VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI-590018

A DBMS Mini Project Report

on

" Hostel Management System "

Submitted in partial fulfillment of the requirements for the V semester and award of the degree of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi

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CERTIFICATE

Certified that the mini project work entitled **“Hostel Management System ”**has been successfully carried out by **”Aanchal Sharma”** bearing USN **”1RN20CS003”** and **“Amisha M Angadi”** bearing USN **”1RN20CS017”**, bonafide students of **”RNS Institute of Technology”** in partial fulfillment of the requirements for the 5th semester of **”Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University”**, Belagavi, during academic year 2022-2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the DBMS laboratory requirements of 5th semester BE, CSE.

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Acknowledgement

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Abstract

Related to project This Project "HOSTEL MANAGEMENT INFORMATION SYSTEM" targeted for the College Hostel integrates the transaction management of the Hostel for better control and timely response. This eliminates time delay and paper transactions being marked. The warden is provided with a better control over the transactions like adding the details of new students in the hostel, modifying the details of the students, deleting the students, viewing the students details in the Hostel. This project's main motto is to reduce the effort of Wardens and provide better service to the students. The goal of this project is to develop a system for the computerization of the Hostel. The common transactions of the hostel includes the maintenance of mess bills, information about students in the hostel, enrolling of new students and their payments and dues etc are stored into the databases and reports are generated according to the user requirements.

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Chapter 1

Introduction

1.1 DATABASE TECHNOLOGIES

The essential feature of database technology is that it provides an internal representation (model) of the external world of interest. Examples are, the representation of a particular date/time/flight/aircraft in an airline reservation or of the item code/item description/quantity on hand/reorder level/reorder quantity in a stock control system. The technology involved is concerned primarily with maintaining the internal representation consistent with external reality; this involves the results of extensive RD over the past 30 years in areas such as user requirements analysis, data modelling, process modelling, data integrity, concurrency, transactions, file organisation, indexing, rollback and recovery, persistent programming, object-orientation, logic programming, deductive database systems, active database systems... and in all these (and other) areas there remains much more to be done. The essential point is that database technology is a CORE TECHNOLOGY which has links to:

- Tnformation management / processing.
- Data analysis / statistics
- Data visualization / presentation.
- Multimedia and hypermedia.
- office and document systems.
- Business processes , workflow , CSCW(computer-supported cooperative work).

Relational DBMS is the modern base technology for many business applications. It offers flexibility and easy-to-use tools at the expense of ultimate performance. More recently relational systems

have started extending their facilities in directions like information retrieval, objectorientation and deductive/active systems which lead to the so-called ’Extended Relational Systems’.
Information Retrieval Systems began with handling library catalogues and then extended to full free-text by utilizing inverted index technology with a lexicon or thesaurus. Modern systems utilize some KBS (knowledge-based systems) techniques to improve the retrieval.

Object-Oriented DBMS started for engineering applications in which objects are complex, have versions and need to be treated as a complete entity. OODBMSs share many of the OOPL features such as identity, inheritance, late binding, overloading and overriding. OODBMSs have found favours in engineering and office systems but haven’t been successful yet in traditional application areas.

Deductive / Active DBMS has evolved over the last 20 years and combines logic programming technology with database technology. This allows the database itself to react to the external events and also to maintain its integrity dynamically with respect to the real world

1.2 CHARACTERISTICS OF DATABASE APPROACH

Traditional form included organising the data in file format. DBMS was a new concept then, and all kinds of research was done to make it overcome the deficiencies in traditional style of data management. A modern DBMS has the following characteristics

- Real-world entity A modern DBMS is more realistic and uses real-world entities to design its architecture. It uses behaviour and attribute too. For example, a school database may use students as an entity and their age as an attribute.

- Relation-based tables DBMS allows entities and relations to form tables. A user can understand the architecture of a database by just looking at the table names.

- Isolation of data and application A database system is entirely different than its data. A database is an active entity, whereas data is said to be passive, on which the database works and organizes. DBMS also stores metadata, which is data about data, to ease its own process.

- Less redundancy DBMS follows the rules of normalization, which splits a relation when any of its attributes has redundancy in its values. Normalization is a mathematically rich and scientific process that will reduces the data redundancy

- Consistency Consistency is a state where every relation in a database remains consistent. There exists methods and techniques, that can detect an attempt of leaving database in an inconsistent state. DBMS can provide greater consistency as compared to earlier forms of data storing applications like file-processing systems.

- Query Language DBMS is equipped with query language, which makes it more efficient to retrieve and manipulate data. A user can apply as many and the filtering options as required to retrieve a set of data. Traditionally it was not possible where file-processing system was used.
- ACID Properties DBMS follows the concepts of Atomicity, Consistency, Isolation, and Durability (normally shortened as ACID). These concepts are applied on transactions, which manipulate data in a database. ACID properties help the database to stay healthy in multi-transactional environments and also in case of failure.
- Multiuser and Concurrent Access DBMS supports multi-user environment and allows them to access and manipulate data in parallel. Though there are restrictions on transactions when users attempt to handle the same data item, but users are always unaware of them
- Multiple views DBMS offers multiple views for different users. A user in the Sales department will have a different view of the database from the person working in the Production department. This feature enables the users to have a concentrate view of the database according to their requirements.
- Security Features like multiple views offer security to certain extent when users are unable to access the data of other users and departments. DBMS offers methods to impose constraints while entering data into the database and retrieving the same at a later stage. DBMS offers many different levels of security features, which enables multiple users to have different views with different features. For example, a user in the Sales department cannot see the data that belongs to the Purchase department. It can also be helpful in deciding how much data of the Sales department should be displayed to the user. Since a DBMS is not saved on the disk as traditional file systems, it is very hard for miscreants to break the code.

1.3 Applications of DBMS

The applications of computer graphics can be divided into four major areas:

- Telecom: There is a database to keeps track of the information regarding the calls made, network usage, customer details etc. Without the database system it is hard to maintain such huge amounts of data which gets updated every millisecond

- Industry: Whether it is a manufacturing unit, a warehouse or a distribution centre, each one needs a database to keep the records of the ins and outs. For example, a distribution centre should keep a track of the product units that were supplied to the centre as well as the products that got delivered from the distribution centre on each day; this is where DBMS comes into picture
- Banking System: For storing information regarding a customer, keeping a track of his/her day to day credit and debit transactions, generating bank statements etc is done with through Database management systems
- Education sector: Database systems are frequently used in schools and colleges to store and retrieve the data regarding the student , staff details, course details, exam details, payroll data, attendance details, fees details etc. There is lots of inter-related data that needs to be stored and retrieved in an efficient manner
- Online shopping: You must be aware of the online shopping websites such as Amazon, Flip kart etc. These sites store the product information, your addresses and preferences, credit details and provide you the relevant list of products based on your query. All this involves a Database management system.

1.4 PROBLEM DESCRIPTION/STATEMENT

The Hostel Management System deals with maintaining and managing the details of a student.

This system involves the following functionalities:

- To maintain the hostel students details manually.
- To maintain monthly bills.
- To maintain provisions details.
- To maintain the information about the payments and dues.
- Redundancy is reduced; loss of data due to physical damages can be overcome by taking the backup and recovery from the proposed system.
- Generates reports as when needed.
- Because of computerization manual work is eliminated and manual errors can be overcome easily.

Chapter 2

REQUIREMENT ANALYSIS

2.1 HARDWARE REQUIREMENTS

The Hardware requirements are very minimal and the program can be run on most of the machines.

Processor	:	i5 processor
Processor Speed	:	1.2GHz
RAM	:	1 GB
Storage Space	:	40 GB
Monitor Resolution	:	1024*768 or 1336*768 or 1280*1024

2.2 SOFTWARE REQUIREMENTS

- Operating System used: Windows 10
- Technologies used: HTML, CSS, PHP, AJAX, Bootstrap
- XAMPP Server: MySQL, PhpMyAdmin
- IDE used: Visual Studio Code.
- Browser that supports HTML.

