

Conference room booking system

Cs207 - Applied Database Practicum



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To:

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Conference room booking system

Abstract:

Generally, being an student or faculty in a college , there are lots of problems we face when it comes to booking a conference room. One of the problems we encounter was whenever user need a conference room, each he need to go to the higher authority for permission. To overcome from that, we introduced an html-php based web portal named “Conference Room Booking System”, through which a user can reserve conference room online.

An online web portal developed in visual studio integrated development environment where users can reserve the conference room in advance for various purposes such as course meetings, group meetings, project discussion and classes . To reserve a conference room in advance, users first need to register at the web app and then login with their login credentials and select the date and time for when they need to reserve the conference room with required duration. Once the user register themselves, the system will allocate them a conference room number. And once their allocated time gets completed, they will be automatically logged out from the register and the conference room gets allocated to the next user request on further days . This keeps the users more organized with an ease of access making the best use out of the resources. Also the reservation give high priority to faculty over student and faculty can book the conference room booked by student cancelling the student booking.

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1. Introduction :

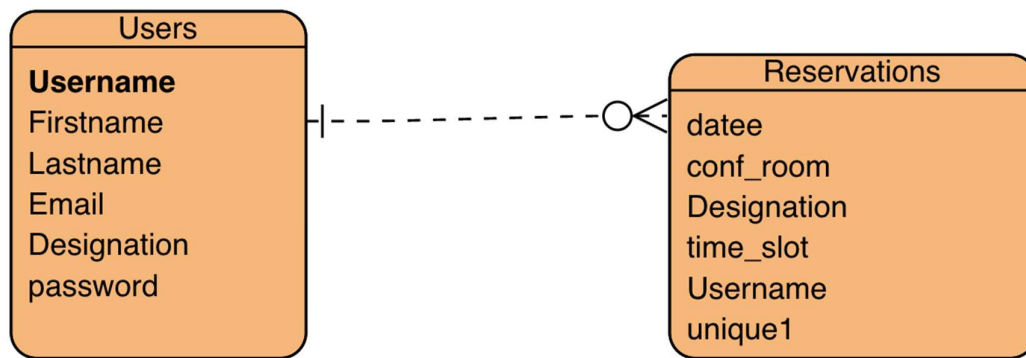
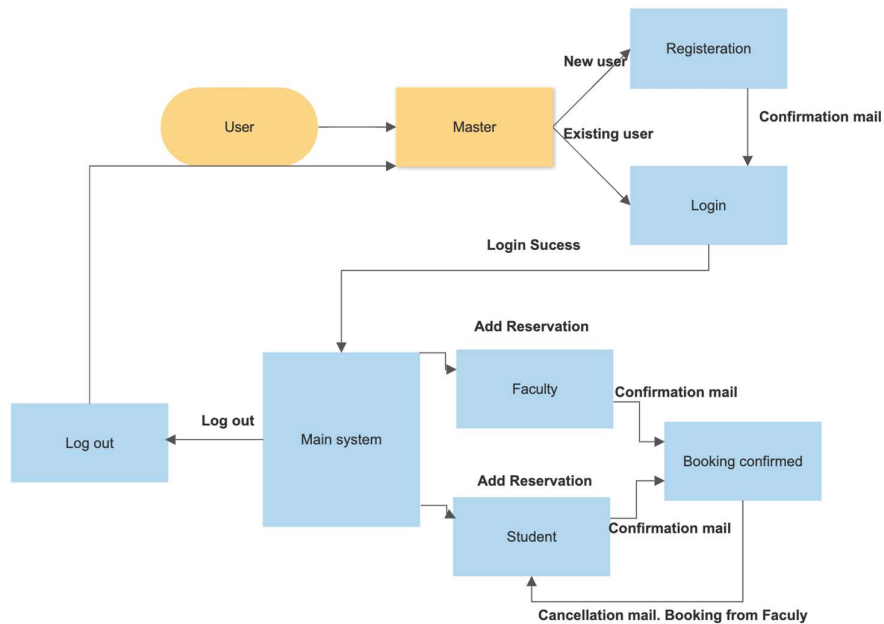
'Conference Room Booking System 'is the web application in mysql-php-html framework which is the project that aims at creating an Online Room Reservation system which can be used by community of college to reserve conference rooms in advance for various purposes such as group study, group meetings. This online system manages the study rooms at various locations in the campus for students and faculty with discrete time slots. If the user logs into system he will be able to book the reservations on any day, month and year.

- Users can check the availability of conference rooms.
- The users can register and log into the system.
- The user will able to know the details of his reservations.
- Faculty can cancel reservation of student and book that slot.

