

CS 207 (DB & IS) Project Documentation

HOSTEL MANAGEMENT SYSTEM

Submitted By:

Group ID: G6

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ACKNOWLEDGMENT

Presentation inspiration and motivation have always played a key role in the success of any venture.

We pay our deep sense of gratitude to **IIT Indore** for giving us the opportunity to prepare this project.

We would like to express our sincere thanks to **Dr Nagendra Kumar**, IIT Indore to encourage us to the highest peak and to help us in preparing this Hostel Management project. We are immensely obliged to our friends for their elevating inspiration, encouraging guidance and kind supervision in the completion of this project.

We feel to acknowledge our indebtedness and deep sense of gratitude to our guide **Mr. Ankit Jain** for the valuable guidance and kind supervision given to us throughout the course which shaped the present work as its show.

Proposal

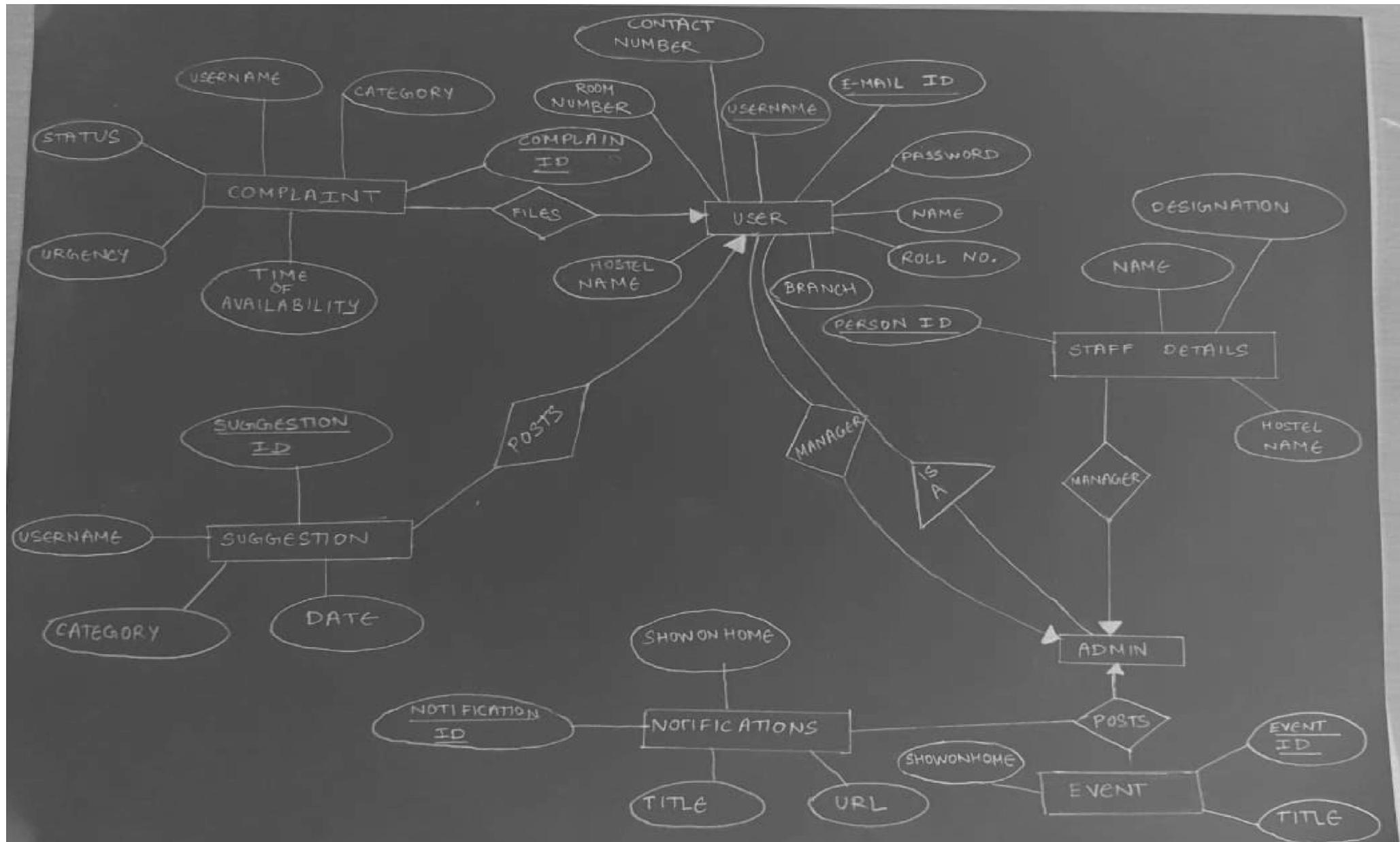
In our institute, we sometimes face issues in our hostels like broken furniture, lack of water supply, non-functional electrical appliances, etc. We then have to report the problem in person to the person in charge of that. The person has a notebook which is not good to keep records and resolve all complaints. It is a tedious task for both the student and the person who maintains this record. Thus our project is to build a platform that will make this process simple and digitalized.

On this website, users can sign up using their institute E-mail ID, a unique username, and a password by validating the OTP sent to his/her institute E-mail ID. After signing up, the user also has to enter his/her details. This detail will be stored in the database as a record for future use. The user will be directed to the home page after login.

The home page will contain information about the upcoming events and important announcements, services, and links to each hostel's image gallery. Users will have the option to register complaints, give suggestions regarding hostel facilities, edit their profile information, and get all contact details and details of workers present in the hostel.

Users will register their complaints or suggestions by filling a form. The details of the same will be displayed on the admin's screen. Users can also request housekeeping services from the complaints page. The admin will make sure the task gets completed as soon as possible. There are individual admins for each hostel, and also a main admin. Individual admins can access the details of their respective hostels, while the main admin can access the details of all hostels. Thus, the main admin can monitor the performance of all the hostel admins. Admins can also post notifications and ongoing events on the homepage.

ER DIAGRAM:-



Database Details

Our website will need to store user information, complaints, and suggestions.

Entities:

- User details
- Complaint
- Suggestion
- Staff details
- Upcoming events or important announcements
- Notifications
- Admins

Attributes:

- **User details**
 - ❖ Username (primary key)
 - ❖ E-mail ID
 - ❖ Password
 - ❖ Name
 - ❖ Roll No
 - ❖ Branch
 - ❖ Hostel Name
 - ❖ Room No.
 - ❖ Contact No.

- **Complaint**

- ❖ Complaint ID (primary key)
- ❖ Username (foreign key, referencing Username in User)
- ❖ Category
- ❖ Urgency
- ❖ Subject
- ❖ Details
- ❖ Time of Availability
- ❖ Status

- **Suggestion**

- ❖ Suggestion ID (primary key)
- ❖ Username (foreign key, referencing Username in User)
- ❖ Subject
- ❖ Detail

- **Staff details**

- ❖ staff_ID(primary key)
- ❖ Name
- ❖ Post
- ❖ Hostel name
- ❖ Webpage Link

- **Events**

- ❖ Event_ID(primary key)
- ❖ Title
- ❖ Show on home

- **Admins**

- ❖ Admin_ID (primary key)
- ❖ Password
- ❖ Name
- ❖ Main admin or not
- ❖ Hostel name
- ❖ Email

Relations:

The relationship between user and complaint is one-to-many, i.e., a user can file many complaints, while a complaint is related to only one user.

The relationship between user and suggestion is also one-to-many, i.e., a user can give many suggestions, while a suggestion is related to only one user.

Complaints and suggestions are not related to each other.

Admin can post announcements and notifications which the user can see. An admin can post many notifications and announcements.

Main admin can also add or delete staff members and can also edit the details of all hostels.

Hostel admins can add or delete staff members, post announcements and notifications for their respective hostels.

Tables

Users Table

| username | email | password | name | rollno | branch | hostelname | roomno | mobileno |
|----------|--------------------|---|-----------|-----------|--------|--|--------|------------|
| dummy1 | dummy1@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student A | 190001001 | CSE | VIKRAM SARABHAI HALL OF RESIDENCE | 501 A | 9876543210 |
| dummy10 | dummy10@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student J | 190005002 | MEMS | C. V. RAMAN HALL OF RESIDENCE | 510 E | 9879553210 |
| dummyY11 | dummy11@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student K | 190001003 | CSE | HOMI JEHANGIR BHABHA HALL OF RESIDENCE | 511 A | 9875544210 |
| dummy12 | dummy12@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student L | 190002003 | EE | J. C. BOSE HALL OF RESIDENCE | 512 B | 9876543210 |
| dummy2 | dummy2@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student B | 190001002 | CSE | A. P. J ABDUL KALAM HALL OF RESIDENCE | 502 B | 9886543210 |
| dummy3 | dummy3@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student C | 190002001 | EE | DEVI AHILYA HALL OF RESIDENCE | 503 C | 9877543210 |
| dummy4 | dummy4@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student D | 190002002 | EE | C. V. RAMAN HALL OF RESIDENCE | 504 D | 9876553210 |
| dummy5 | dummy5@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student E | 190003001 | ME | HOMI JEHANGIR BHABHA HALL OF RESIDENCE | 505 E | 9876544210 |
| dummy6 | dummy6@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student F | 190003002 | ME | J. C. BOSE HALL OF RESIDENCE | 506 A | 9876543310 |
| dummy7 | dummy7@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student G | 190004001 | CE | VIKRAM SARABHAI HALL OF RESIDENCE | 507 B | 9876543220 |
| dummy8 | dummy8@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student H | 190004002 | CE | A. P. J ABDUL KALAM HALL OF RESIDENCE | 508 C | 9886543211 |
| dummy9 | dummy9@iiti.ac.in | \$5\$rounds=535000\$2qetQJKaWcwteIn3\$oOVQ1WkuJaS.b8q/MKtHrHq8HNvbNzU2sbRy11ITPA1 | Student I | 190005001 | MEMS | DEVI AHILYA HALL OF RESIDENCE | 509 D | 9977543210 |

User data is stored in a single table. Password is stored after hashing it so that the password isn't visible even to the admin. 'username' is the Primary Key

Table Description

| Field | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|-------|
| username | varchar(255) | NO | PRI | NULL | |
| email | varchar(255) | YES | | NULL | |
| password | varchar(255) | YES | | NULL | |
| name | varchar(255) | YES | | NULL | |
| rollno | tinytext | YES | | NULL | |
| branch | varchar(255) | YES | | NULL | |
| hostelname | varchar(255) | YES | | NULL | |
| roomno | varchar(255) | YES | | NULL | |
| mobileno | text | YES | | NULL | |

Admins Table

| admin_id | adminname | password | mainadmin | hostelname | email |
|----------|-----------|----------|-----------|--|----------------------|
| 1 | admin | admin123 | 1 | NULL | admin@iiti.ac.in |
| 2 | admin_vsb | admin123 | NULL | VIKRAM SARABHAI HALL OF RESIDENCE | admin_vsb@iiti.ac.in |
| 3 | admin_apj | admin123 | NULL | A. P. J ABDUL KALAM HALL OF RESIDENCE | admin_apj@iiti.ac.in |
| 4 | admin_da | admin123 | NULL | DEVI AHILYA HALL OF RESIDENCE | admin_da@iiti.ac.in |
| 5 | admin_cvr | admin123 | NULL | C. V. RAMAN HALL OF RESIDENCE | admin_cvr@iiti.ac.in |
| 6 | admin_hjb | admin123 | NULL | HOMI JEHANGIR BHABHA HALL OF RESIDENCE | admin_hjb@iiti.ac.in |
| 7 | admin_jcb | admin123 | NULL | J. C. BOSE HALL OF RESIDENCE | admin_jcb@iiti.ac.in |

Data of all the admins is stored in this admin table. ‘admin’ is the main admin who has access to all the data. Other admins are the respective hostel admins who have access only to their own hostel’s data.