2.3 FUNCTIONAL REQUIREMENTS

2.3.1 Major Entities

Admin: Admin is the entity who can view student details, add new student ,add and manage rooms etc. Few attributes are id, email, password, username

User: Student is an entity which can view the details,room allocated which are active. Few attributes are id, name, password, mobile , address.

Hostel Rooms: rooms allocated by the admin can be edited by them and can be viewed by the students.

2.3.2 End User Requirements

The technical requirements for the project are mentioned below:

HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from a local storage and render them to multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects like interactive forms can be embedded into the rendered page. It provides a way to create structured documents by denoting structural semantics for the text like headings, paragraphs, lists, links, quotes and other items. HTML elements are delimited by tags that are written within angle brackets. Tags such as ¡img /¿ and ¡input /¿ introduce content into the page directly. Other tags such as ¡p¿...¡/p¿ surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can also embed programs written in a scripting language such as JavaScript which affect the behaviour and content of web pages. Inclusion of CSS defines the look and layout of content

CSS

Cascading Style Sheets (CSS) is a style sheet language which is used for describing the presentation of a document written in a markup language. Although most often its used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is also applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications

CSS is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share the formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

PHP

PHP is a server-side scripting language designed primarily for web development but is also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Development Team. PHP originally stood for Personal Home Page, but it now stands for the recursive acronym PHP: Hypertext Pre-processor.

PHP code can be embedded into HTML or HTML5 markup, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server software combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code can also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

The standard PHP interpreter, powered by the Zend Engine, is a free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers, on almost every operating system and platform, free of charge. The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as a de facto standard. Since 2014 work has gone into creating a formal PHP specification. HP development began in 1995 when Rasmus Lerdorf wrote several Common Gateway Interface (CGI) programs in C, which he used in order to maintain his personal homepage. He extended them to work with web forms and to communicate with databases, and called this implementation ”Personal Home Page/Forms

Interpreter” or PHP/FI

PHP/FI could help to build simple, dynamic web applications. To accelerate bug reporting and to improve the code, Lerdorf initially announced the release of PHP/FI as ”Personal Home Page Tools (PHP Tools) version 1.0” on the Usenet discussion group on June 8, 1995 This release already had the basic functionality that PHP has as of 2013. This included Perl-like variables, form handling, and the ability to embed HTML. The syntax resembled that of Perl but was simpler, more limited and less consistent.

MySQL

MySQL is a Relational Database Management System (RDBMS). MySQL server can manage many databases at the same time. In fact, many people might have different databases managed by a single MySQL server. Each database consists of a structure to hold onto the data itself. A data-base can exist without data, only a structure, be totally empty, twiddling its thumbs and waiting for data to be stored in it.

Data in a database is stored in one or more tables. You must create the data-base and the tables before you can add any data to the database. First you create the empty database. Then you add empty tables to the database. Database tables are organized in rows and columns. Each row represents an entity in the database, such as a customer, a book, or a project. Each column contains an item of information about the entity, such as a customer name, a book name, or a project start date. The place where a particular row and column intersect, the individual cell of the table, is called a field. Tables in databases can be related. Often a row in one table is related to several rows in another table. For instance, you might have a database containing data about books you own. You would have a book table and an author table. One row in the author table might contain information about the author of several books in the book table. When tables are related, you include a column in one table to hold data that matches data in the column of another table.

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by MySQL AB. MySQL AB is a commercial company, founded by the MySQL developers. It is a second generation Open Source company that unites Open Source values and methodology with a successful business model.

- MySQL is a database management system. A database is a structured collection of data. It can be anything from a simple shopping list to a picture gallery or the vast amount of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

- MySQL is a relational database management system. A relational database stores data in separate tables rather than putting all the data in one big storeroom. This adds speed and flexibility. The SQL part of "MySQL" stands for "Structured Query Language." SQL is the most common standardized language used to access databases and is defined by the ANSI/ISO SQL Standard. The SQL standard has been evolving since 1986 and several versions exist. "SQL-92" refers to the standard released in 1992, "SQL:1999" refers tothe standard released in 1999, and "SQL:2003" refers to the current version of the standard. We use the phrase "the SQLstandard" to refer to the current version of the SQL Standard.

- MySQL software is Open Source. Open Source means that it is possible for anyone to use and modify the software. Anybody can download the MySQL software from the Internet and use it without paying anything. If you wish, you may study the source code and change it to suit your needs. The MySQL software uses the GPL (GNU General Public License), to define what you may and may not do with the software in different situations. The MySQL Database Server is very fast, reliable, and easy to use.

  MySQL Server was originally developed to handle large databases and has been successfully used in highly demanding production environments for several years. MySQL Server today offers a rich and useful set of functions. Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet

- MySQL Server works in a client/server or embedded systems. The MySQL Database Software is a client/server system which consists of a multi-threaded SQL server that supports different back ends, several different client programs and libraries, administrative tools, and a wide range of application programming interfaces (APIs).

XAMPP server

Xampp server installs a complete, ready-to-use development environment. Xampp server allows you to fit your needs and allows you to setup a local server with the same characteristics as your production.

While setting up the server and PHP on your own, you have two choices for the method of connecting PHP to the server. For many servers, PHP has a direct module interface (also called SAPI). These servers include Apache, Microsoft Internet Information Server, Netscape and iPlanet servers. Many other servers support ISAPI, the Microsoft module interface (OmniHTTPd for example). If PHP has no module support for your web server, you can always use it as a CGI or FastCGI processor. This means you set up yourserver to use the CGI executable of PHP to process all PHP file requests on the server. XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl. It also comes with a number of other modules, including OpenSSL, phpMyAdmin, MediaWiki, Joomla, WordPress and more. Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another.XAMPP is offered in both a full and a standard version (Smaller version). The most obvious characteristic of XAMPP is the ease at which a WAMP webserver stack can be deployed and instantiated. Later, some common packaged applications that could be easily installed were provided by Bitnami.

Officially, XAMPP's designers intended it for use only as a development tool, to allow website designers and programmers to test their work on their own computers without any access to the Internet. To make this as easy as possible, many important security features are disabled by default. XAMPP has the ability to serve web pages on the World Wide Web. A special tool is provided to password-protect the most important parts of the package.

XAMPP also provides support for creating and manipulating databases in MariaDB and SQLite, among others.

Once XAMPP is installed, it is possible to treat a local host like a remote host by connecting using an FTP client. Using a program like FileZilla has many advantages when installing a content management system (CMS) like Joomla or WordPress[further explanation needed]. It is also possible to connect to localhost via FTP with an HTML editor. XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage that common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami.

Chapter 3

DATABASE DESIGN

3.1 Major Entities , attributes and relationships

The entities and the attributes are mentioned below.

Student:

Id

Username

Password

Email

regDate

updationDate

Admin

Id

firstName

middlename

lastName

gender

contact

email

password

Table 3.1: Student

Name	Name of the student
Mobile-No	Mobile Number of the student
D.O.B	Date Of Birth
Address	Address Of student
Class	Class of Student

Table 3.2: Hostel

Room-Id	Specifies the Room Id
Loaction	Loaction Of Hostel
Room-no	Room number of the Student
No of Students	Number Of Students

Table 3.3: Fee-Structure

Fee-Id	Specifies the Fee Id
Monthly Pay	Monthly Payment
Yearly Pay	Yearly Payment
Security Amount	Advance payment
Room Price	Price Of Stay

