

## **Hostel Room Allocation System**

**Ms.B.Neelima#1,P.sri Harshitha#2,V.Mohana#3,D.Hari Krishna#4**

#1,Asst.Professor,Department of computer science & engineering

#2,3,4,B.Tech.,Students,Department of computer science & engineering

#1,2,3,4, QIS College Of Engineering And Technology,Vengamukkapalem

### **1. Introduction**

As the name specifies “HOSTEL ROOM ALLOCATING SYSTEM” is software developed for managing various activities in the hostel. As we can notice that educational institutions are increasing year by year, thereby the number of hostels is also increasing at the same pace. Since this can be a lot of strain on the person who is running the hostel and software’s are not usually used in this context. Therefore there is a greater need for software for the accommodation of the students studying in these institutions which manages this activity of maintaining hostels. And also because a well-reputed college like QIS, should support this online system.which is why we wanted to target this aspect and bring this software to life.

### **2. Background and Motivation**

Currently,most of the colleges do manual work to allocate hostels and rooms to the students every year.We all know that its an overwhelming process to do allocation where the student’s strength is pretty high as local colleges.Also hostlers find it difficult to raise their complaints to the hostel administration faculty.Even if they do, they won’t have a clear idea about the status of that complaint or issue.So due reduce this hectic work we introduced a web-app by which students can choose their hostels and also roomies through an online portal.It reduces the work of hostel administration faculty and also students will find this useful due to its feature of send and tracking their complaints directly to admins.Hostel administration faculty will find this useful to post any import updates or daily feeds to students.

### **3.Implementation**

#### **1. Admin Module:**

- a. Admin\_login.php : this page avails the admins to login.
- b. Add\_admin.php : this page enables the main admin to add new admins to maintain hostels (this is accessible only to the main admin i.e admin1).
- c. Update\_hostels.php : the main admin(admin1) can make new entries of hostels using this page.
- d. Admin\_land.php : this displays the dashboard of all admin details and complaints of all students under the logged-in admin.
- e. Admin\_list.php : this page displays the details of all students in that hostel maintained by the logged-in admin.
- f. Admin\_feed.php : using this page admin can post notices to students.

#### **2. Student Module:**

- a. Index.php : this is the login page for students. New users (students) can sign up by providing the required credentials.

- b. Signup.php : students can sign up using this page
- c. student\_main.php : students get to choose a hostel and roommate using this page.
  - i. Through this page, a student can send requests for the students who are supposed to stay in that particular hostel of the logged-in student.
  - ii. Here one can check their requests and correspondingly accept or reject them and there might be cases where students might misuse this feature and start spamming the database so duplicate requests are not entertained (as implementation is concerned).
  - iii. Students can post their complaints, which will be sent to the corresponding admin.

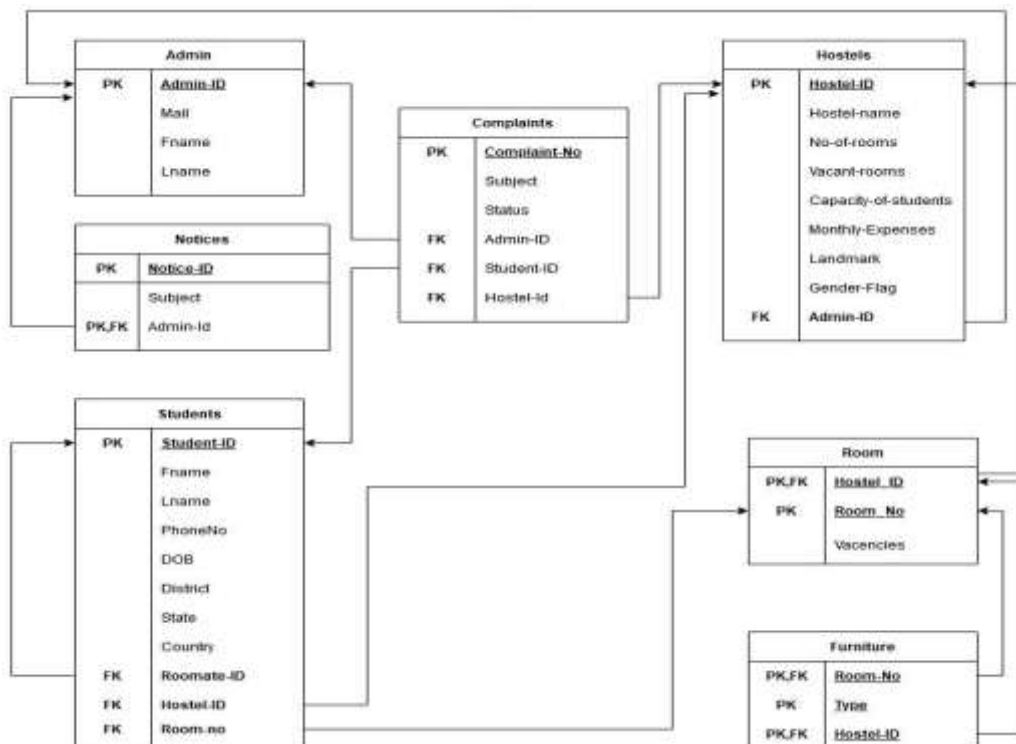
The feedback of these operations is displayed as a snack bar component.