Table Description

| Field | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|----------------|
| admin_id | int | NO | PRI | NULL | auto_increment |
| adminname | varchar(255) | YES | | NULL | |
| password | varchar(255) | YES | | NULL | |
| mainadmin | text | YES | | NULL | |
| hostelname | varchar(255) | YES | | NULL | |
| email | varchar(255) | YES | | NULL | |

Staff Table

| staff_id | fullname | post | hostelname | link |
|----------|----------|------------------|--|------|
| 1 | Staff A | Junior Assistant | VIKRAM SARABHAI HALL OF RESIDENCE | NULL |
| 2 | Staff B | Attendant | VIKRAM SARABHAI HALL OF RESIDENCE | NULL |
| 3 | Staff C | Junior Assistant | A. P. J ABDUL KALAM HALL OF RESIDENCE | NULL |
| 4 | Staff D | Attendant | A. P. J ABDUL KALAM HALL OF RESIDENCE | NULL |
| 5 | Staff E | Junior Assistant | DEVI AHILYA HALL OF RESIDENCE | NULL |
| 6 | Staff F | Attendant | DEVI AHILYA HALL OF RESIDENCE | NULL |
| 7 | Staff G | Junior Assistant | C. V. RAMAN HALL OF RESIDENCE | NULL |
| 8 | Staff H | Attendant | C. V. RAMAN HALL OF RESIDENCE | NULL |
| 9 | Staff I | Junior Assistant | HOMI JEHANGIR BHABHA HALL OF RESIDENCE | NULL |
| 10 | Staff J | Attendant | HOMI JEHANGIR BHABHA HALL OF RESIDENCE | NULL |
| 11 | Staff K | Junior Assistant | J. C. BOSE HALL OF RESIDENCE | NULL |
| 12 | Staff L | Attendant | J. C. BOSE HALL OF RESIDENCE | NULL |

This table contains the list of all the staff members of the different hostels. Admins can add/remove any staff member or edit their data.

Table Description

| Field | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|----------------|
| staff_id | int | NO | PRI | NULL | auto_increment |
| fullname | varchar(255) | YES | | NULL | |
| post | text | YES | | NULL | |
| hostelname | text | YES | | NULL | |
| link | text | YES | | NULL | |

Complaints Table

| complaint_id | username | subject | category | time_of_availability | details | complain_status | urgency |
|--------------|----------|--------------|--------------|----------------------|---------|-----------------|---------|
| 1 | pdp | housekeeping | Carpentry | 10:20 | dasff | resolved | NULL |
| 2 | nim | housekeeping | Housekeeping | 10:20 | xfdg | pending | 1 day |

This table contains the record of all the complaints registered by the users. This data is used by respective admins to make sure no complaint is left.

TABLE DESCRIPTION

| Field | Type | Null | Key | Default | Extra |
|----------------------|--------------|------|-----|---------|----------------|
| complaint_id | int | NO | PRI | NULL | auto_increment |
| username | varchar(255) | YES | MUL | NULL | |
| subject | text | YES | | NULL | |
| category | text | YES | | NULL | |
| time_of_availability | varchar(255) | YES | | NULL | |
| details | text | YES | | NULL | |
| complain_status | varchar(255) | YES | | pending | |
| urgency | varchar(10) | YES | | NULL | |

Suggestions Table

| suggetion_id | username | subject | details |
|--------------|----------|------------------|--|
| 1 | dummy1 | Plant trees | Plant more trees |
| 2 | dummy2 | Security Cameras | No. of security cameras in the hostel must be increased. |
| 3 | dummy3 | Tree Plantation | Need more trees around the hostel |
| 4 | dummy4 | Security Cameras | Need more security cameras in the hostel |
| 5 | dummy5 | Tree Plantation | Need more trees around the hostel |
| 6 | dummy6 | Security Cameras | Need more security cameras in the hostel |
| 7 | dummy7 | Tree Plantation | Need more trees around the hostel |
| 8 | dummy8 | Security Cameras | Need more security cameras in the hostel |

This table contains the record of all the suggestions given by the users. This data is used by respective admins to make required changes in the hostel for the welfare of the people.

Table Description

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|----------------|
| suggetion_id | int | NO | PRI | NULL | auto_increment |
| username | varchar(255) | YES | MUL | NULL | |
| subject | text | YES | | NULL | |
| details | text | YES | | NULL | |

Notification Table

| notification_id | title | url | showonhome |
|-----------------|--|-----|------------|
| 1 | Campus entry prohibited after 11.30 PM sharp | | yes |
| 2 | Necessary to carry ID Cards while going outside the campus | | yes |

It is the list of notifications ever posted by the admin. When ‘showonhome’ is ‘yes’, notifications are shown on the home page, and if a notification is not to be shown anymore, ‘showonhome’ is changed to ‘no’.

Table Description

| Field | Type | Null | Key | Default | Extra |
|-----------------|--------------|------|-----|---------|----------------|
| notification_id | int | NO | PRI | NULL | auto_increment |
| title | varchar(255) | YES | | NULL | |
| url | text | YES | | NULL | |
| showonhome | varchar(255) | YES | | yes | |

Events Table

| event_id | title | showonhome |
|----------|---|------------|
| 1 | Diwali Celebrations in Campus on 14 Nov' 20 | yes |
| 3 | Gymkhana Meet on 20 Nov' 20 | yes |

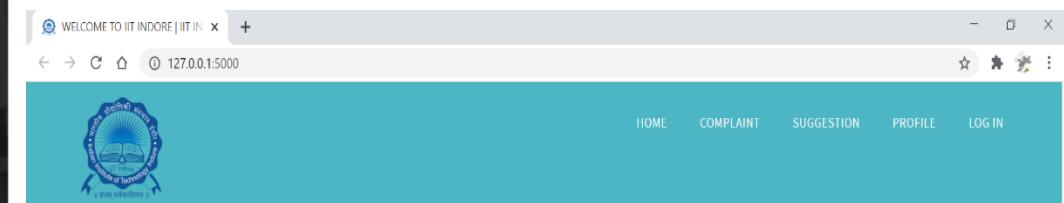
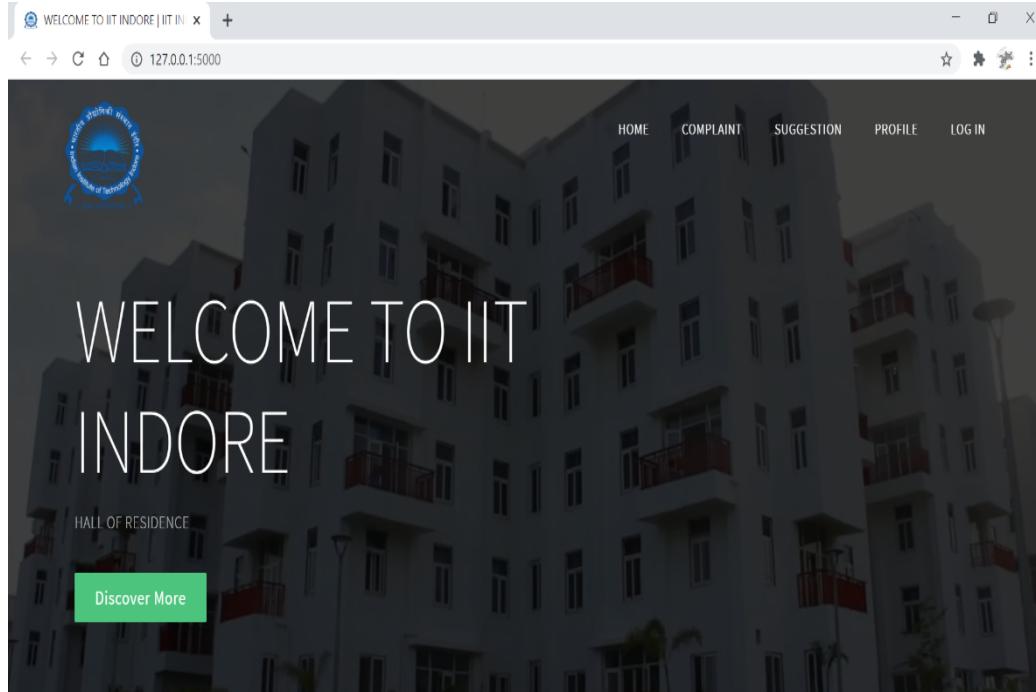
This table records all the events about to happen in a hostel or all the hostels. Admin can post these events.

Table Description

| Field | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|----------------|
| event_id | int | NO | PRI | NULL | auto_increment |
| title | varchar(255) | YES | | NULL | |
| showonhome | varchar(255) | YES | | yes | |