2. Special features of Project:

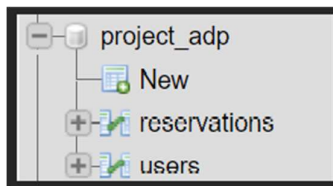
- A. Ensuring Unique username
- B. Password validation
- C. Registration Mail
- D. Priority of Faculty booking over student booking
- E. Conference room booking and availability
- F. Cancellation and Confirmation Mail
- G. Dynamically update booking data.
- H. User can login with his/her own client id and secret phrase.
- I. Check subtleties of rooms held for the present day.
- J. View client subtleties.

3. Flow - Chart of Reservation System:



4. E-R Diagram of Booking database:

- * The mysql database in the backend primarily consist of two tables Users and reservations having one many relationship from users to reservations. The primary key in Users table corresponds to username. A particular user can have one or more than one conference room bookings.

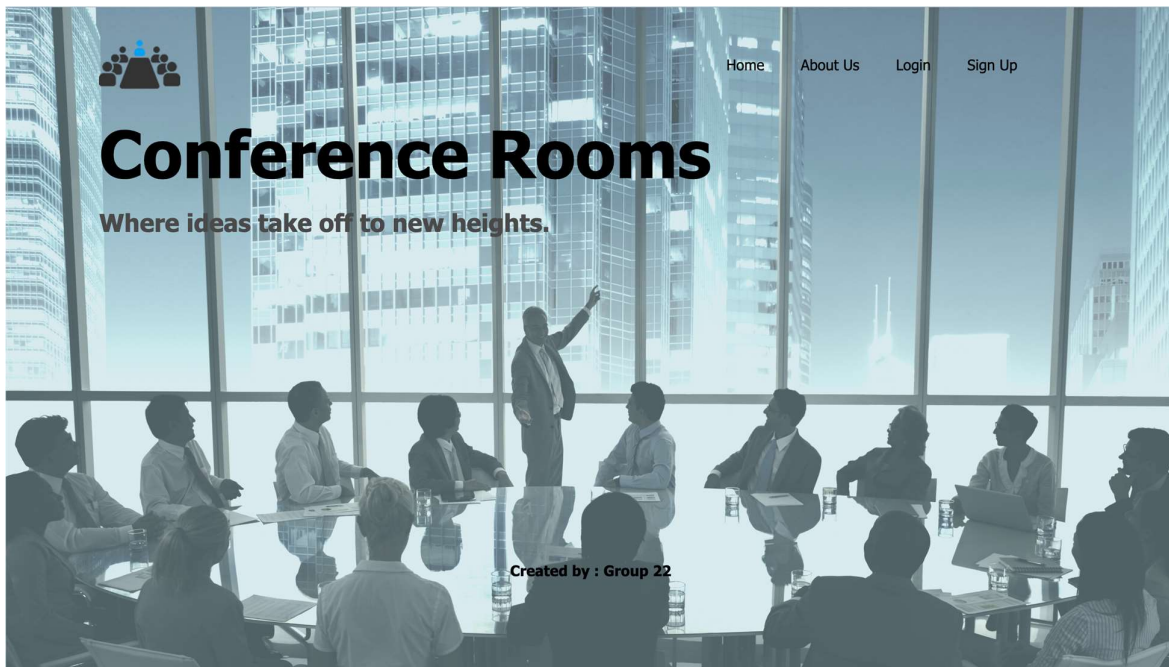


Field	Type	Null	Key	Default	Extra
username	varchar(50)	NO	PRI	NULL	
firstname	varchar(50)	NO		NULL	
lastname	varchar(50)	NO		NULL	
email	varchar(50)	NO		NULL	
password	varchar(50)	NO		NULL	
cpassword	varchar(50)	NO		NULL	
designation	varchar(50)	NO		NULL	

5. Project Description:

- Home Page
- Registration Page
- Login Page
- Reservation Page
- Thank you page
- About us page

Home Page: This is the welcome page for Conference booking system.

