DESIGN AND IMPLEMENTATION OF HOSTEL ALLOCATION AND INFORMATION MANAGEMENT SYSTEM

BY

AKPOJOTOR OMOGHENE MITCHELL

PSC1808773

DEPARTMENT OF COMPUTER SCIENCE

FACULTY OF PHYSICAL SCIENCE

UNIVERSITY OF BENIN

BENIN CITY

SEPTEMBER 2O23

DESIGN AND IMPLEMENTATION OF HOSTEL ALLOCATION AND INFORMATION MANAGEMENT SYSTEM

BY

AKPOJOTOR OMOGHENE MITCHELL

PSC1808773

A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE, FACULTY OF PHYSICAL SCIENCE, UNIVERSITY OF BENIN, BENIN CITY

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A BACHELOR OF SCIENCE (B.Sc.) DEGREE IN COMPUTER SCIENCE

SEPTEMBER 2O23

CERTIFICATION

This is to certify that this project work was carried out **by AKPOJOTOR OMOGHENE MITCHELL** with Matriculation number **PSC1808773** under my supervision in the Department of Computer Science, Faculty of Physical Sciences, University of Benin City, Benin City.

PROF. A. A. IMIANVAN **DATE**

Project Supervisor

APPROVAL

This project work is hereby approved in partial fulfilment of the requirements for the award of Bachelor of Science (B.Sc.) Degree in Computer Science of the University of Benin

PROF. MRS A.O EGWALI **DATE**

Head of Department

DEDICATION

I dedicate this work to God, for giving me the strength and guidance to properly carry out and complete the work and also for his protection throughout my time in the University of Benin

This work is also dedicated to my parents, for making this journey as possibly easy as they could, for encouraging me and guiding me.

ACKNOWLEDGEMENT

I am profoundly grateful to God for guiding me through my entire academic journey.

I extend immeasurable thanks to my parents for their unwavering support, care, and guidance throughout the duration of this project and my academic journey. I also want to express my gratitude to my siblings and friends who have offered their support and attentive ears during my moments of vulnerability. May God, in His infinite mercy, shower blessings upon all of you.

To my project supervisor, Prof. A.A. Imianvan, I owe a debt of gratitude for your extraordinary patience, unwavering motivation, and invaluable support and guidance during my tenure at the University of Benin.

I extend special thanks to the Head of the Department of Computer Science, Prof. Mrs A.O Egwali, and my project coordinator Dr. Mrs. R.A. Usiobaifo. Additionally, I want to express my deep appreciation to my esteemed lecturers in the Department of Computer Science, including Prof E.A Onibere, Prof (Mrs.) S.C Chiemeke, Engr. Prof. F.A.U Imouokhome, Prof (Mrs.) V.V.N Akwukwuma, Prof. (Mrs.) F. Egbokhare, Dr. S.S. Daodu, Dr. Aladeselu, Mr. E.D. Nwanze, Mr.P. Imiefoh, Mr. E.E. Obasohan, Mr. S.O.P. Oliomogbe, Mr. N.E.O. Agbonlahor, Prof. G.O. Ekuobase, Dr. F.O. Chete, Prof. F.I Amadin, Prof. K.C. Ukaoha, Prof. (Mrs.) A.O.Egwali, Prof.(Mrs.).S. Konyeha, Dr. Mrs. A.R. Usiobaifo, Prof. (Mrs.). V. Osubor, Mrs. M. Iyawe, Mr. O.O Igene, Dr. J.C. Obi, F.O. Oliha, PhD, Mrs. E.P. Ebietomere, Dr. (Mrs.) R.O. Osaseri, Mr. E.C. Igodan, Dr. E. Nwelih, Dr. (Mrs.) Aziken, Mr. K.O. Otokiti, Mr. I.E. Obayagbona, Miss L.Usiosofe, Mrs. T. Agenmomen, Dr. Odetayo, Mr. Idehen, Mrs. Izebizuwa, for their devoted tutoring and mentorship. Your collective efforts have not only equipped me with the necessary skills for my professional journey but also imparted crucial life knowledge. May God bless each and every one of you.

ABSTRACT

This project is based on the Design and Implementation of an Hotel Allocation and Information Management System which could be useful to Universities and Institutions that still make use of the manual method of allocation hostels to students. It evolved from the manual file record system used to store hostel details, room details, student records, hostel allocation and other data in the hostel. With the help of the internet, computers and other mobile devices are used to manage hostel records and help the administrator effectively access these records. This project aims to create an efficient and reliable hostel management system that can do all the manual work with ease. In order to achieve its aim and objectives, a database was created, and design steps were taken using the iterative and incremental model. This project is carried out using PHP, MySQl with other frontend and backend technologies using Visual Studio Code as the Integrated Development Environment.

The Hostel Management System created is useful in helping hostel administrators, record officers monitor and manage their respective operations properly. It is also a faster and more efficient way of keeping hostel records and monitoring them.

Keywords: Allocation, Application, Data, Database, File Management, Hostel

TABLE OF CONTENT

LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

"Online Hostel Management System" is software developed for managing various activities in the hostel. For the past few years the number of educational institutions has been increasing rapidly. Thereby the number of hostels is also increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who is running the hostel and software's are not usually used in this context. This particular project deals with the problems of managing a hostel and avoids the problems which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of a computerised system that will be compatible with the existing system with the system which is more user friendly and more website oriented. We can improve the efficiency of the system, thus overcoming the drawbacks of the existing system.

The hostel facility management software is a user-friendly application package specifically designed to automate, coordinate and look after all the processes of managing hostel facilities. It is useful especially in large educational institutions with college hostels, school hostels, and organisations like the military, large corporations and establishments with working employees' hostels. All the functions that hostel management entails can easily be managed by hostel management software. (Choudhury et. al, 2017).

The developed system overcomes the drawbacks of traditional methods of hostel management; it is more user-friendly, graphical-user-interface oriented, reliable, efficient and secured with access control mechanisms.(Ayanlowo et. al., 2014)

This system is designed in favour of the hostel management which helps them to save the records of the students about their rooms and other things. It helps them from the manual work from which it is very difficult to find the record of the students and the mess bills of the students, and the information about those who had left the hostel years before. This system gives an idea about how a student and fee details, room allocation, mess expenditure are maintained in a better way. The

hostel management system will also contain special features like how many students are in a room, student's id and free rooms or space available. The administration has a unique identity for each member as well as student details (Baffoe, 2015).

1.2 STATEMENT OF THE PROBLEM

The growing number of students in higher institutions all over the world has posed a lot of accommodation problems on the part of students and school management. Students at the beginning of each session waste half of the semester looking for accommodation and the few hostels that exist in the universities are not properly managed, since they are using manual system, which is paper-based

The problems faced by the existing system to be solved by the Hotel Management System are described below:

1. Difficulty in maintenance of records
2. Time consuming
3. Editing of data becomes a tedious job
4. Incidence of Fraud
5. Data insecurity
6. High Data redundancy
7. Data inconsistency

1. **Difficulty in maintenance of records:** It is very difficult to maintain data records in the system as all the records are entered in the register or the prospective record books. There are chances of the record books or files in which all the Data are stored may be torn or worn out or some other damage result or files may even be misplaced.
2. **Time Consuming:** It is very time consuming and difficult to write each and every entry and exit of customers into the hotel in the register. Also it takes a lot of time if all the entries are to be repeated say to keep in another record for safe keeping. It is also time consuming

to check for data quickly. In the current system processes such as making different types of reports, preparing merit lists, and tedious calculations are examples of time-consuming processes.

3. **Editing of data:** Manually written data cannot be changed or edited once written. If there is a mistake and the administrator tried to cancel it out and write it again this would make the entire register very dirty and disorganized. If data is entered incorrectly the entire system gets incorrect while editing wrongly entered data cannot easily solve errors.
4. **Incidence of Fraud:** Fraudulent acts can be perpetuated by the staff arising from record insecurity. The continuous incidence of fraud in the hotel organization may lead to non-profitability of the business and the hotel involved may eventually fold up.
5. **Data Insecurity:** As the data is stored in files or registers, it is not a secure place, As the storage media here are files and books or registers, there are chances of getting this storage media lost, torn, or it may go in the hand of the wrong person which can destroy the database or it can also be destroyed accidentally. Also in the system, data should be shown to the person according to his position on the establishment; everybody should not be allowed to use all the data.
6. **High Data Redundancy:** As mentioned in the current system. Due to maintenance of so many registers there is a high redundancy of data i.e., same data is recorded repeatedly.
7. **Data Inconsistency:** Here as mentioned in the above step the same information is written in more than one place that creates the problem, where there is a change or deletion in the recorded data.

1.3 AIM AND OBJECTIVES

The aim of this research is to design and implement an online hostel management system that could be useful to universities still using the manual method of hostel allocation.
The specific objectives are to:

1. Identify and model the requirements specification to develop the system.

2. Design and develop a central database system that would serve as hostel database, which will contain all the records related to Hostel.
3. Providing data integrity of the student using approved login.
4. To add new existing hostels and rooms to the system
5. To generate report on hostel occupancy
6. Enable student get current information about hostels

1.4 SCOPE OF THE STUDY

This project, which is web-based, automates the student's hostel application process, allocates rooms to students, maintains the integrity of the information being processed by using password to limit access to only approved individuals. The system also creates an automatic database for the storage of students and staff information.

1.5 SIGNIFICANCE OF THE STUDY

The new system designed for computer driven student's hostel management and allocation. Its significant are;

1. The system will enable the student get their hostel room before the lectures will commence every semester
2. The system helps to know the particular student occupying a particular room each semester
3. It will improve how the hostel is been managed
4. It gives the actual number of the students in the hostel statistically.
5. The system will state hostels that are available for booking.
6. It will help new student to get current and vital information about any hostel of their choice

1.6 DEFINITION OF TERMS

1. Hostel: A hostel is a home for students when staying away from their home. It has large well ventilated dormitories and single rooms and is situated in the school premises.
2. Management Information System (MIS): Is a system that provides information needed to manage organisations effectively.
3. Hostel Management System: is a software that manages the activities of staff and students in the hostel, the system enables students to apply online for hostels and the system allocates rooms to the students in the hostels.
4. Data: Historically, data referred to known facts that could be recorded and stored on computer media. These are facts made up of text, numbers, images, and sounds.
5. Databases: A systematically arranged collection of computer data, structured so that it can be automatically retrieved or manipulated. It is also called Databank.
6. Computer Program: This is a set of instructions that guides the computer on the action to perform.
7. System: system is a combination or arrangement of parts to form an integrated whole. A system includes an orderly arrangement according to some common principles or rules. (Emmanuel, 2015)

CHAPTER TWO

LITERATURE REVIEW

2.0 MEANING OF HOSTEL

In some countries the word hostel is specifically used for the accommodation of students and travellers. However in India and Pakistan, the hostel is believed to be a place of residence that a school, colleges or universities has, all hostels are supervised by the hostel wardens and other staff. The hostel generally consists of hundreds of students. All of them make a group of students. These students come from different ethical, social, geographical and economical backgrounds. The hostel is a place where students stay to pursue formal education away from their homes. But the concept of hostel is not only limited to place of residence, the hostel is a human practical laboratory. Therefore a hostel is not simply a place for living, it is a centre of education. Students learn as much as from their teachers as well as fellows during hostel stay. It enriches the understanding of the curriculum through analytical discussion among the students living in the hostels, and may contribute to character building as well. Students in hostels not only learn theoretical material, they also learn how to enhance their personal abilities and learn to live independently (Iftikhar and Ajimal, 2015).

2.1 IMPACT OF HOSTEL LIFE

Living away from family for a specific period of time leaves some enduring experiences in the life of the students. In this new lifestyle, students learn to live independently, and learn how to compromise with the other students and roommates (Kozaei et al., 2010).

Students living in hostels face many difficulties and hurdles such as financial crises, adjustment issues, personal helplessness, distress, changes in eating and sleep habits, and many other issues. Research suggests that Empathy, altruistic behaviour, emotional stability will be more in hostel students. Hostel environment gives an opportunity for socialisation among students (Mimrot, 2012).

There is a popular quotation “Times change people changes” it is best applicable for the hostel students. Hostel life is going to change the way a student is, its effect on the personality behaviour, thinking, and dressing as well. In hostel students are surrounded by other students of about the same age as they are, all those students have different characteristics. In hostel life all students have to adjust to the other students staying in the hostel (Thakkar, 2012).

2.2 HISTORY OF HOSTEL

Hostelling has come a long way since the German schoolteacher Richard Schirrmann began the youth hostel movement in 1909. He saw the need for overnight accommodation that would allow school children the chance to travel and experience other parts of their country safely and affordably. As a result, the world’s first Jugendherberge (youth hostel) was opened in 1912 in the beautiful Altena Castle, located on the Lenne river valley, western Germany. There is still a hostel within the castle grounds today and it is possible to visit the original rooms which were used by the very first youth hostellers. More and more hostels appeared and by 1919, Schirrmann had founded the nationwide German Youth Hostel Association.(Panaligan, 2014)

2.3 MANAGEMENT INFORMATION SYSTEM

In the last two decades, Information Technology has emerged in the world affecting our personal, social and public life and has made a significant impact on the quality of life. It handles data and information represented in digital, text, image, graphics or voice media and deals with communication, storage, processing, and printing or exhibition in the manner and find as desired by the users. It is an outcome of the advances in telecommunication and computer technology.
Management Information System was written to provide a real-world understanding of Information Systems for business and computer science students. By teaching students how to use and manage information technologies to revitalise business processes, improve business decision making and gain competitive advantages. This text establishes a firm foundation in information systems on which students can build successful career whether they find themselves formulating strategic plans in executive suits, optimising operations in business or factory floors, fine tuning plans for their own entrepreneurial ventures, designing information system to optimise their

organisation's needs, or creating valuable new information products in any number of industries.(O'brien & Maraka, 2006).

2.4 HOSTEL MODULE

Hostel management module has features of efficiently and effectively managing the entire residential facility in the institute. It has reduced the staff & paper works and improved workflows. Hostel Management System has helped the accommodation office in saving the human resource as compared to the previous system. All the edited information or updated information will show in the HMS immediately.

Through the usage of this system, they can easily manage the room details, student records, allocation of room and hostel information. Besides, repetition can be easily avoided. It also has reduced that data redundancy and any inconsistency of data. The accommodation office uses Hostel Allocation Management System to key in all the details of the students who are staying in the hostels. This system is mainly used to do room bookings. Reports in regard to the room allocation and room availability are provided too.(Omopariola and Tirimisiyu , 2015)

2.5 OBJECTIVES

The objective of the proposed system is to help automate hostel management activities. The system which will consist of two modules; Administrator Module and Student Module should have individual access. For effective functionality, the program needs to include some basic features:

Allocation and checking of room availability: This is one of the major aspects of HMS which the current system lacks, the students have to walk up to their housekeepers and porters for enquiry about their room allocation which is a waste of time.

