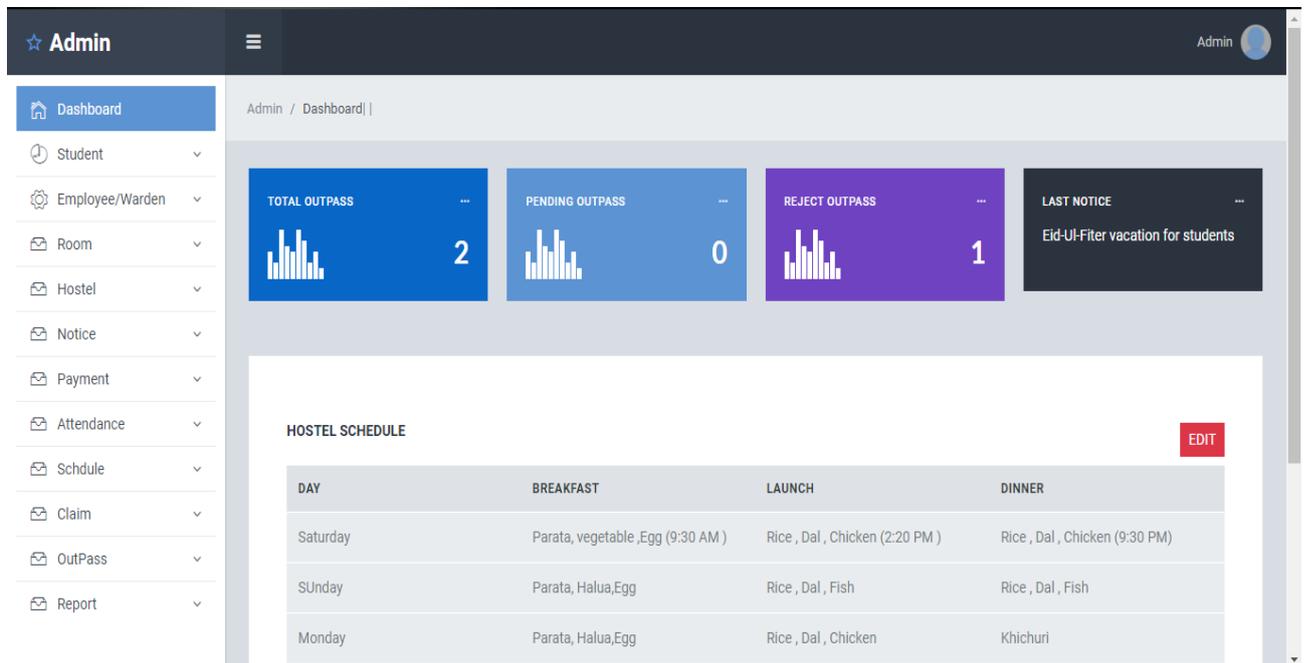
Figure 4.1.1: starting and login Page of Admin/employee and students.

##### 4.1.2 Dashboard after login for both students and admin

Here is the dashboard design for admin and student. Student need to admit first and got

registration by admin then student can login.