- d. Profile.php : this page displays the details of logged-in students where one can also edit their information.
- e. Notifications.php : using this page students can view the notifications posted by the admin and also the status of the complaint posted by the logged-in student.

**4.Tools Used**

- 1. Front- end : Html5, CSS3, Bootstrap
- 2. Back-end : PHP, javascript
- 3. Database : SQL

**5.Proposed system & Architecture**



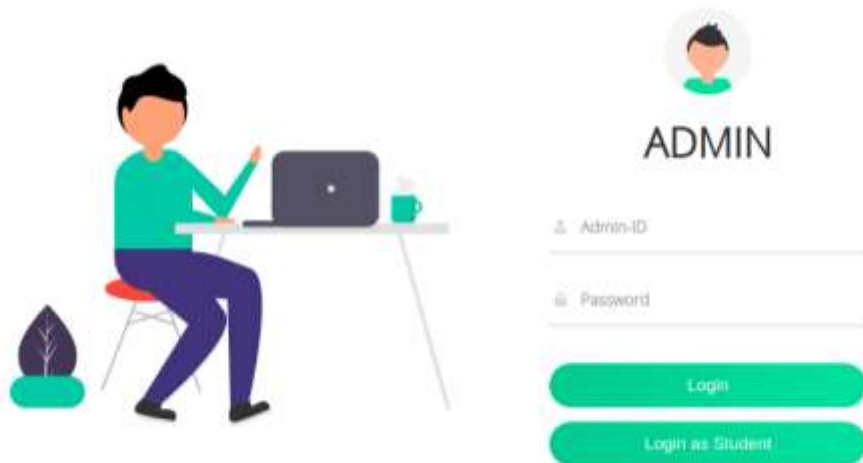
## 6.Results & Discussion

Through this software, a very laborious task of allocating the hostel rooms has been made automated and also provided the users to choose the hostel and their roommates according to their choice. This platform created a direct bridge between hostel officers and students, thereby reducing the gap between them and making interactions simple. This also avails the hostel officers to reach the students in no time just by posting a news feed. This also clears the dilemma of students whether the complaint made by them is being processed or not by displaying the status of their complaints, thereby increasing the transparency in running the system.

### 1. For Admin

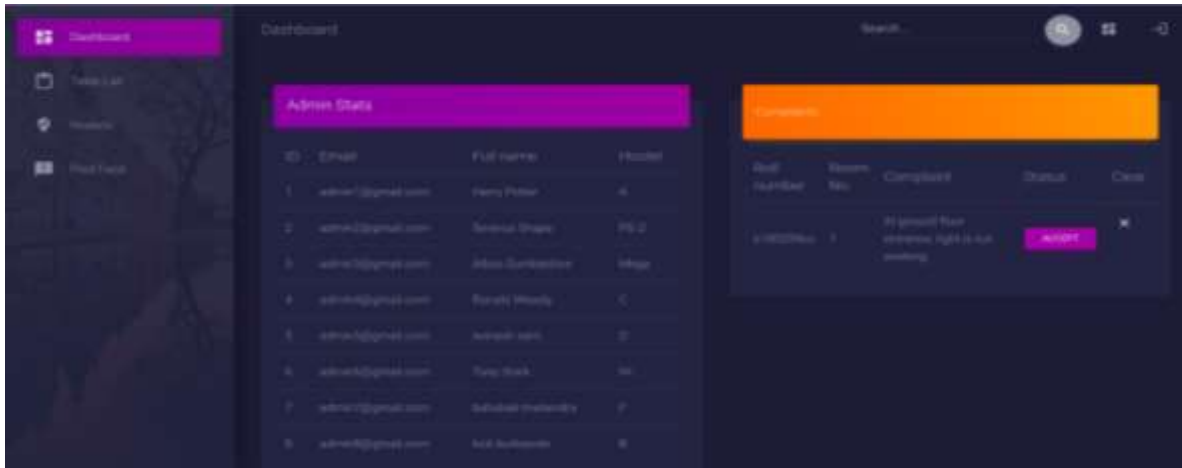
#### Sign-in :

Every admin is provided with a username and the password by the main admin i.e admin1. So all the admin users can only sign-in to the webpage using their credentials.