3.2 ER Schema

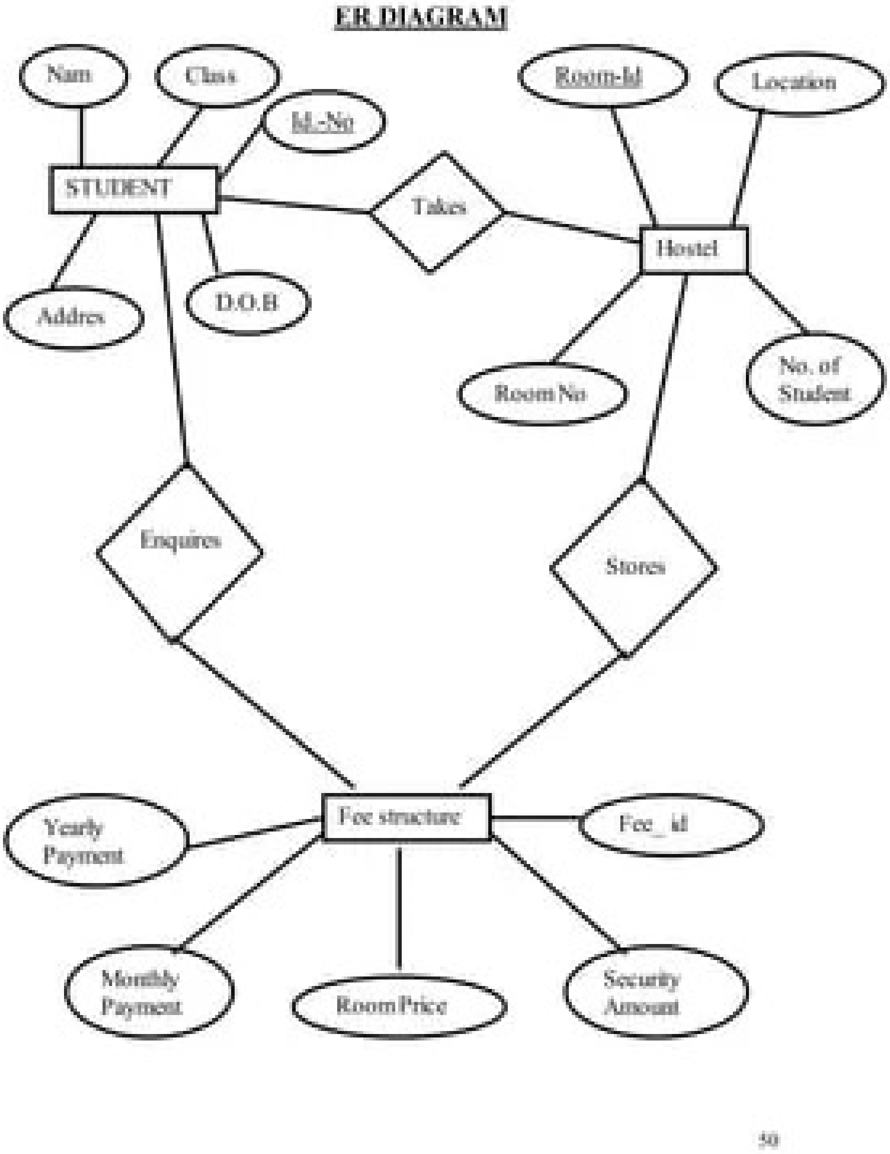


Figure 3.1: Admin Login

3.3 Relational Schema

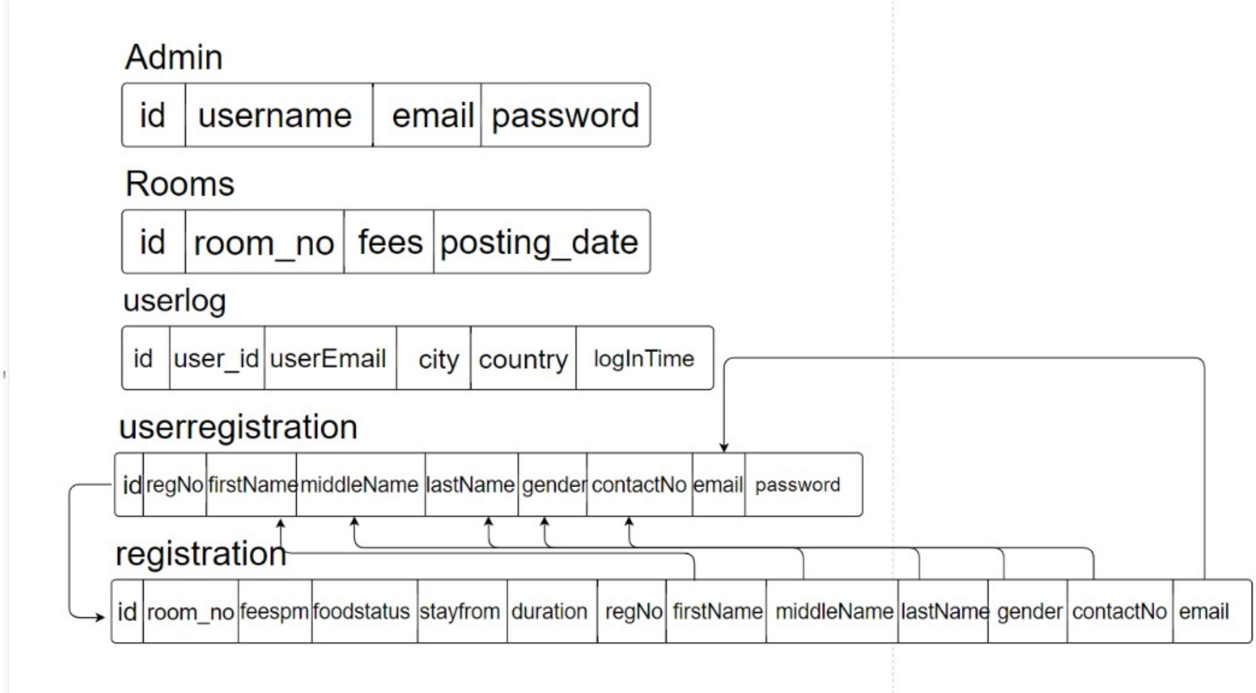


Figure 3.2: Schema Diagram

Information about Relational Schema:

Relation schema defines the design and structure of the relation like it consists of the relation name, set of attributes/field names/column names. every attribute would have an associated domain. A relational schema is an outline that shows how companies store and organize information within a database. It also shows what connections make up the database. Developers often view relational schemas as the shape, blueprint or design of the sets of information within the database. Relational schemas don't contain actual data because it's simply a blueprint. A developer's goal is to design the schema in a way that ensures the information is readable and avoids redundancy. The developer can choose to display a schema as a visual depiction, like a graph, or as formulas written in coding language.

There are two different types of schemas: logical and physical. A logical schema represents how a programmer organizes data within the table and a physical schema represents how a programmer physically stores data on disk storage, which can show how they physically format the database.

Chapter 4

Implementation

4.1 Creating Database Connection

1.PHP provides built-in database connectivity for a wide range of databases – MySQL, PostgreSQL, Oracle, Berkeley.

2. Use either mysql$_{c}onnectormysql_{p}connecttocreatedatabaseconnection.$

3.$mysql_{c}onnect : connectionisclosedatendofscript(endofpage).$

4.$mysql_{p}connect : createspersistentconnection - connectionremainsevenafterendofthepage.$

5.$ConnecttotheMySQLserver$

5.1.connection=mysql$_{c}onnect(”localhost$”,username, $password);$

6.$Accessthedatabase6.1.mysql_{s}elect_{d}b(”databasename$”,connection);

7. Perform SQL operations Example: $result = mysql_{q}uery($query, $connection)$

8.$Disconnectfromtheserver8.1.mysql_{c}lose($connection);