Administrator module: This module should be able to manage the main data and information. Other activities like:

Login in as an Admin: Only the authorised user is allowed access to the portal with a user account and password for verification.

Reject applications: Application of students who are not qualified, unauthorised or haven‟t paid the required fees will be rejected by the admin.

Make broadcasting messages: These broadcast messages are used to inform the students on any important information about the affairs of the hostel.

View hostel applications: The system should also allow the staff to view the hostel applications. View and reply the complaints of the students: Student complaints should be able to be viewed and replied to by the admin.

Add and delete from the database: name or details of a student can be deleted by the staff. Broadcast message: The relevant person should be able to send a message/ announcement to the students.

Student Module: Students should be able to check room status and other activities like:

Login to Student Profile: Only authorised 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 allowed to make few changes in case of errors when registration.

Change Password: Students can change or update their password by entering old and new passwords. This is implemented to enhance flexibility incases where a user might forget his/her password.

Checking Broadcast message: Students can check a broadcast message sent by the portal/staff.

2.6 ANALYSIS OF THE EXISTING SYSTEM

In different universities, there are various mechanical methods in which rooms could be distributed evenly to students. The most common method used follows steps;

1. Getting the total number of halls available.
2. Taking not of the maximum capacity of each hall
3. Taking note of the number of rooms available in each hall
4. Taking note of the available bed spaces in each room

Most students are allocated based on the first room in the halls, but levels and course of study are also taken into consideration, in some situations, students offering the same courses or on the same level are not allowed to stay together in the same room, while some students are given rooms based on health issues, whatever happens, when the first room allocated is filled up, we‟ll have to move to the next room, till all the rooms are filled up, then we move to another hall of residence.

2.7 LIMITATIONS OF THE EXISTING SYSTEM

During a review of the existing system, there are some drawbacks in the allocation of rooms, record management and other activities.

1. Record management and searching is a very difficult job.
2. Lodging of complaints regarding hostel facilities.
3. The process of checking of room allocations is tedious

The development of the new application will eradicate all these drawbacks. The development of the application would ease the allocation of hostels to the students.(Olawuyi, 2020)

2.8 REVIEW OF INFORMATION SYSTEM

Information systems which are a collection of multiple pieces of equipment are used by enterprises and corporations to interact with their customers, perform operations and carry out their marketing campaigns. It can also be used by individuals who rely on the Information System to interact with friends on social networks and other day-to-day activities. A good example is the database management system (DBMS) which is a combination of software and data that makes it possible to organise and analyse data.

2.10 RELATED WORDS

The name of this project is Automated Student Accommodation Booking System which is proposed by Mr. Choy Shao Keat. The main purpose of this project is to develop a web-based system that can resolve current accommodation registration issues that are facing UTP students. Besides, it also aims to automate the manually done task to reduce UTP Residential Village Management Team's workload. Evolution of technology has allowed digitalization of manually done activities onto digital platforms, thus saving time and resources. In the past few years, many universities have started to digitise their student accommodation booking activities by implementing online booking systems. Hence, the literature review presents studies that have been conducted in this area and similar systems that are available in other universities. These studies allow the author to brainstorm ideas as well as enhancing the features that are already available on these systems. Furthermore, the methodology that has been chosen for the development of this system is Agile methodology. The reasons for choosing this methodology is to achieve higher product quality and reduce risk of project failure. Scrum meetings and sprint review in Agile methodology also provides a better visibility into project performance. Despite that, this report aims to clarify and emphasise the importance of the development of this project and how relevant it is to the UTP Students Community as well as UTP Residential Village Management Team. The system design is based on the existing accommodation booking system. Besides that, the room booking concept that is available in the hotel booking system will be a reference to the proposed system. The proposed system aims to provide a set of useful features to both students and Residential Village Management Team, at the same time providing a high level of user friendliness

to all users. Last but not least, the conclusion and future work will describe how this project can sustain as well as explaining the future development process that is going to be done by the author.(Choy ,2020)

M-commerce (mobile commerce) is the buying and selling of goods and services through wireless handheld devices such as cellular telephone and personal digital assistants PDA. M-commerce provides a lot of services like Mobile ticketing, Mobile banking, Mobile location based services, Mobile auctions, Mobile purchasing and so on. This represents an incredible opportunity to enable mobile devices, as a universal device for mobile commerce applications. For such applications, we normally want to choose the best hotel in prime locations, with modern facilities, clean environment and affordable rates. This can be time consuming and sometimes costly when doing this on our own or using human agents. So based on this we here propose "Intelligent Agent Based Hotel Search and Booking System ". This system here would use an intelligent agent (instead of the human agent) to perform similar search and booking activities that can improve the speed of the search and reduce cost significantly. So in summary we propose developing an agent that will move from hotel to hotel from the mobile devices like Smartphones by collecting details on the list of available facilities, price, customer experience, transportation etc and forward-feeding them back to the user's mobile phone. The implementation will be carried out using the JADE-LEAP agent development kit.(McTavish & Sankaranarayanan, 2010).

Online booking system is a booking service through wireless handheld devices such as cell phones. There are many applications in the real world that implement this system to enable a faster interface for the end-user as the world is growing in this technology era. For such applications, we want to ease the students, staff and lecturers specifically in the School of Electrical Engineering to book the available facilities. This can be time consuming when doing this on our own and data was not recorded for further action if something happened. So based on this we here proposed the “SKE Booking Hub” application. We will be using Android Studio to develop this app that can improve the speed of booking activities. Booking activities is one of the

major pieces of work in university. It is crucial especially when to do extra class or class replacement. Many individuals will be affected by the difficulties of the current manual booking system. To overcome this is by developing an automatic booking system which will work online. This project will be focusing on SKE citizens as this is a beta version or in trial mode. The system will require users to register their username and password only to get access to the main menu to start booking. We want to secure the users privacy and ease the process of registration. Furthermore, there are choices for available room or facilities, time and date selection. It is very user friendly since all the steps are straightforward and does not require any assistance. The booking database can be observed by the developers. In this project we will entitle our booking app as “SKE Booking Hub".(Yii et al., 2020)

The study focuses on exploration of knowledge for online booking systems and on the views of local students-users concerning the booking rate based on these online systems. Another perspective of this project is to investigate the decision-making process (emotion-focused) that they follow in order to choose a tourist destination via online booking systems. For the purposes of this study, three scales were administered: E-WOM and Accommodation Scale, Emotion-Based Decision-Making Scale and Trait Emotional Intelligence Scale. Survey data were collected, preprocessed and analysed based on Data Mining techniques evaluating the results. More specifically, classification and association algorithms were utilised to manage to describe hidden patterns. Findings showed how development of the Internet has significantly changed the market conditions of tourist organisations providing new tools for tourism marketing and management. It allows interaction between tourist organisations and users and as a result changes the entire process of development, management and marketing in tourism. There are many opportunities for further research in this field, because the complex nature of human behaviour, the constant changes in the environment and the various e-technologies create many chances to tourist companies for innovative activities and use of new and still unrecognised opportunities.(Halkiopoulos et al., 2020).

Online allocation studies the problem in which input information is revealed step by step, and the algorithm is required to make irrevocable decisions in each step without the knowledge of future input items. Data comes in an online fashion for certain resource allocation problems. For example, in the Google AdWords problem, keywords arrive sequentially in real time, and after observing a keyword query, Google needs to decide immediately and irrevocably what advertisement to display to maximise its revenue. In this paper, we study the problem of online resource allocation in a roommate assignment setting proposed. The objective in a roommate market problem is to match rooms to applicants under certain budget constraints. In the public massive housing program, applicants are required to fill in a form to state their preference over rooms and room-mates. The model also applies to applications such as university accommodation and conference roommate arrangement. Each person has a valuation for each room and a happiness valuation of each potential roommate. An allocation is an assignment of each person to some room, such that each room contains exactly two persons. The utility of a person is defined as the sum of his/her happiness for a roommate and valuation for the room.(Huzhang et al., 2017)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 THE METHODOLOGY OF THE WORK

The methodology adopted for this research work is object oriented methodology (OOP). We live in a world of objects. These objects exist in nature, in man-made entities, in business, and in the products that we use. They can be categorised, described, organised, combined, manipulated and created.

Therefore, an object-oriented view has come into picture for creation of computer software. An object-oriented approach to the development of software was proposed in the late 1960s. Object-Oriented development requires that object-oriented techniques be used during the analysis, and implementation of the system. This methodology asks the analyst to determine what the objects of the system are, how they behave over time or in response to events, and what responsibilities and relationships an object has to other objects. Object-oriented analysis has the analyst look at all the objects in a system, their commonalities, differences, and how the system needs to manipulate the objects. OOM of building systems takes the objects as the basis, Firstly, the system to be developed is observed and analysed and the requirements are defined. Secondly, the objects in the required system are identified e.g. students, admin, computer systems, online allocation system etc. in simple terms, OOM is based on identifying the objects in a system and their interrelationships, once this is done, the implementation of the system is done.

The basic steps of system designing using Object Modelling may be listed as:

1. System Analysis
2. System Design
3. Object Design
4. Implementation

3.1.1 ADVANTAGES OF OBJECT ORIENTED METHODOLOGY

Object Oriented Methodology closely represents the problem domain. Because of this, it is easier to produce and understand designs. The objects in the system are immune to requirement changes. Therefore, allows changes more easily.Object Oriented Methodology designs encourage more re-use. New applications can use the existing modules, thereby reducing the development cost and cycle time. The Object Oriented Methodology approach is more natural. It provides nice structures for thinking and abstracting and leads to modular design.

3.2 SYSTEM ANALYSIS AND DESIGN

Systems analysis is a process of collecting factual data, understanding the processes involved, identifying problems and recommending feasible suggestions for improving the functionality of the system. This involves studying the business processes, entity relationships, gathering operational data, understanding the information flow, finding out bottlenecks and evolving solutions for overcoming the weaknesses of the system so as to achieve the organisational goals. System Analysis also includes decoupling of complex processes that make up the entire system, identification of data stores and manual processes.

3.2.1 ANALYSIS OF THE EXISTING SYSTEM

The population of students gaining admission to higher institutions is increasing on a yearly basis. This is putting enormous pressure on the facilities in these institutions. Adopting the conventional manual scheduling methods to the facility management job is the common practice in most institutions here in the developing world. This method is characterised by numerous drawbacks, some of which are human error, low security, data redundancy, difficulty in management, difficulty in data update, difficulty in record keeping, difficulty in data recovery in case of disaster etc.

3.2.2 ADVANTAGES OF EXISTING SYSTEM

1. Power supply does not affect the operation of the current system.
2. The current system can be used by both computer literates and non-computer literates.

3.2.3 DISADVANTAGES OF EXISTING SYSTEM

The existing system is characterised but not limited to the following inefficiencies:

1. The current system makes the retrieval of information very difficult because of the large volume of file one has to sort through to retrieve or have access to one's file.
2. The current system lacks adequate security because unauthorised users can have access to information which makes it inefficient.
3. The current system is vulnerable to natural disasters like flood, fire outbreak and rodent attack of files which will cause loss of information.
4. The current system lacks a computer-based database for the storage of files which makes these files occupy the physical storage space.
5. Lots of time is devoted to the filling of forms in logic for easy retrieval of information.
6. There is insufficient manpower to cope with the growing population.

3.3 ALTERNATIVE SOLUTION TO THE PROBLEMS IDENTIFIED

The alternative solution to these problems is development of an online hostel management system; the hostel management system will eliminate the problems encountered in the manual system. If implemented, it will play a great role such as:

1. **Increase efficiency:** the computerised system formulates accurate efficiency, faster and effective way of processing hostel activities, with the intervention of computers.
2. **Storage:** the new system provides a better means of information storage, all records related to the hostel are stored on a centralised database and encrypted to avoid unauthorised access.

3. **Error free:** the new system with the computer intervention in processing, errors will be avoided or eliminated.
4. **Speed:** the new system offers the students affairs officer and the management an opportunity to retrieve and sort files in the shortest possible time compared to the manual method.
5. **Reliability:** delay is completely faced out on the retrieval of record about the hostel using the computerised system.

3.4 JUSTIFICATION OF THE PROPOSED SYSTEM

After a thorough analysis of the existing system and a careful feasibility study to find out if there is need for automation of the existing system, the adoption and implementation of the proposed system could help in overhauling the current system which is characterised by inconsistency, data security, lack of data integrity, concurrency problem and the possibility of student's file being lost on transit.

The proposed system which will run on a Server with its robust database will prevent ineligible students from applying, ensure data integrity by eliminating duplicity of information, keep track of information in the system and above all interconnect all those involved in the student's allocation/management process.

3.4.1 ANALYSIS OF THE PROPOSED SYSTEM

The proposed system which is a web-based that can be launched on the internet or run on a server is a robust system which interconnects all the departments and personnel involved in the student's management and allocation process in a network. The system also has a robust database for the storage of information in all places where student data needs to be stored.

3.4.2 ADVANTAGES OF THE PROPOSED SYSTEM

1. The proposed system will automate the hostel's allocation/management process thereby eliminating the loopholes associated with the current system.
2. The use of databases will help in easy retrieval of information and control data concurrency.
3. The use of passwords will be incorporated to maintain and ensure data security and integrity.
4. The online connection of all the departments and the relevant personnel involved in the allocation process will help users to locate and view information faster and use applications that are relevant to their roles and responsibilities.
5. The new system is cost effective because information can be accessed through web browsers rather than maintaining physical documents which will help to save money on printing, duplicating of documents as well as document maintenance overhead.

3.4.3 DISADVANTAGES OF THE PROPOSED SYSTEM

1. The proposed system will require electricity to function.
2. It will take time to train the adequate manpower required to operate the proposed system.

3.5 SYSTEM DESIGN AND SPECIFICATIONS

The system design shows the blueprint of any system that is to be developed. It gives the very detail about every component of the system that is to be built. Here the researcher gives the general outline of the final product (what could be referred to as manual).The various procedures of usage of the new system is given here, i.e. how to, what to and on what shall the system be used on. The importance of the design is to enable system designers or researchers to know the cost consequence of the product on the user and the developer. In that the effectiveness of the system will not be obsolete. (Investing much resources and having less productivity).

3.5.1 SYSTEM DESIGN

System design is the process of defining the architecture, product design, modules, interfaces and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. A designer uses the design tools to express the information and knowledge in the structure of a system that is defined by a consistent set of rules and definitions.

