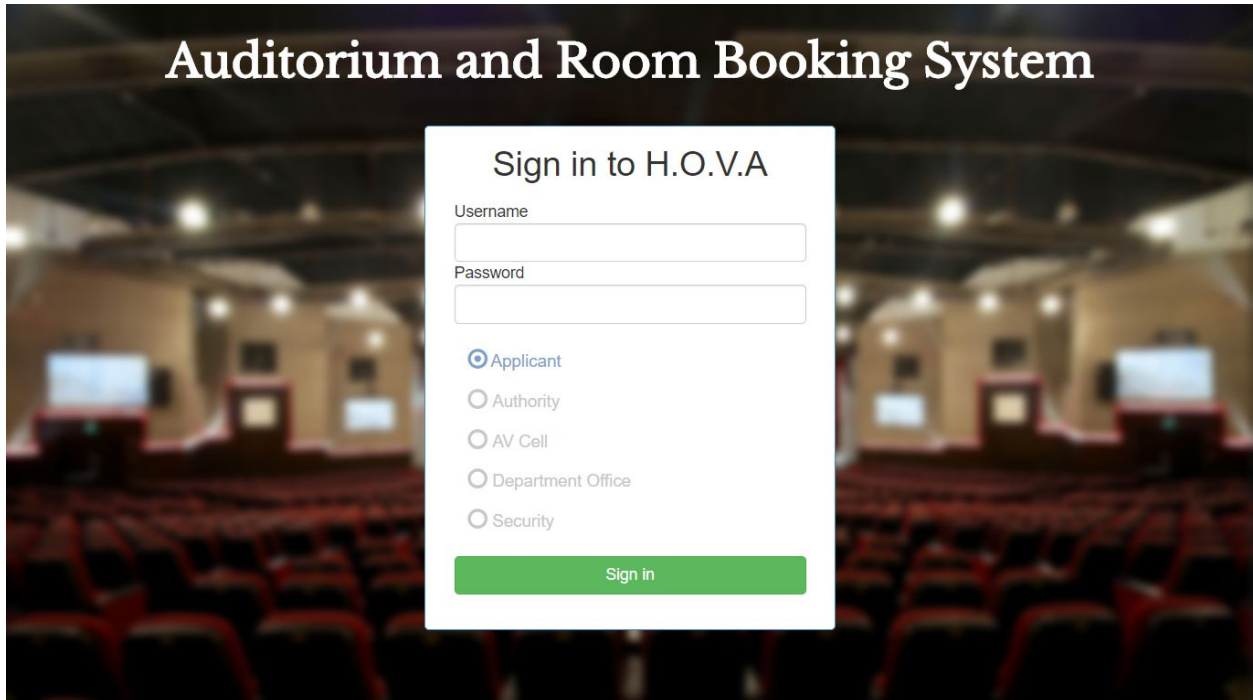


Login Page of the application where an user can



The image shows the login page of the 'Auditorium and Room Booking System'. The background is a blurred photograph of an auditorium with red seats and stage lights. A white login form is centered on the screen. The form has a title 'Sign in to H.O.V.A' and two input fields for 'Username' and 'Password'. Below these fields are five radio button options: 'Applicant' (selected), 'Authority', 'AV Cell', 'Department Office', and 'Security'. At the bottom of the form is a green 'Sign in' button.