4.2 Architecture used(4-tier architecture)

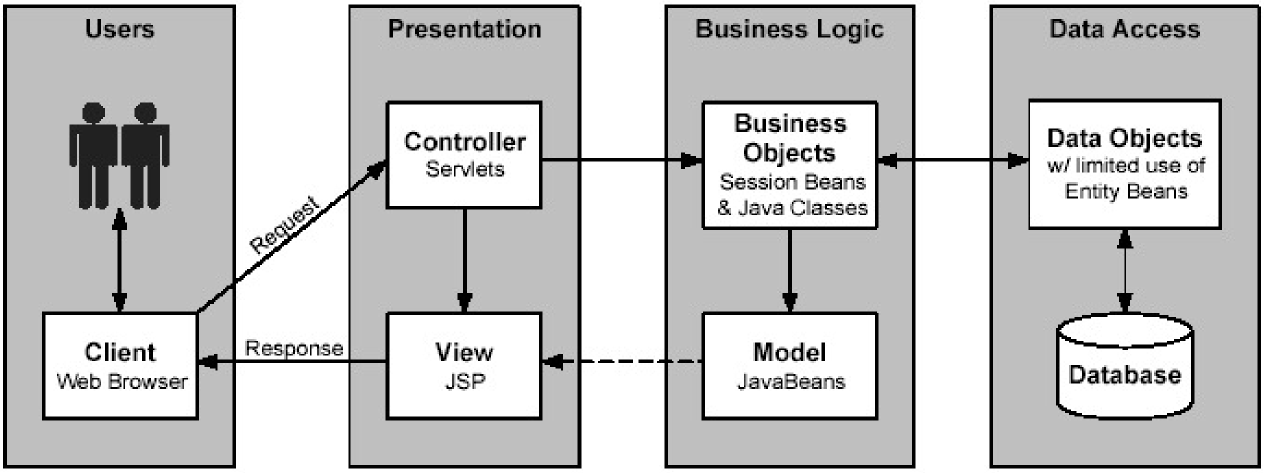


Figure 4.1: 4-Tier Architecture

Four Tier architecture is a client–server architecture in which presentation, application processing, and data management functions are physically separated. Four-tier application architecture provides a model by which developers can create flexible and reusable applications. By segregating an application into tiers, developers acquire the option of modifying or adding a specific layer, instead of reworking the entire application

Presentation layer

This is the topmost level of the application. The presentation tier displays information related to services such as browsing merchandise, purchasing and shopping cart contents. It also communicates with other tiers and puts out the results to the browser/client tier and to all other tiers in the network. In simple terms, it is a layer which users can access directly (such as a web page, or an operating system's GUI).

Business Layer

Business layer or domain logic is the part of the program that encodes the real-world business rules which determine how data can be created, stored, and changed. It is contrasted with the remainder of the software that might be concerned with lower-level details of managing a database or displaying the user interface, system infrastructure, or generally connecting various parts of the program.

Data access layer

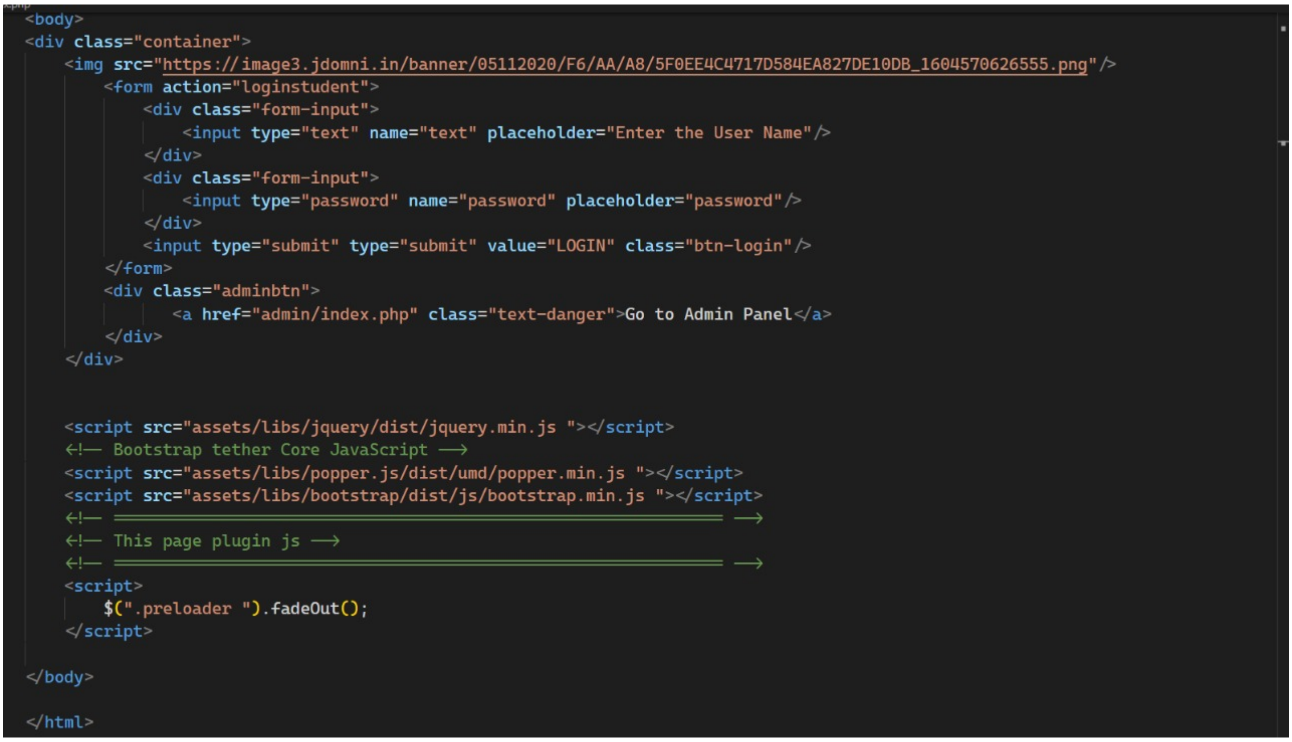
A Data Access Layer (DAL) in computer software, is a layer of computer program which provides simplified access to data stored in persistent storage. For example, the DAL might return a reference to an object (in terms of object-oriented programming) with its attributes instead of a row of fields from a database table. This allows the client (or user) modules to be created with a higher level of abstraction. This kind of model could be implemented by creating a class of data access methods that directly reference a corresponding set of database stored procedures. Another implementation could potentially retrieve or write records to or from a file system. The DAL hides the complexity of the underlying data store from the external world.

Control layer

The control layer is responsible for the communication between business and presentation layer. It connects logic and data with each other and provides a better connectivity and separation between layers

4.2.1 Pseudo Code For Major Functionalities

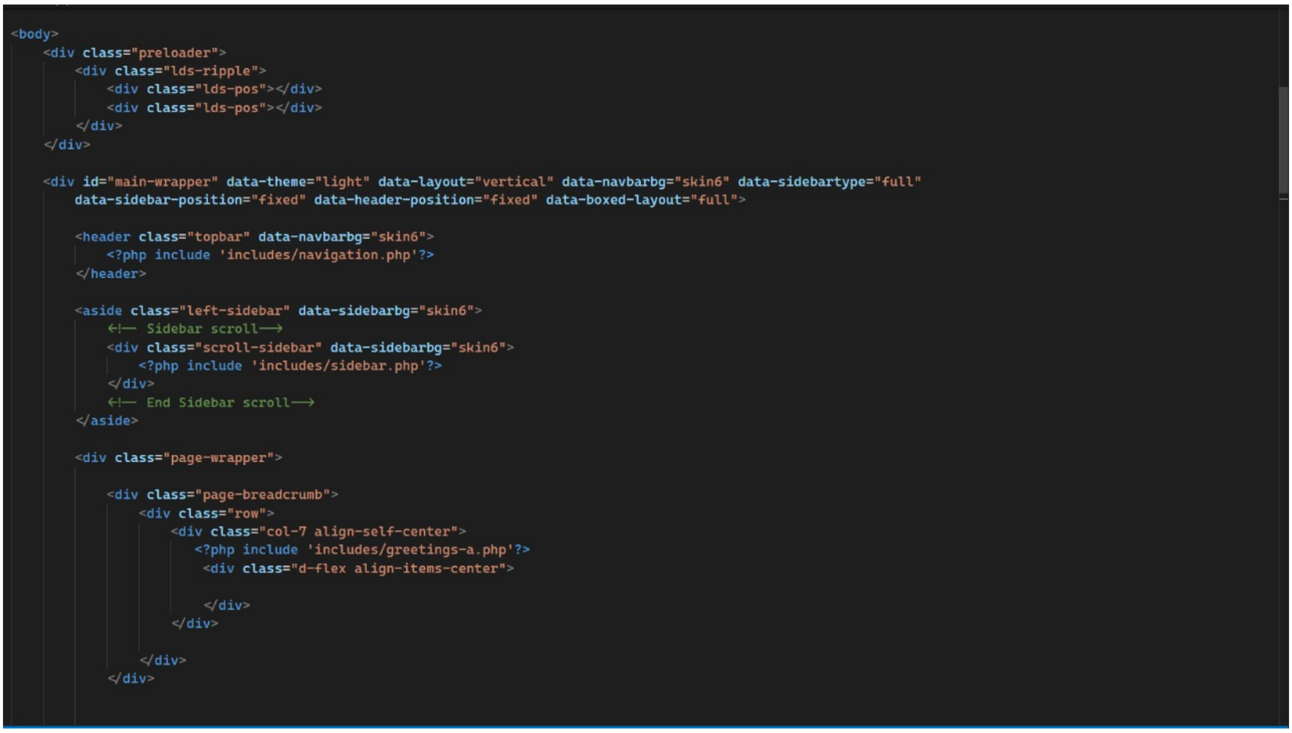
Login page: It is used for login purposes. When we enter the correct email and password it will go to the next page



```
<body>
<div class="container">
    <img src="https://image3.jdomni.in/banner/05112020/F6/AA/A8/5F0EE4C4717D584EA827DE10DB_1604570626555.png"/>
        <form action="loginstudent">
            <div class="form-input">
                <input type="text" name="text" placeholder="Enter the User Name"/>
            </div>
            <div class="form-input">
                <input type="password" name="password" placeholder="password"/>
            </div>
            <input type="submit" type="submit" value="LOGIN" class="btn-login"/>
        </form>
        <div class="adminbtn">
               <a href="admin/index.php" class="text-danger">Go to Admin Panel</a>
        </div>
    </div>


    <script src="assets/libs/jquery/dist/jquery.min.js "></script>
    <!-- Bootstrap tether Core JavaScript -->
    <script src="assets/libs/popper.js/dist/umd/popper.min.js "></script>
    <script src="assets/libs/bootstrap/dist/js/bootstrap.min.js "></script>
    <!-- ============================================================== -->
    <!-- This page plugin js -->
    <!-- ============================================================== -->
    <script>
        $(".preloader ").fadeOut();
    </script>

</body>

</html>
```