3.5.1.1 SYSTEM DESIGN TOOLS

System design tools play an important role in system development. A few design tools used by software designers include:

1. **Data Flow Diagram (DFD):** a data flow diagram is a graphical representation of flow of data in an information system. It is often used as a preliminary step to create an overview of the system, which can later be elaborated. The DFD is capable of depicting incoming data flow, outgoing data flow and stored data. It mentions nothing as to how data flows in a system.
2. **Unified Modelling Language (UML):** is a general-purpose modelling language for systems engineering applications. It was designed to provide a standard way to visualise the design of a system. UML offers a way to visualise a systems architectural blueprint in a diagram including elements such as: activities, individual components of the system and how they interact with other software components, how entities interact with others, how the system will run, external user interface.
3. **Systems Modelling Language (SysML):** is a general-purpose modelling language for systems engineering applications. SysML is an extension of a subset of UML using UML's profile mechanism.

3.5.1.2 SYSTEM DESIGN TOOL: UML

The Unified Modelling Language was chosen as the tool for modelling the designs for the software application. To properly design the system for implementation, selected components of UML were used: class, diagrams, activity diagrams and use case diagrams. These components were selected due to the fact

that it is self-illustrative if properly designed, it is simple and suits the nature of the system. It is also easy for end users to understand the model for the software system.

3.5.1.3 UML – USE CASE DIAGRAM

Use cases are a means of specifying required usage of a system. A use case is a list of actions or event steps typically defining the interactions between a role (an actor) and a system, to achieve a goal. Simply put, it is a description of the system's behaviour from the user's point of view with measurable result or value.

Table 3.1: Use Case diagram notations and descriptions

Object	Symbol	Description
Actor		They are the system's users. The actor could be a person, organization or external system. They perform a role in the system.
Use case		Use case is a lot of steps, typically defining interactions between an actor and a system to achieve a goal.
Relationship		Illustrates the relationship between an actor and a use case with a simple line. It illustrates the relationship between use cases

Use Case Diagram

A use case diagram is a graphical representation of the relationship between the elements of a system. A use case is also a methodology used in system analysis to define, clarify, and organise system requirements. The following are the different use case diagrams for the system:

Admin Use Case

The Admin should be able to Login to the system, interact with the dashboard and view what the system has to offer. Record Officers should also be able to view students' records in the hostel, make Posts and update profiles. The diagram is shown in *(Figure 3.0)*

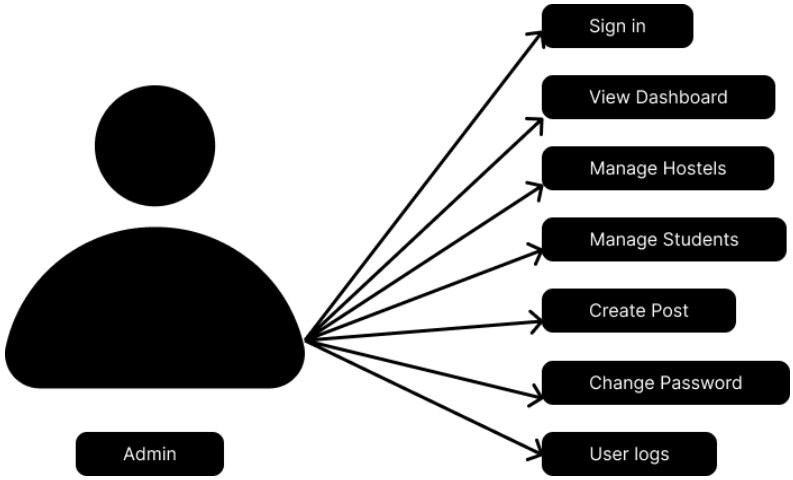


Fig (3.0) Admin Use Case

Student Use Case

The Student should be able to login into the system using their matric number, interact with the dashboard, check room availability, report complaints, report maintenance, view broadcast messages, change password and update profile.The diagram is shown in *(Figure 3.1)*

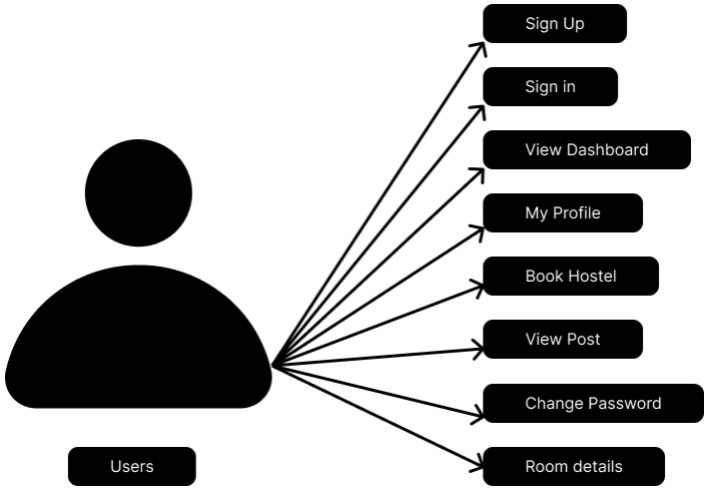
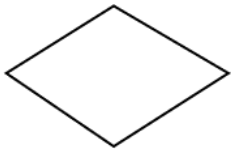
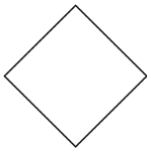
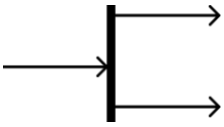
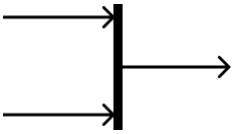


Fig (3.1) User Use Case

3.5.1.4 UML DESIGN – ACTIVITY DIAGRAM

Activity diagram is used to show the flow from one operation to another. The operation is called an activity. An activity diagram is a UML diagram that focuses on execution and flow more than implementation. The flow between them can either be sequential, branched or concurrent. Table 3.2 shows the notations used in a uml activity diagram.

Table 3.2: Activity Diagram Notation

object	symbol	Description
start / Initial node		Represents the starting or the initial point/state of an activity.
Final node		Marks the end of all control flows within the activity diagram.
Activity/Action state		Represents the activities of the process.
Decision node		Represents a conditional branch point with one input and multiple outputs.
Control flow		Represents the flow of control from one action/activity to another
Merge Node		Represents the merging of flows. It has several inputs, but one output.
Fork		Represents a flow that may branch into two or more parallel flows.
Merge/Join		Represents two or more parallel flows that may merge into one flow

The system employed the use of an activity diagram because it captures the dynamic behaviour of the system.

3.5.2 ACTIVITY DIAGRAM FOR VARIOUS USERS

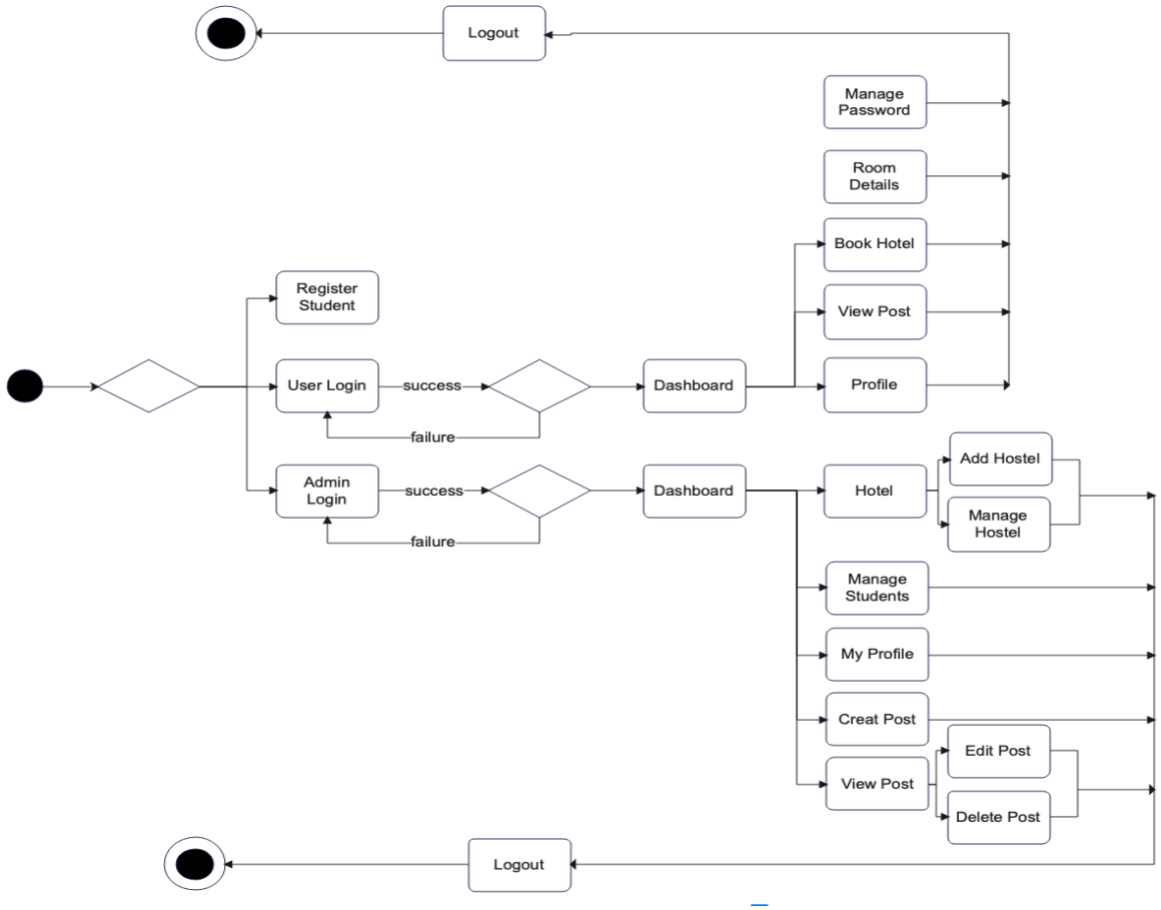


Figure 3.2: Hostel allocation and information management system activity diagram

Admin

The diagram below shows the activity for a user that is logged In as an Admin in (***Figure 3.4)***

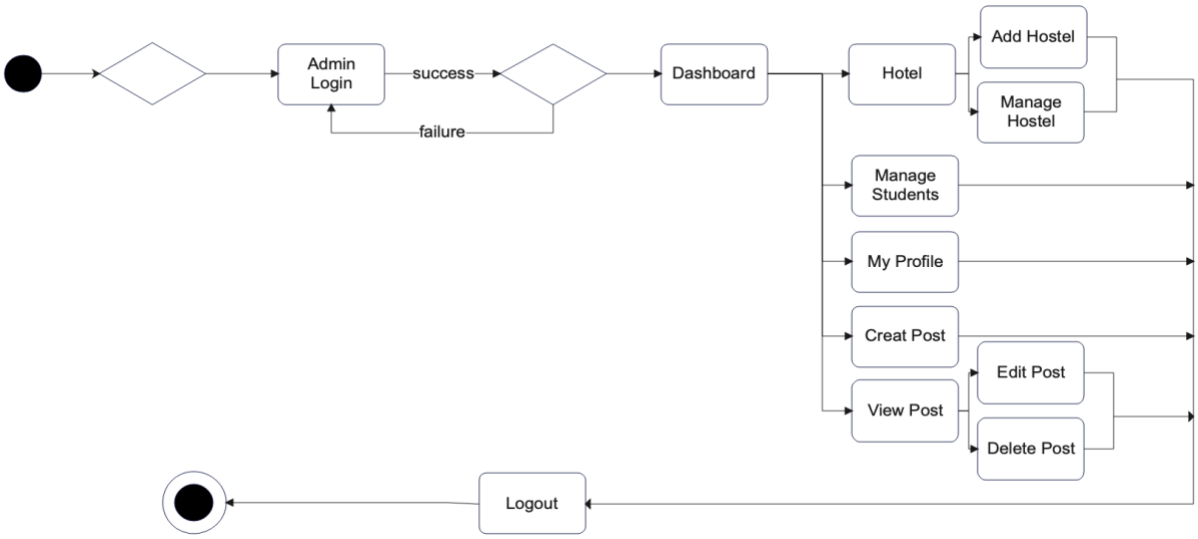


Figure 3.3: Activity diagram of the Admin

Student

The diagram below shows the activity for a user that is logged In as a student in (*Figure 3.5*).

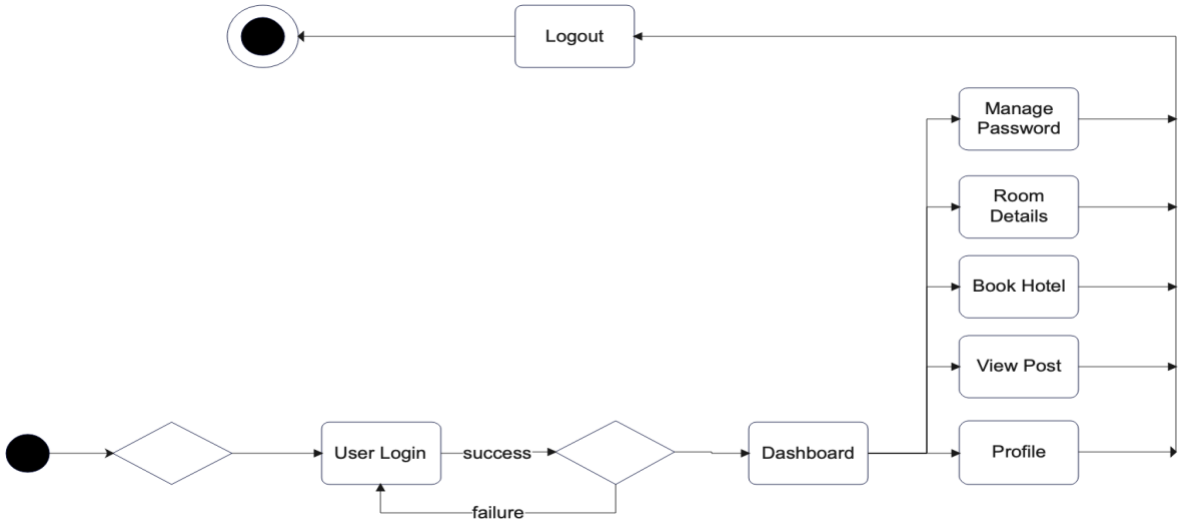


Figure 3.4: Activity diagram of the Admin

3.6 DATABASE DESIGN

A database is a collection of data. It is used for data storage and manipulation. Administrators can use the dashboard page to post any academic materials they choose, including pdfs, audios, and videos with the help of a database. The database management used for this web application is MySQL, a relational database. This database consists of five (6) relational databases.