### Dashboard/index for Admin



### Dashboard for student

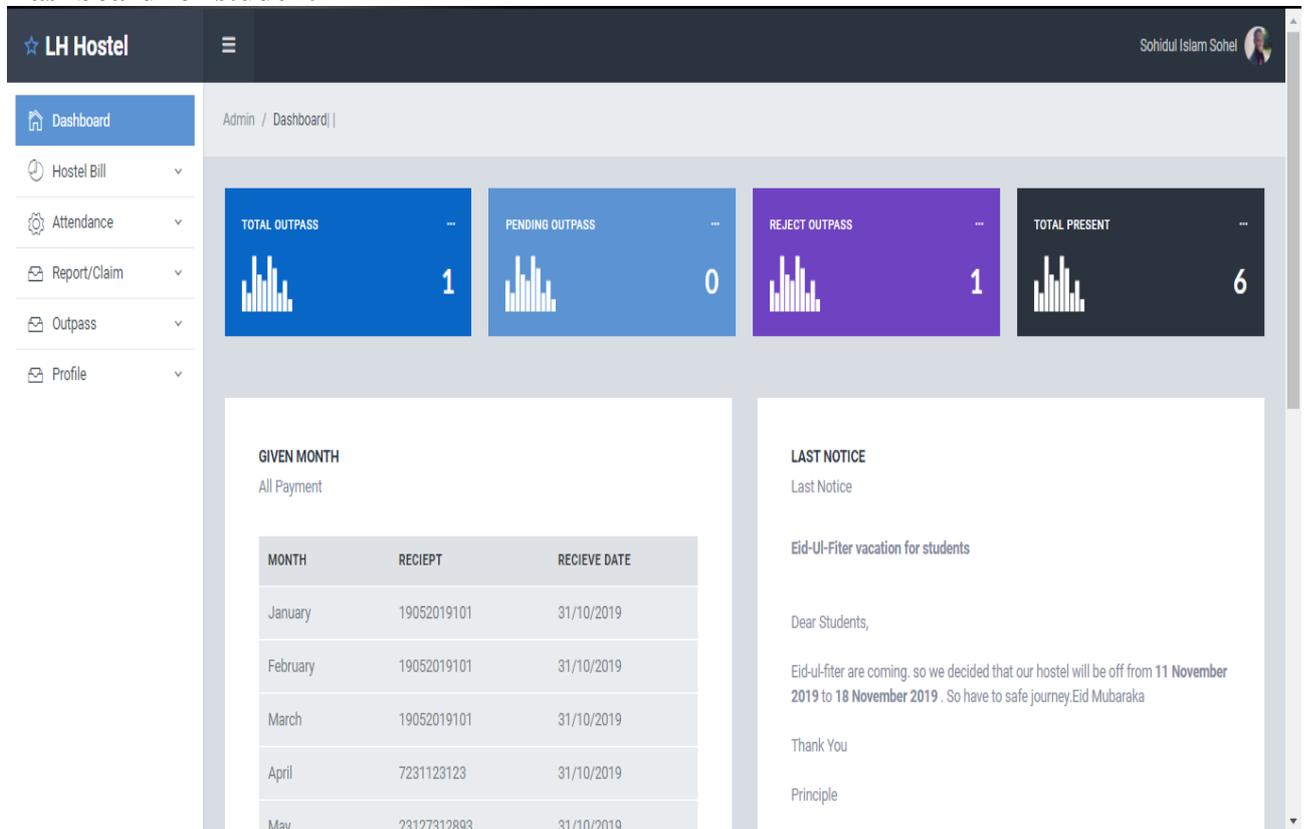


Figure 4.1.2: Dashboard for student and admin.

### 4.1.3 Update profile

Students, Employees and admin can update their information here. After login, by clicking edit profile they can update their profile easily.

#### Student's profile update

The screenshot shows the 'Profile Update' interface for a student in the 'LH Hostel' system. The user is 'Sohidul Islam Sohel'. The form contains the following fields:

Field	Value
Name	Sohidul Islam Sohel
Phone	01961363543
Father Name	Moklesur Rahman
Mother Name	Kamala begum
Gurdian Mobile	01328992817
Village	Shariatpur Bangedesh
Address	Dhaka Dhanmondi 32 Kalabagan math
Gender	Male
Department	EEE

There is a 'Photo' section with a 'Choose file...' button and a 'Browse' button. A green 'Update' button is at the bottom of the form.

#### Admin's profile update

The screenshot shows the 'Profile Update' interface for an admin in the 'Warden' system. The user is 'Moniruzzan Akash'. The form contains the following fields:

Field	Value
Name	Moniruzzan Akash
Phone	01961363544
email	employee@gmail.com
Village	Shariatpur Bangedesh
Adress	Dhaka Dhanmondi 32 Kalabagan math
Gender	Male
Father Name	Moklesur Rahman
Mother Name	Kamala begum
Home Mobile	01328992817

There is a 'Photo' section with a 'Choose file...' button and a 'Browse' button. A blue 'Update' button is at the bottom of the form.

Figure 4.1.3: profile update for both in the system

### 4.1.4 Adding student

Only warden and admin can register students by their valid information. When a student got admit into the hostel then admin can add him/her. After registration completion student can login the systems by their valid email and default password (123456). Students can change their password after first login.