Figure 4.2: Pseudo Code for Admin

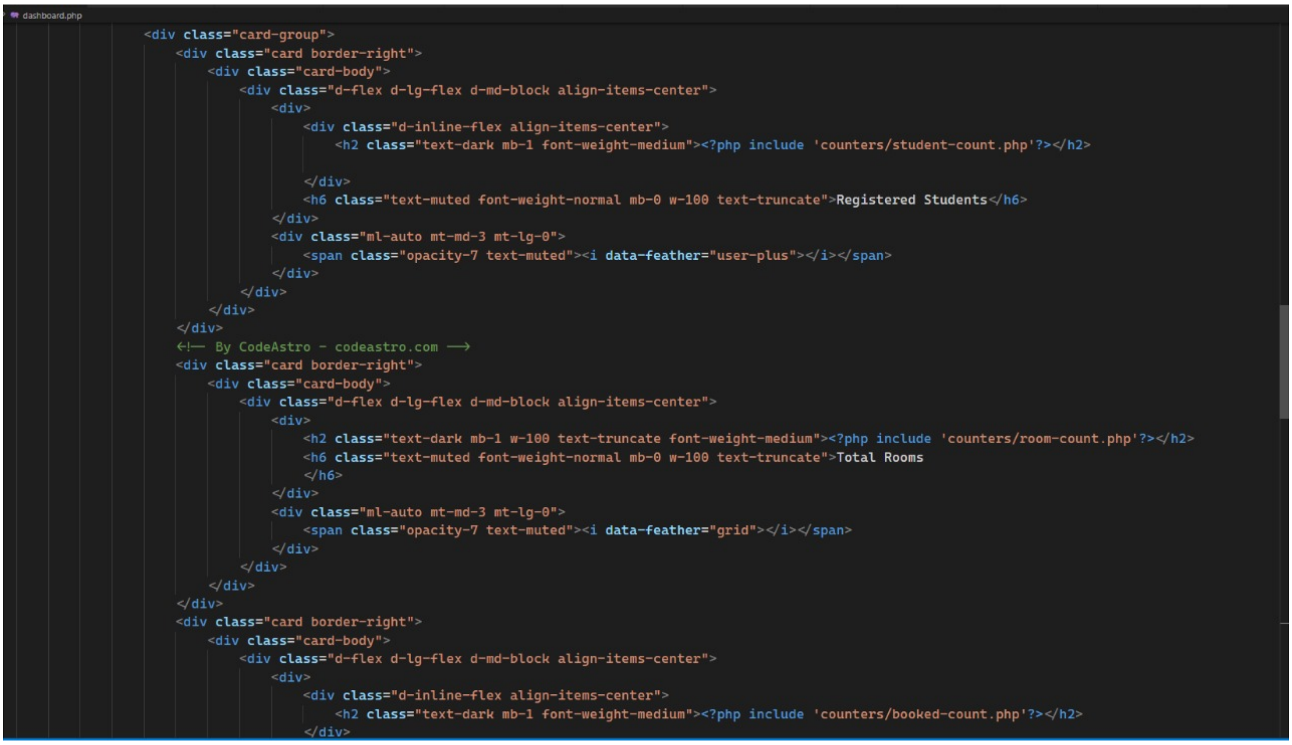
Admin Dashboard:



```
<body>
    <div class="preloader">
        <div class="lds-ripple">
            <div class="lds-pos"></div>
            <div class="lds-pos"></div>
        </div>
    </div>

    <div id="main-wrapper" data-theme="light" data-layout="vertical" data-navbarbg="skin6" data-sidebartype="full"
        data-sidebar-position="fixed" data-header-position="fixed" data-boxed-layout="full">

        <header class="topbar" data-navbarbg="skin6">
            <?php include 'includes/navigation.php'?>
        </header>

        <aside class="left-sidebar" data-sidebarbg="skin6">
            <!-- Sidebar scroll-->
            <div class="scroll-sidebar" data-sidebarbg="skin6">
                <?php include 'includes/sidebar.php'?>
            </div>
            <!-- End Sidebar scroll-->
        </aside>

        <div class="page-wrapper">

            <div class="page-breadcrumb">
                <div class="row">
                    <div class="col-7 align-self-center">
                       <?php include 'includes/greetings-a.php'?>
                        <div class="d-flex align-items-center">

                        </div>
                    </div>

                </div>
            </div>
```

Figure 4.3: Pseudo Code for Dashboard

Student Dashboard:



dashboard.php

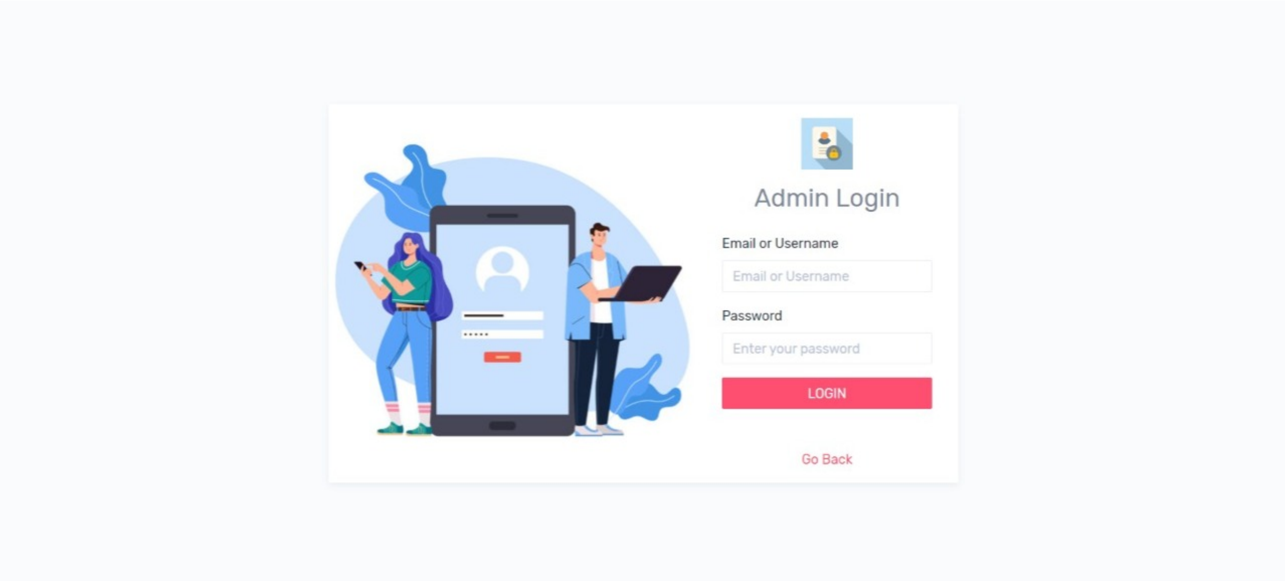
```
                    <div class="card-group">
                        <div class="card border-right">
                            <div class="card-body">
                                <div class="d-flex d-lg-flex d-md-block align-items-center">
                                    <div>
                                        <div class="d-inline-flex align-items-center">
                                            <h2 class="text-dark mb-1 font-weight-medium"><?php include 'counters/student-count.php'?></h2>

                                        </div>
                                        <h6 class="text-muted font-weight-normal mb-0 w-100 text-truncate">Registered Students</h6>
                                    </div>
                                    <div class="ml-auto mt-md-3 mt-lg-0">
                                        <span class="opacity-7 text-muted"><i data-feather="user-plus"></i></span>
                                    </div>
                                </div>
                            </div>
                        </div>
                        <!-- By CodeAstro - codeastro.com -->
                        <div class="card border-right">
                            <div class="card-body">
                                <div class="d-flex d-lg-flex d-md-block align-items-center">
                                    <div>
                                        <h2 class="text-dark mb-1 w-100 text-truncate font-weight-medium"><?php include 'counters/room-count.php'?></h2>
                                        <h6 class="text-muted font-weight-normal mb-0 w-100 text-truncate">Total Rooms
                                        </h6>
                                    </div>
                                    <div class="ml-auto mt-md-3 mt-lg-0">
                                        <span class="opacity-7 text-muted"><i data-feather="grid"></i></span>
                                    </div>
                                </div>
                            </div>
                        </div>
                        <div class="card border-right">
                            <div class="card-body">
                                <div class="d-flex d-lg-flex d-md-block align-items-center">
                                    <div>
                                        <div class="d-inline-flex align-items-center">
                                            <h2 class="text-dark mb-1 font-weight-medium"><?php include 'counters/booked-count.php'?></h2>
                                        </div>
```

Figure 4.4: Pseudo Code for Student Dashboard

Chapter 5

Results,Snapshots And Discussions

Admin Login page: It is used for login purposes. When we enter the correct email and password it will go to the next page.



Admin Login

Email or Username

Email or Username

Password

Enter your password

Figure 5.1: Admin Login

Student Login page: It is used for login purposes. When we enter the correct email and password it will go to the next page.

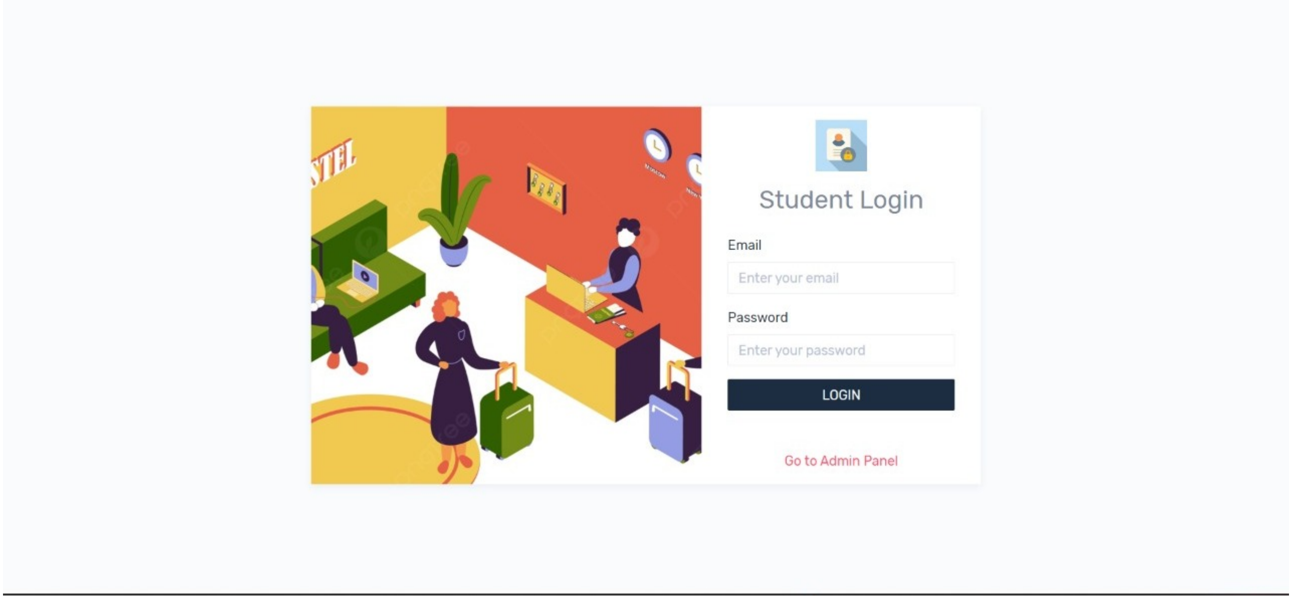
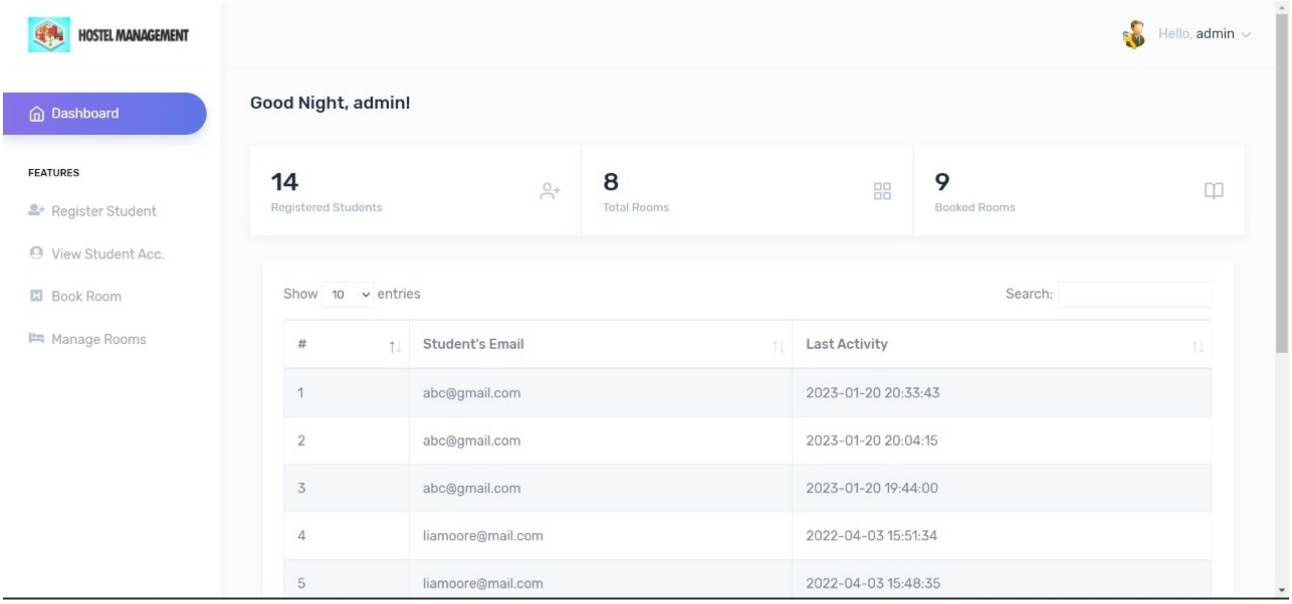


Figure 5.2: Student Login

Admin Dashboard: It is a dashboard displaying options to register and view student details, book and manage rooms.



Good Night, admin!