Table 3.3: Admin

Name	Description	Type
id	Unique identification number	Int
username	Account name	Varchar
email	Account email	Varchar
password	Unique character set	Varchar
reg_date	Date of registration	Timestamp
updation_date	Date of last updated profile	Date

Table 3.4: Posts

Name	Description	Type
id	Unique identification number	Int
title	This is the title of the post	Varchar
content	Holds the body (content) of the posts	Longtext

Table 3.5: Hostelmanagement

Name	Description	Type
id	Unique identification number	Int
hostelname	This is the name of the hostel	Varchar
noofrooms	This is the total number of rooms that exists in the hostel	Varchar
fees	This is the price of each hostel	Varchar
available	This shows the number of hostel that is available	Varchar

Table 3.6: registration

Name	Description	Type
id	Unique identification number	Int
hoselname	This is the name of the hostel	Varchar
seater	This is the particular room number allocated to a student	Varchar
fees	This is the price of each hostel	Varchar
course	This is the course of study of the student	Varchar
matno	This is the matriculation number of the student	Varchar
firstName	First name of the user or student	Varchar
middleName	Middle name of the user or student	Varchar
lastName	Last name of the user or student	Varchar
gender	Gender of the user	Varchar
contactno	Contact of the user	Varchar
emailid	Amount email	Varchar
duration	Session of the user (Year)	Varchar

Table 3.7: userregistration

Name	Description	Type
id	Unique identification number	Int
password	Unique character set	Varchar
matno	This is the matriculation number of the student	Varchar
firstName	First name of the user or student	Varchar
middleName	Middle name of the user or student	Varchar
lastName	Last name of the user or student	Varchar
gender	Gender of the user	Varchar
contactNo	Contact of the user	Varchar
email	Amount email	Varchar
regDate	Date of registration	Timestamp

Table 3.8: userlogs

Name	Description	Type
id	Unique identification number	Int
userid	This is a foreign key for each user	Int
userEmail	Amount email	Varchar
logTime	This shows the time a user logs in	Timestamp

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION

This section talks about the implantation of this project, this chapter discusses the system design and analysis, it includes pictures from the application and the interfaces involved in the development of the application and also the methods used in the development, the whole object is building a system which are a set of things working together as. parts of a mechanism or an interconnecting system, it is a set of interacting or interdependent components forming an integrated whole or a set of elements to other elements.

Some characteristics of a system include:

1. A system has a particular behaviour; it contains processes that transform inputs to outputs.
2. A system has interconnectivity, the parts and processes are connected by structural and behavioural relationship

4.1 SYSTEM DESIGN OBJECTIVE

The hostel management system is a software application that would offer help and assist the students in an effective way, which would give them less stress and trouble in the allocation of their hostel rooms.

4.2 SYSTEM DESIGN

The system design is majorly the implementation of the application to be developed and this is divided into 3 parts:

1. Logical design
2. Conceptual design
3. Physical design

This model was developed indicating all the vital steps the system development went through. In this step, used case tools like flow charts and data flow diagrams were used. These models were vital and important in the development of the system. This stage included the graphical user interface design, input design in which the user inputs in data, the output design which displays the results of what a user would or have entered and database design where data is stored for easy

4.2.1 LOGICAL DESIGN

This model was developed indicating all the vital steps the system development went through. In this step, used case tools like flow charts and data flow diagrams were used. These models were vital and important in the development of the system. This stage included the graphical user interface design, input design in which the user inputs in data, the output design which displays the results of what a user would or have entered and database design where data is stored for easy management. These designs provided the technical blueprint from which the system was built. A combination of layout tools such as hand sketches and CASE tools were used to come up with both input, output designs and the view of the system. The database management system employed was MySQL.

4.2.2 CONCEPTUAL DESIGN

This was just a description of the proposed system in terms of a set of integrated ideas and concepts about what the system is expected to do, behave and look like, that would easily be comprehended by the users in the manner intended. This process was started by identifying several entities required by the users and also identifying all the important relationships that exist between the entities. The result was the model of the user interface that has been developed.

4.2.3 PHYSICAL DESIGN

This was the physical realisation of logical design. Forms, reports and tables were created and relationships defined among these tables and security constraints set. During the physical the expected schemas were translated into actual database structure.

4.3 SYSTEM REQUIREMENT AND MODEL SPECIFICATION

To be used efficiently, all computer software needs certain hardware components or other software resources to be present on a computer. These prerequisites are known (as computer) system requirements and are often used as a guideline as opposed to an absolute rule.Below are the requirements for the proposed system:

4.3.1 NETWORKING REQUIREMENTS

As stated earlier, it is expected that the system is used in a networked environment. By design, it is expected that at least on a machine with a minimum of the specification enumerated above would be in each of the Students Affairs‟ department, the Students representative council and the Health centre. In addition, all these systems are networked in a local area network (LAN). This may be through optic fibres or radio links. Coaxial cables may not be appropriate regarding the distance between these sections of the institution. With coaxial cables, attenuation sets in at a certain distance.

Table 4.0: Software Requirement

Components	**Requirement**
Operating System	Microsoft window XP, Vista, 7, 8, and 10, Linux, macOS
Programming Languages and Frameworks	PHP, HTML, CSS, JavaScript and Bootstrap
Database Management system	MySQL
Integrated Development Environment(IDE)	VS Code
Web Server	XAMPP, MySQL server, Apache HTTP server
Browser	Google chrome, internet explorer, Firefox, safari etc.
Photo editing software	Figma

Table 4.1: Hardware Requirement

Component	**Requirements**
RAM	513mb and above
Processor	Pentium and above

4.4 FEATURES OF LANGUAGE AND FRAMEWORKS USED FOR IMPLEMENTATION

The application is designed with HTML, CSS, Bootstrap and JavaScript for the front end development while PHP is used for the back end development while MySQL is used for the database management. A brief description of the languages and framework used for the development of this web application is given below:

HTML: Hypertext Mark-up Language (HTML) is a platform independent language which can be used on any platform to create web pages with different text editors. The basis of every web site is the specification language it uses, HTML (HyperText Markup Language). It structures the sites, and the current version HTML5 can access hierarchical object models of the site, which are accessed via JavaScript. CSS (Cascading Style Sheets) organise the graphic contents of the site. (Krause, 2016)

CSS: Cascading Style Sheets (CSS) is a styling sheet language that defines the presentation of mark-up language documents like HTML. The formatting rules are applied to text, images and forms to define elements with style properties such as colours, paddings and margins. CSS uses English-like syntax statements to specify names of various style properties. One of the benefits of using CSS is that it allows responsive web designs to be developed on different platforms such as mobile platforms and desktop platforms.

JavaScript: JavaScript is a scripting language that is used to enhance the behaviour of a web page by adding functionality to the frontend, JavaScript has become a crucial factor for both browser

vendors and Web app developers. JavaScript is a scripting language that enables you to dynamically update content, control multimedia, animate images, and pretty much everything else.

PHP: PHP is a simple yet powerful language designed for creating HTML content. (Tatroe and MacIntyre, 2020). PHP is used as the preferred language for the development of this application because of the following reasons:

i. PHP results in fast load time
ii. PHP is a free and open sourced language
iii. It is cross platform compatible i.e. it is supported on various operating systems such as Windows, Mac, and Linux etc.
iv. It is flexible and can be integrated with HTML, MySQL and JavaScript.
v. It is specially designed for developing of dynamic web applications
vi. It has the ability to interface with many relational database management systems like MySQL, Oracle etc.

MySQL: MySQL is a popular open source SQL database management system that is developed, distributed, and supported by Oracle Corporation. MySQL manages a structured collection of data. A MySQL database helps you to add, access, and process the data stored in the database. MySQL stores data in separate tables. The database structures are organised into physical files optimised for speed.(Christudas, 2019) The following features make MySQL an appropriate database management system for this project:

i. It is easy to use and very secure i.e. password in MySQL are always encrypted
ii. It is a relational database management system that is free to use
iii. MySQL integrates with PHP easily i.e. it was very easy to set up when starting this project.
iv. It is available on various platforms such as Windows, Linux and Unix.

XAMPP: Xampp is a free and open source cross-platform web server stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP programming.

4.5 SYSTEM DEVELOPMENT

After laying the foundation of the system's design in chapter three, we turn our attention to the critical aspect of system development. This phase involves the actual implementation of the proposed design through rigorous coding techniques. The system requirements and model specifications, meticulously outlined earlier in this chapter, serve as the guiding principles for the development phase. They provide a comprehensive blueprint that ensures the system meets its intended objectives. As we embark on this development journey, we adopt a structured approach, addressing each system window or form with precision and attention to detail. This granular focus ensures that every aspect of the system is properly crafted. Each system window or form is treated as a unique entity, warranting a tailored approach to development. This allows us to cater to specific functionalities and user interactions, resulting in a cohesive and seamless user experience. The development phase is characterised by a hands-on engagement with programming languages, frameworks, and libraries. This is where the system's logic is defined, algorithms are implemented, and data flow is orchestrated to achieve optimal performance. By breaking down the development process window-by-window or form-by-form, we not only streamline the coding efforts but also maintain a clear view of progress, enabling timely adjustments and optimizations. The hard-core coding involved in this phase is the backbone of the system's functionality. It encompasses tasks such as database integration, user interface design, input validation, and error handling, all of which are crucial in delivering a robust and reliable system. As we navigate through the development phase, we emphasise not only the technical proficiency but also the adherence to best practices and coding standards. This ensures that the resulting system is not only functional but also maintainable and scalable in the long run.

Home Page

This is the welcome page of the project, it is opened when the URL of the hostel management system, when you open this page, it will bring the User registration, User login and the Admin login interfaces. The interface is as shown in *(Figure 4.0)*

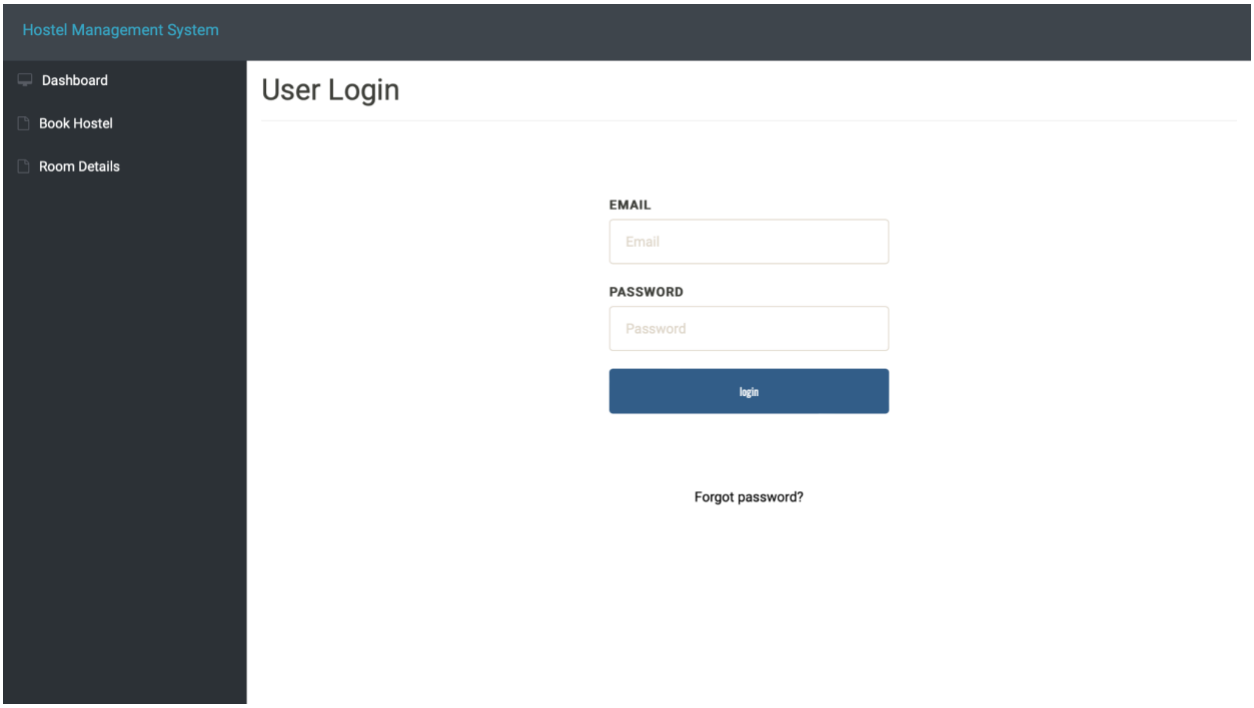


Figure 4.0 Showing the Home page

4.5.1 ADMIN MODULE

Admin login

This is the interface where the admin logs in to make posts, check the students that have book rooms and the rooms that are being booked. The interface is as shown in *(Figure 4.1)*

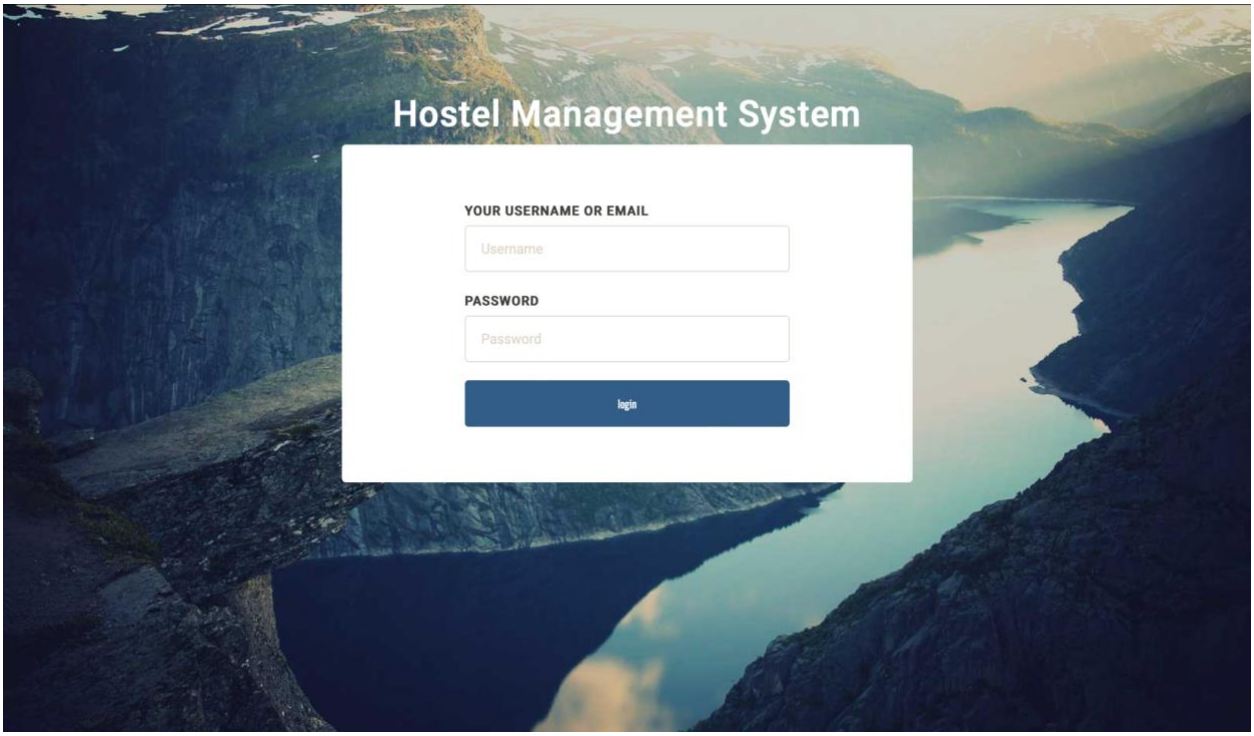


Figure 4.1 Showing the admin login interface

Admin Dashboard

This interface is accessed by clicking on the login from the admin login page, which is on the homepage, and it brings you to the place where you see the dashboard and also make posts, it comprises of the profile, Total hostels, Hostel management, manage students, user access logs, creation and manipulation of posts. The interface is as shown in *(Figure 4.2)*