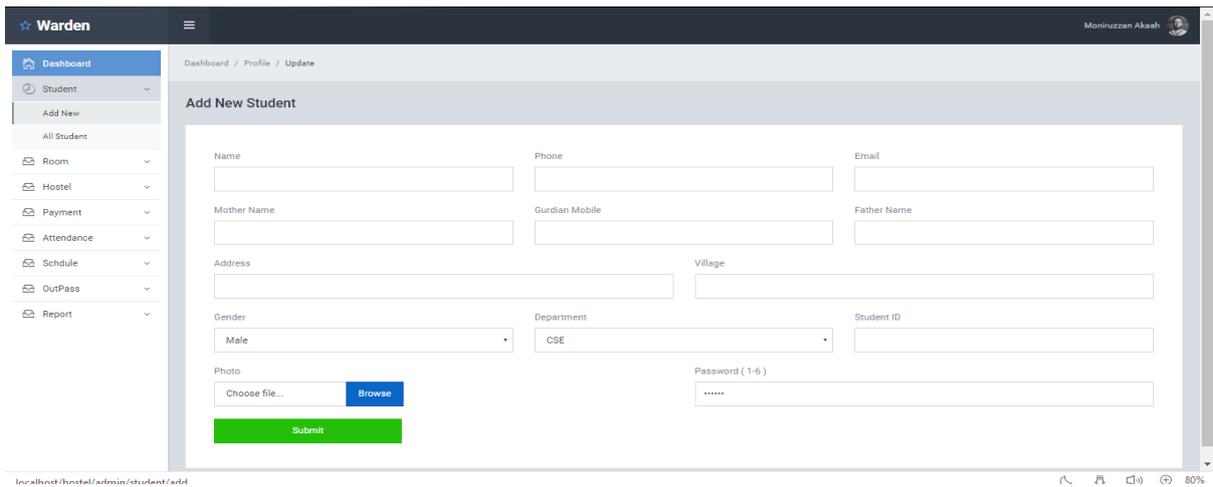
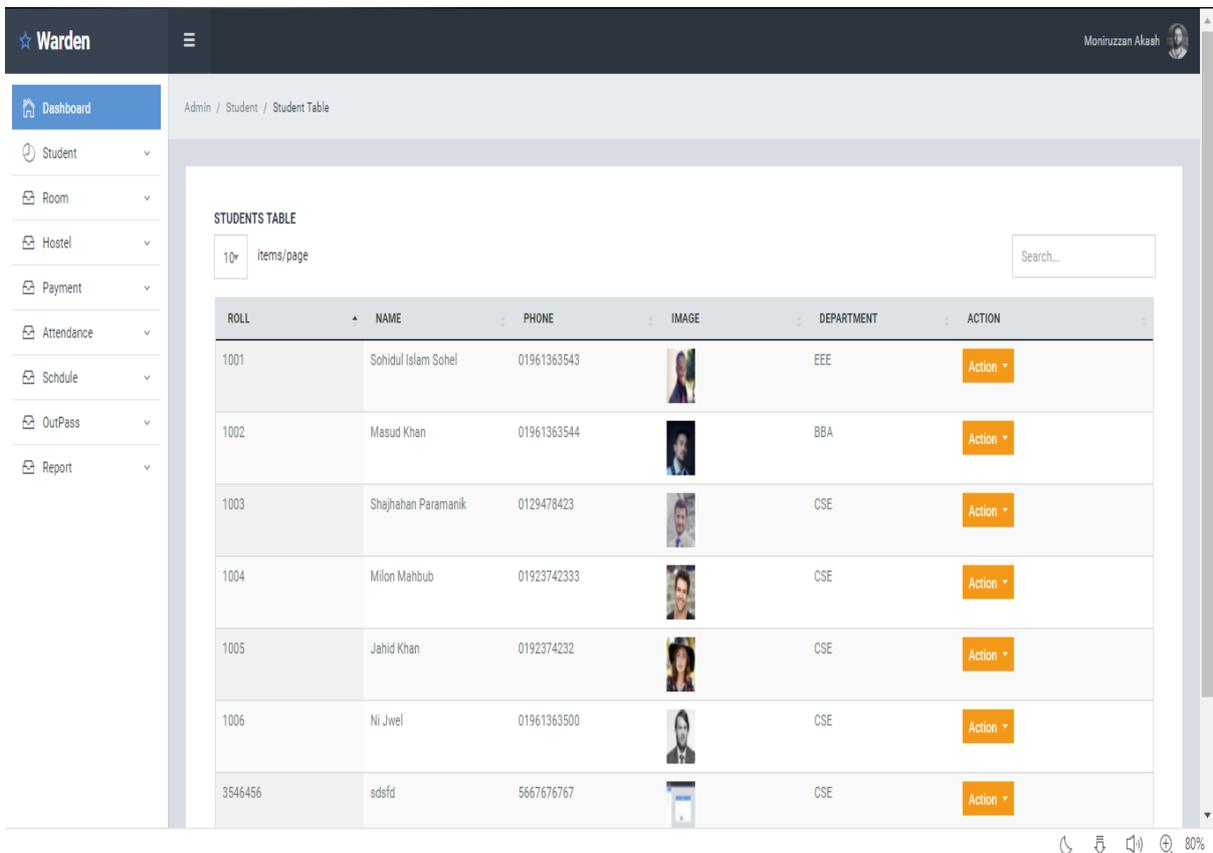


Figure 4.1.4: Adding students to the hostel website.