Auditorium and Room Booking System

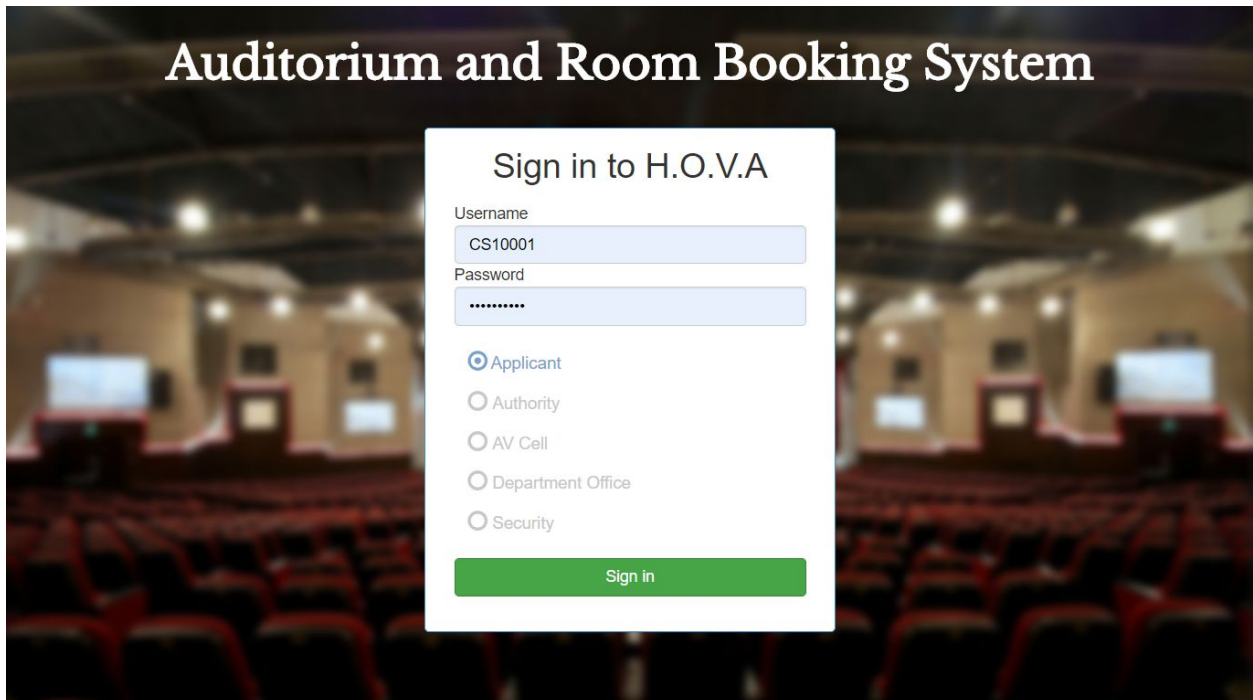
Sign in to H.O.V.A

Username

Password

☒ Applicant
☐ Authority
☐ AV Cell
☐ Department Office
☐ Security

Signing in as Applicant



This image shows the same login page as the previous one, but with the 'Applicant' radio button selected and the input fields filled with example data. The 'Username' field contains 'CS10001' and the 'Password' field contains a series of dots. The 'Sign in' button remains green.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username

Password

☒ Applicant
☐ Authority
☐ AV Cell
☐ Department Office
☐ Security

These are a snapshot of Applicant Booking Interface where an applicant (Student or Professor) can initiate a new booking and view all of his/her previous bookings and cancel them as well.

Aaryan Sanjay Sarupria

Previous BookingsNew Booking

Logout

New Booking

Select Room

NC131

Select Date

Show Slots

☐ AV Cell Required

Book

localhost:8080/dbmslab/applicant.jsp#

Selecting the rooms from a list for booking

Aaryan Sanjay Sarupria

Previous BookingsNew Booking

Logout

New Booking

Select Room

NC131NC232NC233NC234NC241NC242NC243NC244NC331NC332NC333NC334NC341NC342NC343NC344NC431

New Booking initiation

Aaryan Sanjay Sarupria

Previous BookingsNew Booking

Logout

New Booking

Select Room

NC131

Select Date

04/05/2019

Show Slots

☐

6:00-7:00

☐

7:00-8:00☐☐☐☐

After selecting the room we show the available slots(not-yet booked), which are there for that room. One can also select AV cell is required or not.

Aaryan Sanjay Sarupria

Previous BookingsNew Booking

Logout

New Booking

Select Room

NC131

Select Date

04/05/2019

Show Slots

☐

6:00-7:00

☒

7:00-8:00☒☒☐☐☒ AV Cell Required

Book

Aaryan Sanjay Sarupria

localhost:8080 says
Booked.