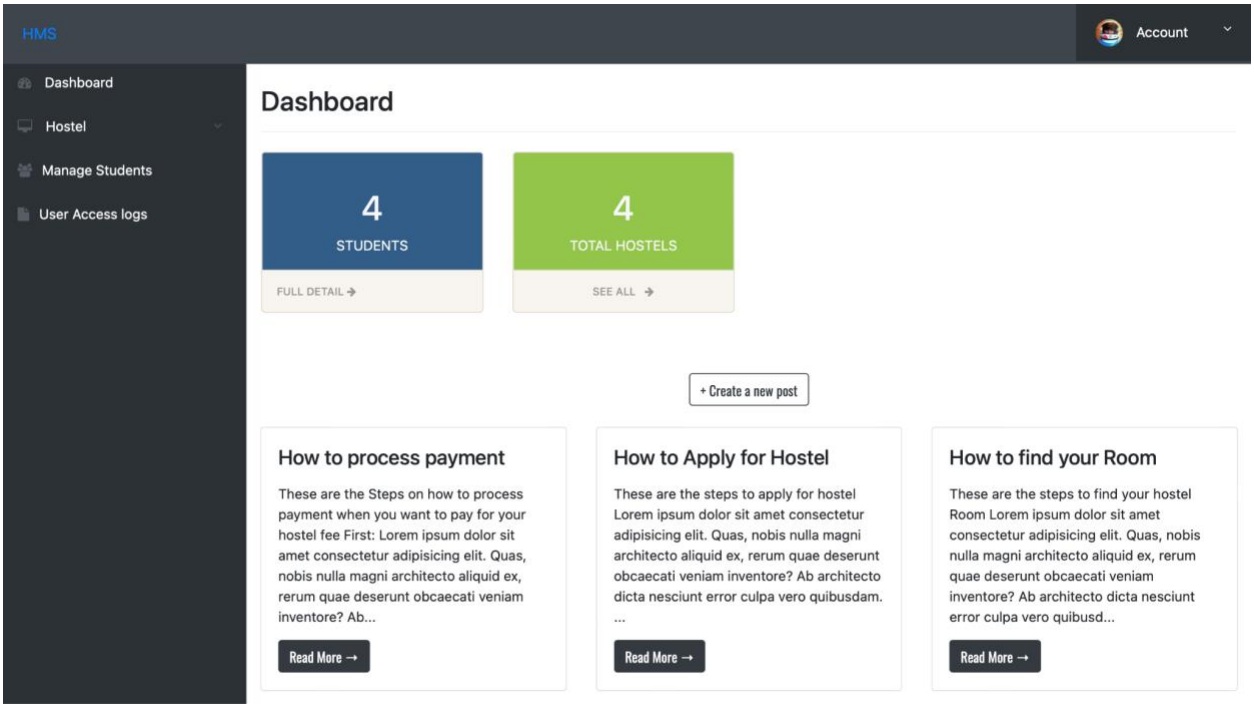


Figure 4.2 Showing the admin dashboard interface

Add Hostel

The "Add Hostel" page in the Hostel Management System serves as a dedicated interface for administrators to effortlessly incorporate new hostels and also input all necessary information about a new hostel into the system. This crucial feature streamlines the process of expanding and maintaining the accommodation offerings within the system. The interface is as shown in (*Figure 4.3)*

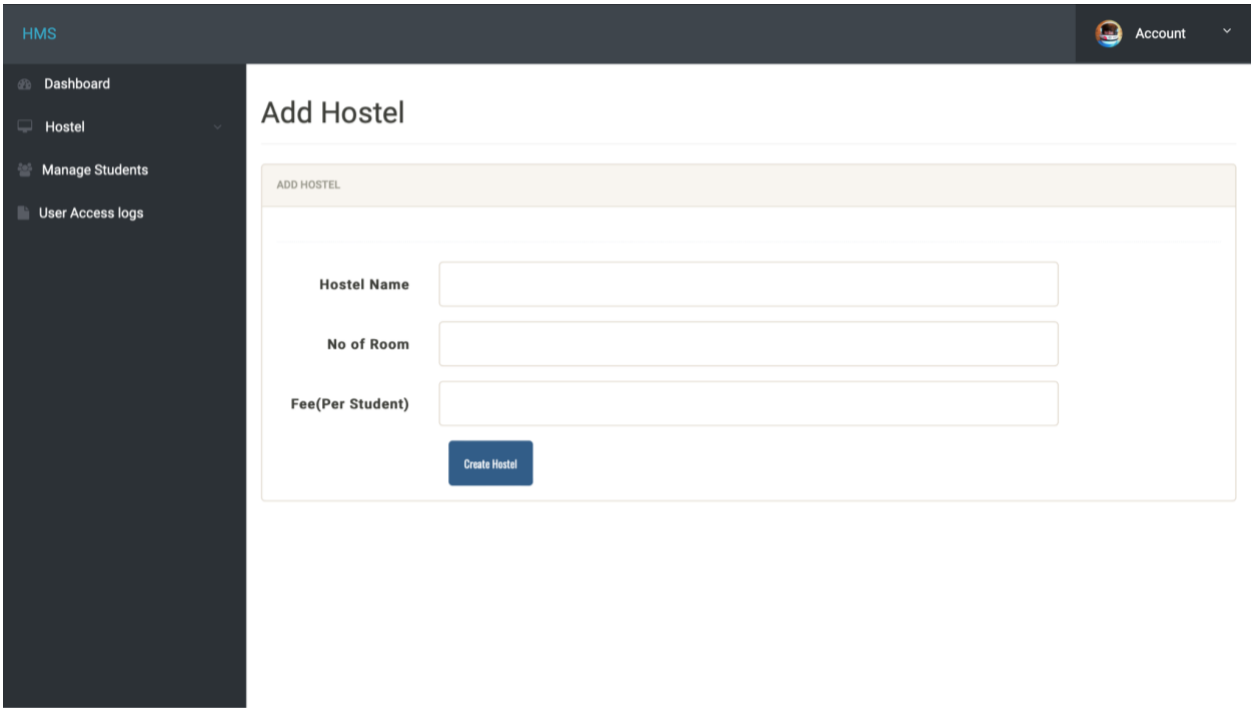


Figure 4.3 Showing the add new hostels interface.

Manage Hostel

Within this interface, administrators gain a comprehensive overview of the hostels integrated into the system. This includes those that have been successfully created and are currently operational, as well as hostels that have been allocated to students, ensuring transparency in occupancy status. Moreover, the interface also provides a clear distinction for hostels that are yet to be allocated to students. This feature enables administrators to efficiently manage the allocation process and ensure every student is accommodated appropriately. The interface's intuitive layout offers administrators a seamless navigation experience, allowing them to swiftly identify and access detailed information about each hostel. This includes vital details like hostel name, location, capacity, and current occupancy status. The interface is as shown in *(Figure 4.4)*

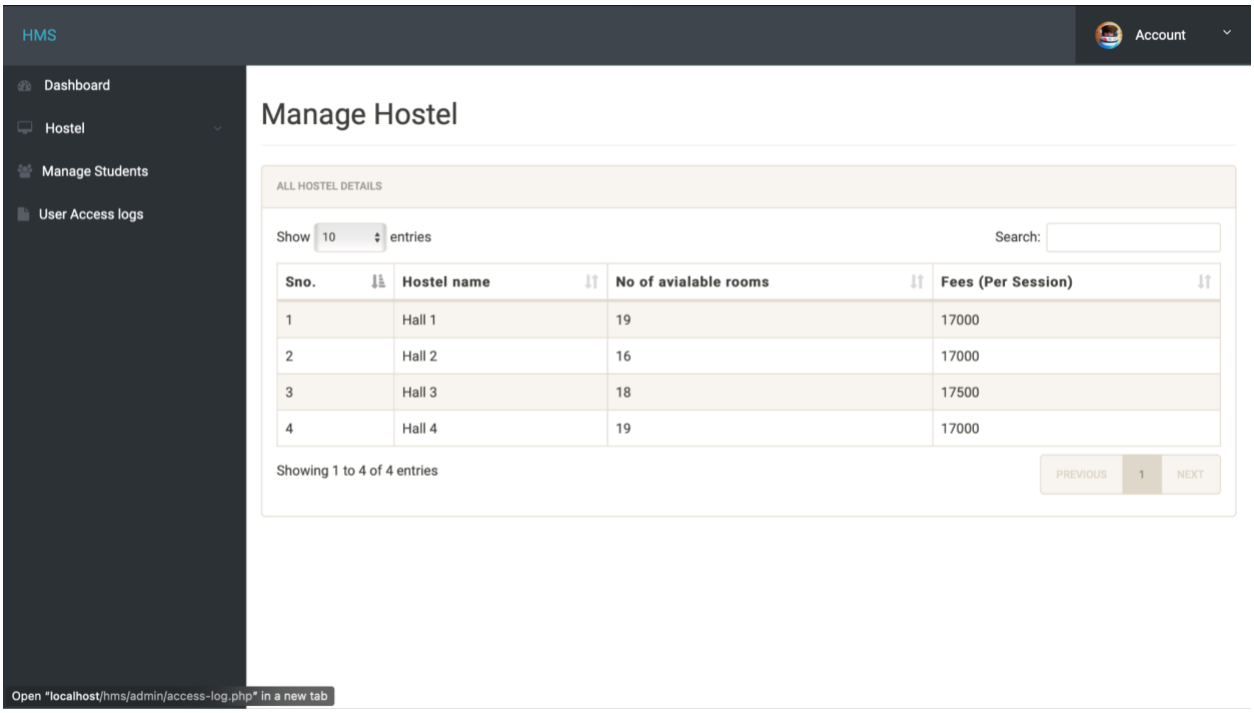


Figure 4.4 Showing managed hostel interface.

Manage Students

In this section, the admin gains a comprehensive view of all the students who have successfully booked a hostel. This feature provides crucial insights into the current occupancy status of the hostels within the system.

The admin holds the authority to make adjustments as needed. This includes the ability to deallocate a user from their assigned room, allowing for efficient management of hostel occupancy. The interface is as shown in *(Figure 4.5)*

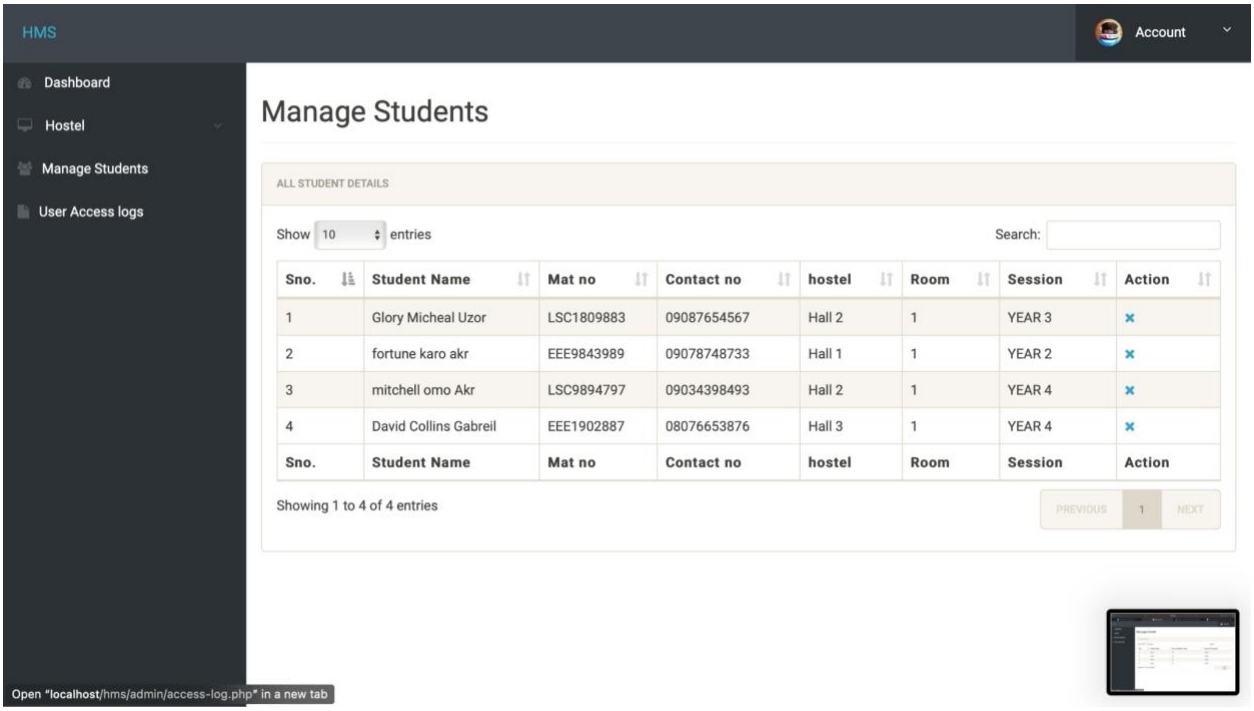


Figure 4.5 Showing the students with a hostel interface.