### 4.1.5 All student Information

Here Admin can see the details information of all students and allocate their room, take action about any students. Admin can see the room information also. Admin can set the total number of students in a room.

#### Student's details



## Room information

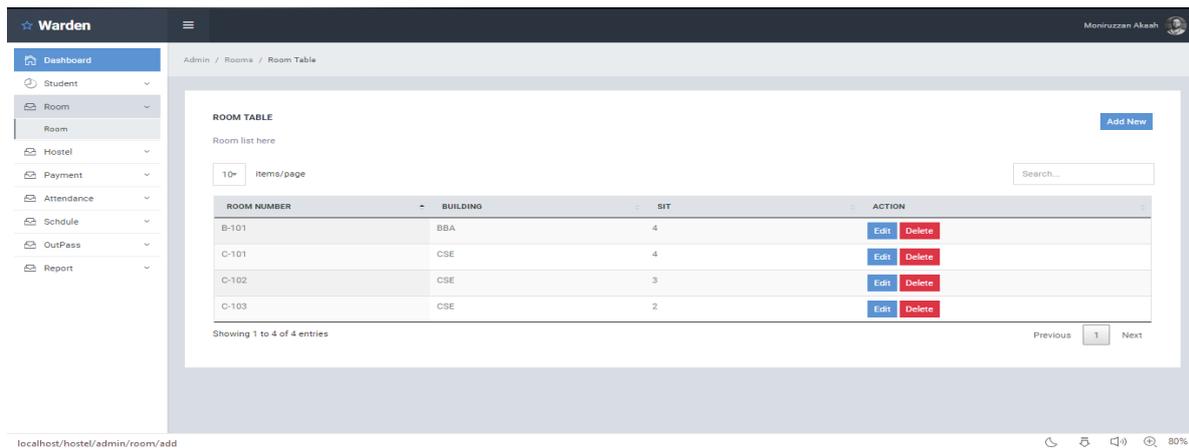


Figure 4.1.5: Student's and room information

### 4.1.6 Payment record saving in hostel database

It's an important thing that take a record of payment details into the database of our website. Admin can add record of payment document of students.

### Payment receipt and details of all payment info

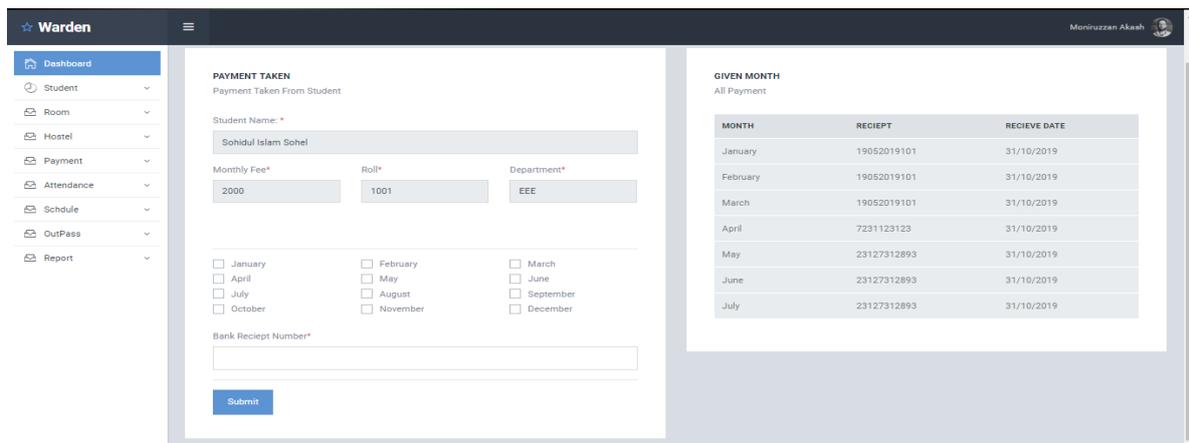


Figure 4.0.6: payment details of a student

### 4.1.7 Daily attendances update

In our website admin and employee can take daily attendances of students. They can also view and edit attendances report.



Figure 4.1.7: Attendances system

### 4.1.8 Food Schedule

Admin can set food schedule, edit schedule menu, update schedule, delete schedule and students can only see the menu any time.

