Project Report On

"Hostel Allotment Portal"

Submitted to the **Uttaranchal University** in partial fulfilment of the requirements for the award of the Degree of

MASTER OF COMPUTER APPLICATIONS

Submitted by

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Under the Guidance of

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(Batch: 2023-2025)

UTTARANCHAL UNIVERSITY, DEHRADUN

Acknowledgement

I am deeply grateful to all those who have contributed to the successful completion of this project.

First and foremost, I would like to express my sincere gratitude to my guide, **Rahul Kumar Singh**, for their invaluable guidance, constant support, and encouragement throughout the duration of this project. Their expertise and constructive feedback have significantly contributed to shaping the direction of this research, and I am truly thankful for their patience and insights.

I would also like to extend my heartfelt thanks to **Centre for Distance and Online Education (CDOE), Uttaranchal University** for providing a conducive environment for learning and research. The resources and knowledge imparted have been instrumental in the successful completion of this project.

Declaration

I, **Samarjeet Kumar**, declare that the project titled **'Hostel Allotment Portal'** is an original work carried out by me under the guidance of **Rahul Kumar Singh**. The work is not copied from any source, and no part of the project has been submitted elsewhere for any other degree.

Signature of Learner: Samarjeet Kumar.

Name of Learner: Samarjeet Kumar

Learner -Id: 2226010250

Certificate of Originality

This is to certify that the project titled **'Hostel Allotment Portal'** submitted by **Samarjeet Kumar**, **2226010250**, in partial fulfilment of the requirements for the degree of **MCA** in **Master of Computer Applications (OL)**, is an original work carried out under my supervision."

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Department: - IT

Organization Name: - Rays Edutech Pvt. Ltd

Date: - 20/12/2024

Table of Content

Introduction of the Project Hostel Allotment Portal

In an educational institution, managing hostel accommodations efficiently is crucial for ensuring a smooth and organized student experience. To streamline this process and enhance convenience for both students and administrative staff, the Hostel Allotment Portal is introduced.

The Hostel Allotment Portal is an innovative online platform designed to automate and simplify the process of hostel room allocation. It serves as a centralized system where students can apply for hostel accommodations, and administrators can efficiently manage and allocate rooms based on various parameters such as availability, preferences, and eligibility criteria.

Purpose: The primary aim of the Hostel Allotment Portal is to replace the traditional manual hostel room allocation system with a digital platform that offers numerous benefits:

Efficiency: By automating the allocation process, the portal saves time and effort for both students and administrators. It eliminates the need for manual paperwork and reduces the risk of errors or discrepancies.

Transparency: The portal provides transparency in the allocation process by allowing students to view available rooms, preferences, and allocation criteria. This transparency fosters trust and fairness among students.

Convenience: Through the portal, students can easily apply for hostel accommodation, select their preferences, and track the status of their application. They can also make changes to their preferences based on availability and personal preferences.

Optimization: The portal employs algorithms to optimize room allocation based on various factors such as student preferences, room capacities, and special requirements. This ensures efficient utilization of hostel resources and maximizes student satisfaction.

This portal aims to revolutionize the traditional manual hostel allocation methods by providing a user-friendly interface accessible to both students and administrators. Through the Hostel Allotment Portal, students can submit their accommodation preferences, view available rooms, and receive timely notifications regarding their room allocations.

Objectives of the Hostel Allotment Portal

1. **Automation**: Develop a web-based application to automate the entire process of hostel room allocation, from student application submission to room assignment, to reduce manual workload and streamline operations.

2. **Efficiency**: Improve the efficiency of hostel room allocation by implementing algorithms that optimize room assignments based on student preferences, room availability, and other relevant criteria.

3. **Transparency**: Enhance transparency in the hostel allocation process by providing students with real-time access to information about available rooms, allocation criteria, and the status of their application.

4. **Fairness**: Ensure fairness in room allocation by implementing an allocation algorithm that considers factors such as student preferences, seniority, and special requirements without bias or discrimination.

5. **Convenience**: Provide students with a user-friendly interface that allows them to easily submit hostel accommodation applications, select their preferences, track the status of their application, and communicate with administrators.

6. **Flexibility**: Allow students to make changes or updates to their room preferences within a specified deadline, providing flexibility and accommodating individual preferences.

7. **Communication**: Facilitate communication between students and administrators through integrated messaging features, enabling students to raise queries or concerns regarding their hostel application and administrators to provide support and assistance.

8. **Optimization**: Optimize the utilization of hostel resources by efficiently allocating rooms based on demand, room capacities, and other relevant factors, maximizing student satisfaction and minimizing unoccupied rooms.

9. **Data Management**: Implement robust data management capabilities to securely store and manage student information, application records, room allocations, and other relevant data in compliance with data protection regulations.

10. **Scalability**: Design the Hostel Allotment Portal to be scalable and adaptable to accommodate the varying needs and requirements of different educational institutions, ensuring its effectiveness across different campuses and student populations.

Portal Analysis

The proposed Hostel Allotment Portal is a comprehensive web-based application designed to revolutionize the hostel room allocation process in educational institutions. The system aims to address the shortcomings of the existing manual system by introducing automation, transparency, and efficiency. Here's an overview of the proposed system:

1. **Online Application**: Students will access the Hostel Allotment Portal through a web interface where they can fill out their hostel accommodation application electronically. The application form will include fields for personal details, room preferences, and any special requirements.

2. **Preference Selection:** The portal will allow students to specify their room preferences based on factors such as room type, location within the hostel, and preferred roommates. Students can rank their preferences to indicate their priority.

3. **Real-time Room Availability:** The portal will display real-time information about available rooms, including room types, capacities, and facilities. This information will help students make informed decisions while selecting their preferences.

4. **Allocation Algorithm:** The Hostel Allotment Portal will employ an advanced allocation algorithm to automatically assign rooms to students based on their preferences and availability. The algorithm will optimize room allocation to maximize student satisfaction and ensure efficient utilization of hostel resources.

5. **Application Tracking:** Students will be able to track the status of their hostel application in real-time through the portal. They will receive notifications regarding the progress of their application, including updates on room allocation.

6. **Administrative Dashboard:** Administrators will have access to a dedicated dashboard where they can manage hostel facilities, view application statistics, and monitor the allocation process. The dashboard will provide insights into application trends and room occupancy rates.

7. **Flexibility for Changes:** The portal will allow students to make changes or updates to their room preferences even after submitting their initial application. Students can

modify their preferences based on availability and personal preferences within the specified deadline.

8. **Communication Channels:** The Hostel Allotment Portal will facilitate communication between students and administrators through integrated messaging features. Students can raise queries or concerns regarding their hostel application, and administrators can provide assistance and support.

Preliminary Investigation

Why HTML and CSS used?

HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets) are fundamental languages in web development for several reasons:

1. **Structure and Content (HTML):**
   HTML provides the basic structure and content of web pages. It defines the elements and layout of a webpage, such as headings, paragraphs, lists, images, links, and forms. HTML serves as the backbone of web development, organizing content in a logical and hierarchical manner.
2. **Presentation and Styling (CSS):**
   CSS is used to style and visually design web pages. It allows developers to define the appearance, layout, and formatting of HTML elements, including colors, fonts, margins, padding, borders, and positioning. CSS separates the content from its presentation, making it easier to maintain and update styles across multiple pages.
3. **Consistency and Branding:**
   CSS enables developers to create consistent and cohesive designs across a website, ensuring a unified look and feel. By defining stylesheets that govern the appearance of various elements, CSS helps maintain brand consistency and reinforces brand identity throughout the website.
4. **Accessibility and Usability:**
   HTML and CSS play crucial roles in making web content accessible and user-friendly. Properly structured HTML ensures that content is accessible to users with disabilities and compatible with assistive technologies such as screen readers. CSS allows developers to optimize layout and design for different screen sizes and devices, enhancing usability and user experience.
5. **Search Engine Optimization (SEO):**
   HTML provides semantic markup that search engines use to understand and index web content effectively. By structuring content with HTML elements such as headings, paragraphs, and lists, developers can improve the visibility and ranking of web pages in search engine results. CSS optimization techniques can also contribute to better SEO performance by improving page load times and user experience.
6. **Responsive Web Design:**

With the proliferation of mobile devices and varying screen sizes, responsive web design has become essential. HTML and CSS enable developers to create responsive layouts and adapt content dynamically based on the device's screen size and orientation. CSS media queries allow for targeted styling adjustments for different devices, ensuring optimal display across desktops, tablets, and smartphones.

7. **Modularity and Maintainability:**

   Separating content (HTML) from presentation (CSS) promotes modularity and maintainability in web development. By organizing code into separate files and reusable components, developers can more efficiently manage and update styles and content, reducing redundancy and improving code maintainability.

Why MySQL used in Database?

MySQL is a widely used relational database management system (RDBMS) in web development for several reasons:

1. **Open Source:**

   MySQL is open-source software, meaning it's freely available for use, distribution, and modification. This makes it accessible to developers and organizations of all sizes without the need for costly licensing fees.

2. **Ease of Use:**

   MySQL is known for its ease of installation, configuration, and administration. It offers straightforward SQL syntax and intuitive management tools, making it suitable for developers with varying levels of expertise.

3. **Scalability:**

   MySQL is designed to scale efficiently, allowing applications to handle growing amounts of data and increased user traffic. It supports features such as replication, sharding, and clustering, enabling horizontal and vertical scalability to meet the demands of large-scale deployments.

4. **Performance**:

   MySQL is optimized for performance, offering fast query execution, efficient indexing, and caching mechanisms that enhance database performance. It utilizes advanced storage engines like InnoDB and MyISAM, which provide reliability, concurrency control, and transaction support.

5. **Compatibility:**

   MySQL is compatible with various operating systems, programming languages, and web development frameworks, making it versatile and widely adopted. It supports popular programming languages such as PHP, Python, Java, and Ruby, as well as integration with web development frameworks like Django, Flask, Laravel, and Ruby on Rails.

6. **Community Support:**

   MySQL benefits from a large and active community of developers, users, and contributors who provide support, documentation, tutorials, and resources. This community-driven ecosystem fosters collaboration, innovation, and the sharing of best practices among users.

7. **Security:**

   MySQL provides robust security features to protect data integrity and confidentiality. It supports authentication, access control, encryption, and auditing mechanisms to safeguard sensitive information and prevent unauthorized access or malicious attacks.