User Access Logs

The Access Logs feature is a valuable addition that provides administrators with a comprehensive record of user activities within the system. It offers insights into the times when users log in and log out, enhancing the system's security and accountability. By accessing the Access Logs, administrators can monitor the frequency and patterns of user interactions with the system. This information proves invaluable in identifying any irregularities or suspicious activities. The interface is as shown in *(Figure 4.6)*

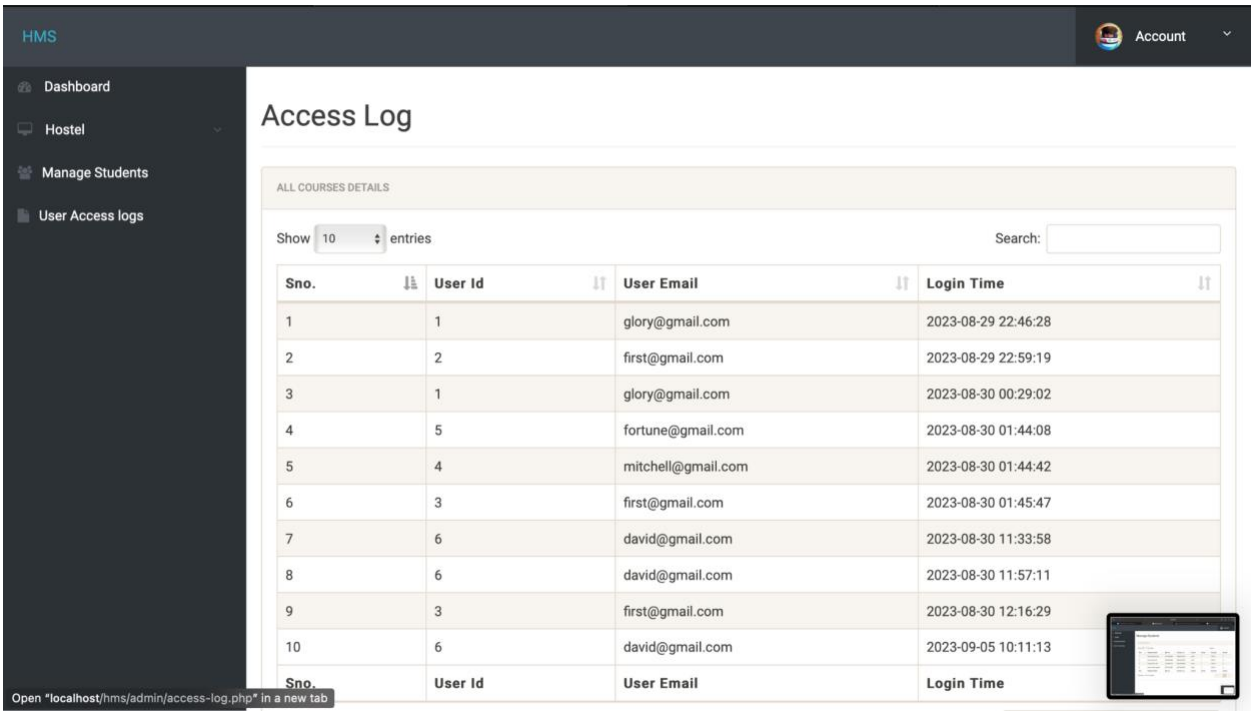


Figure 4.6 Showing the access log

Admin Profile

After logging into the interface, the admin encounters the 'Admin Profile' module. This section acts as a central hub for managing account details and settings. It displays the admin's username, which remains unchangeable, along with their registered email address for communication purposes. Additionally, the module showcases the registration date, offering historical context for the account's creation.

Integrated seamlessly within this module is the 'Change Password' interface, providing a secure avenue for admins to update their passwords as needed. This feature enhances the overall security of the system. The interface is as shown in *(Figure 4.7)*

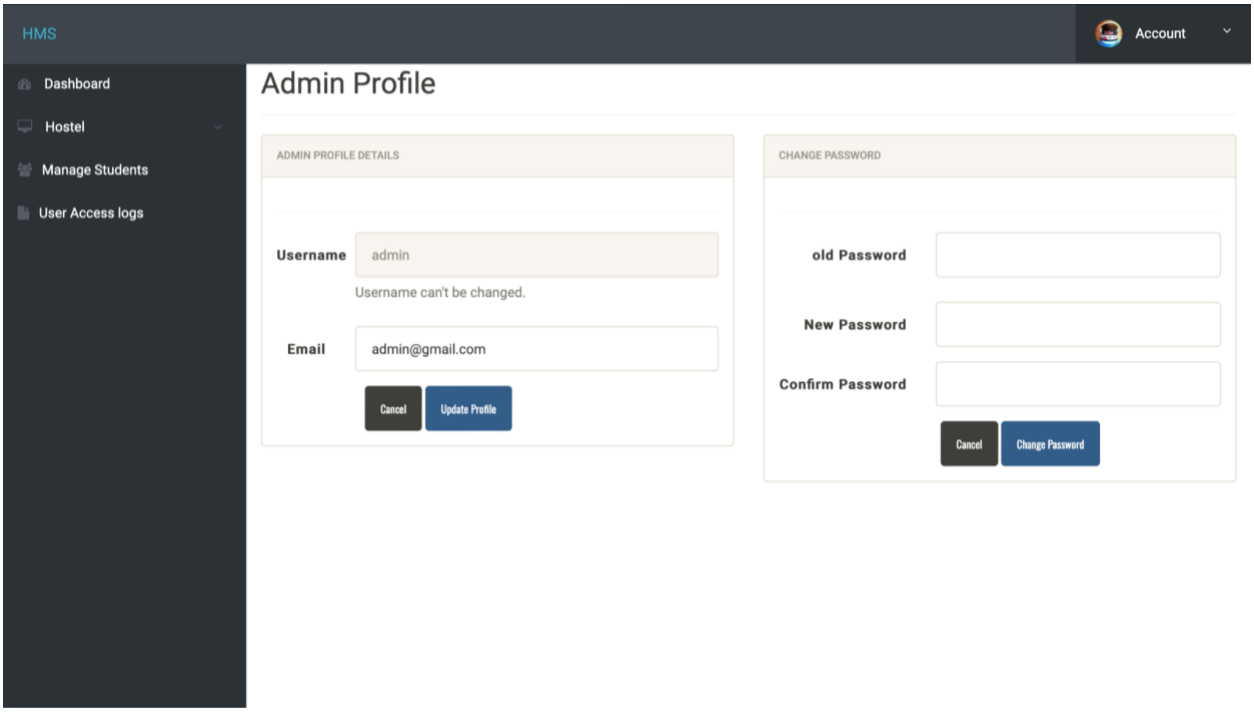


Figure 4.7 Showing the Admin interface

Create Post

The Admin Post Management Interface is a dynamic and user-friendly platform that empowers administrators to effectively communicate with students. The interface is as shown in *(Figure 4.8)*

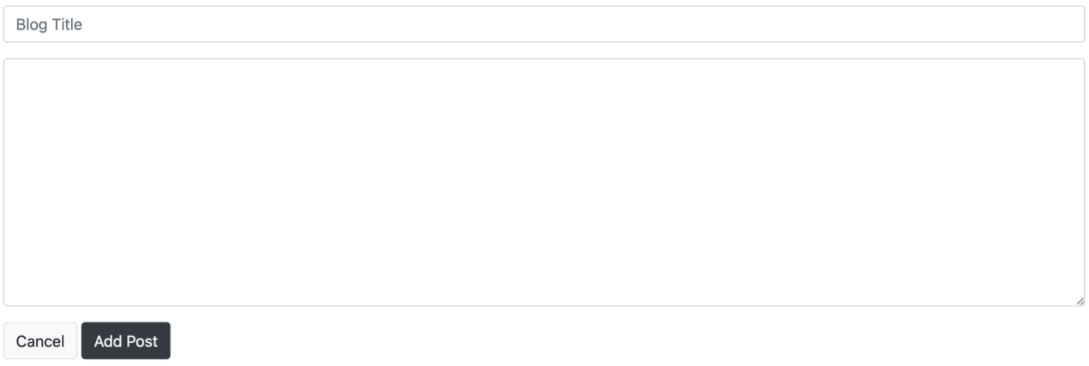


Figure 4.8 Showing the create post interface

Post

This is the page in the admin section where he alone can edit or delete the post. But can be viewed by the student. The interface is as shown in *(Figure 4.9)*

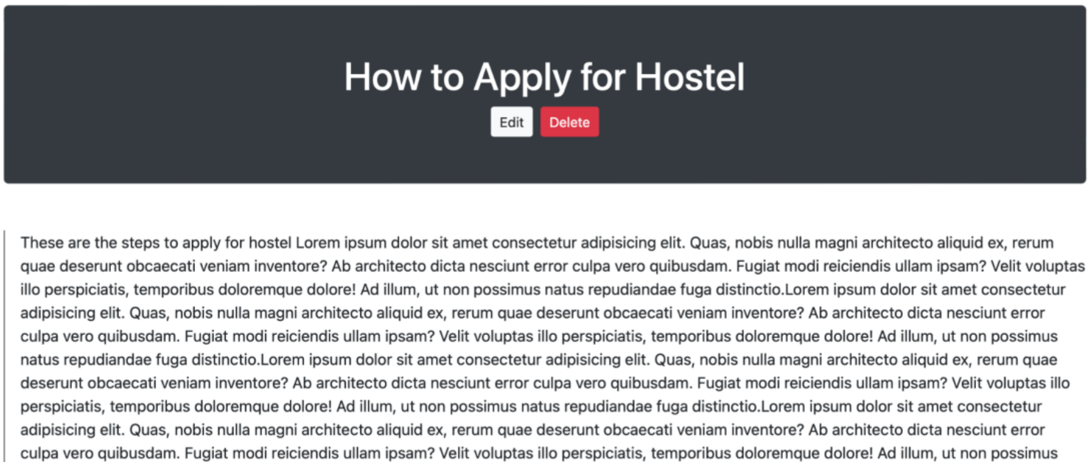


Figure 4.9 Showing the edit post interface

4.5.2 USER MODULE

Book Hostel

This page serves as the application gateway for users and students looking to secure hostel accommodations. It facilitates the submission of essential information prior to making a booking. Here, students can ascertain the availability status of their preferred hostels before proceeding with the reservation process. The interface is as shown in *(Figure 4.10)*

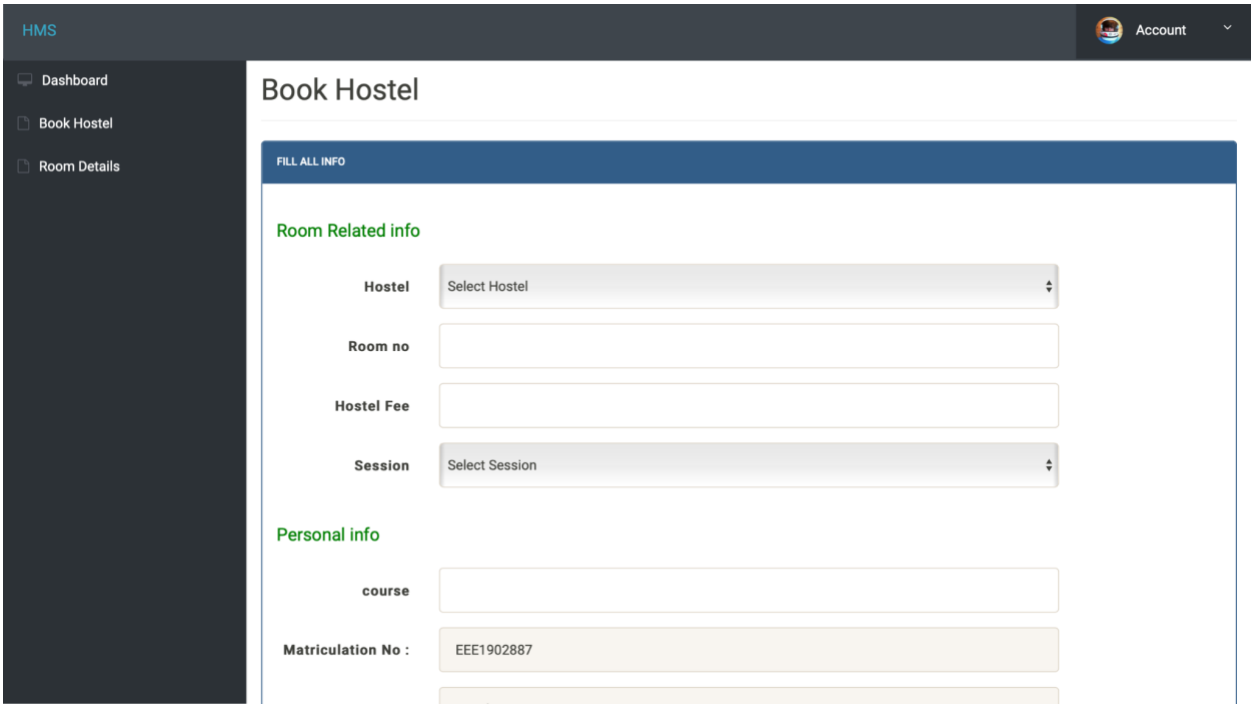


Figure 4.10 Showing the hostel application interface

Booked

This page displays when the current user has already been assigned a hostel. The image representation is as shown in *(Figure 4.11)*

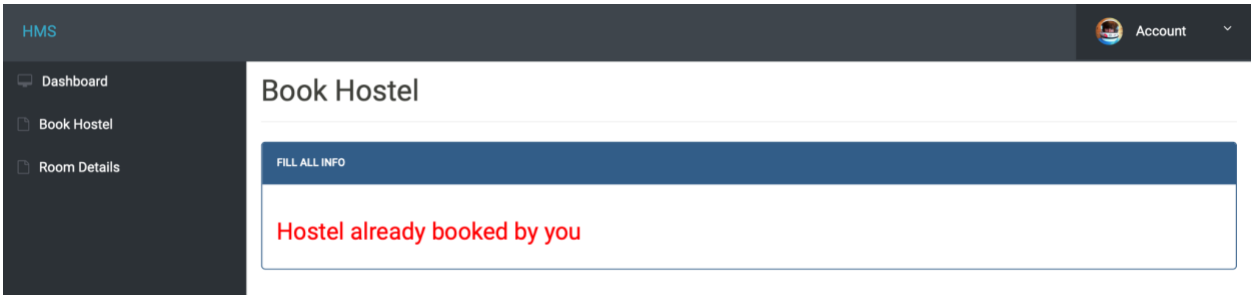


Figure 4.11 Showing the booked interface

Room details

The Student Information Interface is a crucial component of the Hostel Management System, providing students with essential details about their accommodation. It offers a comprehensive view of pertinent information, ensuring a seamless and transparent experience for the student. Within this interface, students can access critical information such as the allocated hostel fee, room number, and the name of the hostel they have been assigned to. This concise yet detailed overview empowers students with the knowledge they need to navigate their accommodation effectively. The interface is as shown in *(Figure 4.12)*