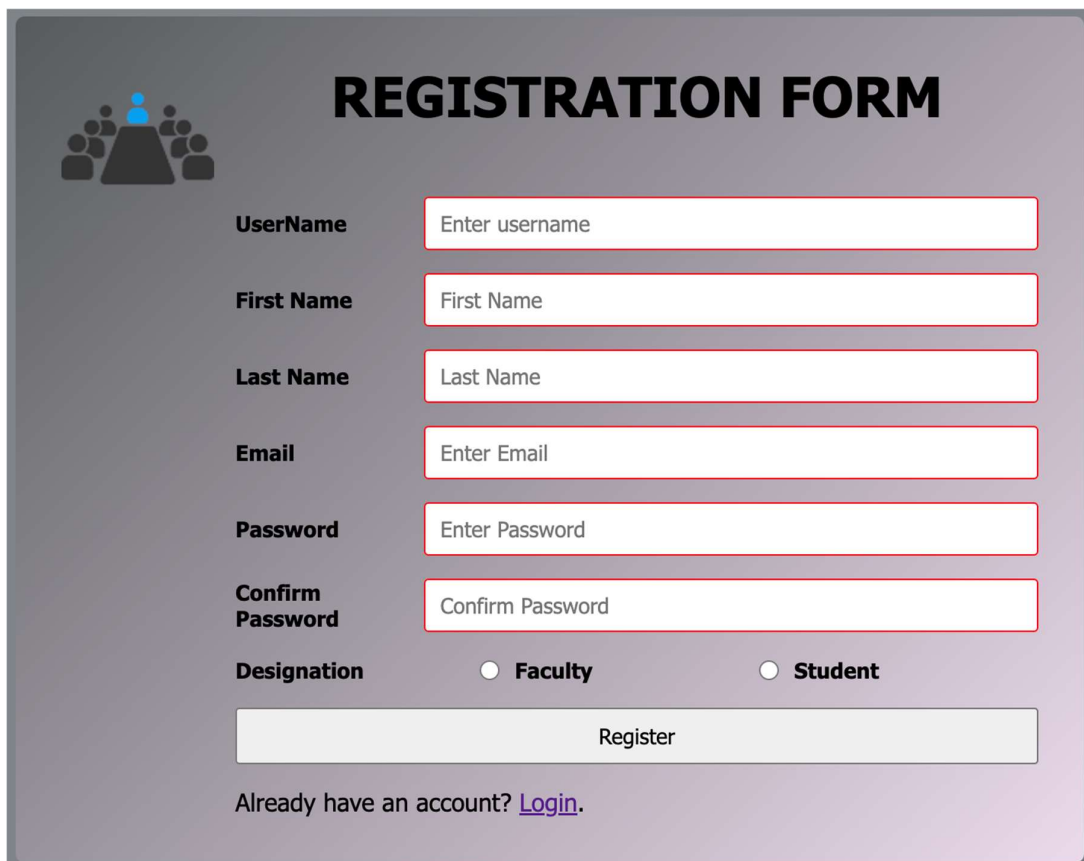


The home page can redirect us to Login page , registration page and about us page.

Also on all the pages we have clickable logos which will redirect us to home page.



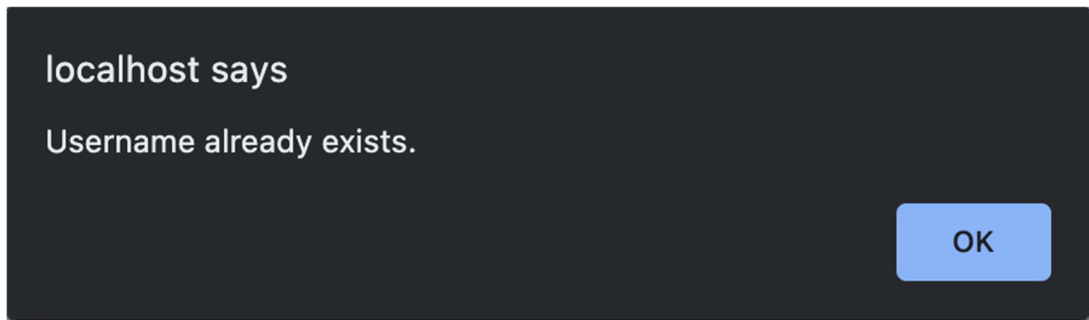
Registration Page: This webpage is used for registering user.



The image shows a screenshot of a web registration form titled "REGISTRATION FORM" in bold black text. On the left side of the form is a small icon of a group of people. The form contains several input fields with red borders, each preceded by a label: "UserName" (placeholder: "Enter username"), "First Name" (placeholder: "First Name"), "Last Name" (placeholder: "Last Name"), "Email" (placeholder: "Enter Email"), "Password" (placeholder: "Enter Password"), and "Confirm Password" (placeholder: "Confirm Password"). Below these fields is a "Designation" section with two radio buttons labeled "Faculty" and "Student". At the bottom of the form is a wide "Register" button. Below the button, there is a link that says "Already have an account? [Login](#)."