8. **Reliability:**

   MySQL has a proven track record of reliability and stability, with features and capabilities that have been refined over decades of development. It is widely used in production environments across various industries and applications.

9. **Enterprise Features:**

   MySQL offers enterprise-grade features and solutions for mission-critical applications and large-scale deployments. This includes features such as high availability, online backup and recovery, automatic failover, and enterprise support options provided by MySQL Enterprise Edition.

10. **Cost-Effectiveness:**

    As an open-source solution, MySQL offers a cost-effective database solution for businesses and organizations looking to minimize infrastructure costs while benefiting from a reliable and feature-rich RDBMS.

Why Python used in back end?

Python is commonly used in backend development for web applications due to several reasons:

1. **Ease of Learning and Readability:**
   Python's syntax is clear, concise, and easy to learn, making it accessible to developers of all skill levels. Its readability resembles pseudo-code, which simplifies the process of understanding and maintaining codebases, contributing to faster development cycles.
2. **Large Ecosystem and Libraries:**
   Python boasts a vast ecosystem of libraries and frameworks tailored for web development, such as Django, Flask, and Pyramid. These frameworks provide pre-built modules and functionalities for handling tasks like routing, authentication, database integration, and more, enabling developers to build robust web applications efficiently.
3. **Django Framework:**
   Django is a high-level Python web framework known for its "batteries-included" approach, offering built-in features for common web development tasks. It follows the "Don't Repeat Yourself" (DRY) principle and emphasizes rapid development, scalability, and security, making it an ideal choice for building complex web applications.
4. **Versatility and Flexibility:**
   Python's versatility allows developers to use it for a wide range of backend tasks, including web development, data analysis, machine learning, automation, and more. Its flexibility enables seamless integration with other technologies and platforms, making it suitable for diverse project requirements.
5. **Community Support:**
   Python has a large and active community of developers who contribute to its growth and development. The community provides extensive documentation, tutorials, forums, and resources, making it easy for developers to find solutions, share knowledge, and collaborate on projects.
6. **Scalability:**
   Python's asynchronous programming capabilities, supported by frameworks like asyncio and Tornado, enable developers to build scalable and high-performance web

applications. Asynchronous programming allows multiple tasks to run concurrently, improving efficiency and handling large numbers of concurrent requests.

7. **Integration with Frontend Technologies:**

   Python seamlessly integrates with frontend technologies such as JavaScript, HTML, and CSS, allowing developers to build full-stack web applications. This integration facilitates smooth communication between the frontend and backend components of the application, enabling dynamic and interactive user experiences.

8. **Support for Multiple Platforms:**

   Python is platform-independent and runs on various operating systems, including Windows, macOS, and Linux. This cross-platform compatibility ensures that applications developed with Python can be deployed and run on different environments without modification.

9. **Deployment and Hosting:**

   Python-based web applications can be easily deployed and hosted on a wide range of platforms and cloud services, including Heroku, AWS, Google Cloud Platform, and Azure. Deployment tools and services specific to Python, such as Gunicorn, uWSGI, and Docker, simplify the process of deploying applications to production environments.

10. **Industry Adoption:**

    Python is widely adopted by tech giants, startups, and enterprises across various industries, including finance, healthcare, e-commerce, and entertainment. Its popularity and proven track record make it a reliable choice for building scalable and maintainable backend systems.

Overall, Python's simplicity, versatility, robust frameworks, extensive libraries, community support, and scalability make it a preferred choice for backend development in web applications. Its ability to streamline development processes, improve productivity, and deliver high-quality solutions contributes to its widespread adoption in the industry.

Feasibility Study

A feasibility study assesses the operational, technical and economic merits of the proposed project. The feasibility study is intended to be a preliminary review of the facts to see if it is worthy of proceeding to the analysis phase. From the systems analyst perspective, the feasibility analysis is the primary tool for recommending whether to proceed to the next phase or to discontinue the project.

A. Economic Feasibility

Establishing the cost-effectiveness of the proposed system i.e. if the benefits do not outweigh the costs then it is not worth going ahead. In the fast paced world today there is a great need for online social networking facilities. Thus the benefits of this project in the current scenario make it economically feasible. The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/benefits analysis.

B. Operational Feasibility

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes.To ensure success, desired operational outcomes must be imparted during design and

development. These include such design-dependent parameters as reliability, maintainability, supportability, usability, producibility, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviors are to be realized. A system design and development requires appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases.

C. Technical Feasibility:

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on outline design of system requirements in terms of input, processes, output, fields, programs and procedures. This can be qualified in terms of volume of data, trends, frequency of updating inorder to give an introduction to the technical system. The technical feasibility assessment is focused on gaining an understanding of the present technical resources of the organization and their applicability to the expected needs of the proposed system. It is an evaluation of the hardware and software and how it meets the needs of the proposed system.

Importance of Feasibility Study

The importance of a feasibility study is based on organizational desire to "get it right" before committing resources, time, or budget. A feasibility study might uncover new ideas that could completely change a project's scope. It's best to make these determinations in advance, rather than to jump in and to learn that the project won't work. Conducting a feasibility study is always beneficial to the project as it gives you and other stakeholders a clear picture of the proposed project.

Below are some key benefits of conducting a feasibility study:

a) Improves project teams' focus
b) Identifies new opportunities
c) Provides valuable information for a "go/no-go" decision
d) Narrows the business alternatives
e) Identifies a valid reason to undertake the project
f) Enhances the success rate by evaluating multiple parameters
g) Aids decision-making on the project
h) Identifies reasons not to proceed

Apart from the approaches to feasibility study listed above, some projects also require other constraints to be analysed -

- **Internal Project Constraints:**
  Technical, Technology, Budget, Resource, etc.
- **Internal Corporate Constraints:**

Financial, Marketing, Export, etc.

- **External Constraints:** Logistics, Environment, Laws, and Regulations, etc

Project Planning

The project will include:

- Student registration, profile management, and room preference selection.
- Room availability tracking and automated allotment.
- Payment gateway integration for hostel fee transactions.
- Admin dashboards for managing applications, room statuses, and user records.
- Notifications for updates on application status and payments.
- Comprehensive analytics and reporting for decision-making.

Project Scheduling (PERT Chart and Gantt Chart both)

PERT Chart

Activity	Description	Predecessor (s)	Optimistic (O)	Most Likely (M)	Pessimistic (P)	Expected Time (TE)
A	Requirement Analysis	-	2	3	4	3.0
B	System Design	A	3	4	5	4.0
C	Frontend Development	B	5	6	7	6.0
D	Backend Development	B	5	6	7	6.0
E	Database Setup	B	3	4	5	4.0
F	Testing	C, D, E	2	3	4	3.0
G	Deployment	F	2	3	4	3.0

Gantt Chart

Activity	Start Week	End Week	Duration
Requirement Analysis	**Week 1**	**Week 2**	**2**
System Design	**Week 3**	**Week 5**	**3**
Frontend Development	**Week 6**	**Week 11**	**6**
Backend Development	**Week 6**	**Week 11**	**6**
Database Setup	**Week 6**	**Week 8**	**3**
Testing	**Week 12**	**Week 13**	**2**
Deployment	**Week 14**	**Week 15**	**2**

Software and Hardware Requirement specifications

Software Requirements:

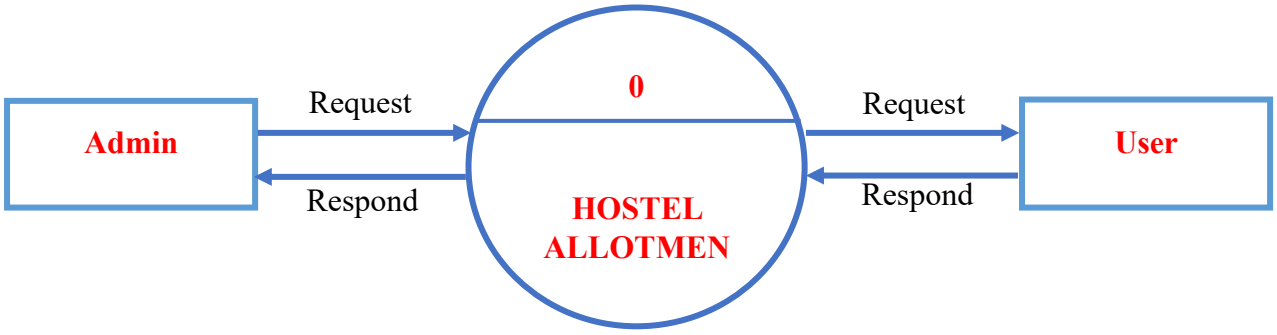
Name of component	Specification
Operating System	Window 11
Frontend Language	HTML5, CSS3, JavaScript, jQuery, Bootstrap
Backend language	Python
Database	MySQL
IDE	VS Code

Hardware Requirements:

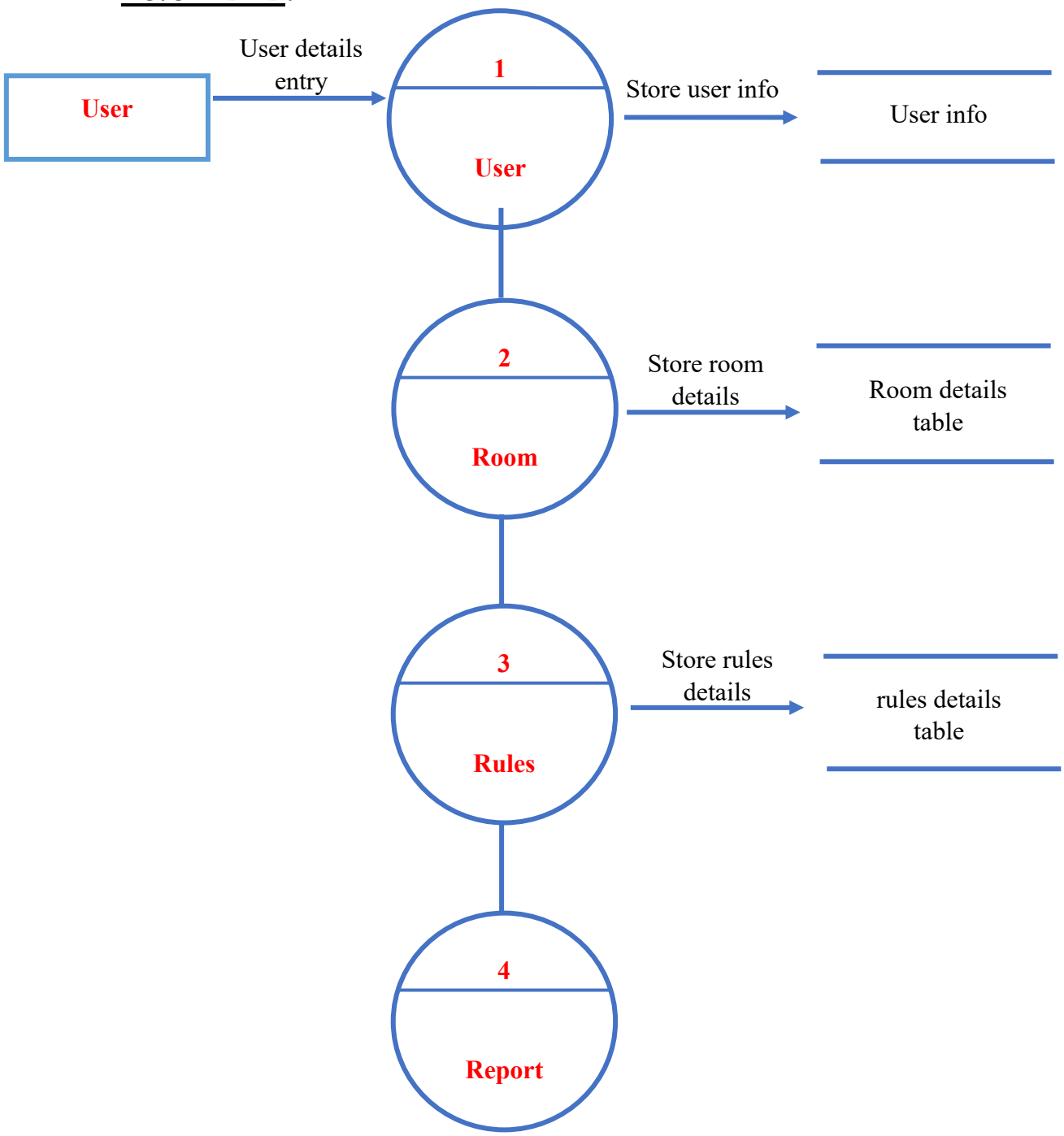
Name of component	Specification
Processor	Window 11
RAM	HTML5, CSS3, JavaScript, jQuery, Bootstrap
Hard Disk	Python
Monitor	MySQL
Keyboard	122 Keys

Data Flow Diagram (DFD)

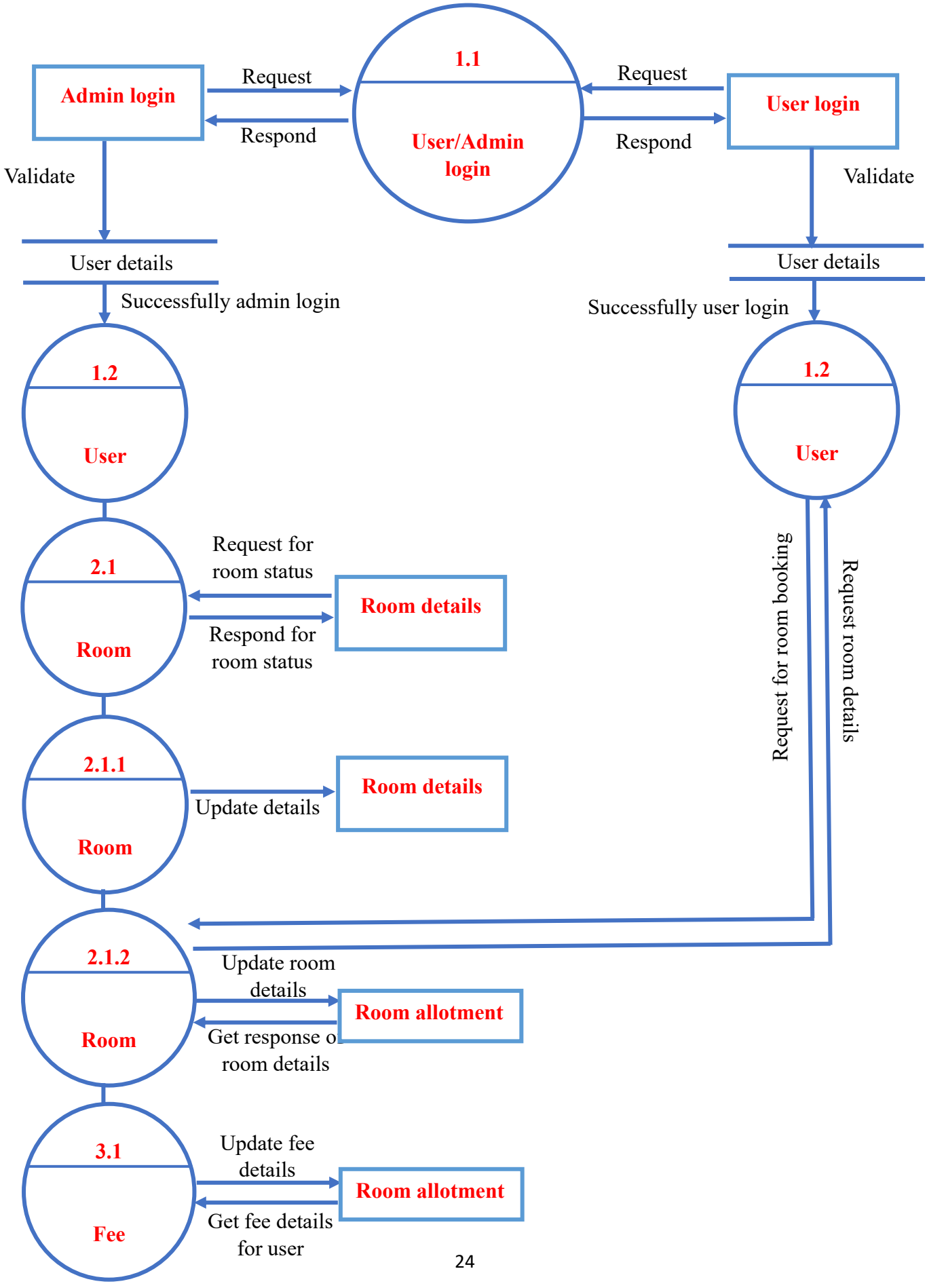
Level 0 DFD: -



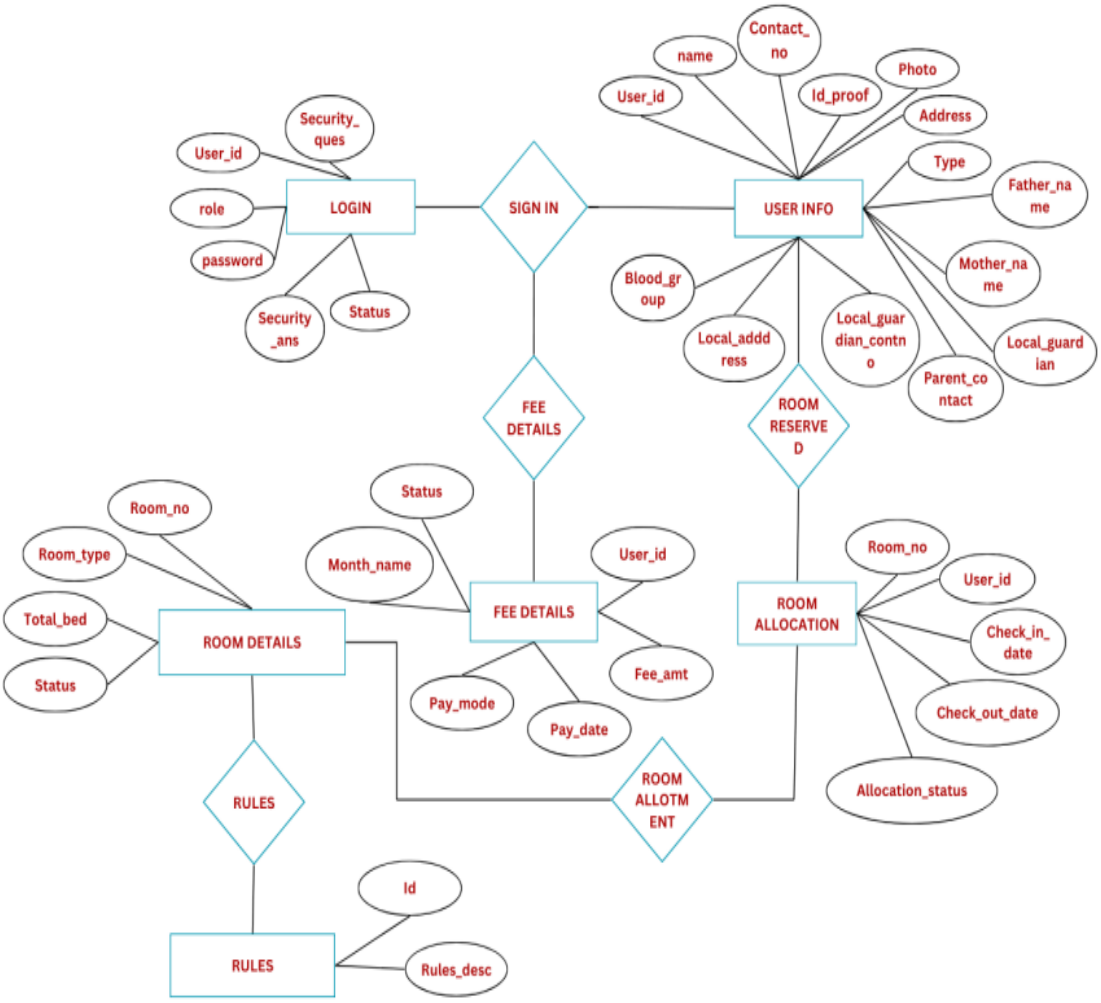
Level 1 DFD: -


User
User details entry
1
User
Store user info
User info
2
Room
Store room details
Room details table
3
Rules
Store rules details
rules details table
4
Report

Level 2 DFD: -


Admin login
Request
Respond
1.1
User/Admin login
Request
Respond
User login
Validate
Validate
User details
User details
Successfully admin login
Successfully user login
1.2
User
1.2
User
2.1
Room
Request for room status
Respond for room status
Room details
2.1.1
Room
Update details
Room details
Request for room booking
Request room details
2.1.2
Room
Update room details
Get response o room details
Room allotment
3.1
Fee
Update fee details
Get fee details for user
Room allotment