14 Registered Students

8 Total Rooms

9 Booked Rooms

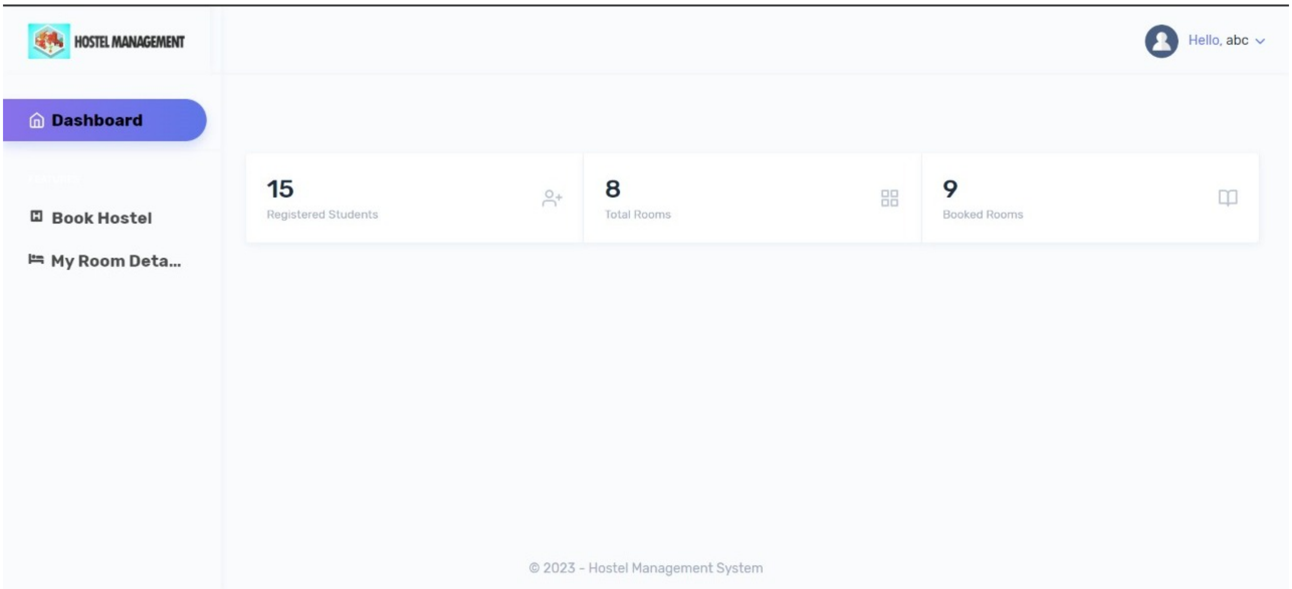
Show 10 entries

Search:

#	Student's Email	Last Activity
1	abc@gmail.com	2023-01-20 20:33:43
2	abc@gmail.com	2023-01-20 20:04:15
3	abc@gmail.com	2023-01-20 19:44:00
4	liamoore@mail.com	2022-04-03 15:51:34
5	liamoore@mail.com	2022-04-03 15:48:35

Figure 5.3: Admin Dashboard page

Student Dashboard: It is a dashboard displaying options to book hostel and view room details



15 Registered Students

8 Total Rooms

9 Booked Rooms

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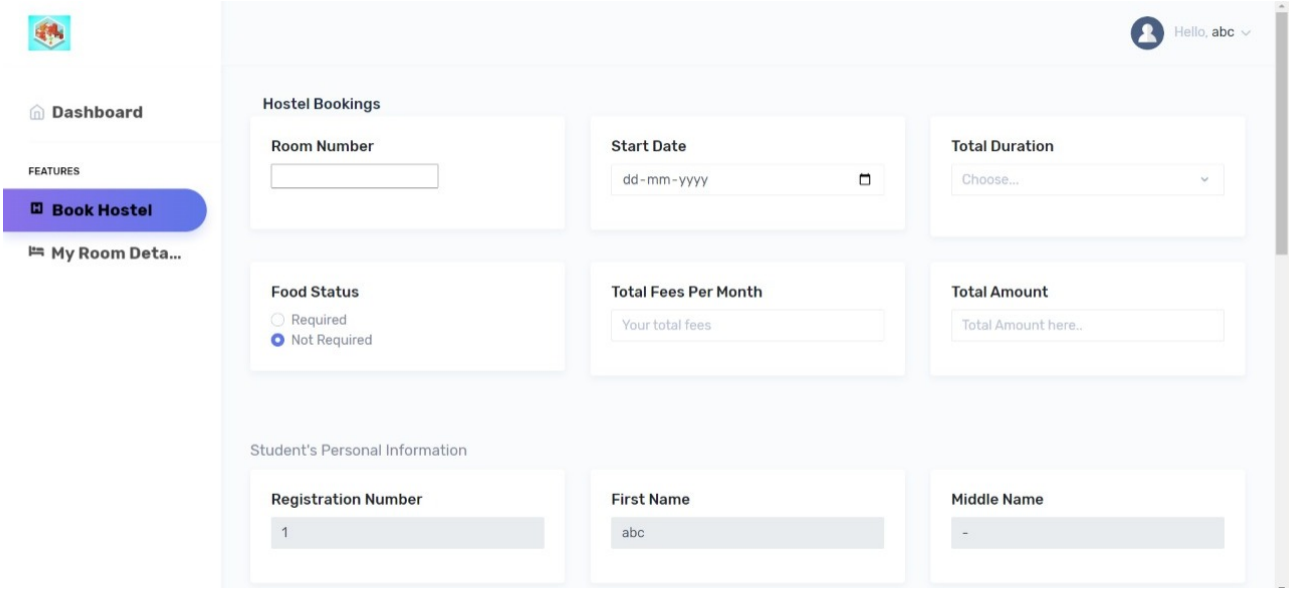
Figure 5.4: Student Dashboard Page

Student registration:



Hostel Bookings

Room Number:

Start Date: dd-mm-yyyy

Total Duration: Choose...

Food Status: ○ Required ● Not Required

Total Fees Per Month: Your total fees

Total Amount: Total Amount here..

Student's Personal Information

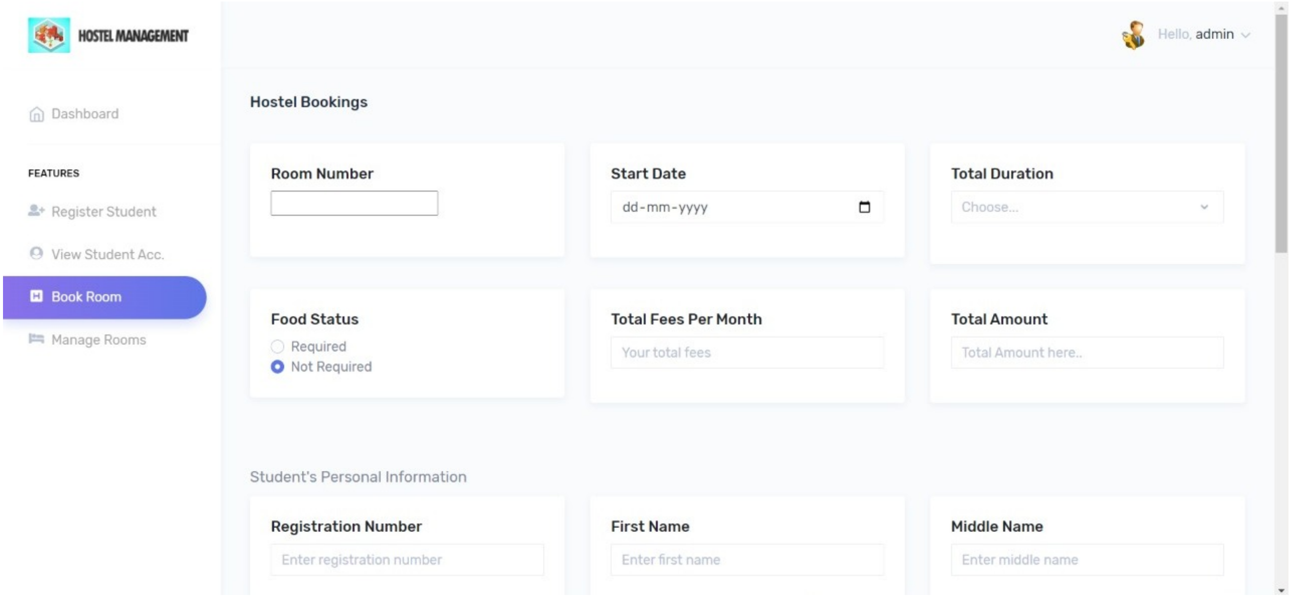
Registration Number: 1

First Name: abc

Middle Name: -

Figure 5.5: Student Registration

Admin registration:



Hostel Bookings

Room Number

Start Date
dd-mm-yyyy

Total Duration
Choose...