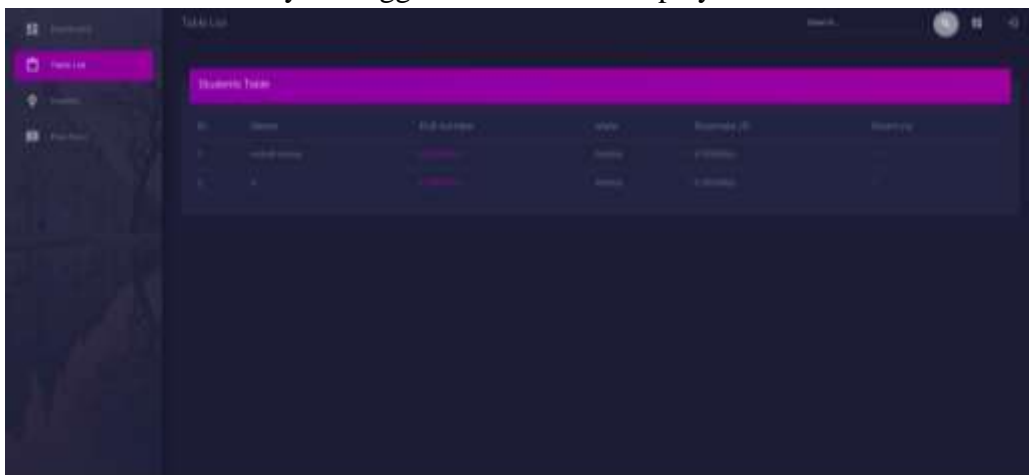


#### Admin Dashboard:

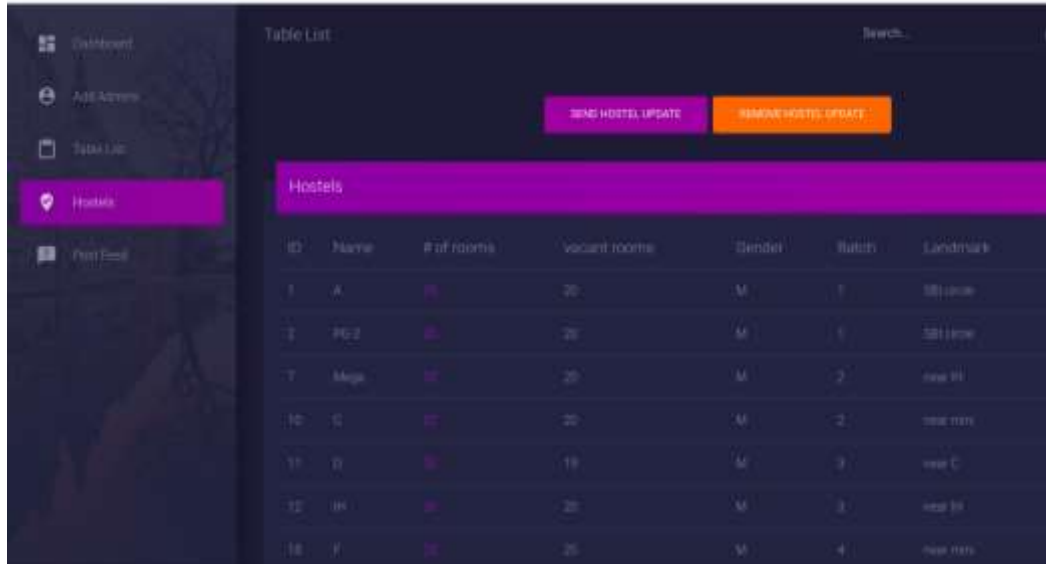
After logging in the landing page of the admin users displays the dashboard containing details of the peer admins and the complaints in their corresponding hostels.