Logout

New Booking

Select Room

NC131

Select Date

04/05/2019

Show Slots

☐ 6:00-7:00

☒ 7:00-8:00

☒ 8:00-9:00

☒ 9:00-10:00

☐ 10:00-11:00

☐ 11:00-12:00

☒ AV Cell Required

Book

Aaryan Sanjay Sarupria Previous Bookings New Booking Logout

[illegible]

The applicant can also logout out from the current session using the Logout button at the right end of the Navigation Bar.

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
20	04/05/2019 7:00-8:00	NC131	1	Nalanda	PENDING	PENDING	PENDING	PENDING	<button>Cancel</button>
	04/05/2019 8:00-9:00								
	04/05/2019 9:00-10:00								

localhost:8080/dbmslab/Logout.jsp

Signing in as the Department Office official

Auditorium and Room Booking System

Sign in to H.O.V.A

Username

CS60001

Password

☐ Applicant

☐ Authority

☐ AV Cell

☒ Department Office

☐ Security

Sign in

The DepOffice official can view the pending bookings made by the applicants of that department.

Javed Uppal	Pending Bookings	Approved Bookings	Logout
-------------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda	<div>Approve</div> <div>Reject</div>

Booking approved by the Department Official

Javed Uppal	localhost:8080 says Booking Approved.	Logout
-------------	--	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda	<div>Approve</div> <div>Reject</div>

The Department Office official can view the approved bookings.

Javed Uppal	Pending Bookings	Approved Bookings	Logout
-------------	------------------	-------------------	--------

Approved Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda

localhost:8080/dbmslab/department.jsp#

Authority officials can sign in into the System using the same login page and choosing 'Auhority' as the radio box option.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username
CS40003

Password

☐ Applicant
☒ Authority
☐ AV Cell
☐ Department Office
☐ Security

Sign in

The default page of the authority is the table of Booking Requests for which the approval is pending. He/She can either approve or cancel the request.

Aditya Anand	Pending Bookings	Approved Bookings	Logout
--------------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00	NC131	1	Nalanda	<button>Approve</button> <button>Reject</button>
					04/05/2019 8:00-9:00				
					04/05/2019 9:00-10:00				

If the request is approved, it shows a pop-up showing Booking approved.

Aditya Anand	localhost:8080 says Booking Approved.	Logout
--------------	--	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00	NC131	1	Nalanda	<button>Approve</button> <button>Reject</button>
					04/05/2019 8:00-9:00				
					04/05/2019 9:00-10:00				

The Authority is also provided with a table of Approved Bookings :