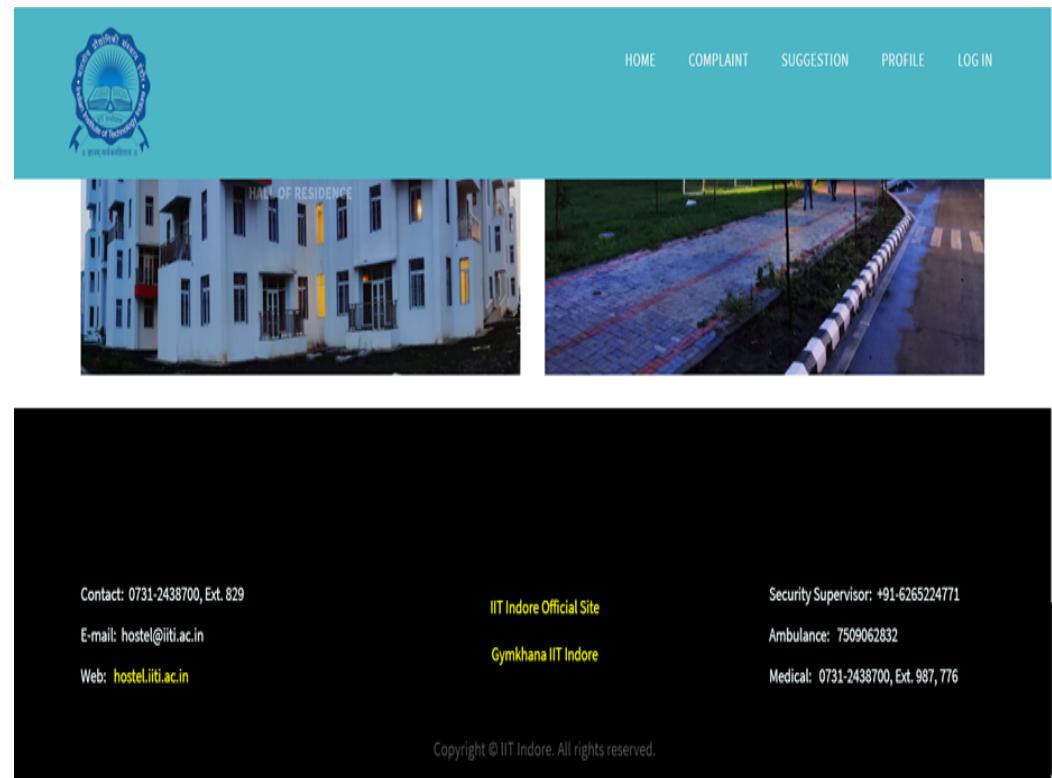
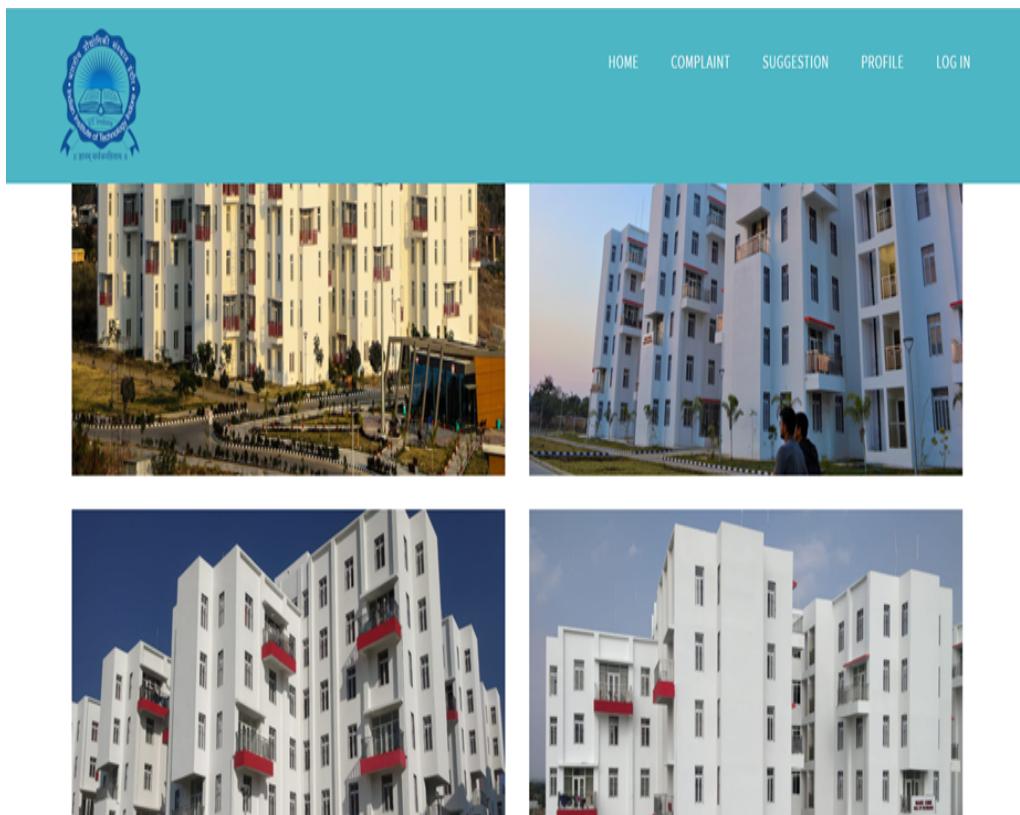
WEB PAGES:-

User Home Page



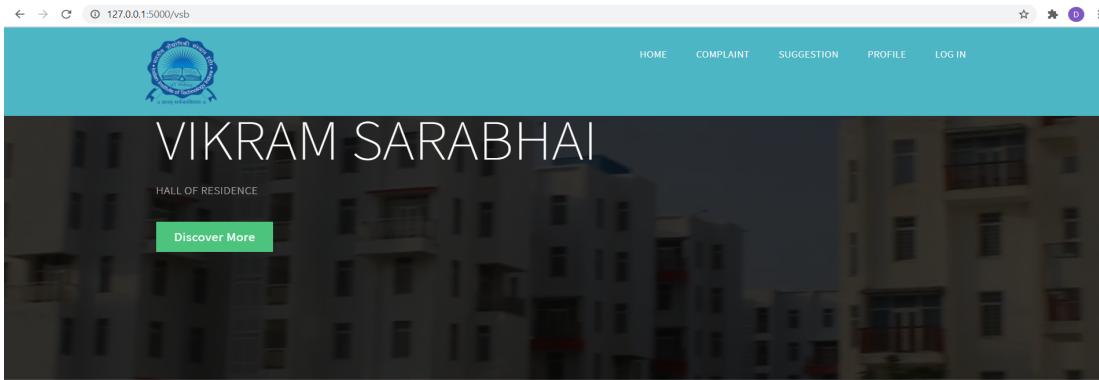
HALL OF RESIDENCE





Home page has a navigation bar which allows all the users to use all the functions. Home page has links to the individual hostel pages. Any announcement made by the admin will appear here. All the important contact details are also mentioned here. In order to use the functions provided we need to login first otherwise you will be redirected to the login page. Users can access the undertaking via the home page. It also contains links to Gymkhana and IIT Indore official website.

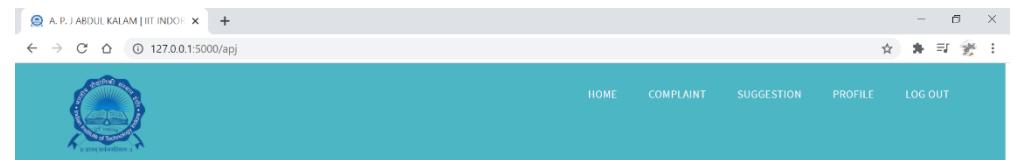
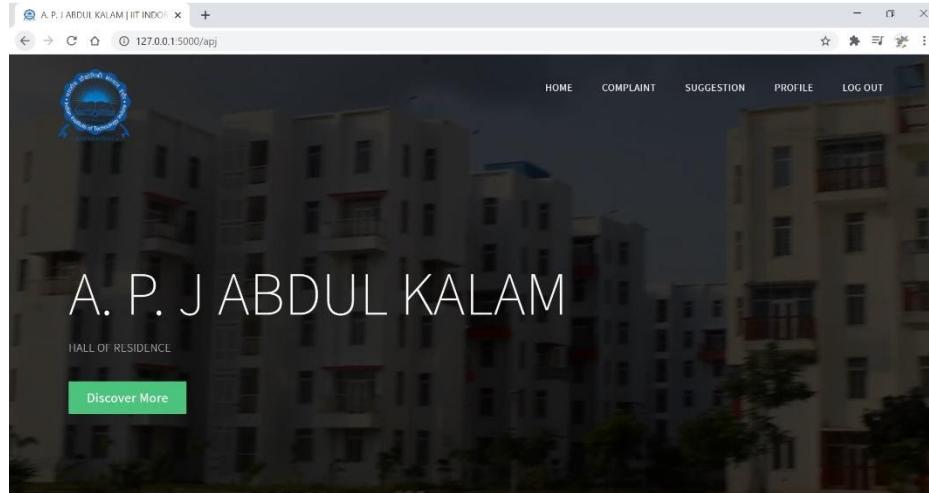
Vikram Sarabhai HOR Web Page



A screenshot of a web browser showing the staff page for the Vikram Sarabhai Hall of Residence. The header includes the IIT Indore logo and navigation links for HOME, COMPLAINT, SUGGESTION, PROFILE, and LOG OUT. The main content area displays two staff profiles: "Staff A Junior Assistant" and "Staff B Attendant", each with a placeholder profile picture and name.

This is the individual hostel page of V.S.B. HOR. It contains the staff details of this hostel.

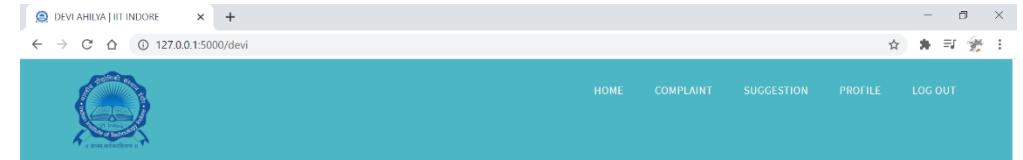
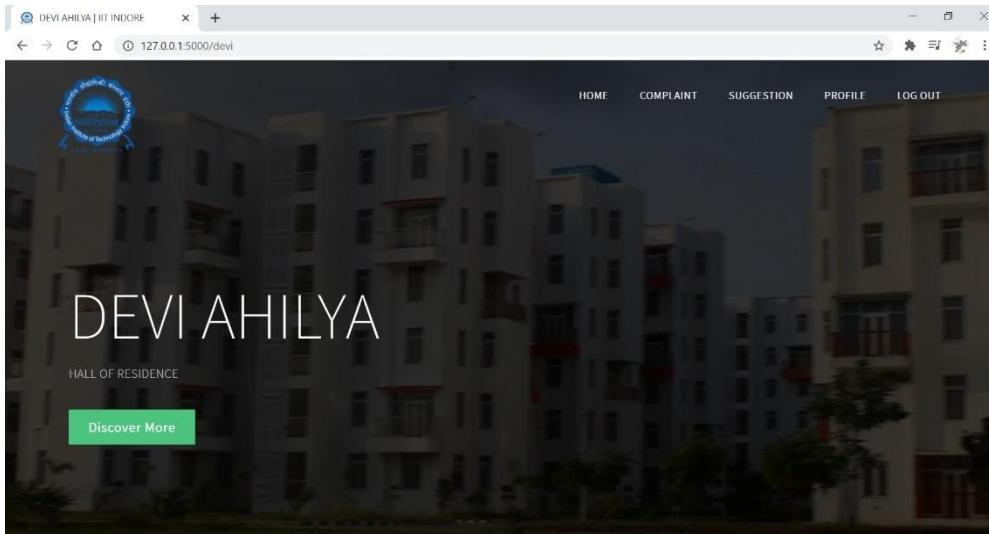
A.P.J. Abdul Kalam HOR Web Page



OFFICE : A. P. J ABDUL KALAM HALL OF RESIDENCE

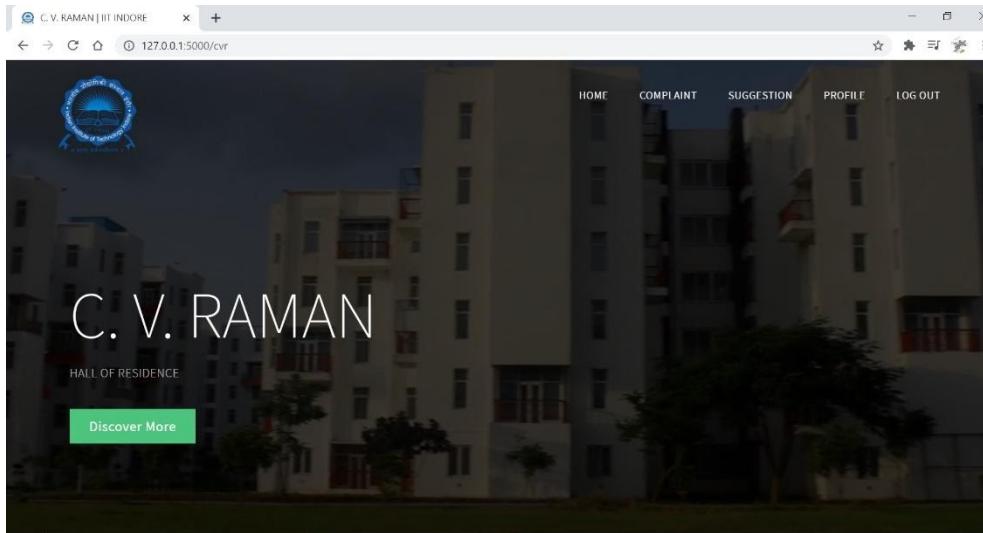
This is the individual hostel page of A.P.J. Abdul Kalam HOR. It contains the staff details of this hostel.