**Student Details:**

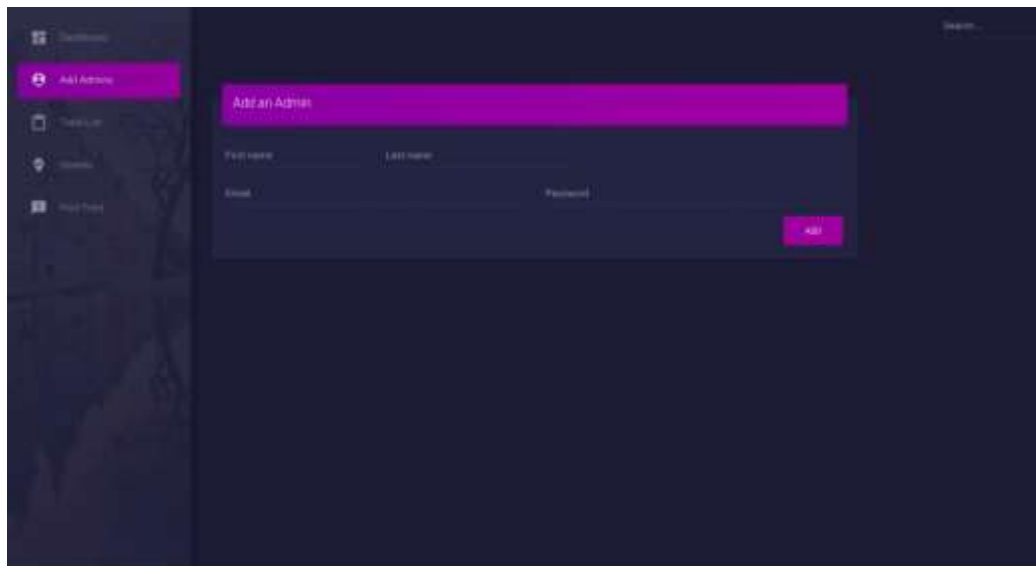
In Table-list (present in the left nav bar of the landing page), all the details of the students maintained by the logged-in admin are displayed.

**Main admin privileges:**

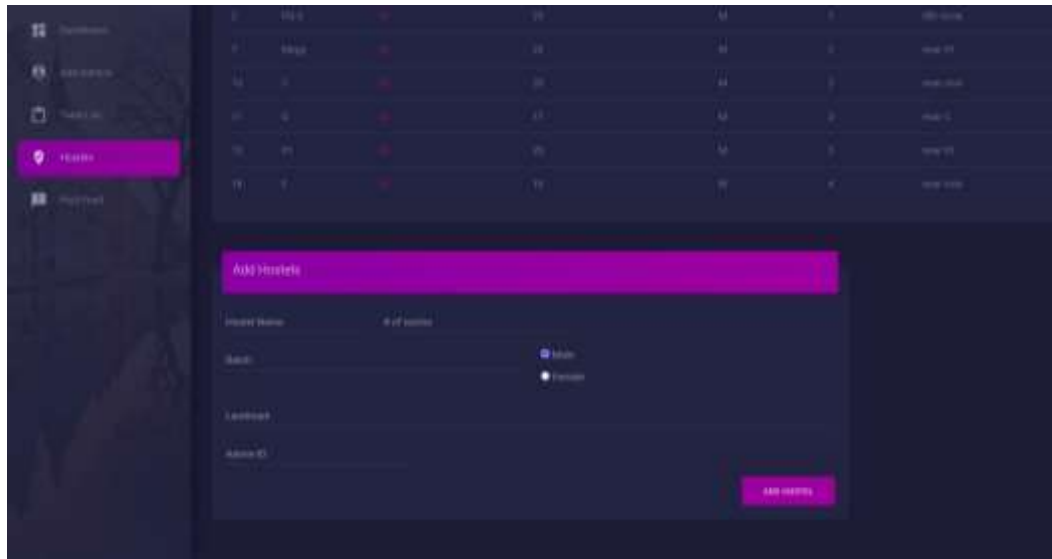
- At the beginning of every academic year, the main admin (admin1) sends the hostel update, so that the rooms can be reallocated to the other students.
- And after a certain deadline, the main admin can remove the update which was given earlier.



- c. The main admin has the privilege to appoint new admins using the **Add Admin** tab present in the left navbar.