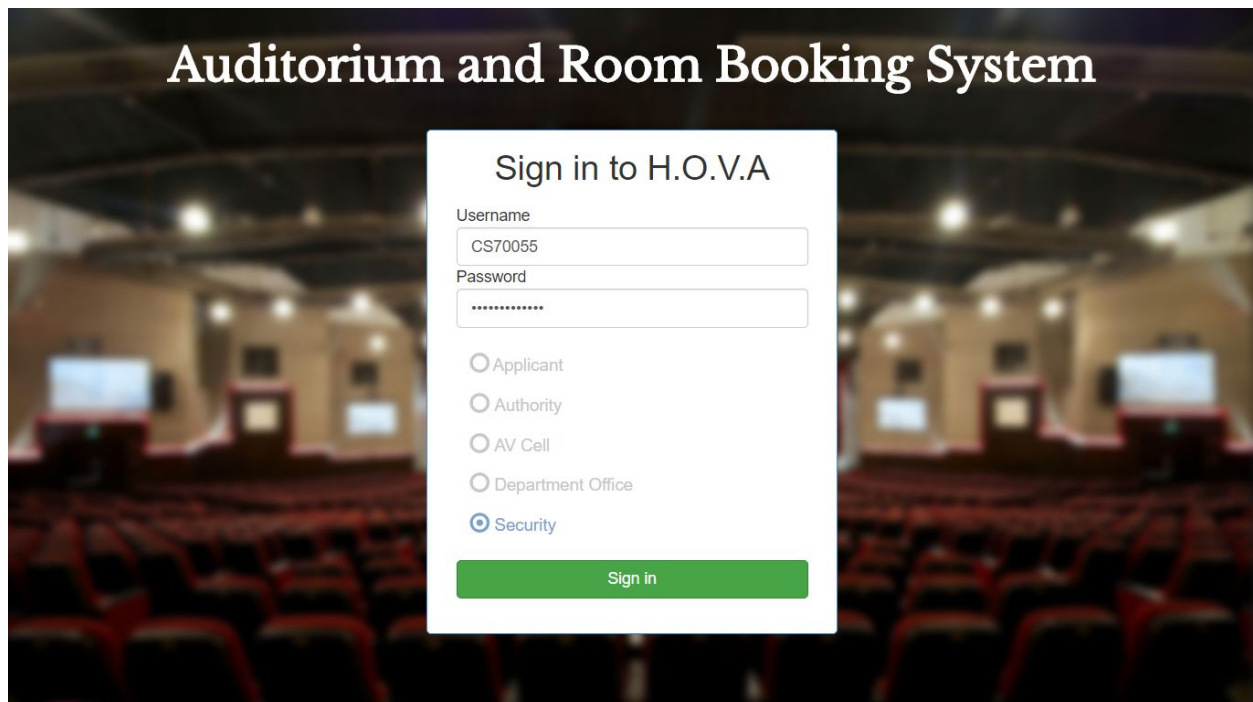
Aditya Anand	Pending Bookings	Approved Bookings	Logout
--------------	------------------	-------------------	--------

Approved Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda

localhost:8080/dbmstlab/authority.jsp#

After the Department Official and Authority Official have approved a request, it is also reflected in the Applicant's account.