We included various features in the registration page such as:

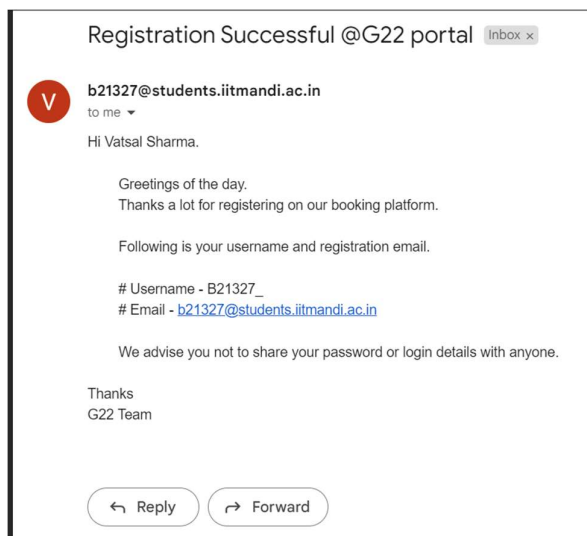
- Username already exist



- Password must contain at least one number and one uppercase and one lowercase letters and should be at least 8 characters .

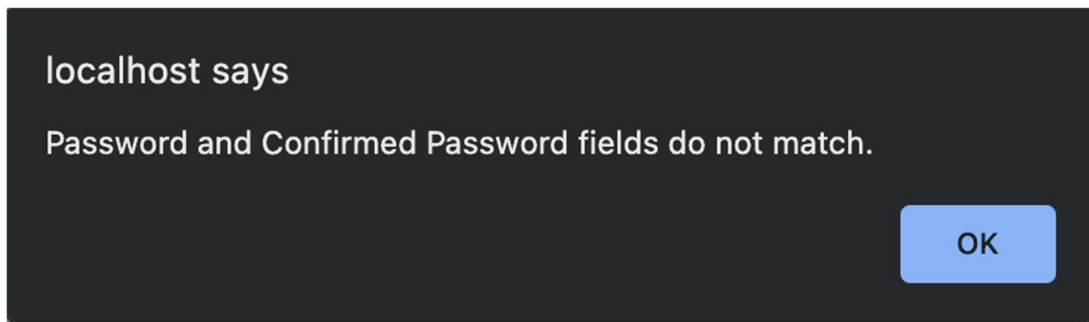
A registration form with a password field and a designation dropdown. The password field has a red border and a tooltip that says "Please match the format requested. Must contain at least one number and one uppercase and lowercase letter, and at least 8 or more characters". The designation dropdown has two options: "Faculty" and "Student", with "Student" selected.

mail



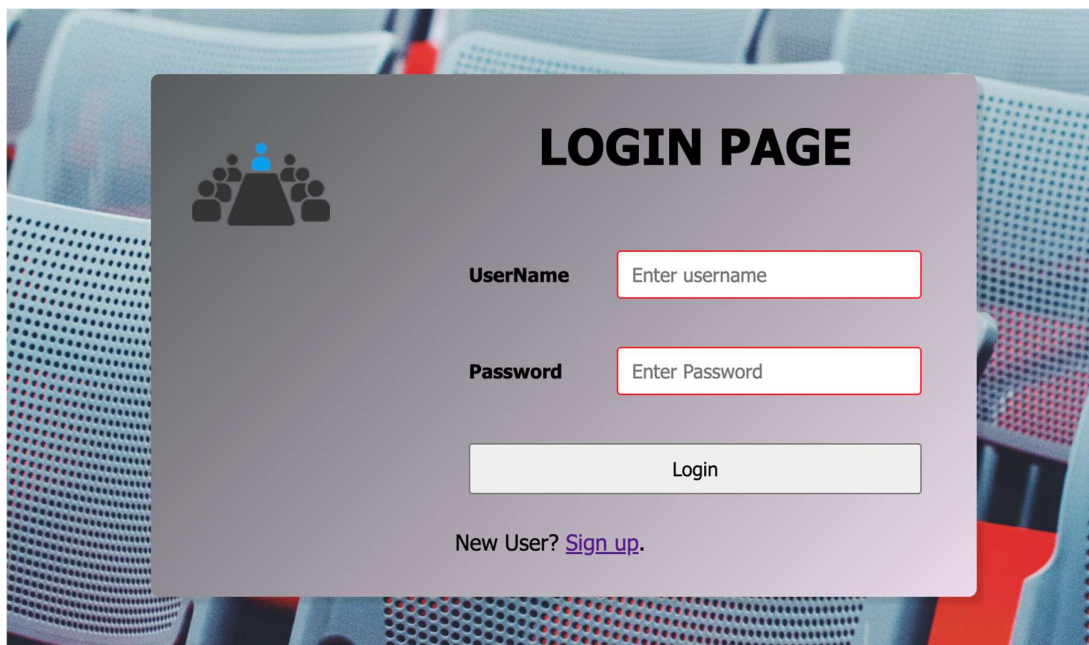
- Sending to user on successful registration.