Devi Ahilya HOR Web Page



This is the individual hostel page of Devi Ahilya HOR. It contains the staff details of this hostel.

C.V. Raman HOR Web Page



OFFICE : C. V. RAMAN HALL OF RESIDENCE

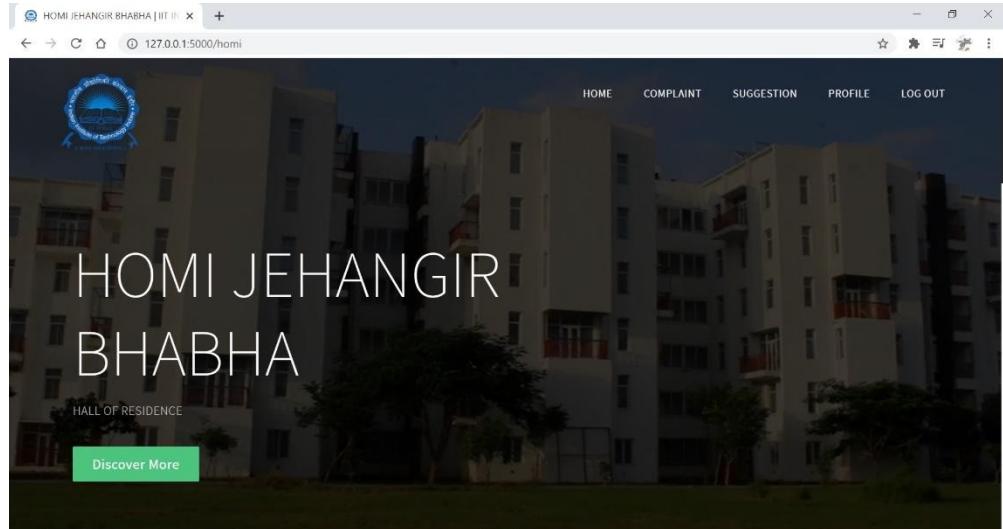


Staff G
Junior Assistant

Staff H
Attendant

This is the individual hostel page of C.V. Raman HOR. It contains the staff details of this hostel.

Homi Jehangir Bhabha HOR Web Page



This is the individual hostel page of Homi Jehangir Bhabha HOR. It contains the staff details of this hostel.

J.C. Bose HOR Web Page

J. C. BOSE
HALL OF RESIDENCE

Discover More

HOME COMPLAINT SUGGESTION PROFILE LOG OUT

OFFICE : J. C. BOSE HALL OF RESIDENCE

Staff K
Junior Assistant

Staff L
Attendant

HOME COMPLAINT SUGGESTION PROFILE LOG OUT

This is the individual hostel page of J.C. Bose HOR. It contains the staff details of this hostel.

Complaints Web Page

← → ⌂ 127.0.0.1:5000/complaints



HOME COMPLAINT SUGGESTION PROFILE LOG OUT

REGISTER YOUR COMPLAINTS HERE

Subject

Category

Urgency

Time of Availability

Details

Submit

Complaint page allows the user to file a complaint regarding any problem he/she is facing in the hostel. It is a very simple form which asks the user to give a subject, and choose the category of the issue (electrical, water, etc.). User can mention the time at which they will be available. This will help admin to resolve their complaint easily. After providing the details, user can click on submit button and the data is sent to the admin. Users can also request for housekeeping via lodging a complaint in the respective category.

Suggestions Web Page

PROVIDE YOUR VALUEABLE SUGGETIONS HERE

Subject

Details

Submit

Suggestions page allows the user to give his/her valuable suggestions. Admin can go through these suggestions to make the appropriate changes for the welfare of the hostel community.

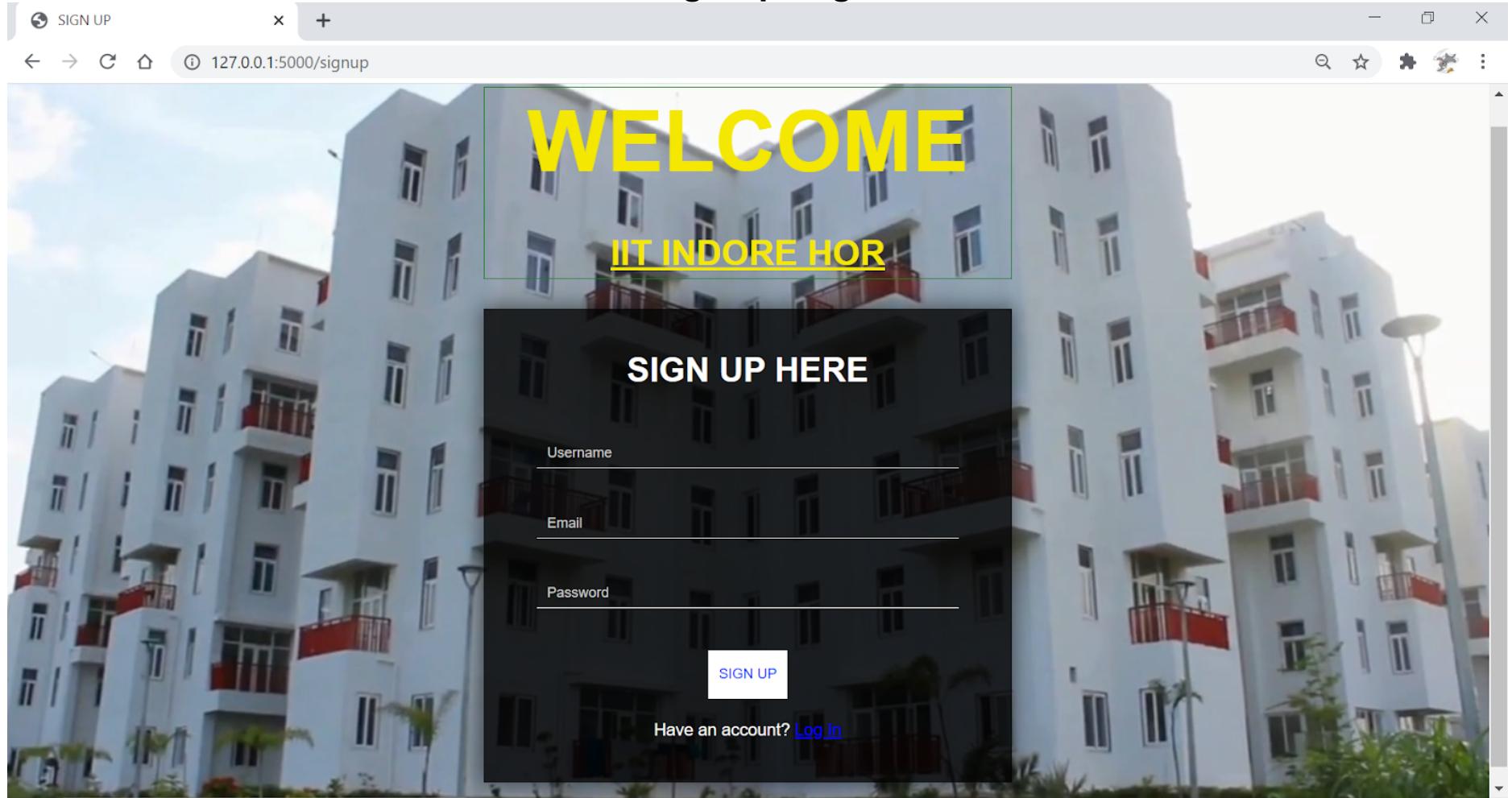
Profile Web Page

The screenshot shows a web browser window titled "PROFILE | IIT INDORE". The address bar displays "127.0.0.1:5000/profile". The page has a teal header with the IIT Indore logo and navigation links: HOME, COMPLAINT, SUGGESTION, PROFILE, and LOG OUT. On the left, there's a profile section for "Student a" (Student), showing a placeholder profile picture, email (dummy1@iiti.ac.in), phone (9876543210), and address (501 A VIKRAM SARABHAI HALL OF RESIDENCE). To the right is a form for updating the profile, containing fields for User Name (dummy1), Full Name (Student a), Roll No. (190001001), Branch (CSE), Hostel Name (VIKRAM SARABHAI HALL OF RESIDENCE), Room No. (501 A), Email (dummy1@iiti.ac.in), Phone No (9876543210), Confirm Password (Current Password), and an "Update Profile" button.

| User Name | dummy1 |
|------------------|-----------------------------------|
| Full Name | Student a |
| Roll No. | 190001001 |
| Branch | CSE |
| Hostel Name | VIKRAM SARABHAI HALL OF RESIDENCE |
| Room No. | 501 A |
| Email | dummy1@iiti.ac.in |
| Phone No | 9876543210 |
| Confirm Password | Current Password |

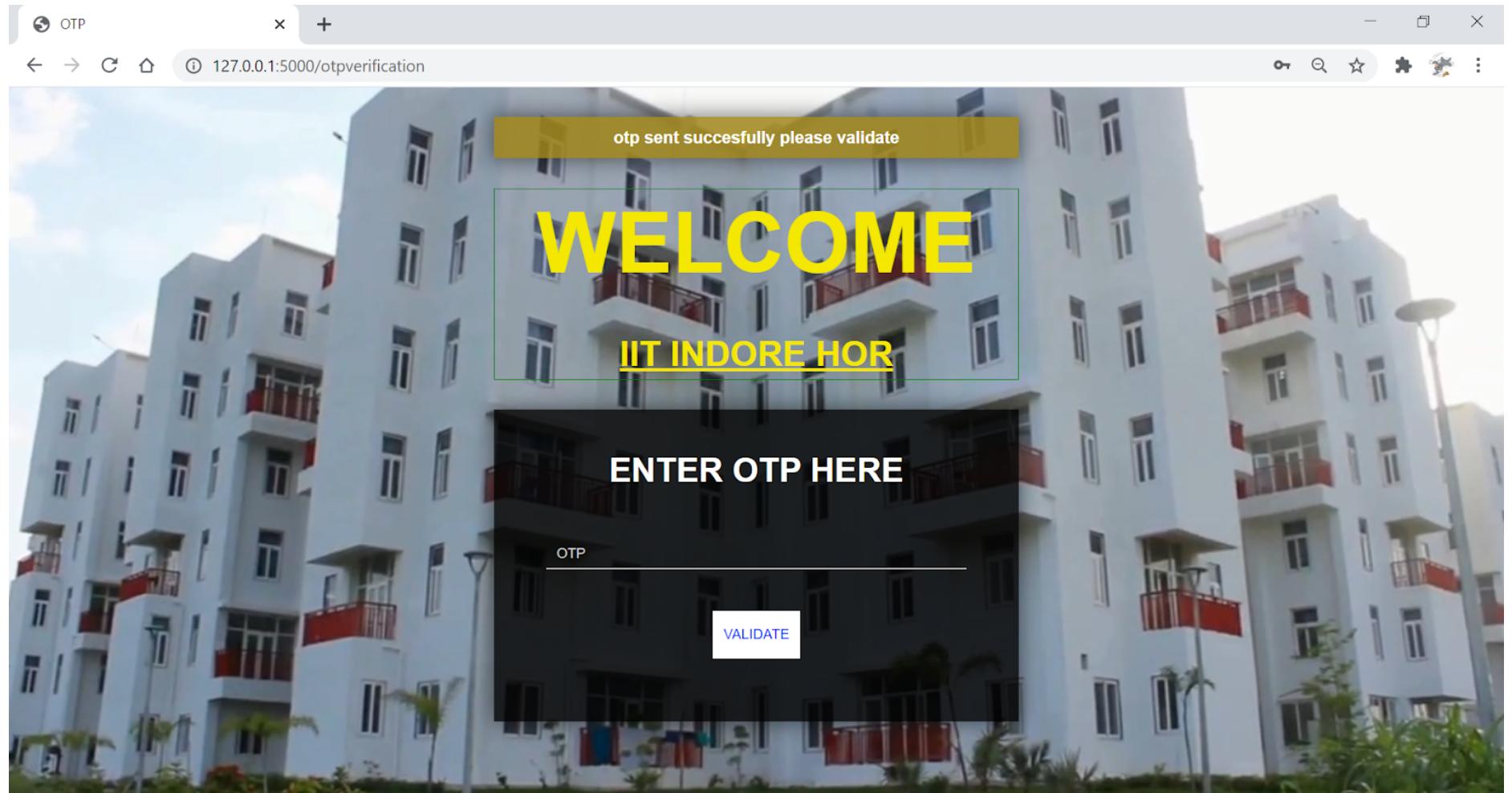
Profile page allows users to see their personal details. The user can also update the information as per his requirement through this page (they have to enter their password once again, to make these changes possible). Users cannot update their email id. Since username and roll no are unique for each user, so they cannot be changed without cross-verification. If the username/roll no are already registered then an error message will appear.