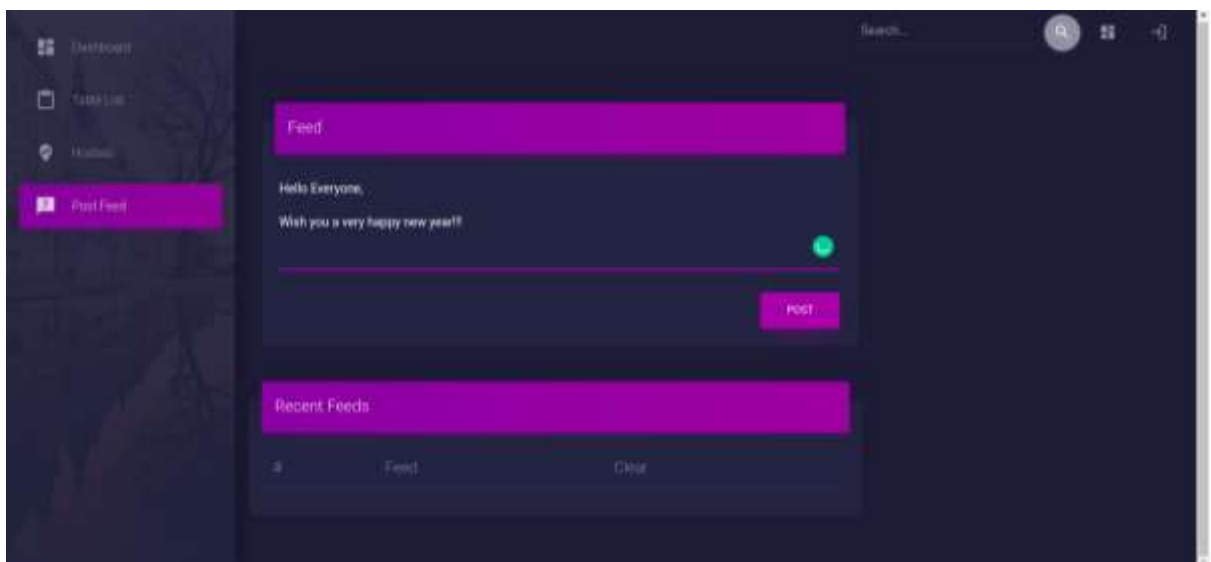


- d. The newly appointed admins can be allocated to one of the hostels.



**Post Feed:**

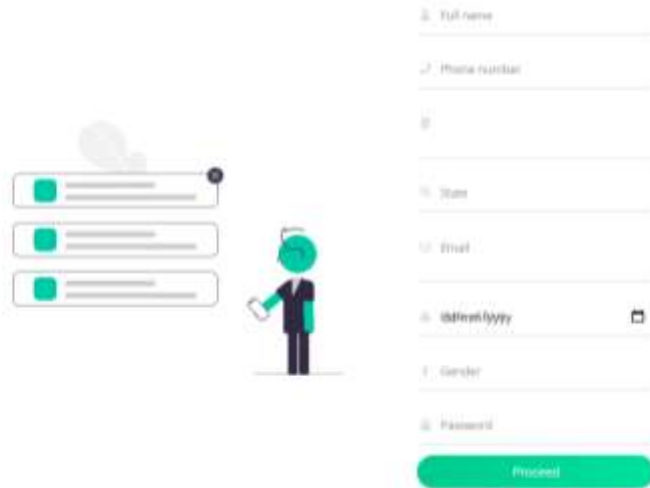
Admins can post their feed or notices to the students of the corresponding hostel using this page. All their previous feeds they have posted are also visible on this page and admins can delete their previously posted feeds on this page.



**2.For Student**

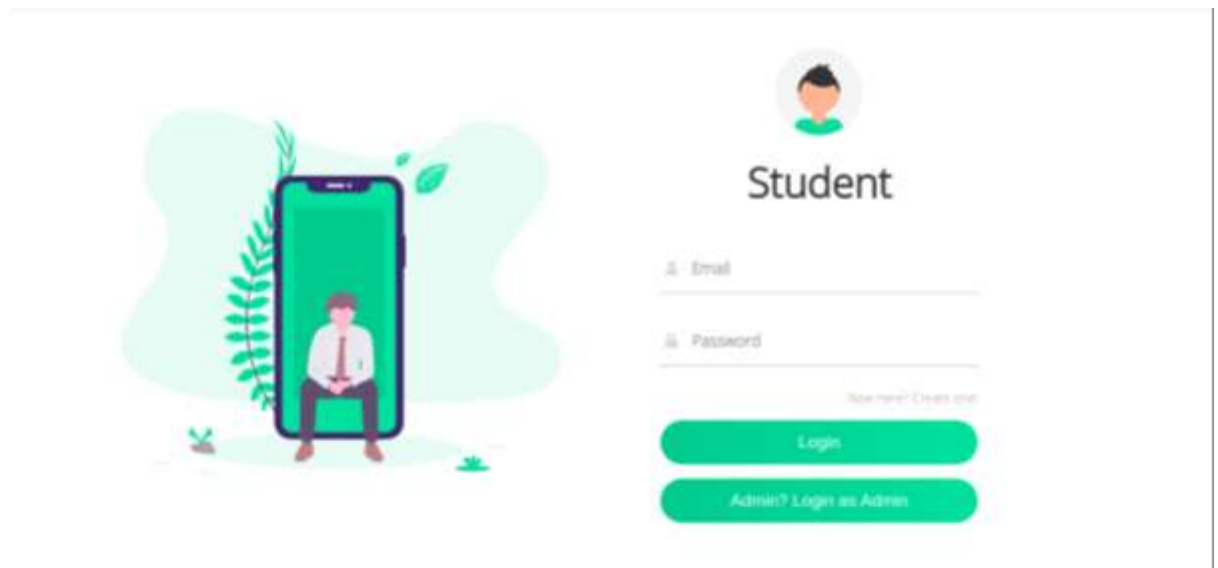
**Sign-up page:**

Students can register to this web-app using this signup page by mentioning all their details.