ER Diagram


Contact_ no
name
Photo
User_id
Id_proof
Address
Security_ ques
User_id
Type
Father_na me
role
LOGIN
SIGN IN
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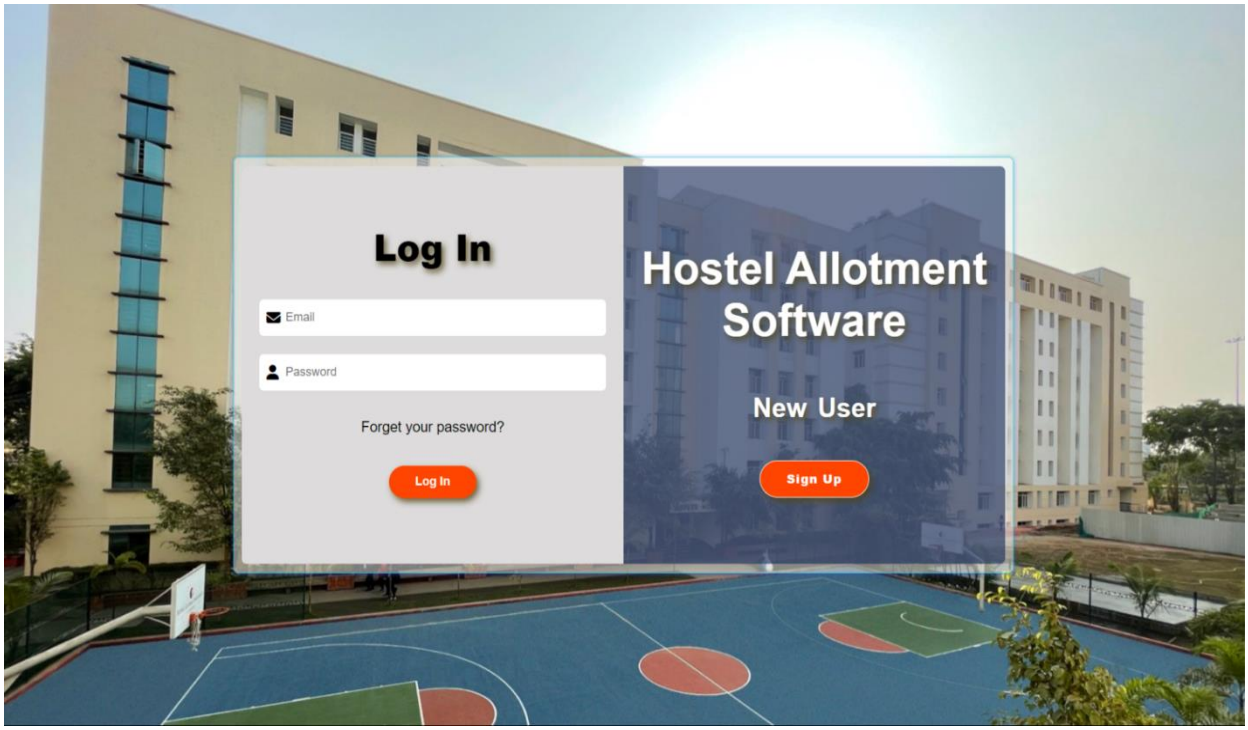
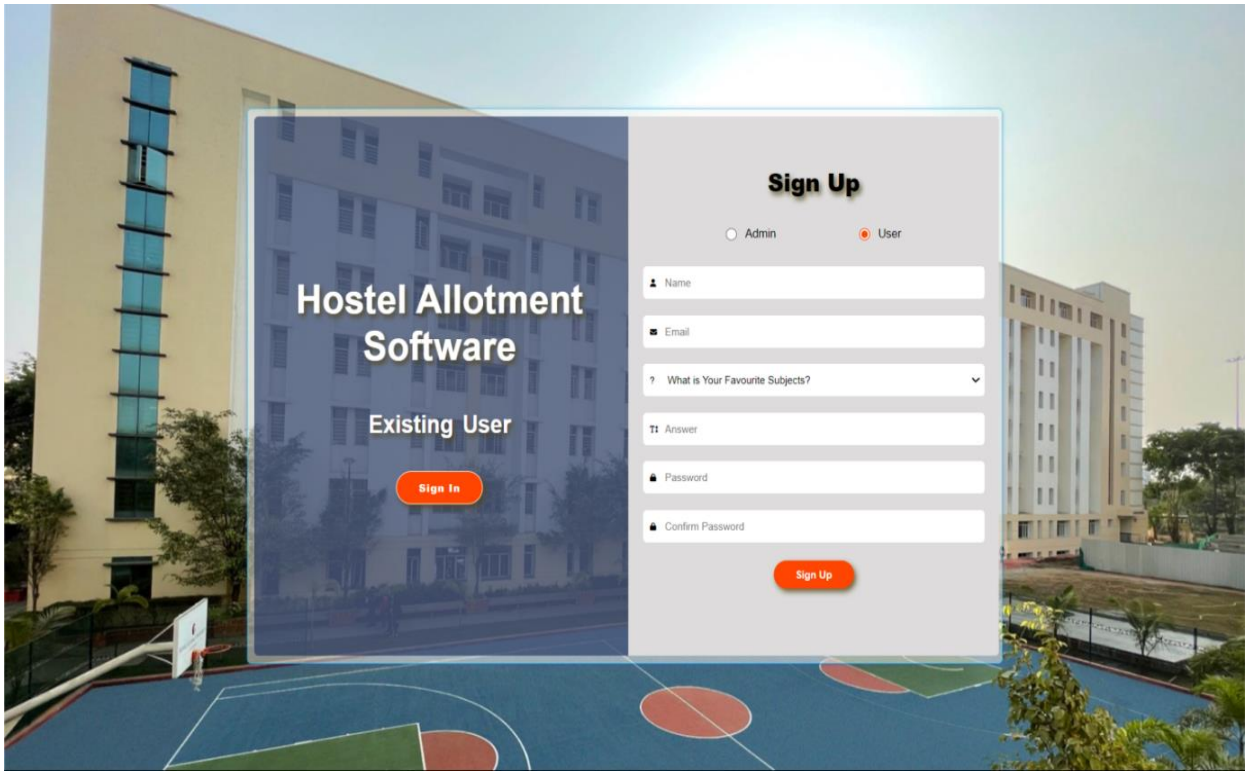
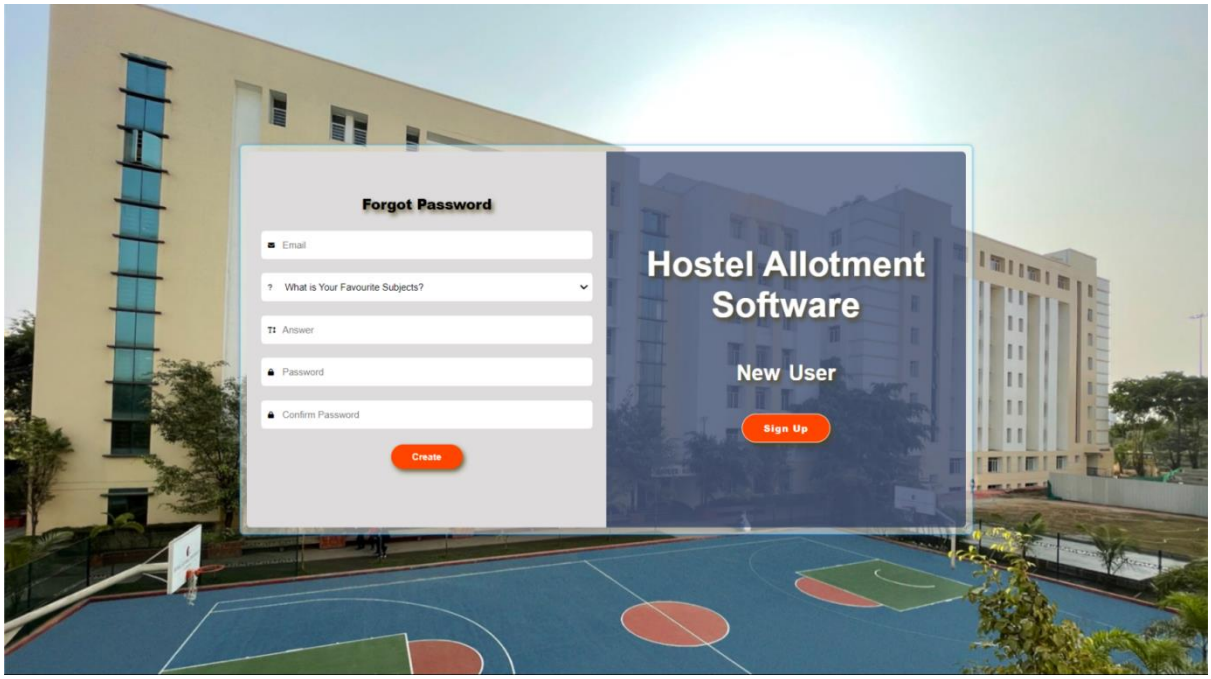
password
Blood_gr oup
Mother_na me
Security _ans
Status
Local_addd ress
Local_guar dian_contn o
Local_guard ian
Parent_co ntact
FEE DETAILS
ROOM RESERVE D
Status
Room_no
Room_type
Month_name
User_id
Total_bed
FEE DETAILS
ROOM DETAILS
ROOM ALLOCATION
Room_no
User_id
Status
Check_in_ date
Fee_amt
Pay_mode
Pay_date
Check_out_date
RULES
ROOM ALLOTM ENT
Allocation_status
Id
RULES
Rules_desc