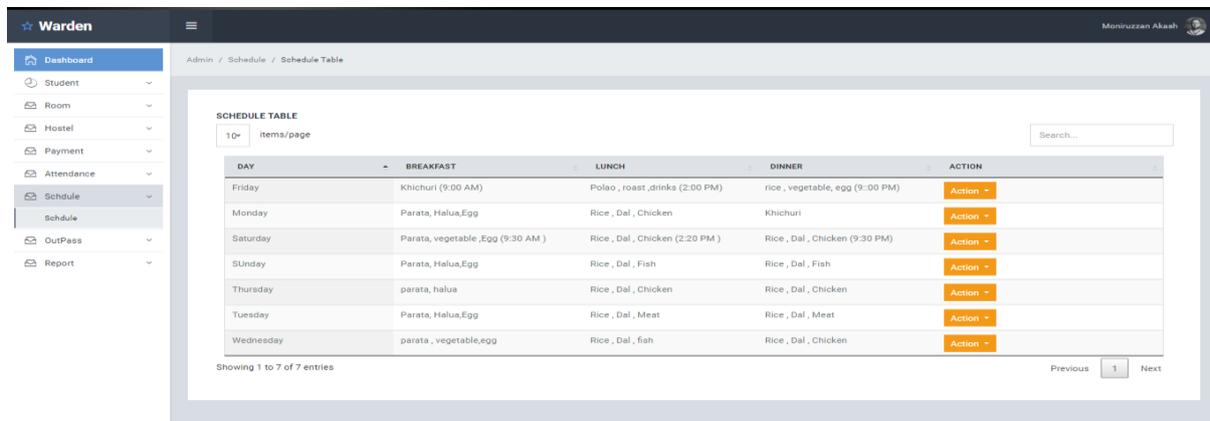


Figure 4.1.8: Hostel Schedule

### 4.1.9 Application for out-pass

Students can apply for out-pass via this system. If an employee or admin accept the out-pass report then the student can go for leave. Admin can verify the report, reject application.

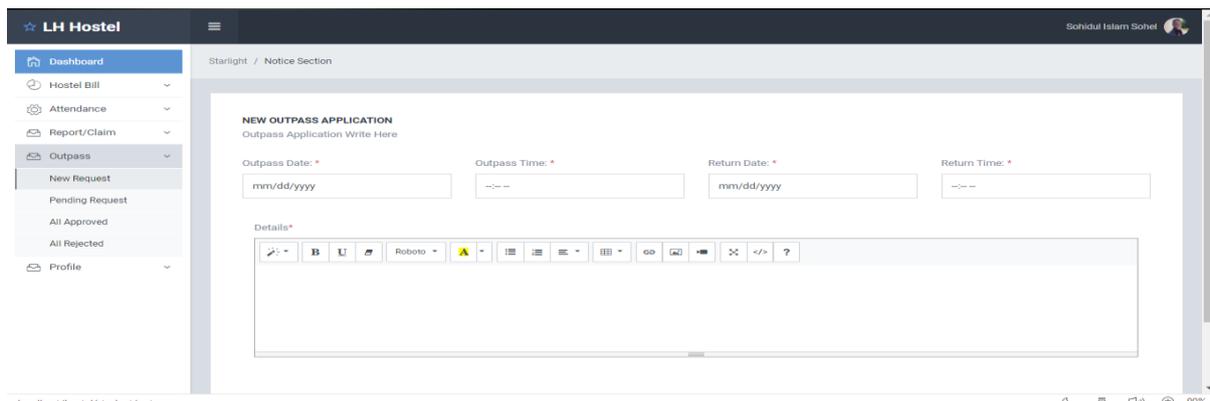


Figure 4.1.9: New out-pass application

### 4.2.1 Complaint section

Student can complaint about any section of a hostel. Complaint reports will receive admin. From this hostel authority can increase the hostel service better.