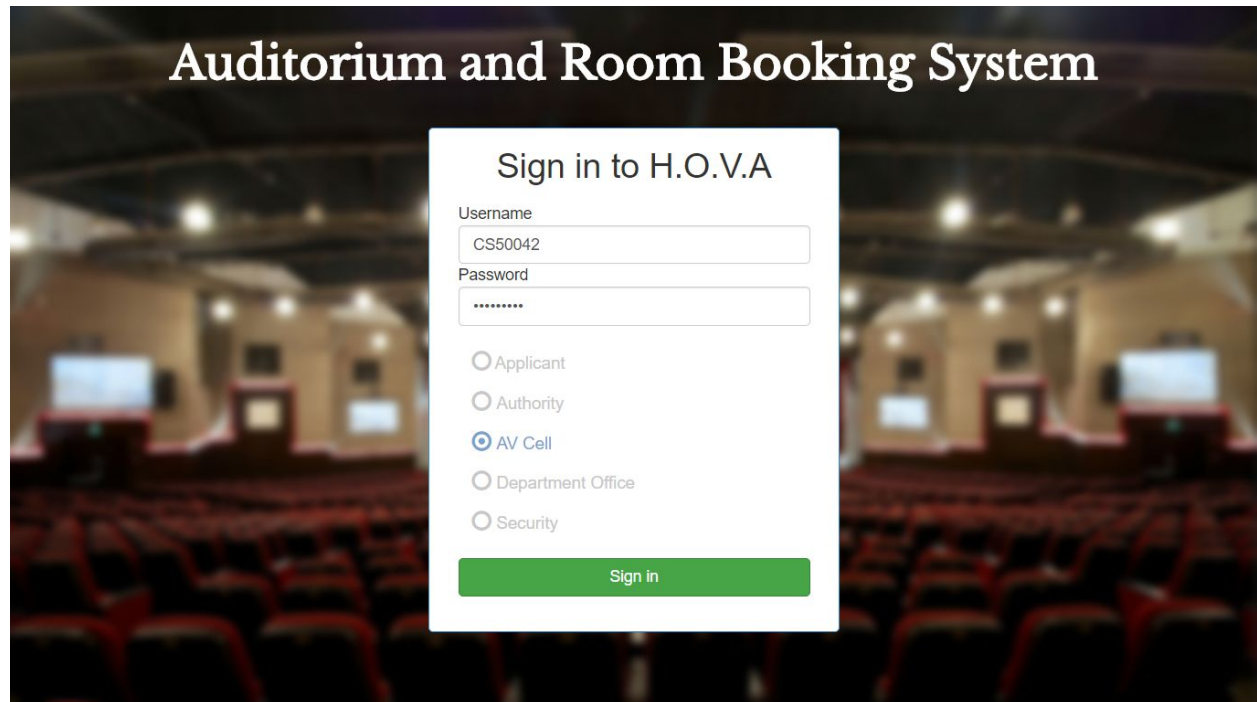


Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00	NC131	1	Nalanda	<button>Approve</button>
					04/05/2019 8:00-9:00				<button>Reject</button>
					04/05/2019 9:00-10:00				

Approved Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00	NC131	1	Nalanda
					04/05/2019 8:00-9:00			
					04/05/2019 9:00-10:00			



Logging in as an AV_Cell Applicant

AV Cell Officials can also view the requests for which their approval are pending. They have an option to approve and reject a request. This action will remove the booking from the pending list.

Aditya Rastogi	Pending Bookings	Approved Bookings	Logout
----------------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00	NC131	1	Nalanda	<div>Approve</div> <div>Reject</div>
					04/05/2019 8:00-9:00				
					04/05/2019 9:00-10:00				

This interface shows a table of all the approved bookings, so that the AV cell can view a list of services they have to provide.

Aditya Rastogi	Pending Bookings	Approved Bookings	Logout
----------------	------------------	-------------------	--------

Approved Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building
20	CS10001	Aaryan Sanjay Sarupria	422220001	Aaryan@gmail.com	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda

localhost:8080/dbmstab/av_cell.jsp#

The following interface shows a list of all of Approved,Rejected and Pending booking list for an applicant. The Approved requests are marked by green background color, the rejected requests are marked by red background color and the pending requests are marked by white background color.

Aaryan Sanjay Sarupria	Previous Bookings	New Booking	Logout
------------------------	-------------------	-------------	--------

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
20	04/05/2019 7:00-8:00 04/05/2019 8:00-9:00 04/05/2019 9:00-10:00	NC131	1	Nalanda	CS60001	CS40003	CS40042	CS70055	Cancel

Now, let's see some other cases, where the hierarchy of approvals become prominent. Let's say, an applicant requests a room on a particular date and slot.

Nitish Kumar Rai

Previous BookingsNew Booking

Logout

New Booking

Select Room

NC144

Select Date

04/06/2019

Show Slots

☒ 6:00-7:00

☐ 7:00-8:00

☐ 8:00-9:00

☐ 9:00-10:00

☐ 10:00-11:00

☐ 11:00-12:00

☐ AV Cell Required

Book

The request is shown as pending.

Nitish Kumar Rai

Previous BookingsNew Booking

Logout

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
21	04/06/2019 6:00-7:00	NC144	1	Nalanda	PENDING	PENDING	NA	PENDING	<div>Cancel</div>

The Department official can see the request and can either approve or reject it.

Javed Uppal

Pending BookingsApproved Bookings

Logout

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
21	CS10040	Nitish Kumar Rai	422220040	Nitish@gmail.com	04/06/2019 6:00-7:00	NC144	1	Nalanda	<div>Approve</div> <div>Reject</div>

But before the Department would approve it, it will not be shown to the Authority an

Aditya Anand	Pending Bookings	Approved Bookings	Logout
--------------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
------------	--------------	----------------	-----------------	-----------------	--------------	---------	-------	----------	--------

Now say the Department approves the request.

Javed Uppal

localhost:8080 says
Booking Approved.

Logout

Pending Bookings

OK

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
21	CS10040	Nitish Kumar Rai	422220040	Nitish@gmail.com	04/06/2019 6:00-7:00	NC144	1	Nalanda	<div>Approve</div> <div>Reject</div>

Now, it is shown to the Authority officials who can either approve or reject the request. Let's say he/she rejects it.