Portal Design

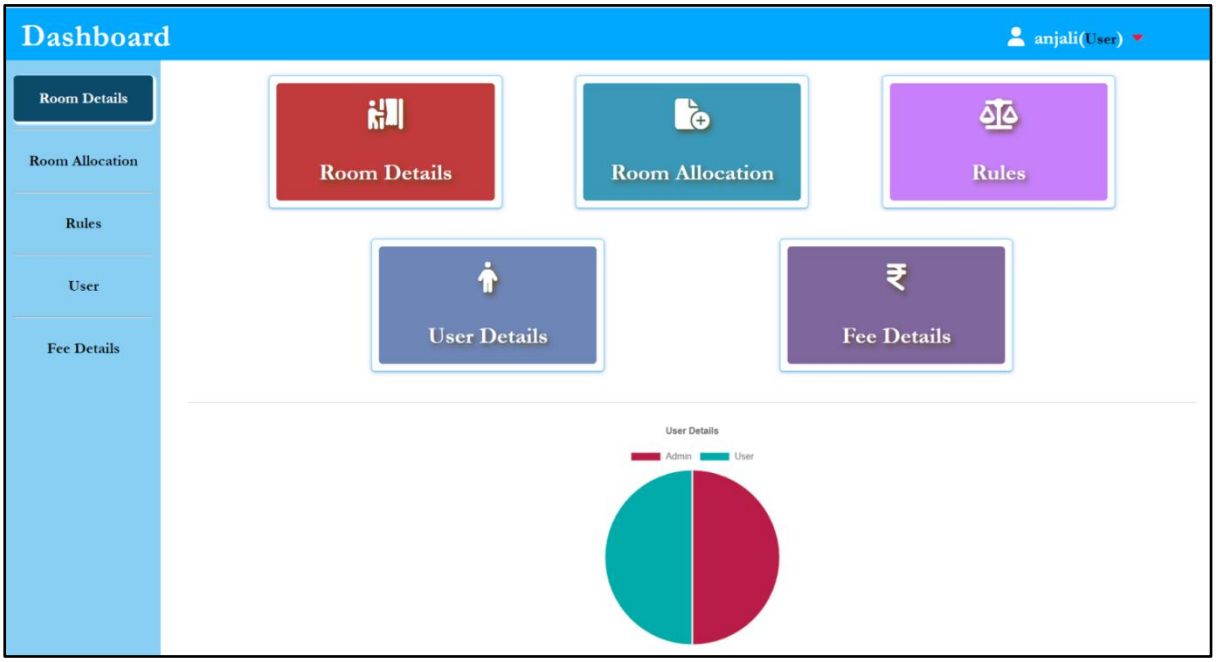
Login page





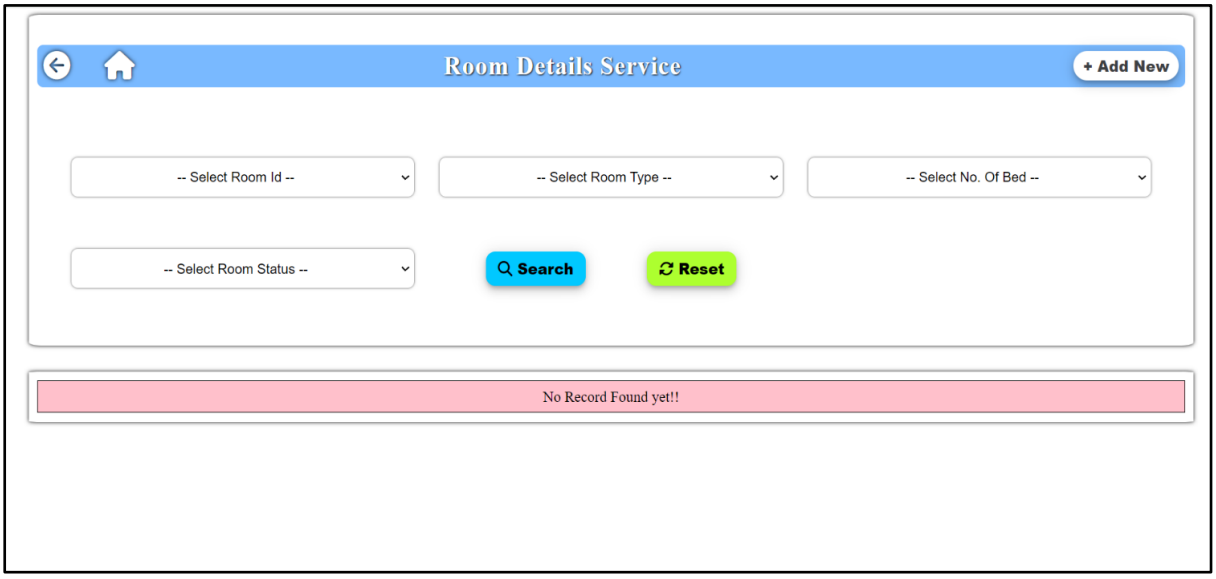

Forgot Password
Email
What is Your Favourite Subjects?
Answer
Password
Confirm Password
Create
Hostel Allotment Software
New User
Sign Up