**Sign-in page:**

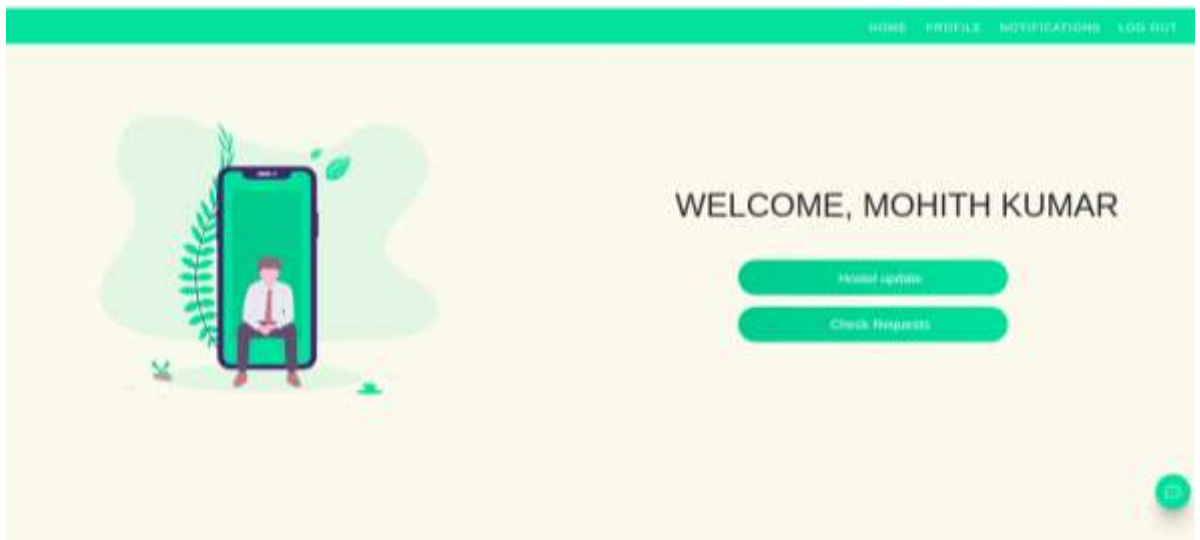
Existing users(students) can log in to the web app using the correct credentials through the sign-in page as shown below.



**Hostel Update:**

After signing in users will be redirected to the landing page which will appear as shown below.

- a. When the main admin sends the notification for the hostel update then the Hostel update button in the landing page of the student becomes active and when there are room requests for the logged-in student the check request button becomes active.