Aditya Anand	Pending Bookings	Approved Bookings	Logout
--------------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
21	CS10040	Nitish Kumar Rai	422220040	Nitish@gmail.com	04/06/2019 6:00-7:00	NC144	1	Nalanda	<div>Approve</div> <div>Reject</div>

A pop-up shows that the request has been successfully rejected.

Aditya Anand

localhost:8080 says
Booking Rejected.

Logout

Pending Bookings

OK

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
21	CS10040	Nitish Kumar Rai	422220040	Nitish@gmail.com	04/06/2019 6:00-7:00	NC144	1	Nalanda	<div>Approve</div> <div>Reject</div>

Now in the Applicant's portal the status of the application/request is shown as rejected by the Authority and the background color has been marked red.

Nitish Kumar Rai	Previous Bookings	New Booking	Logout
------------------	-------------------	-------------	--------

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
21	04/06/2019 6:00-7:00	NC144	1	Nalanda	CS60001	REJECTED	NA	PENDING	Cancel

If some slots are not available, then the checkbox beside it would be unavailable. For example in the following scenario, the slots 7:00-8:00 pm, 8:00-9:00 pm and 9:00-10:00 pm are already booked and hence would not be active for the next applicant for that day.

Inkulu Sampreeth	Previous Bookings	New Booking	Logout
------------------	-------------------	-------------	--------

New Booking

Select Room

NC131

Select Date

04/05/2019

Show Slots

- ☐ 6:00-7:00
- ☐ 7:00-8:00
- ☐ 8:00-9:00
- ☐ 9:00-10:00
- ☒ 10:00-11:00
- ☒ 11:00-12:00

☒ AV Cell Required

Book

Let's take a case, where the hierarchical difference between Department and Authority and AV-cell and Security are shown. The AV cell or security could not approve a request until both the Department and Authority have approved a particular request.

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
22	04/05/2019 10:00-11:00	NC131	1	Nalanda	PENDING	PENDING	PENDING	PENDING	Cancel
	04/05/2019 11:00-12:00								

Now the security logs into his/her account.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username

CS70048

Password

☒ Applicant

☐ Authority

☐ AV Cell

☐ Department Office

☐ Security

Sign in

But security will not be able to see the request until it has been approved by both the Department and the Authority.

Sayan Sinha

Pending Bookings

Approved Bookings

Logout

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
------------	--------------	----------------	-----------------	-----------------	--------------	---------	-------	----------	--------

Now, the Authority Officials logs into their account.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username
CS40053

Password

☐ Applicant
☐ Authority
☒ AV Cell
☐ Department Office
☐ Security

Sign in

But they will not be able to see the request until the request has been approved by the Department.

Vedic Partap

Pending Bookings

Approved Bookings

Logout

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
------------	--------------	----------------	-----------------	-----------------	--------------	---------	-------	----------	--------

The Department Officials log into their account.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username

Password

☐ Applicant

☐ Authority

☐ AV Cell

☒ Department Office

☐ Security

Sign In

The Department Officials can view the request and approve or reject it.

Bimla De	Pending Bookings	Approved Bookings	Logout
----------	------------------	-------------------	--------

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
22	CS10027	Inkulu Sampreeth	422220027	Inkulu@gmail.com	04/05/2019 10:00-11:00	NC131	1	Nalanda	<div>Approve</div> <div>Reject</div>
					04/05/2019 11:00-12:00				

Auditorium and Room Booking System

Sign in to H.O.V.A

Username
CS10027

Password

☒ Applicant
☐ Authority
☐ AV Cell
☐ Department Office
☐ Security

Sign in

Inkulu Sampreeth

Previous BookingsNew Booking

Logout

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
22	04/05/2019 10:00-11:00	NC131	1	Nalanda	PENDING	PENDING	PENDING	PENDING	Cancel
	04/05/2019 11:00-12:00								

Inkulu Sampreeth

localhost:8080 says
Booking Cancelled.

Logout

OK

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
22	04/05/2019 10:00-11:00	NC131	1	Nalanda	PENDING	PENDING	PENDING	PENDING	Cancel
	04/05/2019 11:00-12:00								

In the above three screenshots, we can see that after an applicant can go to the previous bookings and cancel a request.