- Password and confirm password should match and throwing error if

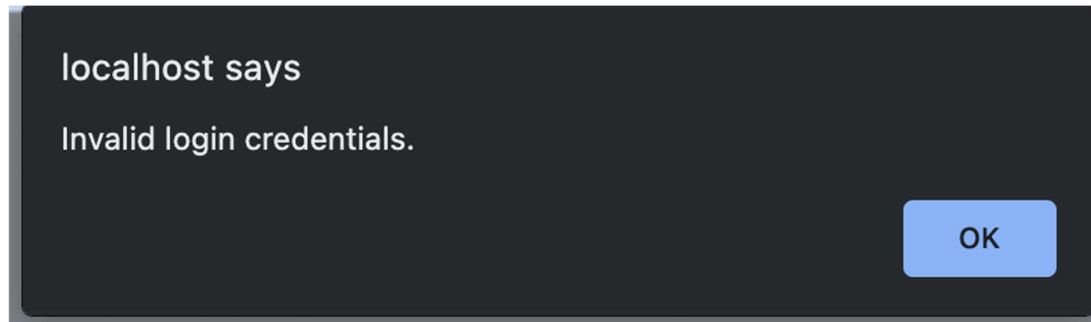


not.

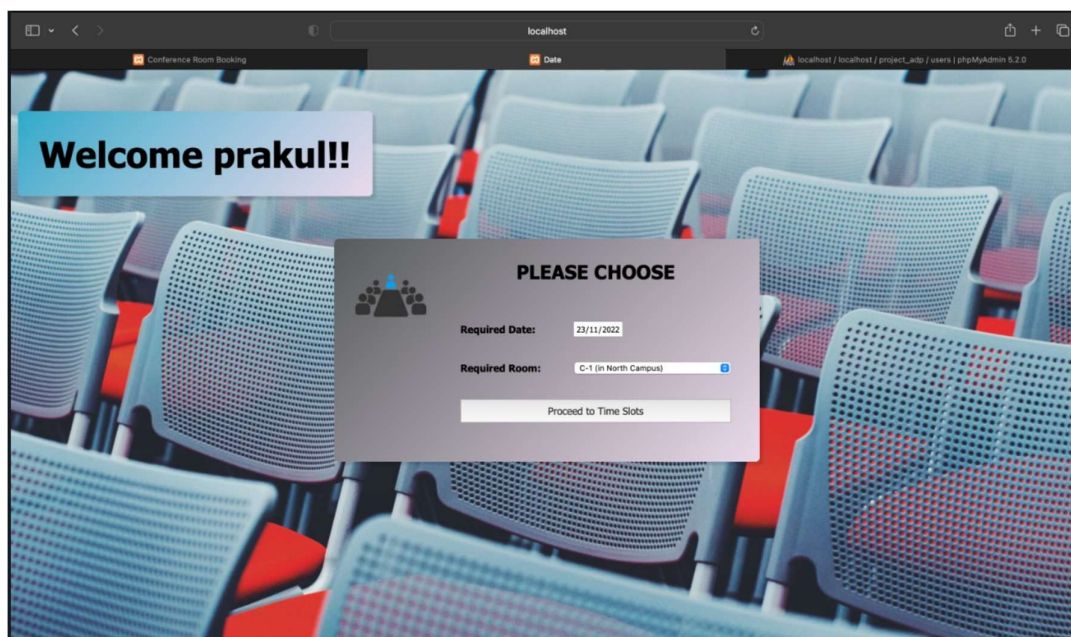
Login Page :



In login page on submitting we check whether the username exists or not or whether the password entered corresponding to username is correct or not.



***Reservation page:**



User logged in the booking page:

User choosing the booking Date:

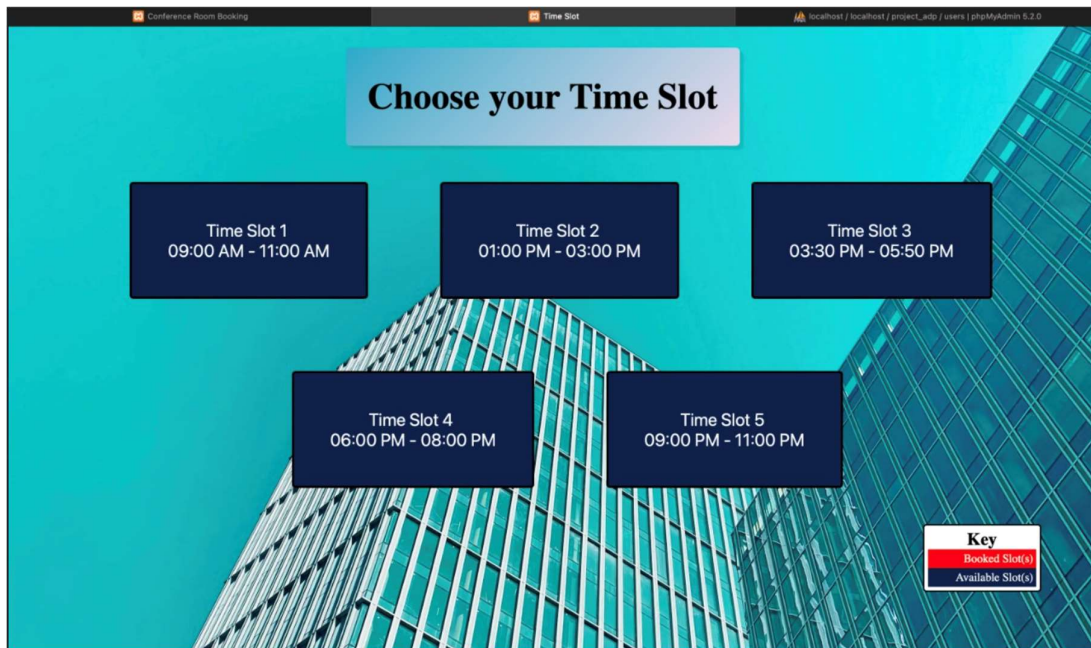
The screenshot shows a web form titled "PLEASE CHOOSE" with a conference room icon. It has two main input fields: "Required Date:" and "Required Room:". The "Required Date:" field is active, showing a date picker for November 2022. The date 29/11/2022 is selected. The "Required Room:" field is empty. Below the fields is a "Proceed" button.