Sign Up Page



New users can sign up through this page. After filling this information, they will have to enter the OTP sent to their E-mail ID. Only IIT Indore email-id can be used for registration. If the username or email id are already registered then, the page will display the respective error message. It also contains a login page link for those who have already registered.

OTP Page



Here, users have to enter the OTP sent to their respective E-mail ID. After the OTP verification, the user is directed to the details page.

Details Page

① 127.0.0.1:5000/userdetails



Successfully registered please enter your details

WELCOME

IIT INDORE HOR

ENTER YOUR DETAILS

Full name

Roll no

Branch

Hostel name

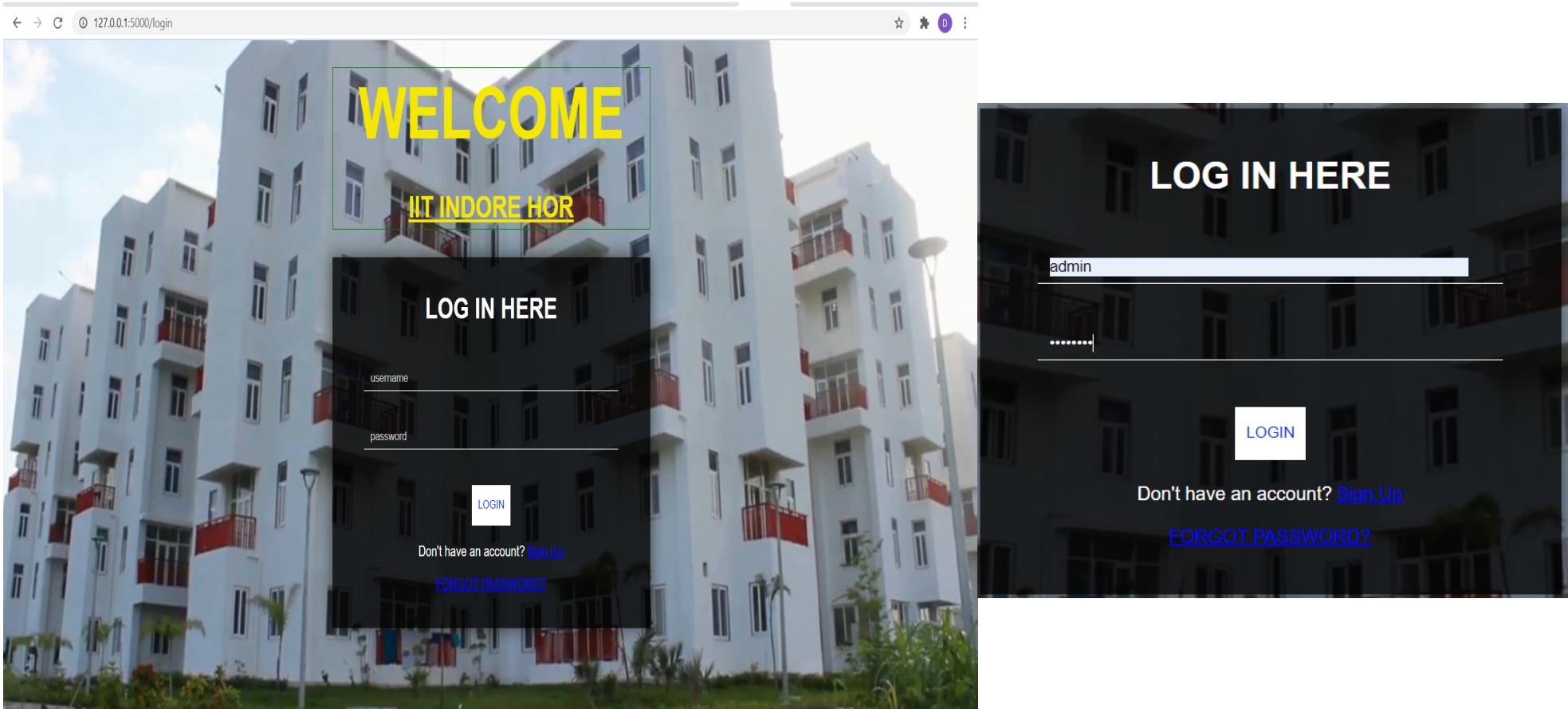
Room No

Mobile No

SUBMIT

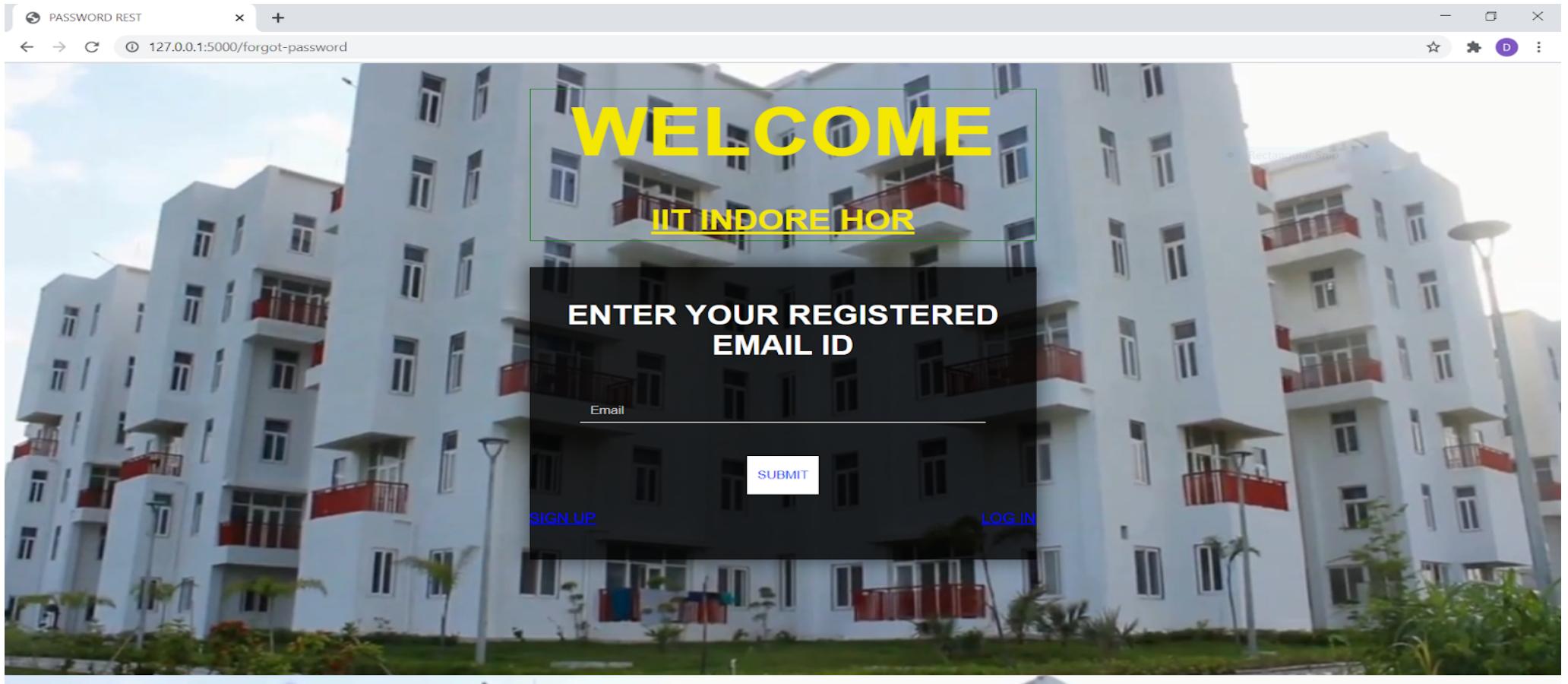
Here, the user has to fill his/her contact and hostel details. Only a 10 digit mobile number will be accepted. This data is saved in the database for admin to see it whenever required.

Login Page



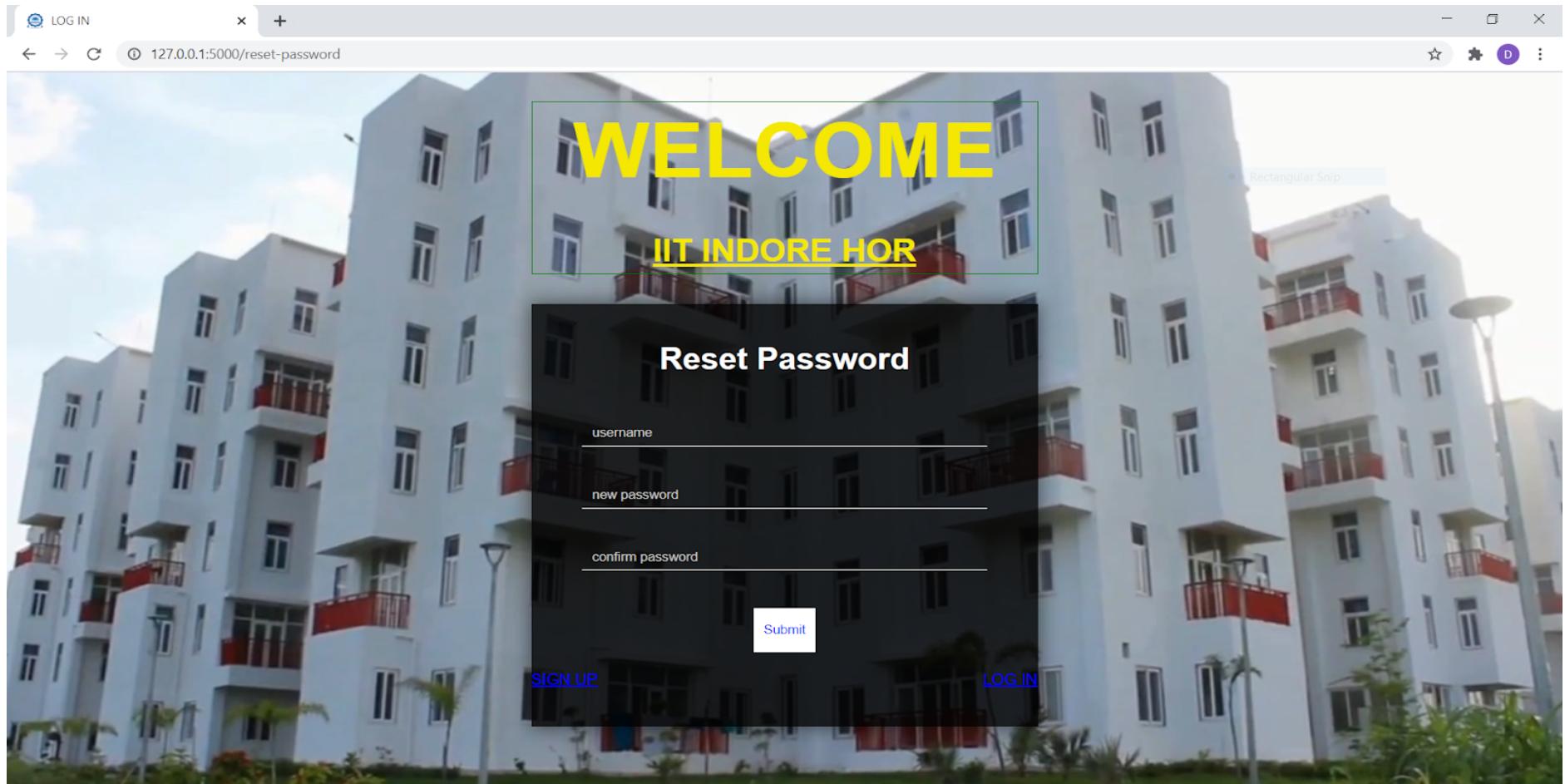
Users can login to their account through this page. It also provides options like forgot password, and sign up option for the new users.