Dashboard page

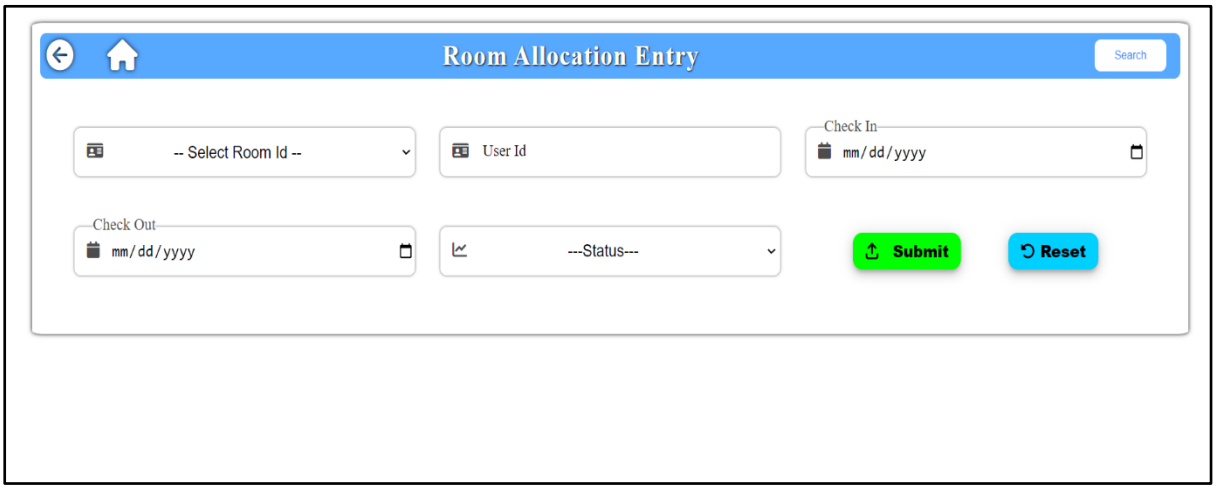


Room details entry page

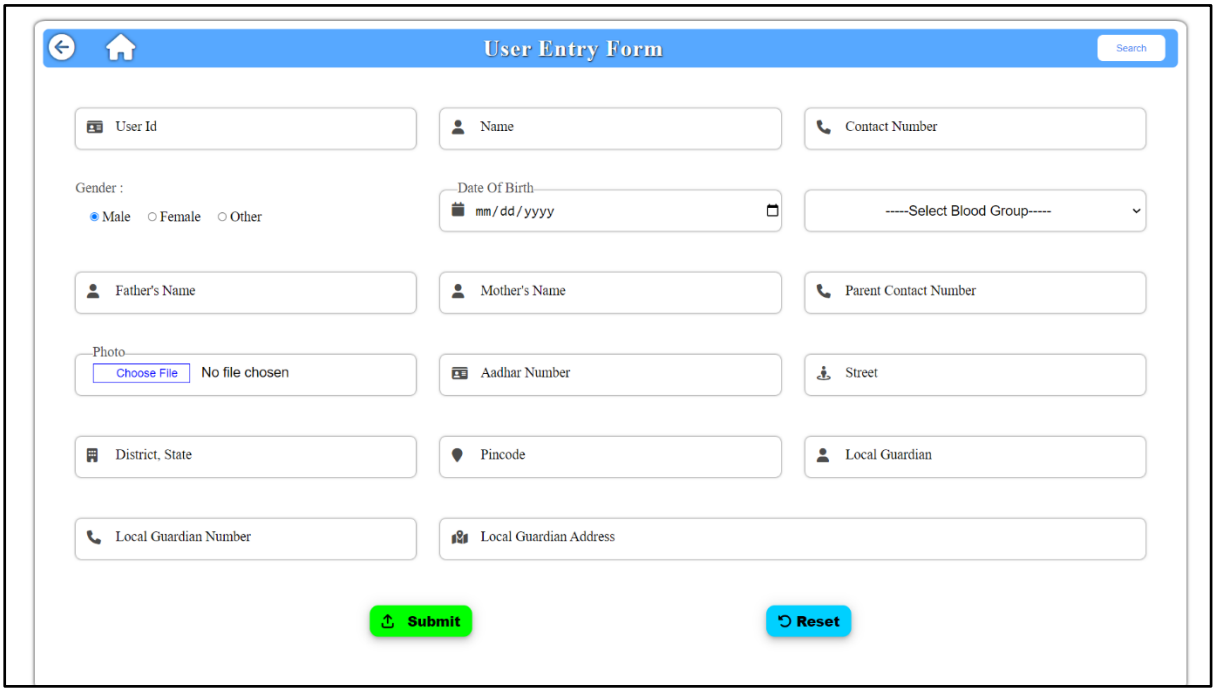
Room details service page



Room allocation entry page

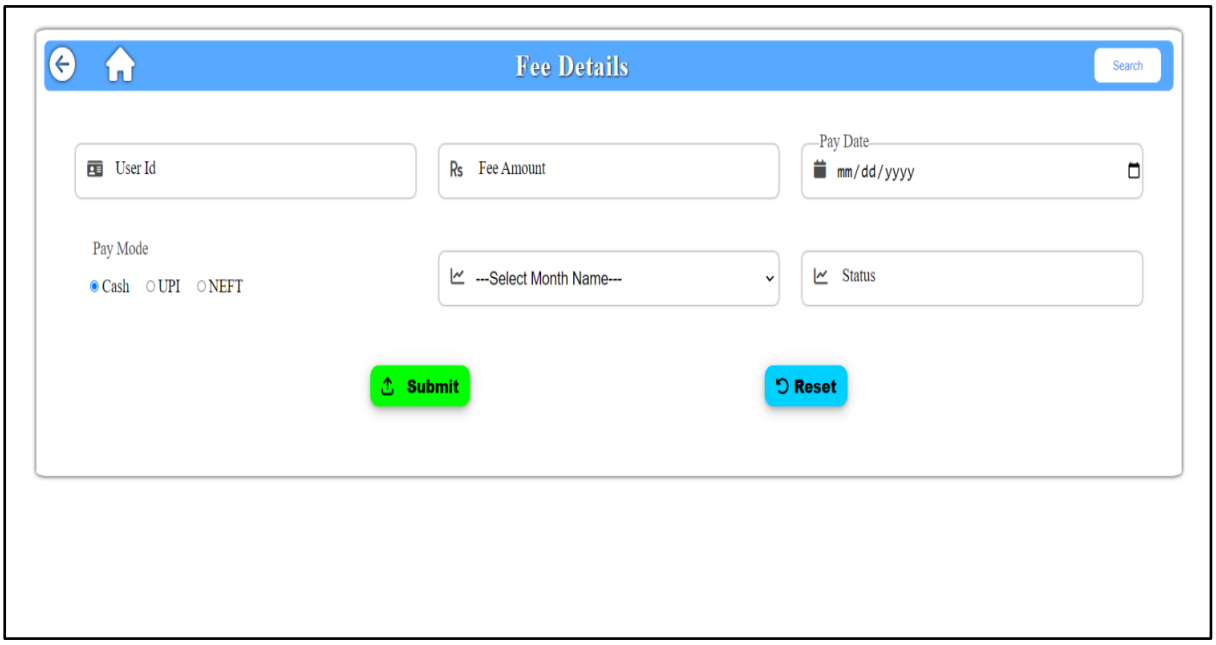


User Entry Form Page



User Details Service Page

Fee Details Page



Modularization details

Source code of Login page

index.html

```
<html>
  <head>
    <title>Hostel | Log In</title>
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css"
      integrity="sha512-
z3gLpd7yknf1YoNbCzqRKc4qyor8gaKU1qmn+CShxbuBusANI9QpRohGBreCFkKxLhei6
S9CQXFEbbKuqLg0DA=="
      crossorigin="anonymous"
      referrerpolicy="no-referrer"
    />
    <link rel="shortcut icon" href="hostel-icon.png" type="image/x-icon" />
    <link rel="stylesheet" href="css/login.css" />
    <style>
      body{
        background-image: url(pic1.jpeg);
        /* width: 100%;
        height: 100%; */
        background-position: center;
        background-repeat: no-repeat;
```

```
    background-size: cover;
  }
 </style>
</head>
<body>
 <div class="d1">
  <div class="d2">
   <div class="d7">
    <h1>Hostel Allotment Software</h1>
    <p>New User</p>
    <button class="b1" id="auto">Sign Up</button>
   </div>
   <div class="d3">
    <h1>Login</h1>
    <div class="d4">
     <table id="tab1">
      <tr>
       <td>
        <i class="fa fa-envelope"></i>
        <input type="email" id="email" placeholder="Email" />
       </td>
      </tr>
      <tr>
       <td>
```

```
<i class="fa fa-user"></i>
<input type="password" id="pas" placeholder="Password"  />
</td>
</tr>
<tr>
<td><span>Forget your password?</span></td>
</tr>
<tr>
<td align="center">
<button class="b1" id="log">LOG IN</button>
</td>
</tr>
</table>
<table id="tab2" hidden>
<tr>
<td style="display: flex;justify-content: space-evenly;align-items: center;">
<input type="radio" id="stu" name="a" value="Admin" style="accent-color: orangered;"><label for="stu" style="margin-left: -22%;font-size: 1.5rem;">Admin</label>
<input type="radio" id="emp" name="a" value="User" checked style="accent-color: orangered;"><label for="emp" style="margin-left: -22%;font-size: 1.5rem;">User</label>
</td>
</tr>
<tr>
<td>
```

```
<i class="fa fa-user"></i>
<input type="text" id="name" placeholder="Name" style="text-
transform:capitalize" />
</td>
</tr>
<tr>
<td>
<i class="fa fa-envelope"></i>
<input type="email" id="email" placeholder="Email" />
</td>
</tr>
<tr>
<td>
<i class="fa fa-question"></i>
<select id="secq">
<option>What is Your Favourite Subjects?</option>
<option>What is your date of birth?</option>
<option>
What was your favorite school teacher’s name?
</option>
<option>What is your favorite movie?</option>
<option>What was your first car?</option>
<option>What is your astrological sign?</option>
</select>
</td>
```

```
</tr>
<tr>
  <td>
    <i class="fa fa-text-height"></i>
    <input type="text" id="ans" placeholder="Answer" />
  </td>
</tr>
<tr>
  <td>
    <i class="fa fa-lock"></i>
    <input type="password" id="pas" placeholder="Password" />
  </td>
</tr>
<tr>
  <td>
    <i class="fa fa-lock"></i>
    <input
      type="password"
      id="cpas"
      placeholder="Confirm Password"
    />
  </td>
</tr>
<tr>
```

```
    <td align="center">
      <button class="b1" id="sign">Sign Up</button>
    </td>
  </tr>
</table>
<table id="tab3" hidden>
  <tr>
    <td>
      <i class="fa fa-envelope"></i>
      <input type="email" id="email" placeholder="Email" />
    </td>
  </tr>
  <tr>
    <td>
      <i class="fa fa-question"></i>
      <select id="secq">
        <option>What is Your Favourite Subjects?</option>
        <option>What is your date of birth?</option>
        <option>
          What was your favorite school teacher’s name?
        </option>
        <option>What is your favorite movie?</option>
        <option>What was your first car?</option>
        <option>What is your astrological sign?</option>
```

```
    </select>
  </td>
</tr>
<tr>
  <td>
    <i class="fa fa-text-height"></i>
    <input type="text" id="ans" placeholder="Answer" />
  </td>
</tr>
<tr>
  <td>
    <i class="fa fa-lock"></i>
    <input type="password" id="pas" placeholder="Password" />
  </td>
</tr>
<tr>
  <td>
    <i class="fa fa-lock"></i>
    <input
      type="password"
      id="cpas"
      placeholder="Confirm Password"
    />
  </td>
```

```
            </tr>
            <tr>
              <td align="center">
                <button class="b1" id="forgot">Create</button>
              </td>
            </tr>
          </table>
        </div>
      </div>
    </div>
  </div>
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
  <script src="https://unpkg.com/sweetalert/dist/sweetalert.min.js"></script>
  <script src="scripts/index.js" type="text/javascript"></script>
 </body>
</html>
```

Login.css

```
*{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}
html{
```

```
    font-size: 10px;
}
body {
    font-family: Arial, Helvetica, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    /* background-color: pink;   */
}
.d1{
    display: flex;
    justify-content: center;
    align-items: center;
    margin: 5rem;
    padding: 1rem;
    border-radius: 6px;
    background-color: rgba(248, 247, 247,.5);
    box-shadow: rgba(33, 120, 192, 0.292) 0px 0.0625em 0.0625em, rgba(50, 90, 221, 0.502)
0px 0.125em 0.5em, rgba(16, 199, 219, 0.555) 0px 0px 0px 1px inset;
    /* width: 80%; */

    /* height: 40rem; */
}
.d2{
    display: flex;
```

```
    justify-content: space-between;
    align-items: center;
    flex-direction: row-reverse;
    width: 100%;
    height: 100%;
    background-color: rgba(19, 38, 86, 0.6);
    /* background-color: rgba(251, 34, 34, 0.8); */
    border-radius: 6px;
    /* padding: 2rem; */
}
.d3{
    /* background-color: #37B5B6; */
    background-color: rgba(221, 220, 220,1);
    border-top-left-radius: 5px;
    border-bottom-left-radius: 5px;
    width: 50%;
    height: 100%;
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    padding: 6rem 2rem;
}
.d3 h1{
```

```
    /* position: relative; */
    font-size: 4rem;
    text-align: center;
    font-weight: 900;
    text-shadow: 3px 4px 7px rgba(81,67,21,0.8);
}
.d4{
    margin-top: 5%;
    width: 100%;
}
table{
    width: 100%;
    text-align: center;
    border-collapse: collapse;
}
table td{
    position: relative;
    height: 6rem;
}
#tab2,#tab3{
    margin-top: -1rem;
    margin-bottom: 1rem;
}
#tab2 td,#tab3 td{
```

```
    height: 6rem;
    /* border: solid 1px red; */
}
table td input,table td select{
    width: 100%;
    height: 4rem;
    padding-left: 3rem;
    border: none;
    border-radius: 0.5rem;
    background-color: rgb(255, 255, 255);
}
/* #tab2 input,#tab2 select,#tab3 input,#tab3 select{
    height: 4rem;
} */
table td i{
    position: absolute;
    left: 2%;
    top: 38%;
}
#tab2 td i,#tab3 td i{
    font-size: 1rem;
    top: 42%;
}
.d6{
```

```
    color: gray;
}
.b1{
    border-radius: 50px;
    padding: 1rem 3rem;
    background-color: orangered;
    color: white;
    font-weight: bolder;
    border: none;
    cursor: pointer;
    box-shadow: 3px 4px 7px rgba(81,67,21,0.8);
}
.d7{
    font-weight: bolder;
    width: 50%;
    height: 100%;
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    row-gap: 5rem;
}
.d7 h1{
    font-size: 5rem;
```

```
    color: white;
    text-align: center;
    font-weight: bold;
    text-shadow: 3px 4px 7px rgba(81,67,21,0.8);
    word-wrap: break-word;
    padding: 1rem;
}
.d7 p{
    font-size: 3rem;
    color: white;
    text-align: center;
    line-height: 1.5rem;
    word-spacing: 4px;
    text-shadow: 3px 4px 7px rgba(81,67,21,0.8);
    /* margin-top: 8rem; */
}
.d7 .b1{
    border: solid 1px white;
    /* margin-top: 8rem; */
    letter-spacing: 0.1rem;
    cursor: pointer;
    box-shadow: 3px 4px 7px rgba(81,67,21,0.8);
}
#stu,#emp{
```

```
    width: 1.5rem;
}
@media (max-width:998px) {
    html{
        font-size:55%;
    }
}
@media (max-width:768px) {
    html{
        font-size:45%;
    }
    table i{
        margin-left: -1%;
    }
}
@media (max-width:600px) {
    html{
        font-size:35%;
    }
    table{
        font-size: 2rem;
    }
    table input{
        font-size: 1.5rem;
```

```
    }
    table .b1{
        font-size: 2rem;
    }
    .d7 .b1{
        font-size: 1.5rem;
        font-family:'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva, Verdana, sans-serif;
    }
    .d7 p{
        font-size: 1rem;
    }
}
span:hover{
    cursor: pointer;
    font-size: 2rem;
    transition: 0.3s;
    color: rgb(105, 105, 240);
}
```