Nov 2022						
Su	Mo	Tu	We	Th	Fr	Sa
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

User choosing the required Conference room:

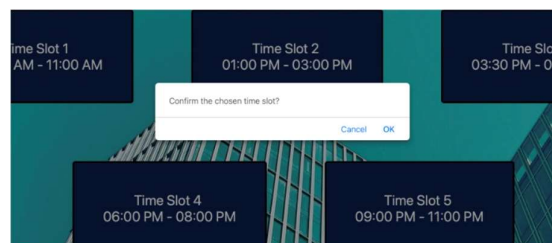
The screenshot shows the same "PLEASE CHOOSE" form. The "Required Date:" field now displays "29/11/2022". The "Required Room:" field has a dropdown menu open, showing three options: "C-1 (in North Campus)", "C-2 (in South Campus)", and "C-3 (Dean Office Conference Room)". The "C-1" option is selected. Below the dropdown is a "Proceed to Time Slots" button.

- ✓ C-1 (in North Campus)
- C-2 (in South Campus)
- C-3 (Dean Office Conference Room)



User proceeding for the time slots for booking Date:

Asking
of chosen



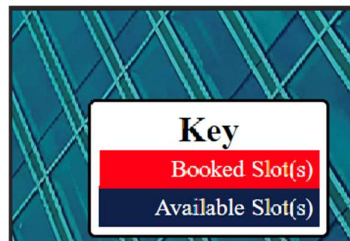
for the confirmation
time slot:

For

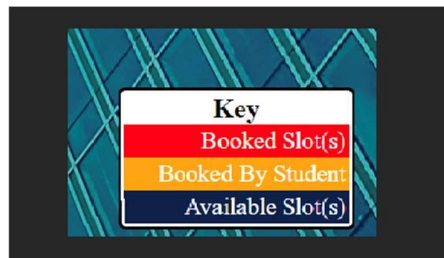
giving faculty

priority we colour the slots accordingly :

- A. If student is user : The student can see two types of coloured slots .
Red colour shown slots are booked by either student or faculty and
the student can only book blue coloured
slots.