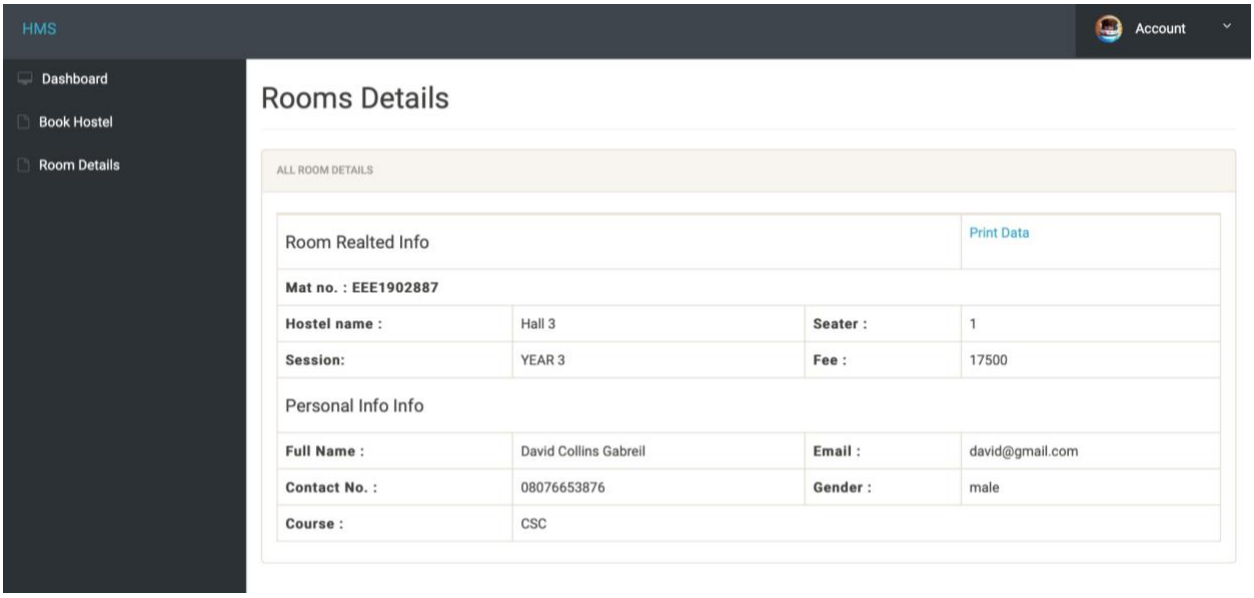


Figure 4.12 Showing the Room details interface

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 SUMMARY

This project work titled "ONLINE HOSTEL ALLOCATION AND INFORMATION MANAGEMENT SYSTEM" developed, is based on the user requirement specification and the analysis of the existing system, acknowledging the issues with the existing system leads to the new design of a computerised system which would be compatible with the existing system, and it is more user friendly and more Graphic user interface oriented. This research project was done to build an online hostel application and allocation platform for Universities still using manual method for the allocation of hostels, having a large and robust database, it has to store every information relating to the hostel management system, it also allows updating of information, as it applies to file processing and to the characteristics of databases. So also the online application of hostels by the students is made possible

The system developed allows:

1. Rooms to be allocated automatically
2. Hostel allocation to be done on a computer device through the internet
3. Human error would reduce
4. A layman would be able to use the system without issues
5. The students would be more familiar with the use of the hostel application
6. The student‟s data and information is kept safe and highly maintained

Chapter one of this project simply talks about Background to the study, the statement of problem, the aim and objectives, the scope of study, the significance of study and the definition of terms. Chapter two talks about the literature review, the existing system, etc. Chapter 3 talks about the methodology, the system analysis and design, etc. Chapter four simply talks about the implementation of the system, and here we have chapter five which brings us to the conclusion, summary and recommendation of this project

5.1 CONCLUSION

Hostel Accommodation Management System is a user-friendly computer-based system for managing hostel facilities in institutions. It has been designed to automate, manage and look after the overall processing of records of students residing in a large hostel. It is capable of managing Enquiry details, Student Details, etc. The developed system provides solutions to manual hostel management problems and also provides information such as hostel information, hostel room information, and hostel accounts information. The software offers stability, cost-effectiveness and usability. It provides the most flexible and adaptable standards management system solutions for hostels. In short about the framework, the project was created utilizing HTML, PHP, JavaScript and MySQL in light of the prerequisite detail of the user and the research of the current framework, with adaptability for future improvement. The functionality of the present programming requires a proper approach towards programming advancement. This Hostel administration website is intended for individuals who need to handle different activities in the hostel. As from last few years‟ numbers of colleges/universities are increasing and so is the number of students which require an automated system which can reduce human effort and make administration easy and in a more technological way.

5.3 RECOMMENDATION

I would like to recommend that other people and associations to make further research and look into this problem very well, because as the day goes by, new problems arises, therefore we need new solutions to tackle these problems that are likely to come up, I would also recommend that people should try using other methods to solve this problem so that there can be alternative ways in which the problem can be solved without much stress.

5.4 CONTRIBUTION TO KNOWLEDGE

This project has contributed to my knowledge, by having to pick up new programming languages to solve the problem of the HOSTEL MANAGEMENT SYSTEM, it has also taught about keeping the database and having to keep and organise files for record keeping in managing the system.

5.5 LIMITATION OF THE STUDY

The limitation to this study includes

i. A computer is needed for this system to function
ii. Without Electricity this system cannot be used
iii. Without the internet, this system cannot be used
iv. A computer illiterate would not be able to use this system
v. This system does not implement the use of online payment
vi. The system does not validate if a student has paid school fees can is eligible to book hostel
vii. It does not validate if one is a student

REFERENCES

Ayanlowo, K., Shoewu, O., Olatinwo, S. O., Omitola, O. O., & Babalola, D. D. (2014). Development of an automated hostel facility management system. *Journal of Science and Engineering*, *5*(1), 01-10.

Baffoe, E. A. (2015). Hostel Management System. *Saf. Sci*, *33*(3), 1-6.

Choudhury, B., Kumar, D., Khatua, D. P., & Patro, A. K. (2017). Online Hostel Management System. *An International Journal of Engineering & Technology*, *4*(3).

CHOY, S. K. (2020). AUTOMATED STUDENT ACCOMMODATION BOOKING SYSTEM. IRC.

Christudas, B. (2019). *MySQL* (pp. 877-884). Apress.

EMMANUEL, A. A. (2015). *DESIGN AND IMPLEMENTATION OF ONLINE HOSTEL MANAGEMENT SYSTEM* (Doctoral dissertation, Department Of Computer Science, Federal University Lafia).

Halkiopoulos, C., Antonopoulou, H., Papadopoulos, D., Giannoukou, I., & Gkintoni, E. (2020). Online reservation systems in e-Business: Analyzing decision making in e-Tourism. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, *6*(1), 9-16.

Huzhang, G., Huang, X., Zhang, S., & Bei, X. (2017, August). Online Roommate Allocation Problem. In *IJCAI* (pp. 235-241).

Iftikhar, A., & Ajmal, A. (2015). A qualitative study investigating the impact of hostel life. *International Journal of Emergency Mental Health and Human Resilience*, *17*(2), 511-515.

Kozaei, F., Ayub, N., Hassan, A.S., & Kozaei, Z. (2010). The factors predicting students satisfaction with university hostels, case study, university Sains Malaysia. Asian Culture and History, 2(2), 148-158.

Krause, J.(2016). HTML: hypertext markup language. *Introducing Web Development*, 39-63.

McTavish, C., & Sankaranarayanan, S. (2010, May). Intelligent agent based hotel search & booking system. In *2010 IEEE International Conference on Electro/Information Technology* (pp. 1-6). IEEE.

Mimrot, B.H. (2012). A comparative study on the effect of residential area on the emotional intelligence of the std.10 female students staying in hostel and in residence (home). Indian Stream Research Journal, 2(11), 1-4.

O'brien, J. A., & Marakas, G. M. (2006). *Management information systems* (Vol. 6). New York, NY, USA: McGraw-Hill Irwin.

OLAWUYI, V. A. (2020). AN ONLINE HOSTEL MANAGEMENT SYSTEM.

Omopariola, K. E., & Tirimisiyu M. O. (2015). DESIGN AND IMPLEMENTATION OF COMPUTERIZED HOSTEL ALLOCATION MANAGEMENT SYSTEM,

Panaligan, J. (2014). History of hostel. *www.academia.edu*. https://www.academia.edu/9239820/History_of_Hostel

Tatroe, K., & MacIntyre, P. (2020). *Programming PHP: Creating dynamic web pages*. O'Reilly Media.

Thakkar, D. (2012). Diary of a fresher-2. Dhirubhai Ambani Institute of information and Communication, Gundhinagar. http://www. coolage.in/2012/06/02/diary-of-a-fresher-2/.

Yii, V. S., Ye, L. G., Hizal, D. A. B. S., Ayub, A. J. F. B., & Ayop, O. B. (2020). Ske Facility Booking System. *Proceedings of Electrical Engineering Capstone Showcase (EECS 2020) Agile Facility Management System*, 45-65.

APPENDIX

USER LOGIN PAGE

```
<?php
session_start();
include('includes/config.php');
if (isset($_POST['login'])) {
   $email = $_POST['email'];
   $password = $_POST['password'];
   $stmt = $mysqli->prepare("SELECT email,password,id FROM userregistration WHERE email=? and
password=? ");
   $stmt->bind_param('ss', $email, $password);
   $stmt->execute();
   $stmt->bind_result($email, $password, $id);
   $rs = $stmt->fetch();
   $stmt->close();
   $_SESSION['id'] = $id;
   $_SESSION['login'] = $email;
   $uip = $_SERVER['REMOTE_ADDR'];
   $ldate = date('d/m/Y h:i:s', time());
   if ($rs) {
      $uid = $_SESSION['id'];
      $uemail = $_SESSION['login'];
      $ip = $_SERVER['REMOTE_ADDR'];
      $geopluginURL = 'http://www.geoplugin.net/php.gp?ip=' . $ip;
      $addrDetailsArr = unserialize(file_get_contents($geopluginURL));
      $city = $addrDetailsArr['geoplugin_city'];
      $country = $addrDetailsArr['geoplugin_countryName'];
      $log = "insert into userLog(userId,userEmail,userIp,city,country)
values('$uid','$uemail','$ip','$city','$country')";
      $mysqli->query($log);
      if ($log) {
         header("location:dashboard.php");
      }
   } else {
      echo "<script>alert('Invalid Username/Email or password');</script>";
   }
}
?>
<!doctype html>
<html lang="en" class="no-js">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1, minimum-scale=1, maximum-scale=1">
   <meta name="description" content="">
   <meta name="author" content="">
```

```
    <meta name="theme-color" content="#3e454c">
    <title>Student Hostel Registration</title>
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/dataTables.bootstrap.min.css">>
    <link rel="stylesheet" href="css/bootstrap-social.css">
    <link rel="stylesheet" href="css/bootstrap-select.css">
    <link rel="stylesheet" href="css/fileinput.min.css">
    <link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css">
    <link rel="stylesheet" href="css/style.css">
    <script type="text/javascript" src="js/jquery-1.11.3-jquery.min.js"></script>
    <script type="text/javascript" src="js/validation.min.js"></script>
    <script type="text/javascript" src="http://code.jquery.com/jquery.min.js"></script>
    <script type="text/javascript">
        function valid() {
            if (document.registration.password.value != document.registration.cpassword.value) {
                alert("Password and Re-Type Password Field do not match  !!");
                document.registration.cpassword.focus();
                return false;
            }
            return true;
        }
    </script>
</head>
<body>
    <?php include('includes/header.php'); ?>
    <div class="ts-main-content">
        <?php include('includes/sidebar.php'); ?>
        <div class="content-wrapper">
            <div class="container-fluid">
                <div class="row">
                    <div class="col-md-12">
                        <h2 class="page-title">User Login </h2>
                        <div class="row">
                            <div class="col-md-6 col-md-offset-3">
                                <div class="well row pt-2x pb-3x bk-light">
                                    <div class="col-md-8 col-md-offset-2">
                                        <form action="" class="mt" method="post">
                                            <label for="" class="text-uppercase text-sm">Email</label>
                                            <input type="text" placeholder="Email" name="email" class="form-control mb">
                                            <label for="" class="text-uppercase text-sm">Password</label>
                                            <input type="password" placeholder="Password" name="password"
                                                class="form-control mb">
                                            <input type="submit" name="login" class="btn btn-primary btn-block"
                                                value="login">
                                        </form>
                                    </div>
                                </div>
                                <div class="text-center text-light">
```

```
                        <a href="forgot-password.php" class="text-light">Forgot password?</a>
                    </div>
                </div>
            </div>
        </div>
    </div>
  </div>
  </div>
  </div>
  </div>
  <script src="js/jquery.min.js"></script>
  <script src="js/bootstrap-select.min.js"></script>
  <script src="js/bootstrap.min.js"></script>
  <script src="js/jquery.dataTables.min.js"></script>
  <script src="js/dataTables.bootstrap.min.js"></script>
  <script src="js/Chart.min.js"></script>
  <script src="js/fileinput.js"></script>
  <script src="js/chartData.js"></script>
  <script src="js/main.js"></script>
</body>
</html>
```