Forgot Password Page



If a user forgets his/her password, he/she can change it through this page, after verification. It requires them to enter their email id. On submitting their email id, users get an otp in their mail. They can change their password, after verifying their otp.

Reset Password Page



Users can reset their password, through this page, after successfully verifying themselves through the OTP sent to their registered E-mail ID.

Main Admin Dashboard Web Page

The screenshot shows a web browser window titled "Dashboard | Admin" with the URL "127.0.0.1:5000/admin". The page is titled "Dashboard" and shows the user "admin" with the email "admin@iiti.ac.in". On the left, there is a sidebar with icons for Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area is divided into two sections: "VIKRAM SARABHAI HALL OF RESIDENCE Complaints" and "VIKRAM SARABHAI HALL OF RESIDENCE Suggestions".

Complaints Section:

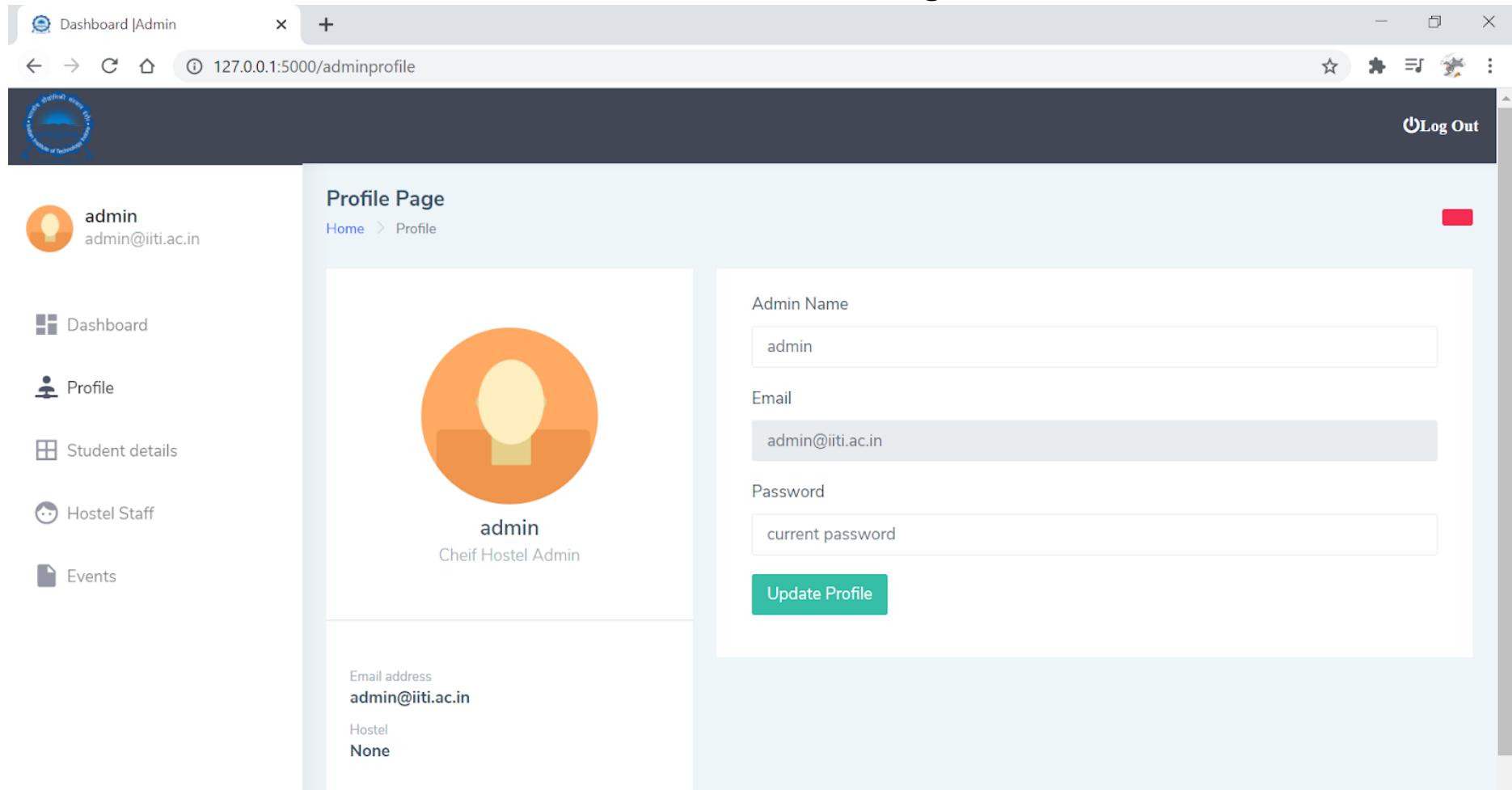
| Complain id | User Name | Subject | Category | Time of availability | Details | Status | Change Status |
|-------------|-----------|----------------|--------------|----------------------|----------------------|---------|-------------------------------------|
| 7 | dummy7 | Water Blockage | Water Supply | 10:00 | Tap water not coming | Pending | <input checked="" type="checkbox"/> |
| 13 | dummy7 | Water Blockage | Water Supply | 10:00 | Tap water not coming | Pending | <input checked="" type="checkbox"/> |

Suggestions Section:

| Suggestions id | User Name | Subject | Details |
|----------------|-----------|-----------------|-----------------------------------|
| 1 | dummy1 | Plant trees | Plant more trees |
| 7 | dummy7 | Tree Plantation | Need more trees around the hostel |

Admin Dashboard contains all the functions that the admin can perform. All the complaints and suggestions of any hostel can be seen by choosing the hostel from the drop-down button. Only the main admin can see data of all the hostels. While individual hostel admins can only see the data of their own hostel. There is a column representing the status of the complaint registered which the admin can change once they are resolved.

Main Admin Profile Page



The screenshot shows a web browser window titled "Dashboard | Admin". The URL in the address bar is "127.0.0.1:5000/adminprofile". The page itself is titled "Profile Page" and shows the profile of the user "admin". The profile picture is a placeholder orange head icon. Below it, the name "admin" and title "Cheif Hostel Admin" are displayed. On the left sidebar, there are navigation links: Dashboard, Profile, Student details, Hostel Staff, and Events. The "Profile" link is currently selected. On the right side, there is a form for updating the profile. The fields are: "Admin Name" (value: "admin"), "Email" (value: "admin@iiti.ac.in"), and "Password" (value: "current password"). A green "Update Profile" button is at the bottom of the form. At the top right of the main content area, there is a "Log Out" button.

This is the profile page of the main admin. The admin can edit his/her personal details on this page by providing their current password.

Main Admin Student Details Web Page

The screenshot shows a web browser window titled "Dashboard | Admin". The URL in the address bar is "127.0.0.1:5000/studentdetails". The page header includes the institution's logo and a "Log Out" button. On the left, a sidebar menu lists "admin" (username), "admin@admin.iiti.ac.in", "Dashboard", "Profile", "Student details", "Hostel Staff", and "Events". The main content area is titled "Students Details" and shows the heading "A. P. J ABDUL KALAM HALL OF RESIDENCE". A dropdown menu labeled "Choose Hostel" is visible. Below it is a table displaying student information:

| UserName | Email | Full Name | Roll No | Branch | Hostel Name | Room No | Mobile No |
|----------|-------------------------|-----------|-----------|--------|---------------------------------------|---------|------------|
| dummy2 | dummy2@admin.iiti.ac.in | STUDENT B | 190001002 | CSE | A. P. J ABDUL KALAM HALL OF RESIDENCE | 502 B | 9886543210 |
| dummy8 | dummy8@admin.iiti.ac.in | STUDENT H | 190004002 | CE | A. P. J ABDUL KALAM HALL OF RESIDENCE | 508 C | 9886543211 |

Through this page, the main admin can see the details of all the students residing inside any hostel. Admin can choose the hostel with the drop-down button.

Main Admin Staff Details Page

The screenshot shows a web application interface for managing staff details. The top navigation bar includes a logo, user information ('admin admin@iiti.ac.in'), and a 'Log Out' button. The main content area has a sidebar with links for Dashboard, Profile, Student details, Hostel Staff, and Events. The central dashboard displays the title 'A. P. J ABDUL KALAM HALL OF RESIDENCE' and a table listing staff members. The table columns are Image, Name, Post, link, Edit, and DELETE. Two staff entries are shown: 'Staff D' (Attendant) and 'Staff C' (Junior Assistant). Below the table is a button labeled '+ ADD NEW MEMBER'.

| Image | Name | Post | link | Edit | DELETE |
|-------|---------|------------------|------|------|--------|
| | Staff D | Attendant | None | | |
| | Staff C | Junior Assistant | | | |
| . | | | | | |

Through this page, admin can see the details of all the staff members of different hostels, by choosing the hostel from the drop-down box. The admin can also add/remove a staff member and can also edit their details.

Main Admin Add Staff Page

The screenshot displays the 'Main Admin Add Staff Page' from a web application. The top navigation bar includes a logo, the text 'Dashboard |Admin', a search bar with the URL '127.0.0.1:5000/addstaff', and a 'Log Out' button. The left sidebar contains a user profile for 'admin' (admin@iiti.ac.in) and links to 'Dashboard', 'Profile', 'Student details', 'Hostel Staff', and 'Events'. The main content area is titled 'Edit Details' and shows a breadcrumb path 'Home > Edit Staff'. It features a large red 'Upload' button with a white arrow icon. To its right are input fields for 'Full Name', 'Post', 'Hostel Name' (with a dropdown menu labeled 'Choose Hostel'), and 'Link'. A green 'Add Member' button is at the bottom of the form.