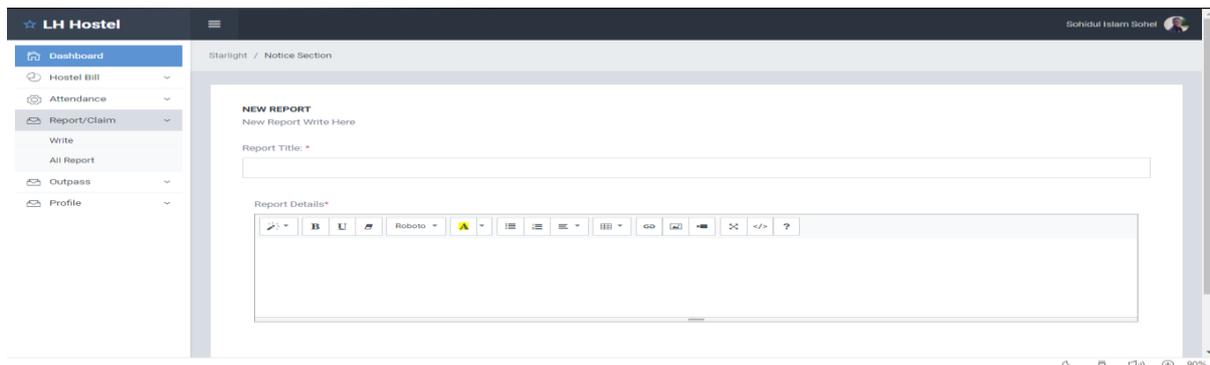
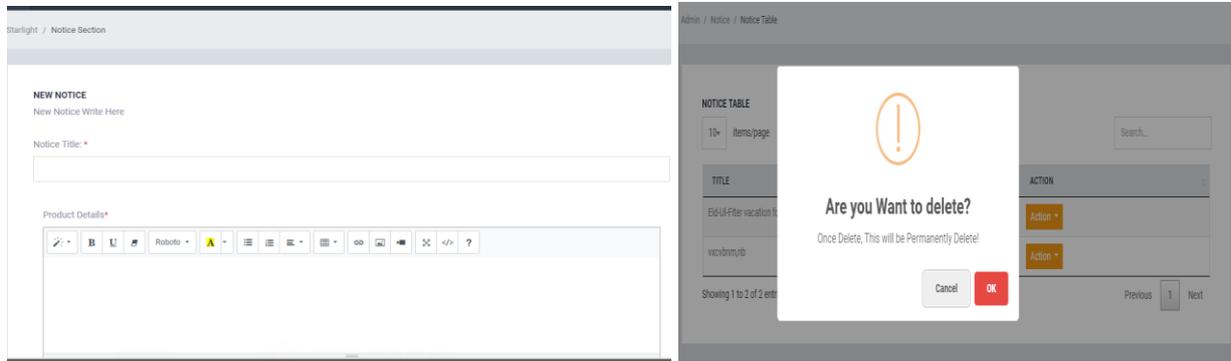


Figure 4.2.1: student's complaint section

## 4.2.2 Online notice section

In our website admin can post notices at any time and all students can see the notices any time after publishing the notices. Admin also can edit or delete notice.

### Writing new notice and deleting notice



### Notice on dashboard

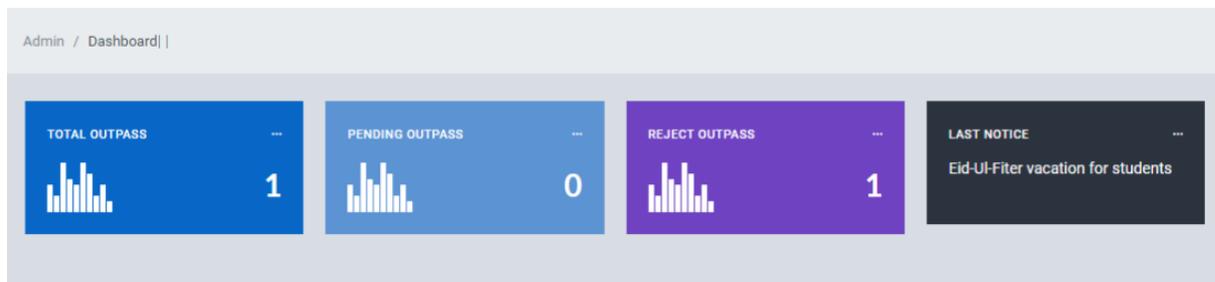
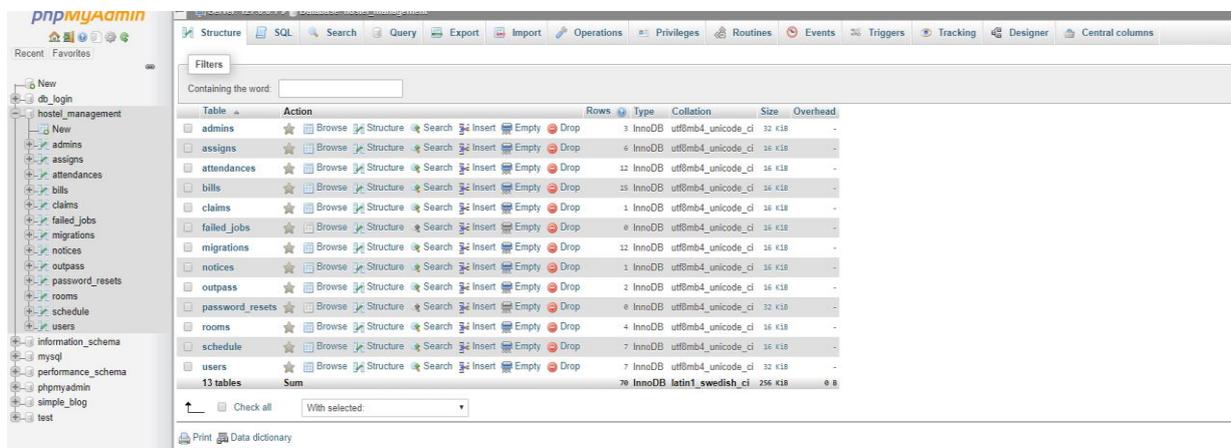