After a request is cancelled, it will not be shown to the applicant any further.

Inkulu Sampreeth	Previous Bookings	New Booking	Logout
------------------	-------------------	-------------	--------

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
------------	--------------	---------	-------	----------	---------------	--------------------	------------------	-------------------	--------

The cancelled requests will also be not shown to the Department Officials.

Auditorium and Room Booking System

Sign in to H.O.V.A

Username
CS60001

Password

☐ Applicant
☐ Authority
☐ AV Cell
☒ Department Office
☐ Security

Sign in

Javed Uppal	Pending Bookings	Approved Bookings	Logout
-------------	------------------	-------------------	--------


Pending Bookings


Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
------------	--------------	----------------	-----------------	-----------------	--------------	---------	-------	----------	--------

When a professor is booking a room, he will not need an approval by the Department.

Auditorium and Room Booking System

Sign in to H.O.V.A

CS20001

.....

☒ Applicant

☐ Authority

☐ AV Cell

☐ Department Office

☐ Security

Sign In

Activate Windows
Go to Settings to activate Windows.

Shamik Sural

[Previous Bookings](#) [New Booking](#)

[Logout](#)

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
------------	--------------	---------	-------	----------	---------------	--------------------	------------------	-------------------	--------

Activate Windows
Go to Settings to activate Windows.

localhost:8080/dbmslab/applicant.jsp#

The professor can choose any room and its department approval will be marked by 'NA' denoting that the given approval is not applicable in case of professors. It will also be shown to the respective authority for approval

Shamik Sural

localhost:8080 says
Booked.

Logout

New Booking

Select Room

NC142

Select Date

04/07/2019

Show Slots

☐ 6:00-7:00
☒ 7:00-8:00
☒ 8:00-9:00
☒ 9:00-10:00
☐ 10:00-11:00
☐ 11:00-12:00

☐ AV Cell Required

Book

Activate Windows
 Go to Settings to activate Windows.

Shamik Sural

Previous Bookings New Booking

Logout

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
23	04/07/2019 7:00-8:00	NC142	1	Nalanda	NA	PENDING	NA	PENDING	Cancel
	04/07/2019 8:00-9:00								
	04/07/2019 9:00-10:00								

Aditya Anand

localhost:8080 says
Booking Approved.

Logout

Pending Bookings

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
23	CS20001	Shamik Sural	442220001	ss@cse.iitkgp.ac.in	04/07/2019 7:00-8:00	NC142	1	Nalanda	Approve
					04/07/2019 8:00-9:00				Reject
					04/07/2019 9:00-10:00				

The Security then approves the request.

Auditorium and Room Booking System

A screenshot of the application interface. On the left, a dark header bar contains the name 'Sayan Sinha'. Below it, the text 'Pending Bookinas' is visible. In the center, a light gray box displays the message 'localhost:8080 says Booking Approved.' with a blue 'OK' button below it. On the right, a dark header bar contains the text 'Logout'.

Booking ID	Applicant ID	Applicant Name	Applicant Phone	Applicant Email	Booking Slot	Room ID	Floor	Building	Action
23	CS20001	Shamik Sural	442220001	ss@cse.iitkgp.ac.in	04/07/2019 7:00-8:00	NC142	1	Nalanda	<div>Approve</div> <div>Reject</div>
					04/07/2019 8:00-9:00				
					04/07/2019 9:00-10:00				

The approved request is then shown in the portal of the Applicant (Professor).

Shamik Sural

[Previous Bookings](#)
[New Booking](#)

[Logout](#)

Previous Bookings

Booking ID	Booking Slot	Room ID	Floor	Building	Dept Approval	Authority Approval	AV Cell Approval	Security Approval	Action
23	04/07/2019 7:00-8:00	NC142	1	Nalanda	NA	CS40003	NA	CS70048	<button>Cancel</button>
	04/07/2019 8:00-9:00								
	04/07/2019 9:00-10:00								