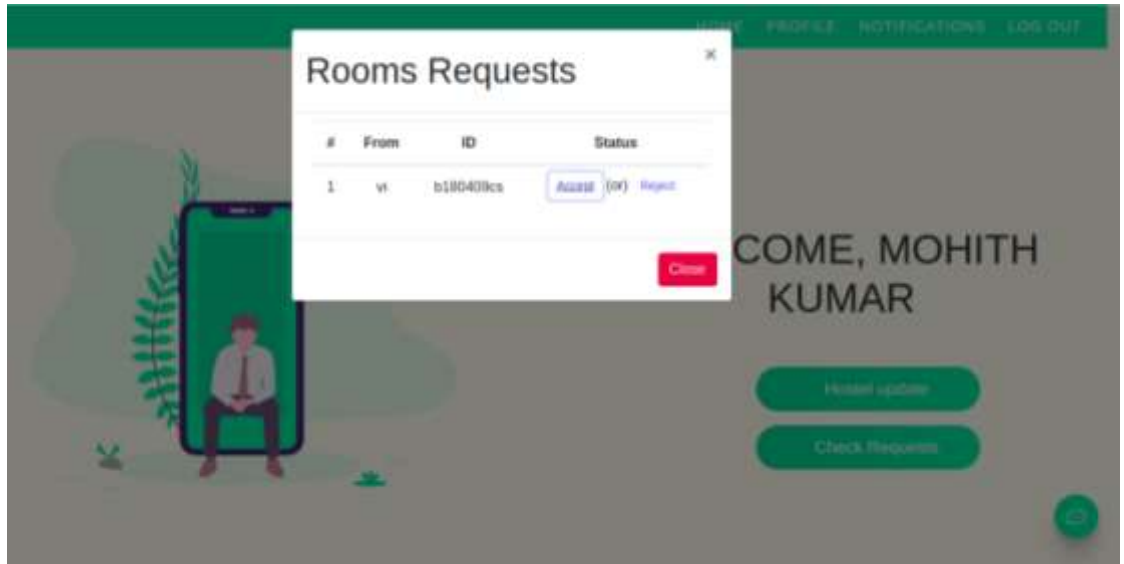
**b. Choose Roommate (send request):**



**c. Accept Request:**

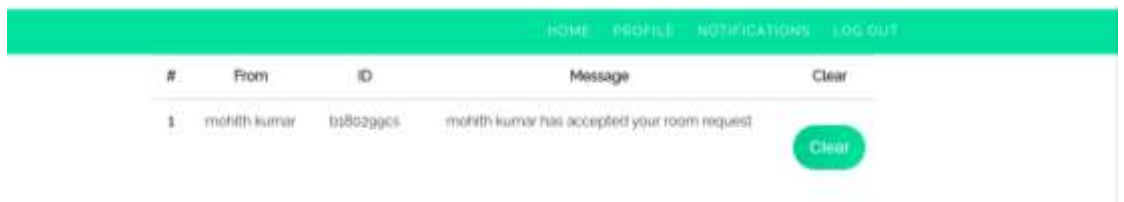
Users(students) can accept or reject the room requests which they have received from other users. If they accept the request then the user will be allocated to the same room and hostel as his request's sender.





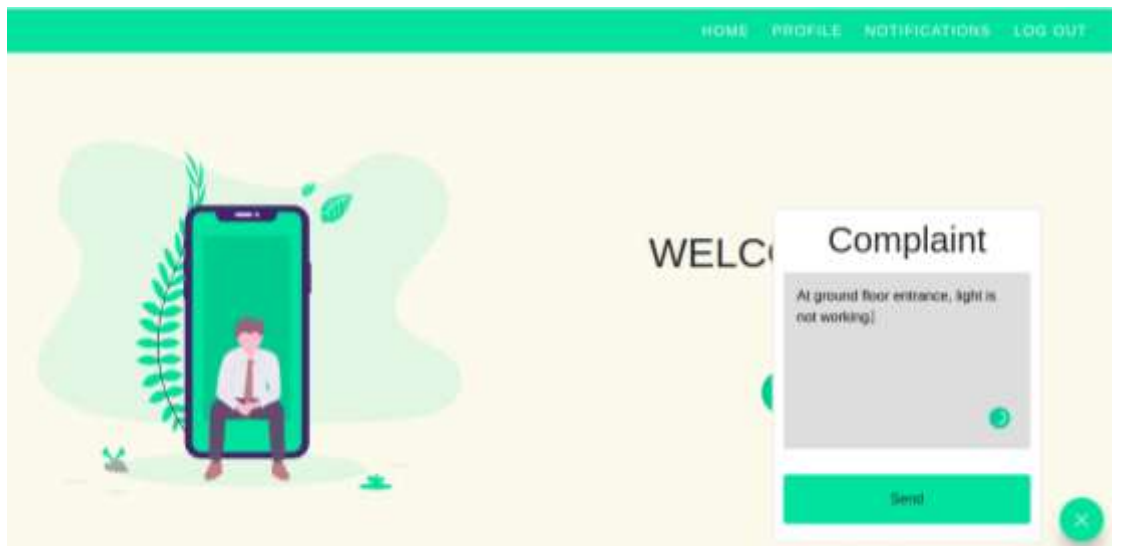
**d. Notification for request acceptance:**

Notifications regarding the acceptance or rejection of your room requests are visible on the notifications page.