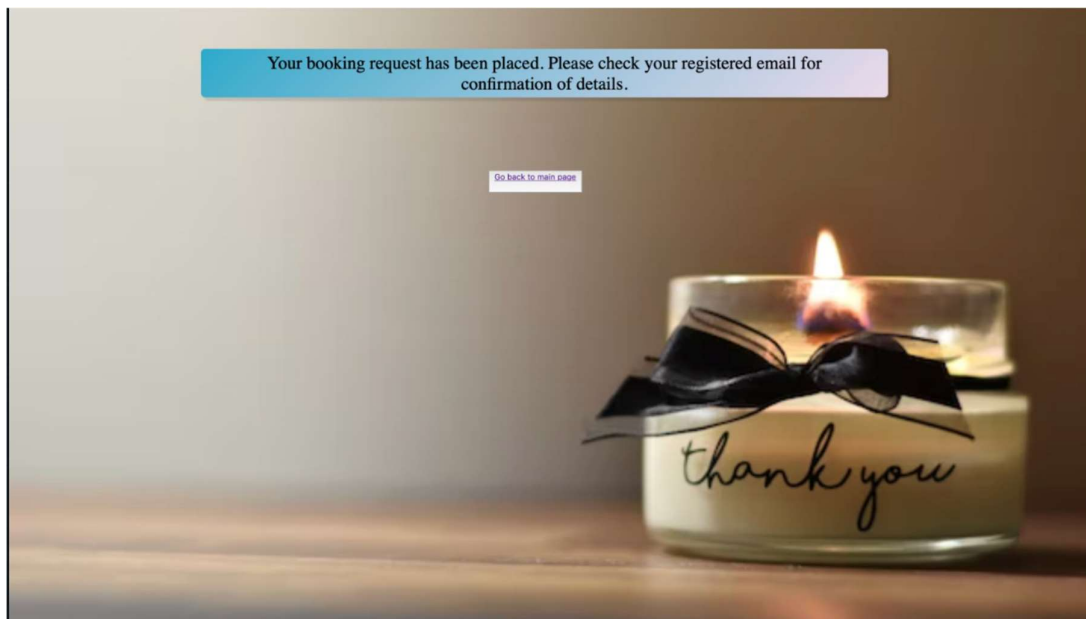


B. If faculty is user :The faculty can see three types of coloured slots . Red colour shown slots are booked by faculty and orange colour slots are booked by the student and blue colour slots are available slots . So faculty can either book blue colour slot or orange colour slot by cancelling the booking of student. The booking confirmation mail to faculty and cancelation mail to student will be sent accordingly

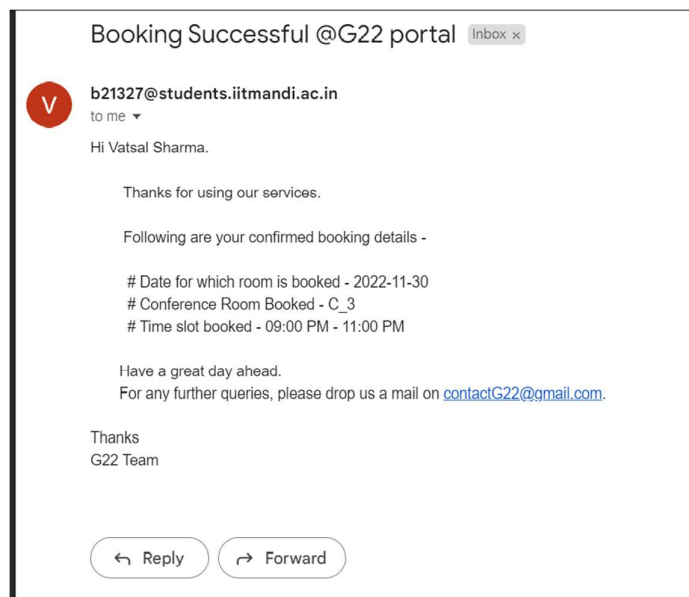


***Thank you page:**

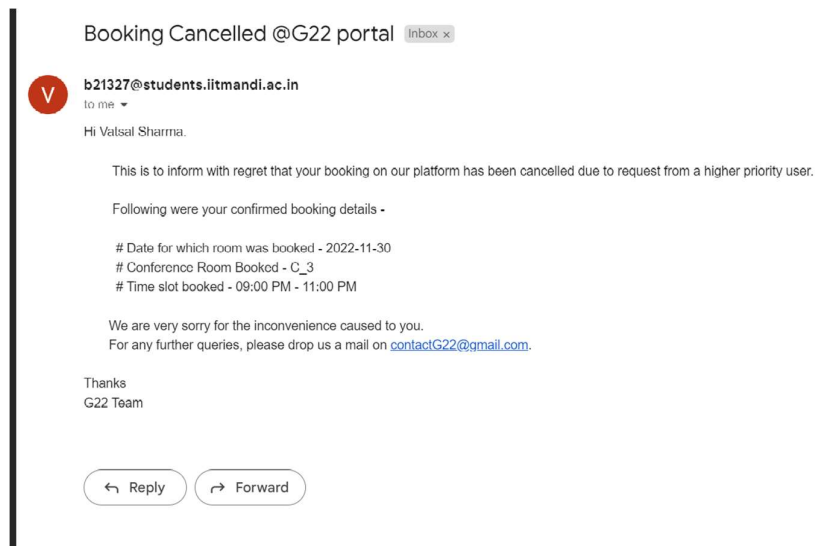
On Confirm Booking user is redirected to thank you page and confirmation mail of booking is sent to user.