The admin has to fill all the details and can add a new member in any hostel with this process. Changes made by admin in staff members are also displayed in the respective hostel home page.

Main Admin Events Web Page

The screenshot shows a web browser window titled "Dashboard | Admin" with the URL "127.0.0.1:5000/events". On the left, there is a sidebar with icons for Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area is titled "Notification". It displays two rows of notifications:

| Title Of Notification | URL | Show On Home | Change status to show or not |
|--|-----|--------------------------|------------------------------|
| Campus entry prohibited after 11.30 PM sharp | yes | <input type="checkbox"/> | |
| Necessary to carry ID Cards while going outside the campus | yes | <input type="checkbox"/> | |

Below this is a button labeled "+ ADD NEW NOTIFICATION".

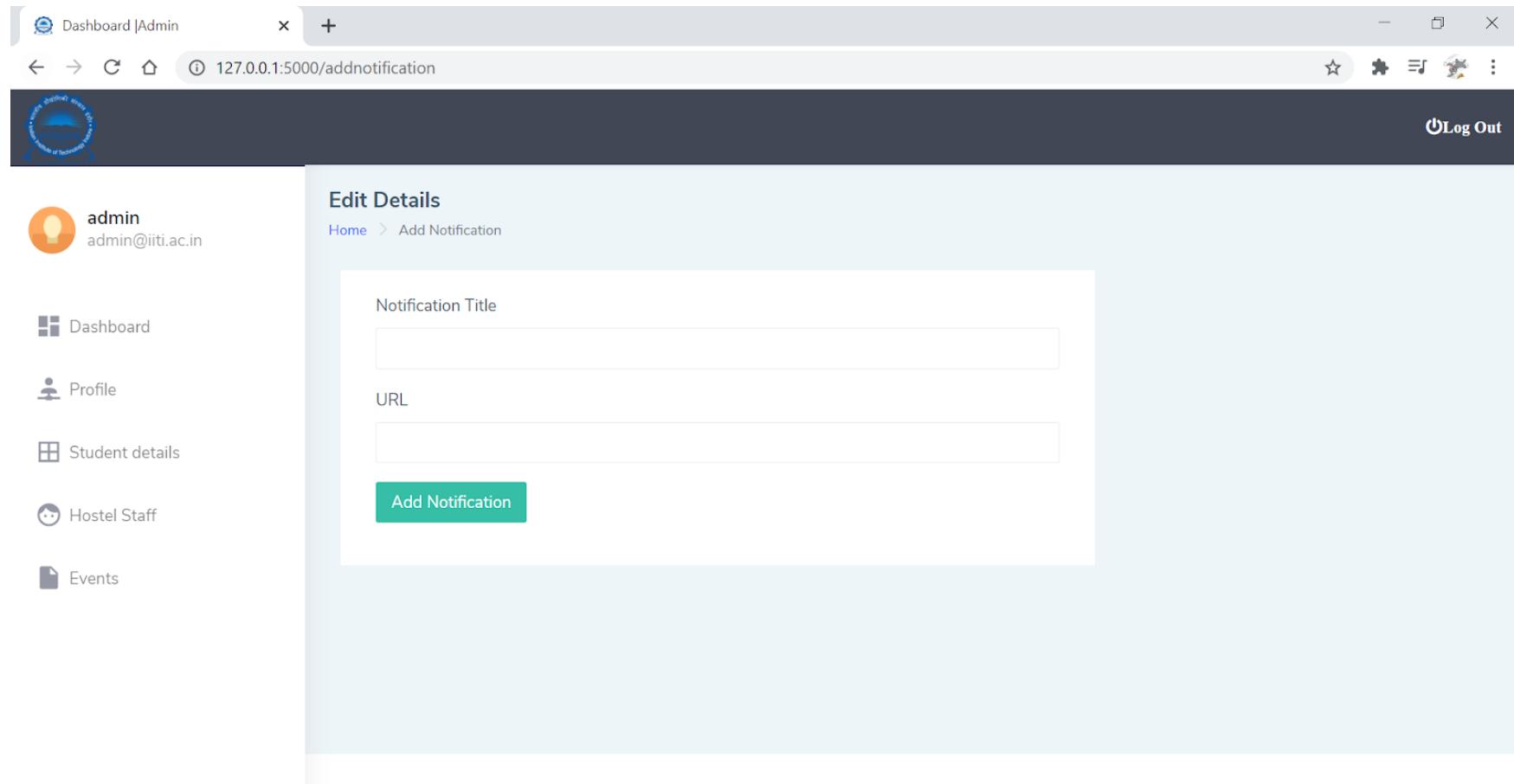
The events page shows all the notifications that are currently active or in-active. Also new notifications or events can be added which are also displayed in the home page.

The screenshot shows a second instance of the "Dashboard | Admin" web page with the URL "127.0.0.1:5000/events". The sidebar and notification section are identical to the first screenshot. The main content area is titled "EVENTS". It displays two rows of events:

| Title Of EVENT | Show On Home | Change Status To Show Or Not |
|--|--------------|------------------------------|
| Campus entry prohibited after 11.30 PM sharp | yes | <input type="checkbox"/> |
| Necessary to carry ID Cards while going outside the campus | yes | <input type="checkbox"/> |

Below this is a button labeled "+ ADD NEW EVENT".

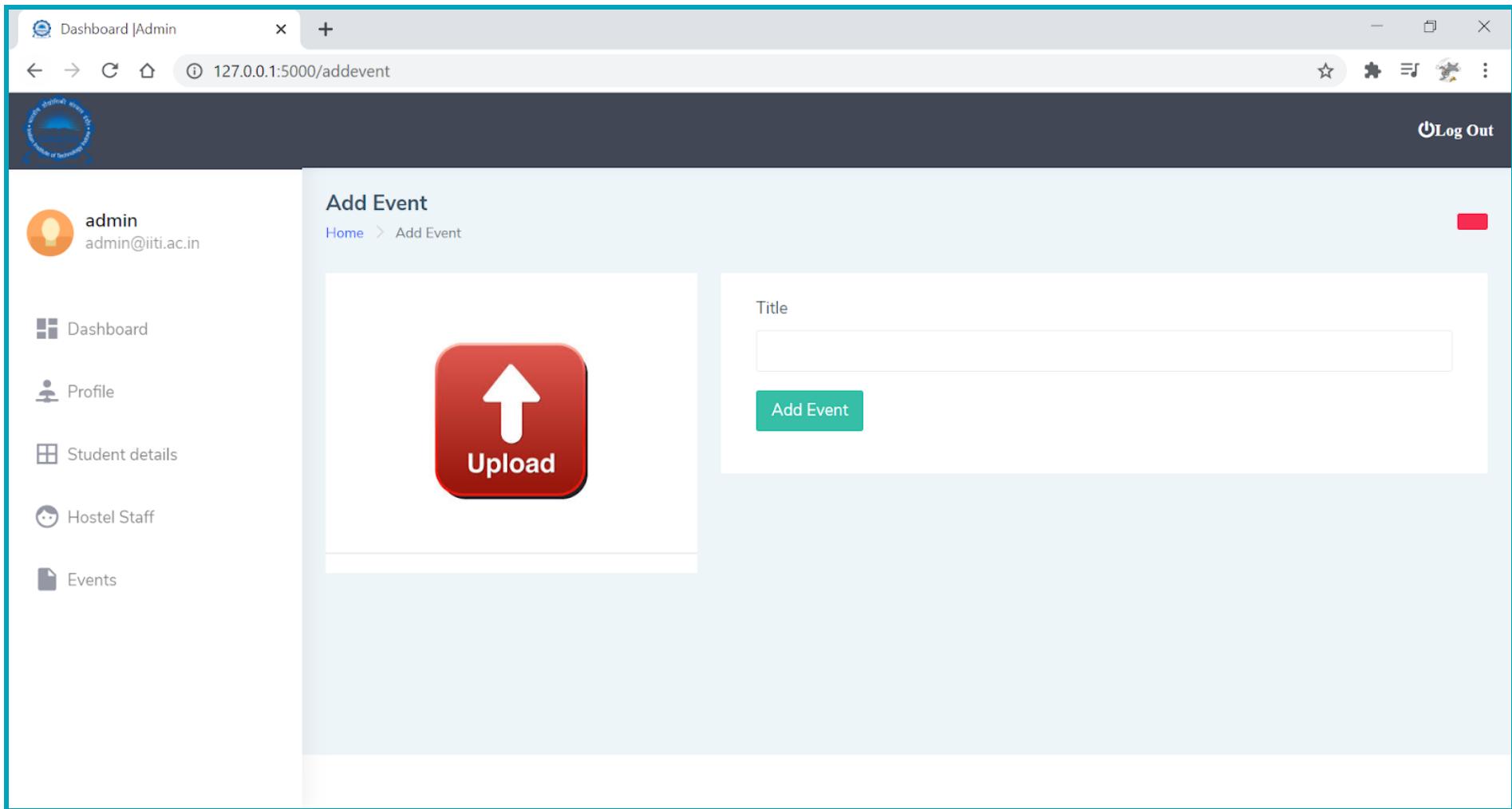
Main Admin Add Notifications Page



The screenshot shows a web browser window titled "Dashboard | Admin". The URL in the address bar is "127.0.0.1:5000/addnotification". The page content is titled "Edit Details" and includes fields for "Notification Title" and "URL", with a "Add Notification" button. On the left, there is a sidebar with links for Dashboard, Profile, Student details, Hostel Staff, and Events. The top right corner features a "Log Out" link.

By filling some simple details, a new notification can be reflected on the website's homepage for all the users to see.

Main Admin Add Event Page



The screenshot shows a web browser window titled "Dashboard | Admin" with the URL "127.0.0.1:5000/addevent". The page has a dark header bar with the "IITI" logo, a "Log Out" button, and a menu bar with icons for star, puzzle, etc. On the left is a sidebar with a user profile for "admin" (admin@iiti.ac.in) and links for Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area is titled "Add Event" and shows a "Home > Add Event" breadcrumb. It features a large red "Upload" button with a white arrow icon. To its right is a form with a "Title" input field and a green "Add Event" button.

Admin can fill this form to post any upcoming event in the campus. This event will reflect in the website's home page for all the users to see.

Individual Hostel Admin Dashboard Web Page

The screenshot shows a web browser window titled "Dashboard | Admin" with the URL "127.0.0.1:5000/admin". The page is for the "VIKRAM SARABHAI HALL OF RESIDENCE". On the left, there is a sidebar with icons for "Dashboard", "Profile", "Student details", "Hostel Staff", and "Events". The main content area has two sections: "Complaints" and "Suggestions".

Complaints:

| Complain id | User Name | Subject | Category | Time of availability | Details | Status | Change Status |
|-------------|-----------|----------------|--------------|----------------------|----------------------|---------|-------------------------------------|
| 7 | dummy7 | Water Blockage | Water Supply | 10.00 | Tap water not coming | Pending | <input checked="" type="checkbox"/> |
| 13 | dummy7 | Water Blockage | Water Supply | 10.00 | Tap water not coming | Pending | <input checked="" type="checkbox"/> |

Suggestions:

| Suggestions id | User Name | Subject | Details |
|----------------|-----------|-----------------|-----------------------------------|
| 1 | dummy1 | Plant trees | Plant more trees |
| 7 | dummy7 | Tree Plantation | Need more trees around the hostel |

This is the hostel page of the V.S.B. HOR admin. Similarly all the admins of other hostels have this page where complaints and suggestions of students from their respective hostels are displayed. These admins can only see data of their own hostel. There is a column representing the status of the complaint registered which the admin can change once they are resolved.