Login.py

```
#! C:\Users\Manish Kumar\AppData\Local\Programs\Python\Python312\python.exe

print("Content-Type: text/html\r\n\r\n")
import cgi
import mysql.connector
```

```
con=mysql.connector.connect(host='localhost', user='hostel',
passwd='data73063',database='hostel')
t=con.cursor()
try:
    f=cgi.FieldStorage()
    cond=f.getvalue('cond')
    if(cond=='entry'):
        t.execute('select * from signup where email="'+str(f.getvalue('t2'))+'"')
        if(t.fetchall()==[]):
            t.execute("insert into signup(name,email,sec_q,ans,pass,user_type)
values(%s,%s,%s,%s,%s,%s)",(f.getvalue('t1'),f.getvalue('t2'),f.getvalue('t3'),f.getvalue('t4'),f.
getvalue('t5'),f.getvalue('t6')))
            con.commit()
            print("Successfully Created!!&&0")
        else:
            print('Already Email Exists!!')
    elif(cond=='login'):
        t.execute('select name,email,user_type from signup where
email="'+str(f.getvalue('t1'))+'" and pass="'+str(f.getvalue('t2'))+'"')
        rs=t.fetchall()
        if(rs!=[]):
            print(rs[0][0],rs[0][1],rs[0][2],sep="&&")
        else:
            print(0)
    elif(cond=='forgot'):
        t.execute('select * from signup where email="'+str(f.getvalue('t1'))+'" and
sec_q="'+str(f.getvalue('t4'))+'" and ans="'+str(f.getvalue('t3'))+'"')
        if(t.fetchall()!=[]):
            t.execute('update signup set pass="'+str(f.getvalue('t2'))+'" where
email="'+str(f.getvalue('t1'))+'"')
            con.commit()
            print('Password Updated Succesfully!!&&0')
```

```
        else:
            print('Please Enter Correct Cerenditals!!')
    elif(cond=='profile_run'):
        t.execute('select * from profile where email="'+str(f.getvalue('t1'))+'"')
        rs=t.fetchall()
        if(rs!=[]):
            for a in rs:
                for i in a:
                    print(str(i)+'&&')
    elif(cond=='update'):
        t.execute('select * from profile where email="'+str(f.getvalue('t2'))+'"')
        if(t.fetchall()==[]):
            t.execute("insert into profile(name,email,cont,dob,gender,stat,dist,pin,loaction,about)
values(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)",(f.getvalue('t1'),f.getvalue('t2'),f.getvalue('t3'),f.
getvalue('t4'),f.getvalue('t5'),f.getvalue('t6'),f.getvalue('t7'),f.getvalue('t8'),f.getvalue('t9'),f.get
value('t10')))
        else:
            t.execute('update profile set
name="'+str(f.getvalue('t1'))+'",cont="'+str(f.getvalue('t3'))+'",dob="'+str(f.getvalue('t4'))+'",g
ender="'+str(f.getvalue('t5'))+'",stat="'+str(f.getvalue('t6'))+'",dist="'+str(f.getvalue('t7'))+'",pi
n="'+str(f.getvalue('t8'))+'",loaction="'+str(f.getvalue('t9'))+'",about="'+str(f.getvalue('t10'))+'
" where email="'+f.getvalue('t2')+'"')
        con.commit()
        print('Profile Updated Succesfully!!&&0')
    else:
        t.execute('SELECT user_type, COUNT(*) AS count_users FROM signup GROUP BY
user_type')
        rs=t.fetchall()
        if rs !=[]:
            user=admin="
            for a in rs:
                if a[0] == 'User':
                    user=a[1]
```

```
            else:
                admin=a[1]
        print(admin,user,sep='&&')
except Exception as e:
    print("Unsuccesss",e)
finally:
    if con.is_connected:
        con.close()
        t.close()
```

Index.js

```
var flag = true;
$(document).ready(function () {
  $("#tab1").on("keyup", function (event) {
    if (event.keyCode === 13) {
      $("#log").click();
    }
  });
  $("#tab2").on("keyup", function (event) {
    if (event.keyCode === 13) {
      $("#sign").click();
    }
  });
  $("#tab3").on("keyup", function (event) {
    if (event.keyCode === 13) {
      $("#forgot").click();
    }
  });
  $("#auto").click(function () {
```

```
if ($(".d7 .b1").text().trim() == "Sign Up") {
  $(".d3").css({
    translate: "101% 0",
    transition: "0.5s",
    "border-top-right-radius": "5px",
    "border-bottom-right-radius": "5px",
    "border-top-left-radius": "0px",
    "border-bottom-left-radius": "0px",
  });
  $(".d7").css({ translate: "-100% 0", transition: "0.5s" });
  $(".d7 .b1").text("Sign In");
  $(".d7 p").text("Existing User");
  $(".d3 .b1").text("Sign Up");
  $(".d3 h1").text("Sign Up");
  $(".d3 h1").css({ "font-size": "3rem" });
  $("#tab2").attr("hidden", false);
  $("#tab1").attr("hidden", true);
  $("#tab3").attr("hidden", true);
} else {
  $(".d3").css({
    translate: "0 0",
    transition: "0.5s",
    "border-top-right-radius": "0px",
    "border-bottom-right-radius": "0px",
    "border-top-left-radius": "5px",
    "border-bottom-left-radius": "5px",
  });
  $(".d7").css({ translate: "0 0", transition: "0.5s" });
  $(".d7 .b1").text("Sign Up");
  $(".d7 p").text("New User");
```

```
    $(".d3 .b1").text("Log In");
    $(".d3 h1").text("Log In");
    $(".d3 h1").css({ "font-size": "4rem" });
    $("#tab2").attr("hidden", true);
    $("#tab3").attr("hidden", true);
    $("#tab1").attr("hidden", false);
  }
});
$("span").click(function () {
  $("#tab3").attr("hidden", false);
  $("#tab1").attr("hidden", true);
  $(".d3 h1").text("Forgot Password");
  $(".d3 h1").css({ "font-size": "2rem" });
  $(".d3 .b1").text("Create");
});
$("#stu").click(function () {
  $("#student,#student1").attr("hidden", false);
  $("#employee").attr("hidden", true);
});
$("#emp").click(function () {
  $("#student,#student1").attr("hidden", true);
  $("#employee").attr("hidden", false);
});
function fl(iid) {
  if ($(iid).val().trim() == "") flag = false;
}
$("#sign").click(function () {
  flag = true;
  if (
    $("#stu").prop("checked") == false &&
```

```
  $("#emp").prop("checked") == false
) {
  flag = false;
  swal("Warning", "Please Select any Student/Employee!!",'warning');
} else if (
  $("#tab2 #pas").val().trim() != $("#tab2 #cpas").val().trim()
) {
  swal("Error", "Please enter same password in confirm password!!", "error");
  flag = false;
} else {
  fl("#tab2 #name");
  fl("#tab2 #email");
  fl("#tab2 #ans");
  fl("#tab2 #pas");
  fl("#tab2 #cpas");
  if (flag == false) {
    swal("Warning", "Please fill all field!!", "warning");
  }
}
if (flag) {
  if (confirm("Do You want to create your account!!")) {
    $.ajax({
      method: "post",
      url: "pythonfile/login.py",
      data: {
        cond: "entry",
        t1: $("#tab2 #name").val().trim(),
        t2: $("#tab2 #email").val().trim(),
        t3: $("#tab2 #secq").val().trim(),
        t4: $("#tab2 #ans").val().trim(),
```

```
          t5: $("#tab2 #pas").val().trim(),
          t6:$('input[name="a"]:checked').val(),
        },
        success: function (data) {
          data = data.split("&&");
          swal('Message',data[0],'info').then((value) => {
            location.reload()
          });
          // if (data[1] == 0)location.reload();
        },
      });
    }
  }
});
$("#log").click(function () {
  flag = true;
  fl("#tab1 #email");
  fl("#tab1 #pas");
  if (flag) {
    $.ajax({
      method: "post",
      url: "pythonfile/login.py",
      data: {
        cond: "login",
        t1: $("#tab1 #email").val().trim(),
        t2: $("#tab1 #pas").val().trim(),
      },
      success: function (data) {
        if(data!=0){
            data=data.split('&&');
```

```
            window.location='Dashboard.html';
            sessionStorage.setItem('uname',data[0].trim());
            sessionStorage.setItem('email',data[1].trim());
            sessionStorage.setItem('user_type',data[2].trim());
          } else {
           swal('Error',"Invalid Username or Password!!",'error');
          }
        },
      });
    } else {
      swal("Warning", "Please fill all field!!", "warning");
    }
  });
  $("#forgot").click(function () {
    flag = true;
    if ($("#tab3 #pas").val().trim() != $("#tab3 #cpas").val().trim()) {
      swal("Error", "Please enter same password in confirm password!!", "error");
      flag = false;
    } else {
      fl("#tab3 #email");
      fl("#tab3 #ans");
      fl("#tab3 #pas");
      fl("#tab3 #cpas");
      if (flag == false) {
        swal("Warning", "Please fill all field!!", "warning");
      }
    }
    if (flag) {
      if (confirm("Are you sure want to update password!!")) {
        $.ajax({
```

```
        method: "post",
        url: "pythonfile/login.py",
        data: {
          cond: "forgot",
          t1: $("#tab3 #email").val().trim(),
          t2: $("#tab3 #pas").val().trim(),
          t3: $("#tab3 #ans").val().trim(),
          t4: $("#tab3 #secq").val().trim(),
        },
        success: function (data) {
          data = data.split("&&");
          swal('Message',data[0],'info').then((value) => {
            location.reload()
          });
          // if (data[1] == 0) location.reload();
        },
      });
    }
  }
 });
});
```

Source code of Dashboard page:

Dashboard.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css"
      integrity="sha512-
z3gLpd7yknf1YoNbCzqRKc4qyor8gaKU1qmn+CShxbuBusANI9QpRohGBreCFkKxLhei6
S9CQXFEbbKuqLg0DA=="
      crossorigin="anonymous"
      referrerpolicy="no-referrer"
    />
    <script src="https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.9.4/Chart.js"></script>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Hostel | Dashbord</title>
    <link rel="shortcut icon" href="hostel-icon.png" type="image/x-icon" />
    <link rel="stylesheet" href="css/dashboard.css" />
  </head>
  <body hidden>
    <div class="nv" style="color: white">
      <span class="s1">Dashboard</span>
```