Food Status
○ Required
● Not Required

Total Fees Per Month
Your total fees

Total Amount
Total Amount here..

Student's Personal Information

Registration Number
Enter registration number

First Name
Enter first name

Middle Name
Enter middle name

Figure 5.6: Admin Registration

5.1 Table entries in database

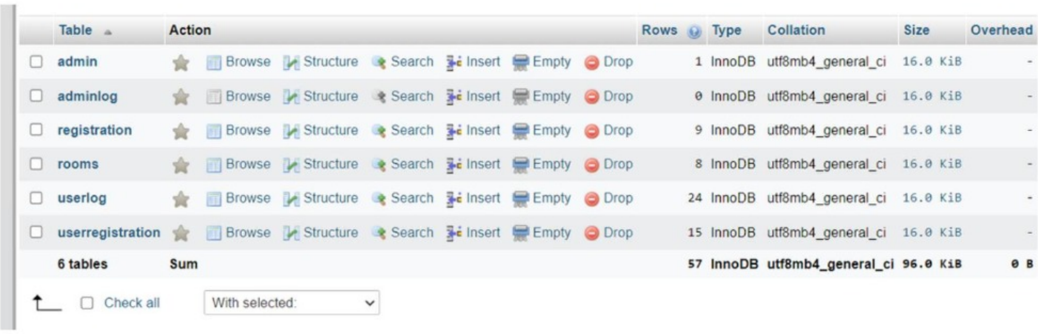
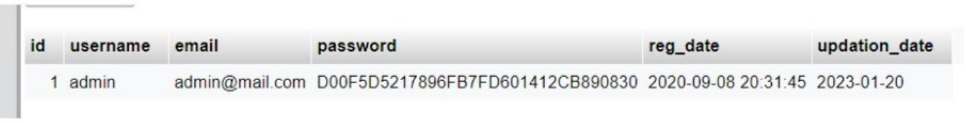


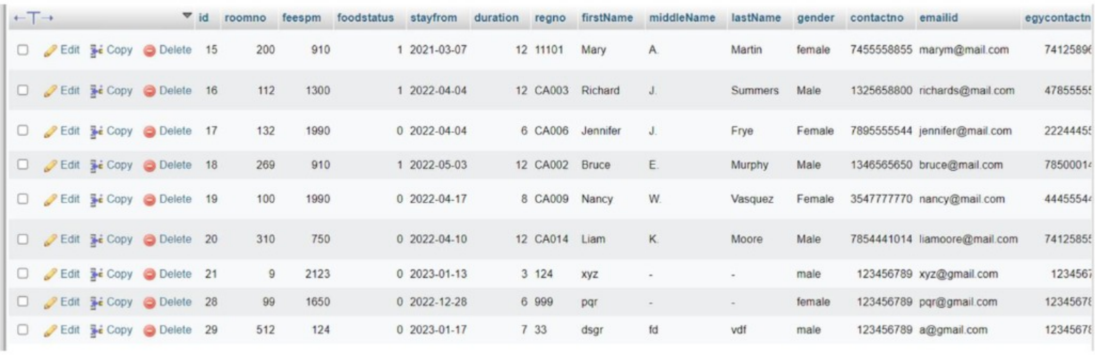
	Table	Action							Rows	Type	Collation	Size	Overhead
□	admin	★	Browse	Structure	Search	Insert	Empty	Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	adminlog	★	Browse	Structure	Search	Insert	Empty	Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	registration	★	Browse	Structure	Search	Insert	Empty	Drop	9	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	rooms	★	Browse	Structure	Search	Insert	Empty	Drop	8	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	userlog	★	Browse	Structure	Search	Insert	Empty	Drop	24	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	userregistration	★	Browse	Structure	Search	Insert	Empty	Drop	15	InnoDB	utf8mb4_general_ci	16.0 KiB	-
	6 tables	Sum							57	InnoDB	utf8mb4_general_ci	96.0 KiB	0 B

admin table



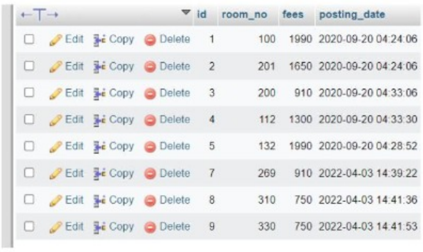
id	username	email	password	reg_date	updation_date
1	admin	admin@mail.com	D00F5D5217896FB7FD601412CB890830	2020-09-08 20:31:45	2023-01-20

registration table



				id	roomno	feespm	foodstatus	stayfrom	duration	regno	firstName	middleName	lastName	gender	contactno	emailid	egycontactn
□	Edit	Copy	Delete	15	200	910	1	2021-03-07	12	11101	Mary	A.	Martin	female	7455558855	marym@mail.com	7412589
□	Edit	Copy	Delete	16	112	1300	1	2022-04-04	12	CA003	Richard	J.	Summers	Male	1325658800	richards@mail.com	4785555
□	Edit	Copy	Delete	17	132	1990	0	2022-04-04	6	CA006	Jennifer	J.	Frye	Female	7895555544	jennifer@mail.com	2224445
□	Edit	Copy	Delete	18	269	910	1	2022-05-03	12	CA002	Bruce	E.	Murphy	Male	1346565650	bruce@mail.com	7850001
□	Edit	Copy	Delete	19	100	1990	0	2022-04-17	8	CA009	Nancy	W.	Vasquez	Female	3547777770	nancy@mail.com	4445554
□	Edit	Copy	Delete	20	310	750	0	2022-04-10	12	CA014	Liam	K.	Moore	Male	7854441014	liamoore@mail.com	7412585
□	Edit	Copy	Delete	21	9	2123	0	2023-01-13	3	124	xyz	-	-	male	123456789	xyz@gmail.com	123456
□	Edit	Copy	Delete	28	99	1650	0	2022-12-28	6	999	pqr	-	-	female	123456789	pqr@gmail.com	1234567
□	Edit	Copy	Delete	29	512	124	0	2023-01-17	7	33	dsgr	fd	vdf	male	123456789	a@gmail.com	1234567

room table



				id	room_no	fees	posting_date
□	Edit	Copy	Delete	1	100	1990	2020-09-20 04:24:06
□	Edit	Copy	Delete	2	201	1650	2020-09-20 04:24:06
□	Edit	Copy	Delete	3	200	910	2020-09-20 04:33:06
□	Edit	Copy	Delete	4	112	1300	2020-09-20 04:33:30
□	Edit	Copy	Delete	5	132	1990	2020-09-20 04:28:52
□	Edit	Copy	Delete	7	269	910	2022-04-03 14:39:22
□	Edit	Copy	Delete	8	310	750	2022-04-03 14:41:36
□	Edit	Copy	Delete	9	330	750	2022-04-03 14:41:53

Chapter 6

CONCLUSION AND FUTURE ENHANCEMENTS

6.1 Conclusion

The Hostel Management System is designed for Admin and Students to enter and manage the information of the hostel details placed.

We have made our website as user friendly as possible. Our back-end tech is reliable and efficient enough to not create any hurdles from the time the user logs into the website to the time when he/she has found the information needed. We hope that the users have a seamless experience when they visit our site.

6.2 Future Enhancements

We will be working on the front end to make the website more user-friendly. This hostel management software is designed for people who want to manage various activities in the hostel. This project is designed to fulfill the need of the future generation This project is small package which includes different categories as well as having all possible features.

Chapter 7

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