Confirmation mail:

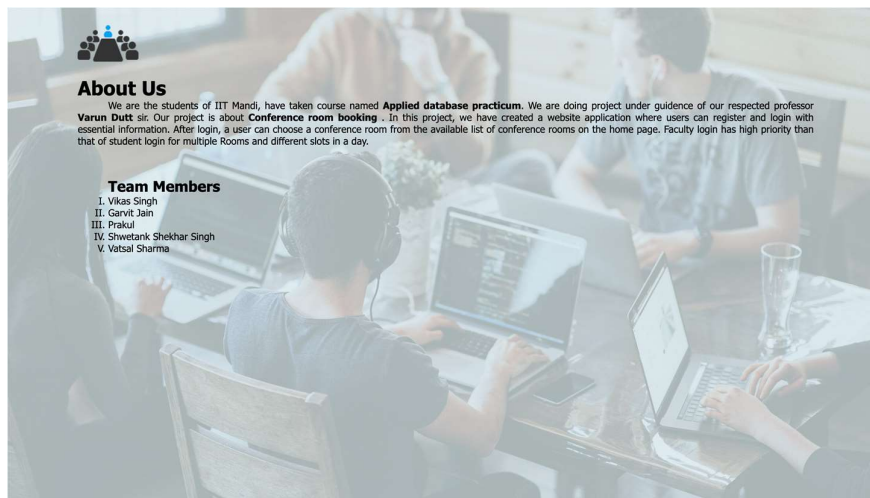


Cancellation mail sent to student on same request of conference room by faculty.



* About us page:

In this page we include some basic information about the group members and project.



6. Development and Deployment of Project:

For the development of project we require visual studio code integrated development environment and Xampp and apache web server for testing of sites on localhost. To deploy the web application, all the configuration about the web server should be configured using the code running manual . If the hosting is successful, then it opens the website URL and displays the contents designed and successfully books the required conference room.

- For this application the hardware and software requirements are:
 - 1024x768 resolution or higher is required for the core products.
 - Dual Core 1.6GHz or faster with RAM: 1 gigabyte (GB) (32-bit) or 2 GB (64-bit).
 - Beta versions of Operating Systems or Web Browsers are not supported. All system requirements are subject to change based on product version.
 - Operating System: Windows 7/8/10 OR ABOVE
 - Server: MYSQL SERVER Database: SQL or MYSQL
 - IDE: Visual Studio 2017

7. Lessons learned:

While implementing the project of conference room booking we considered various approaches and came up with valuable conclusions and lessons. Some of them are:

- How to assemble the necessities for the framework to execute.
- How to configuration, set up and distribute a database in the web.
- Creating and coordinating database according to the input from forms using php.
- Storing information in the database and utilisation of sessions.
- Dealing with database disappointments and mistake taking care of.
- Sending Confirmation and registration mail .
- How to give priority to particular users.
- How to link password and confirm password.
- Password validation and different database techniques.

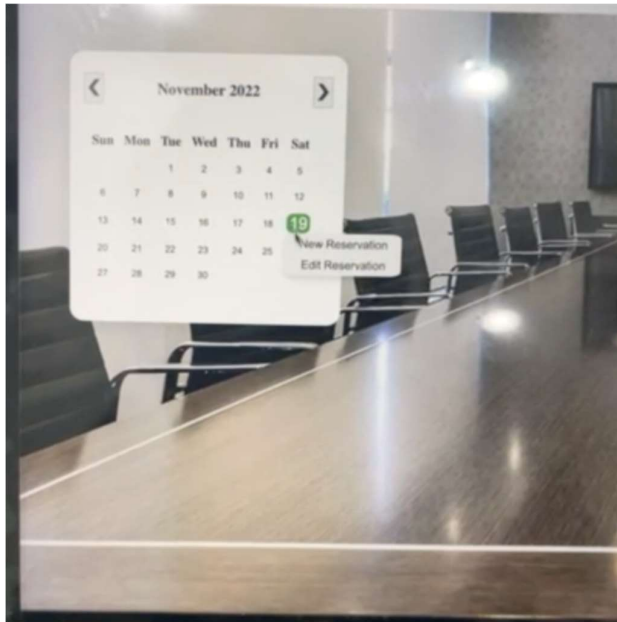
Obtained learning on occasion dealing with and code improvement strategies while implementing the code.

8. Alternative approaches Tried:

We also tried alternative approach for conference booking system in which using a pop up from the calendar we can make new reservation or edit. Existing reservation. We wrote the desired code of calendar from scratch along with various features.

Also we tried for implementing continuous time slots instead of discrete slots for conference room booking. Due to some certain drawbacks of the approach and limited knowledge we were unable to proceed with the idea .

Below is some alternate work done:



9. Scope of Future enhancement :

There is lot of scope of future enhancement in various aspects of the current conference room booking system both in front and back end . We can have continuous booking time slots as compared to discrete booking time slots. Also instead of redirecting the user to new page for booking we can generate a prompt window for room booking. For a particular we can show his previous bookings.

Also an user can be given freedom to cancel booking or edit his booking. In future we can implement this web application as mobile application. And we can also implement some additional features like our software would also keep a record of room resources and staff details in our database. Also we can apply filter to conference rooms according to their capacity and booking cost.