Figure 4.2.2: Online notice

## 4.3 Back-end Design

The back-end design of an application is generally the design of database. The database is related to the connectivity between the user and the server. In our project the back-end design is design of MySQL. We used MySQL as our database server.



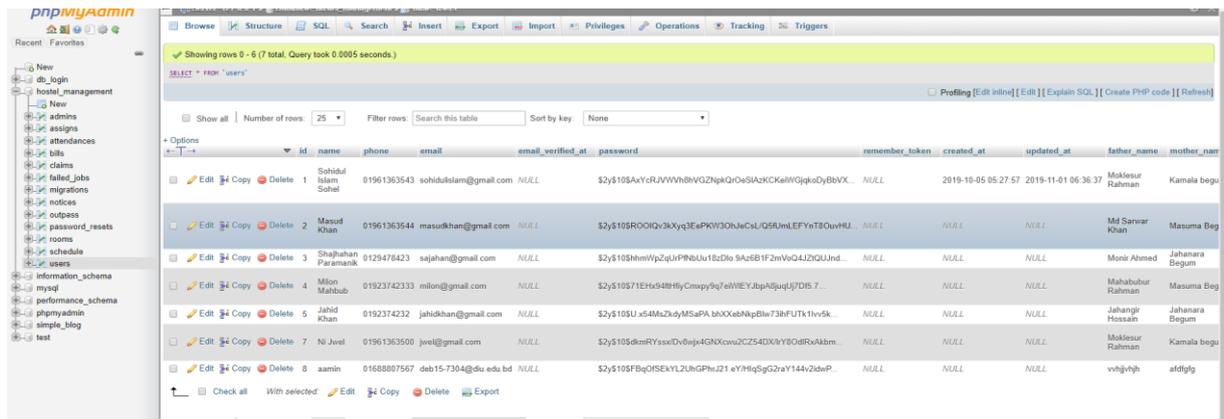


Figure 4.3: Back-end Design

In our project we need to store data and use the data in a local server. In this case, MySQL was the best option for us to showing all stored data. MySQL also very fast and efficient database where we can easily save data within short time and also the database of MySQL response to the website very fast. MySQL is one of the best database for any kind of android, iOS, and also web application. Its work process is very simple and easy to maintain.

## **CHAPTER 5**

### **IMPLEMENTATION AND TESTING**

#### **5.1 System Implementation**

Implementation is that the stage within the project wherever the theoretical style is become an operating system and is giving confidence on the new system for the users that it'll work with efficiency and effectively. It involves careful coming up with, investigation of this system and its constraints on implementation, style of ways to realize the modification over, associate analysis of modification over ways. Except coming up with major task of getting ready the implementation square measure education and coaching of users. The implementation method begins with getting ready an inspiration for the implementation of the system. In line with this set up, the activities square measure to be meted out, discussions created concerning the instrumentality and resources and also the further instrumentality should be non-inheritable to implement the new system. In network backup system no further resources square measure required. Implementation is that the final and also the most vital part. The foremost essential stage in achieving a productive new system is giving the users confidence that the new system can work and be effective. The system is often enforced solely once thorough testing is completed and if it's found to be operating in line with the specification. This technique conjointly offers the best security since the recent system will take over if the errors square measure found or inability to handle sure kind of transactions whereas mistreatment the new system.

As the part of system testing we have a tendency to execute the program with the intent of finding errors and missing operations and conjointly an entire verification to work out whether or not the objectives square measure met and also the user needs square measure glad. The final word aim is quality assurance. Tests square measure meted out and also the results square measure compared with the expected document. Within the case of inaccurate results, debugging is completed. Mistreatment elaborate checking methods a test set up is meted out on every module. The varied tests performed square measure unit testing, integration testing and user acceptance testing.