USER REGISTRATION PAGE

```
<?php
$connect = mysqli_connect("localhost", "root", "", "hostel");
if (isset($_POST["submit"])) {
  if (
    isset($_POST["regno"]) && isset($_POST["fname"]) && isset($_POST["mname"]) &&
isset($_POST["regno"]) && isset($_POST["lname"]) && isset($_POST["gender"])
    && isset($_POST["contact"]) && isset($_POST["email"]) && isset($_POST["email"])
  ) {
    $fname = mysqli_real_escape_string($connect, $_POST["fname"]);
    $mname = mysqli_real_escape_string($connect, $_POST["mname"]);
    $regno = mysqli_real_escape_string($connect, $_POST["regno"]);
    $lname = mysqli_real_escape_string($connect, $_POST["lname"]);
    $gender = mysqli_real_escape_string($connect, $_POST["gender"]);
    $contact = mysqli_real_escape_string($connect, $_POST["contact"]);
    $email = mysqli_real_escape_string($connect, $_POST["email"]);
    $password = mysqli_real_escape_string($connect, $_POST["password"]);
    $query = mysqli_query($connect, "INSERT INTO
userregistration(regNo,firstName,middleName,lastName,gender,contactNo,email,password)
   VALUES('$regno','$fname','$mname','$lname','$gender','$contact','$email','$password')");
    if ($query) {
      $msg = "<div class='alert alert-success'>Congrations $fname $mname $lname! your account was
successfully created, please proceed to login</div>";
```

```
        } else {
            $msg = "<div class='alert alert-danger'>Sorry! Unable to handle registration, please please kindly try
again</div>";
        }
    } else {
        $msg = "<div class='alert alert-danger'>Sorry! Kindly fill the form properly first</div>";
    }
}
?>
<!doctype html>
<html lang="en" class="no-js">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1, minimum-scale=1, maximum-scale=1">
    <meta name="description" content="">
    <meta name="author" content="">
    <meta name="theme-color" content="#3e454c">
    <title>User Registration</title>
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/dataTables.bootstrap.min.css">
    <link rel="stylesheet" href="css/bootstrap-social.css">
    <link rel="stylesheet" href="css/bootstrap-select.css">
    <link rel="stylesheet" href="css/fileinput.min.css">
    <link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css">
    <link rel="stylesheet" href="css/style.css">
    <script type="text/javascript" src="js/jquery-1.11.3-jquery.min.js"></script>
    <script type="text/javascript" src="js/validation.min.js"></script>
    <script type="text/javascript" src="http://code.jquery.com/jquery.min.js"></script>
    <script type="text/javascript">
        function valid() {
            if (document.registration.password.value != document.registration.cpassword.value) {
                alert("Password and Re-Type Password Field do not match  !!");
                document.registration.cpassword.focus();
                return false;
            }
            return true;
        }
    </script>
</head>
<body>
    <?php include('includes/header.php'); ?>
    <div class="ts-main-content">
        <?php include('includes/sidebar.php'); ?>
        <div class="content-wrapper">
            <div class="container-fluid">
                <div class="row">
                    <div class="col-md-12">
```

```
                <h2 class="page-title">Student Registration </h2>
                <div class="row">
                   <div class="col-md-12">
                      <div class="panel panel-primary">
                         <div class="panel-heading">Fill all Info</div>
                         <div class="panel-body">
                            <form method="post" action="" name="registration" class="form-horizontal"
onSubmit="return valid();">
                         <div>
                            <?php echo $msg; ?>
                         </div>
                               <div class="form-group">
                                  <label class="col-sm-2 control-label"> Matriculation no : </label>
                                  <div class="col-sm-8">
                                     <input type="text" name="regno" id="regno" class="form-control"
                                        required="required">
                                  </div>
                               </div>
                               <div class="form-group">
                                  <label class="col-sm-2 control-label">First Name : </label>
                                  <div class="col-sm-8">
                                     <input type="text" name="fname" id="fname" class="form-control"
                                        required="required">
                                  </div>
                               </div>
                               <div class="form-group">
                                  <label class="col-sm-2 control-label">Middle Name : </label>
                                  <div class="col-sm-8">
                                     <input type="text" name="mname" id="mname" class="form-control">
                                  </div>
                               </div>
                               <div class="form-group">
                                  <label class="col-sm-2 control-label">Last Name : </label>
                                  <div class="col-sm-8">
                                     <input type="text" name="lname" id="lname" class="form-control"
                                        required="required">
                                  </div>
                               </div>
                               <div class="form-group">
                                  <label class="col-sm-2 control-label">Gender : </label>
                                  <div class="col-sm-8">
                                     <select name="gender" class="form-control" required="required">
                                        <option value="">Select Gender</option>
                                        <option value="male">Male</option>
                                        <option value="female">Female</option>
                                        <option value="others">Others</option>
                                     </select>
                                  </div>
                               </div>
```

```
                        <div class="form-group">
                            <label class="col-sm-2 control-label">Contact No : </label>
                            <div class="col-sm-8">
                                <input type="text" name="contact" id="contact" class="form-control"
                                    required="required">
                            </div>
                        </div>
                        <div class="form-group">
                            <label class="col-sm-2 control-label">Email id: </label>
                            <div class="col-sm-8">
                                <input type="email" name="email" id="email" class="form-control"
                                    onBlur="checkAvailability()" required="required">
                                <span id="user-availability-status" style="font-size:12px;"></span>
                            </div>
                        </div>
                        <div class="form-group">
                            <label class="col-sm-2 control-label">Password: </label>
                            <div class="col-sm-8">
                                <input type="password" name="password" id="password"
                                    class="form-control" required="required">
                            </div>
                        </div>
                        <div class="form-group">
                            <label class="col-sm-2 control-label">Confirm Password: </label>
                            <div class="col-sm-8">
                                <input type="password" name="cpassword" id="cpassword"
                                    class="form-control" required="required">
                            </div>
                        </div>
                        <div class="col-sm-6 col-sm-offset-4">
                            <button class="btn btn-default" type="submit">Cancel</button>
                            <input type="submit" name="submit" Value="Register"
                                class="btn btn-primary">
                        </div>
                    </form>
                </div>
            </div>
        </div>
    </div>
</div>

<!-- <script src="js/jquery.min.js"></script> -->
<script src="js/bootstrap-select.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.dataTables.min.js"></script>
```

```
    <script src="js/dataTables.bootstrap.min.js"></script>
    <script src="js/Chart.min.js"></script>
    <script src="js/fileinput.js"></script>
    <script src="js/chartData.js"></script>
    <script src="js/main.js"></script>
</body>
<script>
    function checkAvailability() {
        $("#loaderIcon").show();
        jQuery.ajax({
            url: "check_availability.php",
            data: 'emailid=' + $("#email").val(),
            type: "POST",
            success: function (data) {
                $("#user-availability-status").html(data);
                $("#loaderIcon").hide();
            },
            error: function () {
                event.preventDefault();
                alert('error');
            }
        });
    }
</script>
</html>
```

USER DASHBOARD

```
<?php
session_start();
include('includes/config.php');
include('includes/checklogin.php');
check_login();
?>
<!doctype html>
<html lang="en" class="no-js">
    <head>
        <meta charset="UTF-8" />
        <meta http-equiv="X-UA-Compatible" content="IE=edge" />
        <meta
            name="viewport"
            content="width=device-width, initial-scale=1, minimum-scale=1, maximum-scale=1"
        />
        <meta name="description" content="" />
        <meta name="author" content="" />
        <meta name="theme-color" content="#3e454c" />
        <title>DashBoard</title>
        <link rel="stylesheet" href="css/font-awesome.min.css" />
```

```
    <link rel="stylesheet" href="css/bootstrap.min.css" />
    <link rel="stylesheet" href="css/dataTables.bootstrap.min.css" />
    <link rel="stylesheet" href="css/bootstrap-social.css" />
    <link rel="stylesheet" href="css/bootstrap-select.css" />
    <link rel="stylesheet" href="css/fileinput.min.css" />
    <link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css" />
    <link rel="stylesheet" href="css/style.css" />
</head>
<body>
    <?php include("includes/header.php");?>
    <div class="ts-main-content">
        <?php include("includes/sidebar.php");?>
        <div class="content-wrapper">
            <div class="container-fluid" style="padding-top:50px">
                <div class="row">
                    <div class="col-md-12">
                        <h2 class="page-title">Dashboard</h2>
                        <div class="row">
                            <div class="col-md-12">
                                <div class="row">
                                    <div class="col-md-3">
                                        <div class="panel panel-default">
                                            <div class="panel-body bk-primary text-light">
                                                <div class="stat-panel text-center">
                                                    <div class="stat-panel-number h1">My Profile</div>
                                                </div>
                                            </div>
                                            <a
                                                href="my-profile.php"
                                                class="block-anchor panel-footer"
                                                >Full Detail <i class="fa fa-arrow-right"></i
                                            ></a>
                                        </div>
                                    </div>
                                    <div class="col-md-3">
                                        <div class="panel panel-default">
                                            <div class="panel-body bk-success text-light">
                                                <div class="stat-panel text-center">
                                                    <div class="stat-panel-number h1">My Room</div>
                                                </div>
                                            </div>
                                            <a
                                                href="room-details.php"
                                                class="block-anchor panel-footer text-center"
                                                >See All &amp;nbsp; <i class="fa fa-arrow-right"></i
                                            ></a>
                                        </div>
                                    </div>
                                </div>
```

```
                    </div>
                </div>
            </div>
        </div>
        <?php include("includes/group/main.php");?>
    </div>
</div>
<!-- Loading Scripts -->
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap-select.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.dataTables.min.js"></script>
<script src="js/dataTables.bootstrap.min.js"></script>
<script src="js/Chart.min.js"></script>
<script src="js/fileinput.js"></script>
<script src="js/chartData.js"></script>
<script src="js/main.js"></script>
<script>
    window.onload = function () {
        // Line chart from swirlData for dashReport
        var ctx = document.getElementById("dashReport").getContext("2d");
        window.myLine = new Chart(ctx).Line(swirlData, {
            responsive: true,
            scaleShowVerticalLines: false,
            scaleBeginAtZero: true,
            multiTooltipTemplate: "<%if (label){%><%=label%>: <%}%><%= value %>",
        });
        // Pie Chart from doughutData
        var doctx = document.getElementById("chart-area3").getContext("2d");
        window.myDoughnut = new Chart(doctx).Pie(doughnutData, {
            responsive: true,
        });
        // Dougnut Chart from doughnutData
        var doctx = document.getElementById("chart-area4").getContext("2d");
        window.myDoughnut = new Chart(doctx).Doughnut(doughnutData, {
            responsive: true,
        });
    };
</script>
</body>
<div class="foot"></div>
<style>
    .foot {
        text-align: center;
        border: 1px solid black;
    }
</style>
</html>
```

FULL PROFILE

```
<?php
session_start();
include("includes/config.php");
$mysql_hostname = "localhost";
$mysql_user = "root";
$mysql_password = "";
$mysql_database = "hostel";
$prefix = "";
$bd = mysqli_connect($mysql_hostname, $mysql_user, $mysql_password, $mysql_database) or die("Could not
connect database");
// Get the 'id' parameter from the query string
$id = isset($_GET['id']) ? $_GET['id'] : '';
// Create a database connection using mysqli
$mysqli = new mysqli("localhost", "root", "", "hostel");
// Check connection
if ($mysqli->connect_error) {
  die("Connection failed: " . $mysqli->connect_error);
}
// Use prepared statement to fetch data
$query = "SELECT * FROM registration WHERE emailid = ?";
$stmt = $mysqli->prepare($query);
$stmt->bind_param("s", $id);
$stmt->execute();
$result = $stmt->get_result();
$row = $result->fetch_assoc();
$stmt->close();
$mysqli->close();
?>
<script language="javascript" type="text/javascript">
  function onPageLoad() {
    window.print();
  }
    window.onload = onPageLoad;
</script>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
  <title>Student Information</title>
  <link href="style.css" rel="stylesheet" type="text/css" />
  <link href="hostel.css" rel="stylesheet" type="text/css">
</head>
<body>
  <table width="100%" border="0">
    <tr>
      <td colspan="2" align="center" class="font1">&amp;nbsp;</td>
```

```
  </tr>
  <tr>
    <td colspan="2" align="center" class="font1"> </td>
  </tr>
  <tr>
    <td colspan="2" class="font">
      <?php echo ucfirst($row['firstName']); ?>
      <?php echo ucfirst($row['lastName']); ?>'s <span class="font1"> information &raquo;</span>
    </td>
  </tr>
  <tr>
    <td colspan="2"
class="font">            
      <div align="left" style="padding-bottom:10px">Reg Date: <span class="comb-value">
        <?php echo $row['postingDate']; ?>
      </span></div>
    </td>
  </tr>
  <tr>
    <td colspan="2" class="heading" style="color: green;">Room Related Info &raquo; </td>
  </tr>
  <tr>
    <td colspan="2" class="font1">
      <table width="100%" border="0">
        <tr>
          <td width="12%" valign="top" class="heading">Matriculation Number: </td>
          <td class="comb-value1">
            <?php echo $row['matno']; ?>
          </td>
        </tr>
        <tr>
          <td width="32%" valign="top" class="heading">Hostel Name: </td>
          <td class="comb-value1"><span class="comb-value">
            <?php echo $row['roomno']; ?>
          </span></td>
        </tr>
        <tr>
          <td width="22%" valign="top" class="heading">Room No: </td>
          <td class="comb-value1"><span class="comb-value">
            <?php echo $row['seater']; ?>
          </span></td>
        </tr>
        <tr>
          <td width="12%" valign="top" class="heading">Hostel Fee: </td>
          <td class="comb-value1">
            <?php echo $fpm = $row['feespm']; ?>
          </td>
        </tr>
        <tr>
```

```
      <td width="12%" valign="top" class="heading">Session: </td>
      <td class="comb-value1">
        <?php echo $dr = $row['duration']; ?>
      </td>
    </tr>
  </table>
 </td>
</tr>
<tr>
 <td colspan="2" align="left" class="heading" style="color: green;">Personal Info &raquo; </td>
</tr>
<tr>
 <td colspan="2" class="font1">
  <table width="100%" border="0">
    <tr>
      <td width="12%" valign="top" class="heading">Course: </td>
      <td class="comb-value1">
      <?php echo $row['course']; ?>
      </td>
    </tr>
    <tr>
      <td width="32%" valign="top" class="heading">Mat no: </td>
      <td class="comb-value1"><span class="comb-value">
      <?php echo $row['matno']; ?>
        </span></td>
    </tr>
    <tr>
      <td width="22%" valign="top" class="heading">First Name: </td>
      <td class="comb-value1"><span class="comb-value">
      <?php echo $row['firstName']; ?>
        </span></td>
    </tr>
    <tr>
      <td width="12%" valign="top" class="heading">Middle Name: </td>
      <td class="comb-value1">
        <?php echo $fpm = $row['middleName']; ?>
      </td>
    </tr>
    <tr>
      <td width="12%" valign="top" class="heading">Last Name: </td>
      <td class="comb-value1">
        <?php echo $fpm = $row['lastName']; ?>
      </td>
    </tr>
    <tr>
      <td width="12%" valign="top" class="heading">Gender: </td>
      <td class="comb-value1">
        <?php echo $dr = $row['gender']; ?>
      </td>
```

```
          </tr>
          <tr>
            <td width="12%" valign="top" class="heading">Contact Number: </td>
            <td class="comb-value1">
              <?php echo $dr = $row['contactno']; ?>
            </td>
          </tr>
          <tr>
            <td width="12%" valign="top" class="heading">Email: </td>
            <td class="comb-value1">
              <?php echo $dr = $row['emailid']; ?>
            </td>
          </tr>
        </table>
      </td>
    </tr>
  </table>
</body>
</html>
```