Individual Hostel Admin Profile Page

The screenshot displays the 'Profile Page' of an individual hostel admin. On the left, a sidebar lists navigation options: Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area shows a placeholder profile picture with the name 'admin_vsb' and title 'Hostel Admin'. Below this, the admin's email address is listed as 'admin_vsb@iiti.ac.in'. At the bottom, the admin's assigned hostel is shown as 'VIKRAM SARABHAI HALL OF RESIDENCE'. The right side features a form for updating profile information, including fields for 'Admin Name' (containing 'admin_vsb'), 'Email' (containing 'admin_vsb@iiti.ac.in'), and 'Password' (containing 'current password'). A green 'Update Profile' button is located at the bottom of the form.

Dashboard | Admin

127.0.0.1:5000/adminprofile

Log Out

Profile Page

Home > Profile

admin_vsb
admin_vsb@iiti.ac.in

Dashboard

Profile

Student details

Hostel Staff

Events

Email address
admin_vsb@iiti.ac.in

Hostel
VIKRAM SARABHAI HALL OF RESIDENCE

Admin Name
admin_vsb

Email
admin_vsb@iiti.ac.in

Password
current password

Update Profile

This is the profile page of an individual hostel admin. The admin's hostel is displayed at the bottom. Admin can also edit his/her details.

Individual Hostel Admin Student Details Page

The screenshot shows a web browser window titled "Dashboard |Admin" with the URL "127.0.0.1:5000/studentdetails". The page header includes the institution's logo and a "Log Out" button. On the left, a sidebar lists navigation options: Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area is titled "Students Details" and shows the heading "VIKRAM SARABHAI HALL OF RESIDENCE". Below this, a table displays student information:

| UserName | Email | Full Name | Roll No | Branch | Hostel Name | Room No | Mobile No |
|----------|-------------------|-----------|-----------|--------|-----------------------------------|---------|------------|
| dummy1 | dummy1@iiti.ac.in | STUDENT A | 190001001 | CSE | VIKRAM SARABHAI HALL OF RESIDENCE | 501 A | 9876543210 |
| dummy7 | dummy7@iiti.ac.in | STUDENT G | 190004001 | CE | VIKRAM SARABHAI HALL OF RESIDENCE | 507 B | 9876543220 |

The hostel admin can see the details of all the students of that hostel.

Individual Hostel Admin Hostel Staff Page

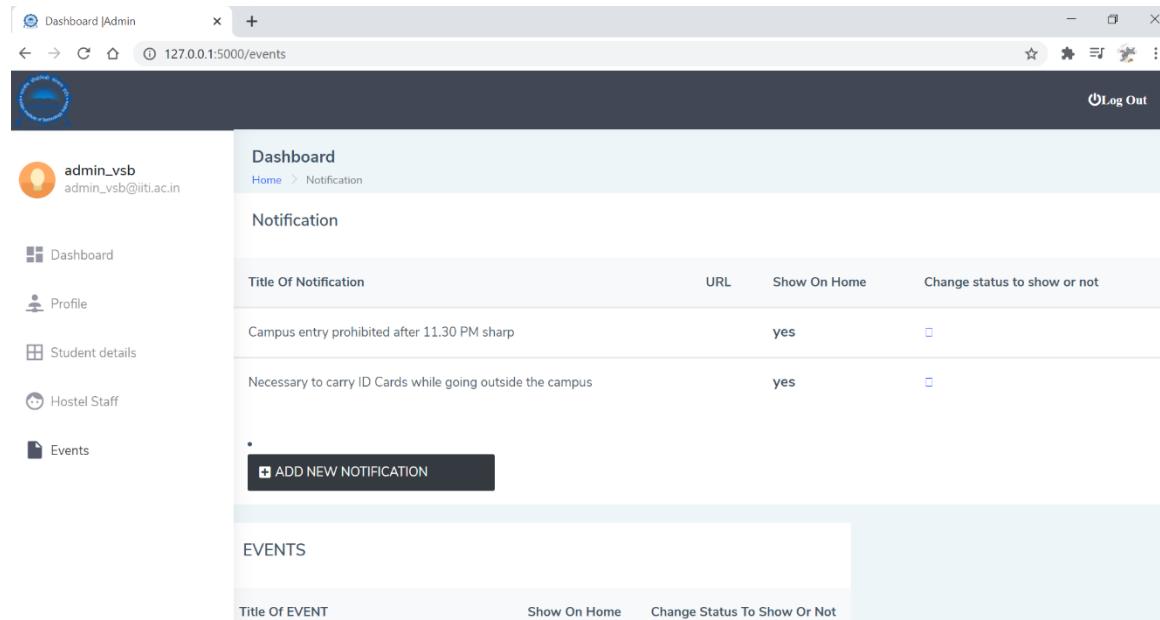
The screenshot shows a web browser window titled "Dashboard | Admin". The URL in the address bar is "127.0.0.1:5000/hostelstaff". The page header includes the logo of the Indian Institute of Technology (IIT) Madras and a "Log Out" button. On the left, there is a sidebar with icons for Dashboard, Profile, Student details, Hostel Staff, and Events. The main content area is titled "Dashboard" and "VIKRAM SARABHAI HALL OF RESIDENCE". It shows a table of staff members:

| Image | Name | Post | link | Edit | DELETE |
|-------|---------|------------------|------|------------------|------------------|
| | Staff A | Junior Assistant | None | | |
| | Staff B | Attendant | | | |
| . | | | | | |

At the bottom of the table, there is a button labeled "+ ADD NEW MEMBER".

The hostel admin can see the details of all the staff members of that hostel and can also edit their details or also remove them. A hostel admin can also add a staff member in that hostel only.

Individual Hostel Admin Events Page

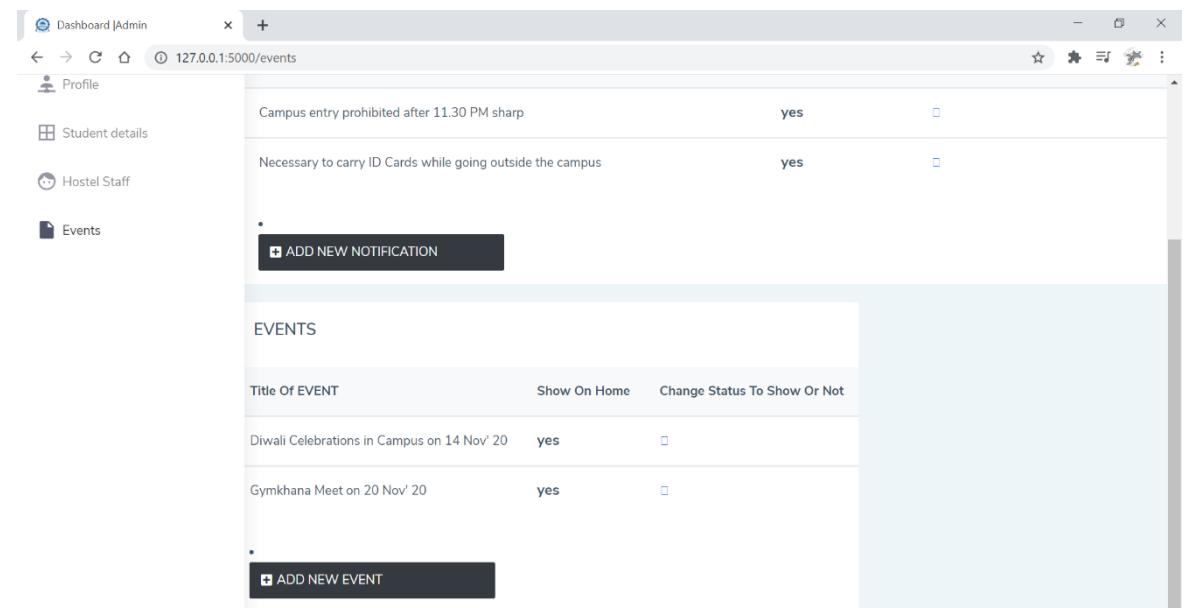


The screenshot shows the 'Notifications' section of the admin dashboard. It includes a table with columns for 'Title Of Notification', 'URL', 'Show On Home', and 'Change status to show or not'. Two notifications are listed:

| Title Of Notification | URL | Show On Home | Change status to show or not |
|--|-----|--------------------------|------------------------------|
| Campus entry prohibited after 11.30 PM sharp | yes | <input type="checkbox"/> | |
| Necessary to carry ID Cards while going outside the campus | yes | <input type="checkbox"/> | |

A 'ADD NEW NOTIFICATION' button is located at the bottom left of the table.

The hostel admin can also see all the notifications and events. These admins can also add new notifications or events displayed for all the users on the home page.



This screenshot shows both the 'Notifications' and 'Events' sections of the admin dashboard.

Notifications:

| Title Of Notification | URL | Show On Home | Change status to show or not |
|--|-----|--------------------------|------------------------------|
| Campus entry prohibited after 11.30 PM sharp | yes | <input type="checkbox"/> | |
| Necessary to carry ID Cards while going outside the campus | yes | <input type="checkbox"/> | |

Events:

| Title Of EVENT | Show On Home | Change Status To Show Or Not |
|---|--------------|------------------------------|
| Diwali Celebrations in Campus on 14 Nov' 20 | yes | <input type="checkbox"/> |
| Gymkhana Meet on 20 Nov' 20 | yes | <input type="checkbox"/> |

A 'ADD NEW NOTIFICATION' button is located in the Notifications section, and a 'ADD NEW EVENT' button is located in the Events section.

Languages and Technologies

For frontend -

- HTML
- CSS
- Javascript
- Bootstrap

For backend -

- Python, Flask

For database -

- MySQL

Softwares Used in development -

- Sublime Text 3 (Text editor)
- Pycharm (Python editor and compiler)
- MySQL workbench
- Spyder
- MYSQL Command Line

Division of tasks between Team members

Mohit Kumar (190001038) -

- Designing and developing the home page and individual hostel pages
- Designing and creating the login and signup pages

Mayank Raj (190001035) -

- Designing and developing complaints and suggestions page
- Designing the admin view of complaints and suggestions.

Devansh Sahu (190001012) -

- Developing the main admin page and students details page for all admins.
- Developing individual admin events and notification pages.

Nimish Bansal (190001040) -

- Designing and developing the user and admin profile page.
- Designing the forgot password page and admin staff page.

References :

- [Stackoverflow.com](https://stackoverflow.com)
- [Tutorialspoint.com](https://www.tutorialspoint.com)
- [Python Flask Tutorial: Full-Featured Web App Part 1 - Getting Started](https://flask.palletsprojects.com/en/2.0.x/tutorial/part1/)
- [Bootstrap.com](https://getbootstrap.com)
- [Javapoint.com](https://www.javatpoint.com)
- [W3schools.com](https://www.w3schools.com)
- [Welcome to Flask — Flask 0.10.1 documentation](https://flask.palletsprojects.com/en/2.0.x/)
- [3.9.0 Documentation](https://anaconda.org)
- <https://anaconda.org>



THANK

YOU!

The image consists of two white, three-dimensional rectangular blocks stacked vertically. The top block has the word "THANK" written in large, bold, orange, sans-serif capital letters. The bottom block has the word "YOU!" written in the same style. Both words are oriented diagonally, pointing upwards and to the right. The blocks cast long, thin shadows to their right onto a solid blue background. The overall design is clean and modern.