```
  <span class="name"
    >&amp;nbsp;<i class="fa-solid fa-user"></i> &amp;nbsp;<label
      style="cursor: pointer"
      >Username<small>User Type</small></label
    >&amp;nbsp;&amp;nbsp;<i
      class="fa-solid fa-caret-down fa-sm"
      style="color: rgb(133, 128, 129)"
      id="ns"
    ></i>
  </span>
  <div class="pop" style="color: black">
    <div onclick="location.href='Profile_Page.html'">Profile</div>
    <div id="logout" onclick="location.href='index.html'">Logout</div>
  </div>
</div>
<aside>
  <h1 style="cursor: pointer" onclick="location.href='Roomdetail.html'">
    <a href="Roomdetail.html">Room Details</a>
  </h1>
  <hr />
  <h1 style="cursor: pointer" onclick="location.href='Roomallocation.html'">
    <a href="Roomallocation.html">Room Allocation</a>
  </h1>
  <hr />
```

```
  <h1 style="cursor: pointer" onclick="location.href='Rules.html'">
    <a href="Rules.html">Rules</a>
  </h1>
  <hr />
  <h1 style="cursor: pointer" onclick="location.href='user.html'">
    <a href="user.html">User</a>
  </h1>
  <hr />
  <h1 style="cursor: pointer" onclick="location.href='Feedetails.html'">
    <a href="Feedetails.html">Fee Details</a>
  </h1>
</aside>
<section>
  <div class="main-div-gp">
    <div class="ur_div">
      <div onclick="location.href='Roomdetail.html'">
        <i class="fa-solid fa-person-booth"></i>
        <span>Room Details</span>
      </div>
    </div>
    <div class="ur_div">
      <div
        style="background: #3a98b9"
        onclick="location.href='Roomallocation.html'"
```

```
  >
    <i class="fa-solid fa-file-circle-plus"></i>
    <span>Room Allocation</span>
  </div>
</div>
<div class="ur_div">
  <div
    style="background-color: #c780fa"
    onclick="location.href='Rules.html'"
  >
    <i class="fa-solid fa-scale-balanced"></i>
    <span>Rules</span>
  </div>
</div>
<div class="ur_div">
  <div
    style="background-color: #6e85b7"
    onclick="location.href='user.html'"
  >
    <i class="fa fa-person"></i>
    <span>User Details</span>
  </div>
</div>
<div class="ur_div">
```

```
      <div
        style="background-color: #7f669d"
        onclick="location.href='Feedetails.html'"
      >
        <i class="fa-solid fa-indian-rupee-sign"></i>
        <span>Fee Details</span>
      </div>
    </div>
  </div>
  <div id="graph" >
    <canvas id="myChart" ></canvas>
  </div>
</section>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
<script src="https://unpkg.com/sweetalert/dist/sweetalert.min.js"></script>
<script>
  $(document).ready(function () {
    var uname = sessionStorage.getItem("uname");
    var user_type = sessionStorage.getItem("user_type");
    setInterval(logout,1000);
    if (!uname) {
      $("body").html("");
    }
    else{
```

```
  $('body').removeAttr('hidden');
 }
 $(".name").click(function () {
  if ($(".pop").css("display") == "none") {
   $(".pop").css({ display: "block" });
  } else {
   $(".pop").css({ display: "none" });
  }
 });
 $("aside h1").click(function () {
  $("aside h1").css({
   "background-color": "#89CFF3",
   color: "black",
   "box-shadow": "none",
  });
  $("aside h1 a").css({
   color: "black",
  });
  $(this).css({
   "background-color": "#0c4a69",
   "box-shadow": "2px 2px 2px 2px",
   color: "white",
   "border-radius": "0.5rem",
  });
```

```
    $(this).children("a").css({
      color: "white",
    });
  });
  $(".name").html(
    ' <i class="fa-solid fa-user"></i>  ' +
      uname +
      '(<small style="color:black;">' +
      user_type +
      '</small>)  <i class="fa-solid fa-caret-down fa-sm" style="color:
rgb(252, 18, 57);" id="ns"></i>'
  );
  $("#logout").click(function () {
    window.location.href = "index.html";
    sessionStorage.removeItem("uname");
  });
  $.ajax({
    method: 'post',
    url: 'pythonfile/login.py',
    success: function (data) {
       if (data.includes('&&')){
         var jk=data.split('&&')
         chart('Admin', 'User', jk[0], jk[1]);
       }
    }
```

```
});
});
function logout(){
  if (!sessionStorage.getItem("uname")){
    location.href='index.html'
  }
}
function chart(a, b, c, d) {
  const xValues = [a, b];
  const yValues = [c, d];
  const barColors = ["#b91d47", "#00aba9"];

  new Chart("myChart", {
    type: "pie",
    data: {
      labels: xValues,
      datasets: [
        {
          backgroundColor: barColors,
          data: yValues,
        },
      ],
    },
    options: {
```

```
            title: {
              display: true,
              text: "User Details",
            },
          },
        });
      }
    </script>
  </body>
</html>
```

Dashboard.css

```
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: Garamond;
}

html {
  font-size: 10px;
}

body {
```

```
  background-color: white;
}

.main {
  position: relative;
  width: 100%;
  height: 100vh;
}

.nv {
  height: 6.8rem;
  width: 100%;
  /* border: 2px solid black; */
  background-color: #00a9ff;
  box-shadow: 5px 5px 5px 5px;
}

.pop {
  position: absolute;
  height: 10rem;
  width: 15rem;
  right: 10rem;
  top: 6.5rem;
  background-color: aliceblue;
```

```
  /* visibility: hidden; */
  display: none;
  z-index: 1000;
  overflow: hidden;
  border-radius: 1rem;
}

.pop div {
  width: 100%;
  height: 50%;
  font-size: 2rem;
  text-align: center;
  padding: 1rem;
  overflow: hidden;
  z-index: 1000;
  border-bottom: 1px solid black;
  cursor: pointer;
}

.pop div:hover {
  font-size: 2.5rem;
  color: blue;
  transition: 0.3s;
}
```

```
.s1 {
  font-size: 4rem;
  font-weight: bolder;
  position: absolute;
  top: 1.5rem;
  left: 2rem;
  letter-spacing: 1px;
}

.name {
  position: absolute;
  font-size: 2.5rem;
  top: 2.5rem;
  font-weight: bold;
  right: 9rem;
  z-index: 1000;
  cursor: pointer;
}

aside {
  position: absolute;
  background-color: #89cff3;
  min-height: 120vh;
```

```
  text-align: center;
  padding: 1rem;
}

aside h1 {
  font-size: 2rem;
  line-height: 5rem;
  padding: 0.5rem 2rem;
  margin: 1rem 0;
}
aside h1 a{
    text-decoration: none;
    color: black;
}
aside h1:first-child {
  background-color: #0c4a69;
  box-shadow: 2px 2px 2px 2px;
  color: white;
  border-radius: 0.5rem;
}
aside h1:first-child a{
    color: white;
}
section{
```

```
  display: flex;
  flex-direction: column;
  align-items: center;
  gap:4rem;
  /* background-color: black; */
  width: 86.2%;
  height: 100%;
  margin-left: 13.8%;
  padding: 2rem;
}
.main-div-gp{
  display: flex;
  justify-content: space-evenly;
  align-items: inherit;
  flex-wrap: wrap;
  gap:4rem;
}
section #graph{
  border-top: solid 1px gainsboro;
  padding-top: 2rem;
  width: 100%;
  /* border: solid 1px red; */
}
section #graph #myChart{
```

```
  margin: auto;
  /* border: solid 1px red; */
  max-width:60rem;
}
section .ur_div{
  /* height: 100%; */
  padding: 1rem;
  width: 25%;
  border-radius: .5rem;
  box-shadow: rgba(33, 120, 192, 0.292) 0px 0.0625em 0.0625em, rgba(50, 90, 221, 0.502) 0px 0.125em 0.5em, rgba(16, 199, 219, 0.555) 0px 0px 0px 1px inset;
  color: white;
  &:hover{
    scale: 1.1;
    transition: .3s ease-in;
    cursor: pointer;
  }
}
section .ur_div div{
  height: 100%;
  width: 100%;
  display: flex;
  flex-direction: column;
  align-items: center;
  row-gap: 4rem;
```

```
  padding: 2rem;
  background-color: rgb(192, 59, 59);
  border-radius: .5rem;
}
section .ur_div i{
  font-size: 4rem;
  text-shadow: 3px 4px 7px rgba(81,67,21,0.8);
}
section .ur_div span{
  text-align: center;
  font-size: 3rem;
  font-weight: bold;
  text-shadow: 3px 4px 7px rgba(81,67,21,0.8);
}
```

Data integrity and constraints

1. UserInfo :-

Field Name	Datatype	Constraint
User_id	Char(6)	Foreign key
Name	Varchar(100)	Not null
Contact_no	char(10)	unique
Id_Proof	Varchar(100)	Unique
Address	Varchar(200)	Not null
Type	Varchar(50)	Not null
Father_name	Varchar(100)	Not null
Mother_name	Varchar(100)	Not null
Local_guardian	Varchar(100)	Null
Parent_contact	Char(10)	Not null
Local_guardian_contno	Char(10)	Null
Local_address	Varchar(100)	Null
Blood_group	Varchar(10)	Null
Photo	Blob	Null

2. RoomDetails :-

Field Name	Datatype	Constraint
Room_no	Varchar(10)	Primary key
Room_type	Varchar(200)	Not null
Total_bed	Varchar(10)	Not null
Status	Varchar(50)	Not null

3. RoomAllocation :-

Field Name	Datatype	Constraint
Room_no	Varchar(10)	Foreign key
User_id	char(6)	Foreign key
Check_in_date	Date	Not null
Check_out_date	Date	Null
Allocation_status	Varchar(20)	Not null

4. FeeDetails :-

Field Name	Datatype	Constraint
User_id	char(6)	Foreign key
Fee_amt	int	Not null
Pay_date	Date	Not null
Pay_mode	Varchar(20)	Not null
Month_name	Varchar(20)	Not null
Status	Varchar(20)	Not null

5. Rules :-

Field Name	Datatype	Constraint
Id	char(6)	Not null
Rule_desc	Varchar(2000)	Not null

6. Login :-

Field Name	**Datatype**	**Constraint**
User_id	char(6)	Primary key
Password	Varchar(20)	Not null
Security_ques	Varchar(200)	Not null
Security_ans	Varchar(200)	Not null
Role	Varchar(50)	Not null
Status	Varchar(50)	Not null