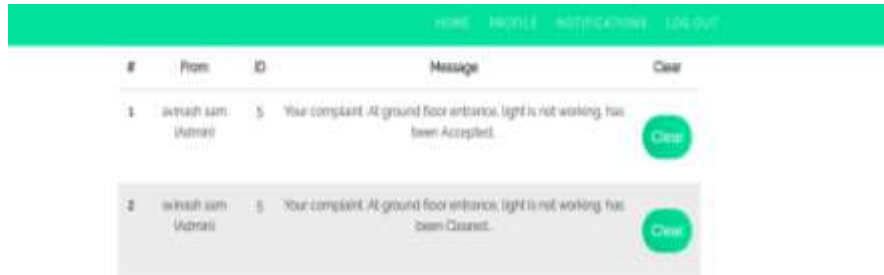
**Complaints:**

**Send Complaints:**



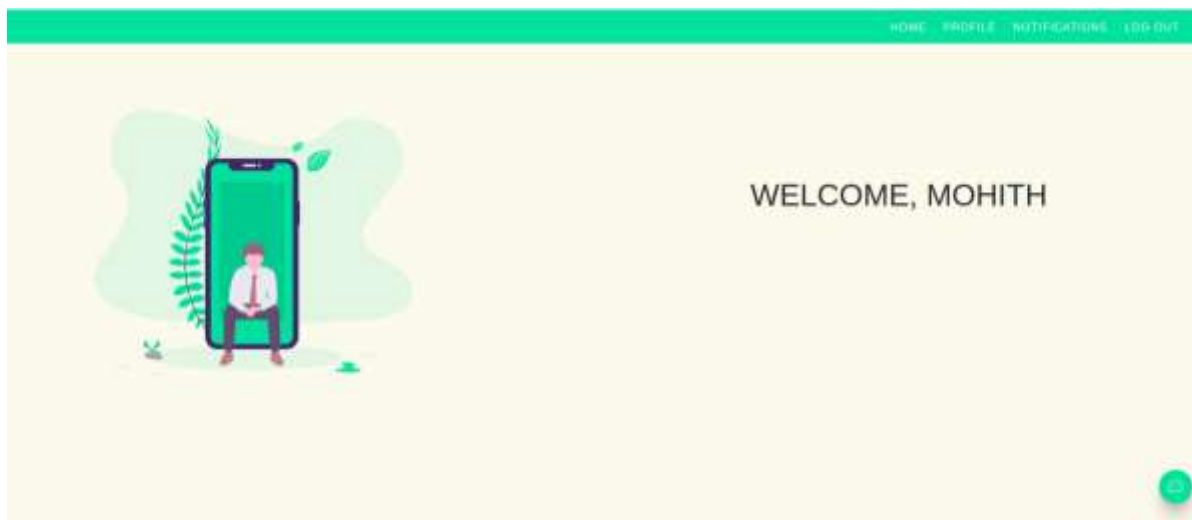
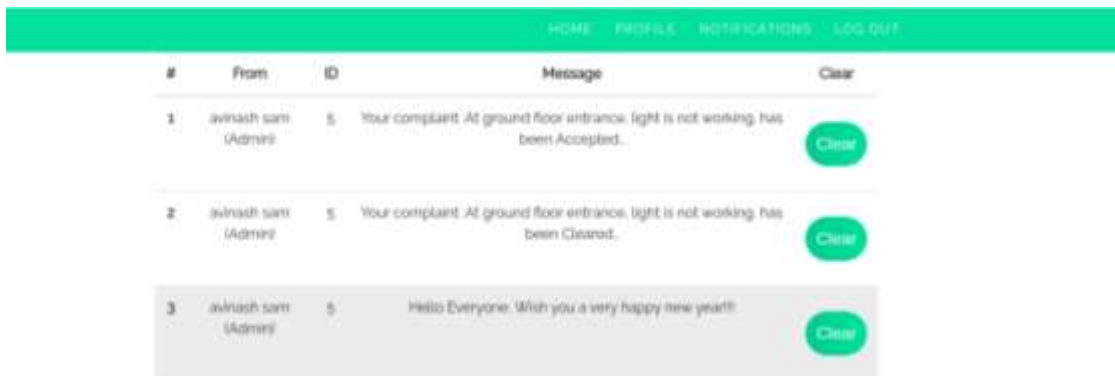
### Notification for the feedback of the complaint:

All the notifications regarding the status(accepted, rejected, cleared) of your complaint sent by the admin are visible here. Users can clear unwanted notifications.



### Check feed posted by admin:

This functions as a virtual notice board where the news feed posted by the admin is notified to the students as a notification that can only be cleared by the admin.



**5. Conclusion**

All the overwhelming work of hostel-room allocation have been reduced since all the room allocations were done automatically by this web-app. Thereby reducing the strain of manual work. This mobile responsive webapp allows users to directly interact with the admins and send their complaints to get them solved. This also facilitates the admins to interact the students very efficiently by sending the notifications to students under this particular admin.

**6. References**

1. <https://www.w3schools.com/php/default.asp>
2. [https://www.w3schools.com/php/php\\_mysql\\_intro.asp](https://www.w3schools.com/php/php_mysql_intro.asp)
3. <https://www.javatpoint.com/php-tutorial>