## 5.2 Requirements for Implementation

For the implementation of our project we need some basic requirements. We cannot run our application as we want to run for achieving our goal. Process will start after fill those requirements which we mentioned below:

- At first we need to manage a hostel to implement our hostel management system.
- Users must be connected to the internet to access our system.
- To gain access to the E-registration system, the user would need a personal computer, a username and a valid password.
- A person will play the role of an admin who will operate the whole system.
- An emergency power supply should be provided to avoid any kind of interruption during the data entry procedure

## 5.3 Testing Implementation

This is the procedure that can consider as in where an application tester or it can be the author of that application will be able to check many cases for the finishing of the application and specification. But maybe there have the limitation in the application at the initial stage or in next.

Table: Test Case Implementation

Test case	Test input	Expected outcome	Obtained outcome	Passed/Failed	Testing Period
Registration	Registered by valid info	Successfully registered	Successfully registered	Passed	25-10-2019
Registration	Registered by invalid mobile number	Re-enter warning for failure	Registered denied	Passed	25-10-2019
Registration	Registration with empty field	Re-enter warning for failure	Registration denied	Passed	26-10-2019

<b>Add student</b>	Add by valid info	Successfully added	Successfully added	Passed	26-10-2019
<b>Add employee</b>	Add by valid info	Successfully added	Successfully added	Passed	26-10-2019
<b>Attendance</b>	Select valid student list	Successfully selected	Successfully selected	Passed	27-10-2019
<b>Out pass</b>	Enter valid request	Request selected	Successfully selected	Passed	27-10-2019
<b>Payment</b>	Before Deadline	Payment successful	Payment successful	Passed	30-10-2019

## **CHAPTER 6**

### **CONCLUSION AND FUTURE SCOPE**

#### **6.1 Discussion and Conclusion**

To conclude the outline concerning the project. The project, developed exploitation HTML, CSS, PHP and Laravel framework and MySQL server relies on the need specification of the user and therefore the analysis of the prevailing system, with flexibility for future sweetening.

On-line hostel management system is extremely helpful for hostel allotment and totally different calculation. This hostel management package is intended for people that need to manage varied activities within the hostel. For the past few years the numbers of instructional establishments square measure increasing apace. Thereby the numbers of hostels also are increasing for the accommodation of the scholars learning during this establishment. And thus there's a great deal of strain on the one who square measure running the hostel and software's don't seem to be typically utilized in this context. This specific project deals with the issues on managing a hostel and avoids the issues that occur once carried manually.

Identification of the drawbacks of the prevailing system ends up in the coming up with of processed system which will be compatible to the prevailing system with the system that is a lot of user friendly and a lot of GUI orientated.

#### **6.2 Future work and Further Development**

We have plans to add more facilities to this application. This system has a lot of future scope to make it more users friendly. Firstly, we will make web based application for all web application users. Now, this application is working for only web application user. In future development, our application will be work in Artificial intelligence. We will add RFID tracking system. One reader will be placed on hostel gate or in front of room. If students punch RFID then the door will be unlocked and attendance will be present. In future we will designed our website fully automated.

## REFERENCES

- [1]. Hostel Management System, Emmanuel Adu Baffoe June, [last access on October 29,2019], available at<< <http://ir.csuc.edu.gh:8080/xmlui/handle/123456789/425>>>
- [2]. Hostel Management System, available at<<http://dspace.cusat.ac.in/jspui/handle/123456789/1182>>>,[last accessed on October 30,2019]
- [3]. Hostel Management System, Devmurari, Vishwa, Patadiya, Hemangi, available at<<<http://library.atmiya.net:8080/dspace/handle/123456789/4533>>>,[last accessed on October 12,2019]
- [4]. Hostel-Management-System-HMS, available at<< <https://github.com/projectworldsofficial/Hostel-Management-System-Project-in-PHP>>>, [last accessed on October 29, 2019]
- [5]. Hostel management Web App, available at<< <https://github.com/LarrySul/hostel-management-software>>>,[last accessed on October 25, 2019]
- [6]. Hostel Management, available at<<<http://dspace.cusat.ac.in/jspui/bitstream/123456789/8250/1/ONLINE%20HOSTEL%20MANAGEMENT%20SYSTEM.pdf>>>
- [7]. Wan Jaafar, W.N.H.(2012). HOSTEL MANAGEMENT SYSTEM (HMS), report for bachelor of computer science degree, University Malaysia Pahang, online, accessed on 9-11-2016.

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