

# STUDENT DATABASE

**Tables:**
**1) Student Information:**

RollNumber	First Name	Last Name	Address	Gender	Category	Department	Programme	Mobile_Number	Email_Id	Password
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**Table Creation SQL Query:**

```
CREATE TABLE `student` (
  `RollNumber` bigint(20) NOT NULL,
  `First Name` varchar(255) NOT NULL,
  `Last Name` varchar(255) NOT NULL,
  `Address` longtext NOT NULL,
  `Gender` varchar(255) NOT NULL,
  `Category` varchar(255) NOT NULL,
  `Department` varchar(255) NOT NULL,
  `Programme` varchar(255) NOT NULL,
  `Mobile_Number` bigint(20) NOT NULL,
  `Email_Id` varchar(255) NOT NULL,
  `Password` varchar(255) NOT NULL
);
```

**2) Hostel Details**

Hostel_Id	Hostel_Name	Hostel_Type
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**Table creation query:**

```
CREATE TABLE `hostel details` (
  `Hostel_Id` bigint(20) NOT NULL,
  `Hostel_Name` varchar(255) NOT NULL,
  `Hostel_Type` varchar(255) NOT NULL
);
```

**Data Entry:**

```
INSERT INTO `hostel details` (`Hostel_Id`, `Hostel_Name`, `Hostel_Type`) VALUES
(1, 'Subansiri', 'Girls Hostel'),
(2, 'Lohit', 'Boys Hostel');
```

**3) Hostel Room details Information:**

Room_Id	Hostel_Id	Room_Size	Conditioning	Status	Allotted_To	Requested_By	Allotted_Roll_Number

**Table Creation Query:**

```
CREATE TABLE `room details` (
  `Room_Id` int(11) NOT NULL,
  `Hostel_Id` int(11) NOT NULL,
  `Room_Size` varchar(255) NOT NULL,
  `Conditioning` varchar(255) NOT NULL,
  `Status` varchar(255) NOT NULL,
  `Allotted_To` varchar(255) NOT NULL,
  `Requested_By` varchar(255) NOT NULL,
  `Allotted_Roll_Number` bigint(20) NOT NULL
);
```

**Data Entry:**

```
INSERT INTO `room details` (`Room_Id`, `Hostel_Id`, `Room_Size`, `Conditioning`, `Status`, `Allotted_To`, `Requested_By`, `Allotted_Roll_Number`) VALUES  
(1000, 1, 'Single Bed', 'Non AC', 'Available', "", "", 0),  
(1001, 1, 'Single Bed', 'Non AC', 'Available', "", "", 0),  
(1002, 1, 'Single Bed', 'Non AC', 'Available', "", "", 0),  
(1003, 1, 'Single Bed', 'Non AC', 'Available', "", "", 0),  
(1004, 1, 'Single Bed', 'Non AC', 'Available', "", "", 0),  
(1005, 1, 'Double Bed', 'Non AC', 'Available', "", "", 0),  
(1006, 1, 'Double Bed', 'Non AC', 'Available', "", "", 0),  
(1007, 1, 'Double Bed', 'Non AC', 'Available', "", "", 0),  
(1008, 2, 'Double Bed', 'Non AC', 'Available', "", "", 0),  
(1009, 2, 'Double Bed', 'Non AC', 'Available', "", "", 0),  
(1010, 2, 'Double Bed', 'AC', 'Available', "", "", 0),  
(1011, 2, 'Double Bed', 'AC', 'Available', "", "", 0),  
(1012, 1, 'Double Bed', 'AC', 'Available', "", "", 0),  
(1013, 1, 'Double Bed', 'AC', 'Allotted', "", "", 0),  
(1014, 1, 'Double Bed', 'AC', 'Available', "", "", 0),  
(1015, 1, 'Single Bed', 'AC', 'Available', "", "", 0),  
(1016, 1, 'Single Bed', 'AC', 'Available', "", "", 0),  
(1017, 1, 'Single Bed', 'AC', 'Available', "", "", 0),  
(1018, 1, 'Single Bed', 'AC', 'Available', "", "", 0),  
(1019, 1, 'Single Bed', 'AC', 'Available', "", "", 0);
```

**\*More entries can be entered as per user discretion\***

**4) Allocation of rooms information**

Allocation_Id	Room_Id	Hostel_Id	Hostel_Type	Conditioning	Stayin g_Fro m	Stayin g_To	Status	State	Last_A ctivity	Roll_N umber
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**Table creation query:**

```
CREATE TABLE `allocation` (
    `Allocation_Id` bigint(20) NOT NULL,
    `Room_Id` bigint(20) NOT NULL,
    `Hostel_Id` bigint(20) NOT NULL,
    `Hostel_Type` varchar(255) NOT NULL,
    `Conditioning` varchar(255) NOT NULL,
    `Staying_From` varchar(255) NOT NULL,
    `Staying_To` varchar(255) NOT NULL,
    `Status` varchar(255) NOT NULL,
    `State` varchar(255) NOT NULL,
    `Last_Activity` varchar(255) NOT NULL,
    `Roll_Number` bigint(20) NOT NULL
);
```

**5) Dues information:**

Due_Id	Roll_Number	Type_of_Due	Amount_Payable	Amount_Paid	Amount_to_be_Paid	Due_Date	Status

**Table creation query:**

```
CREATE TABLE `dues` (
    `Due_Id` bigint(20) NOT NULL,
    `Roll_Number` bigint(20) NOT NULL,
    `Type_of_Due` varchar(255) NOT NULL,
    `Amount_Payable` double NOT NULL,
    `Amount_Paid` decimal(10,0) NOT NULL,
    `Amount_to_be_Paid` decimal(10,0) NOT NULL,
    `Due_Date` varchar(255) NOT NULL,
    `Status` varchar(255) NOT NULL
);
```

);

**6) Payment Information:**

Pay_Id	Pay_Type	Roll_Number	Due_Id	Amount	Date_of_Payment
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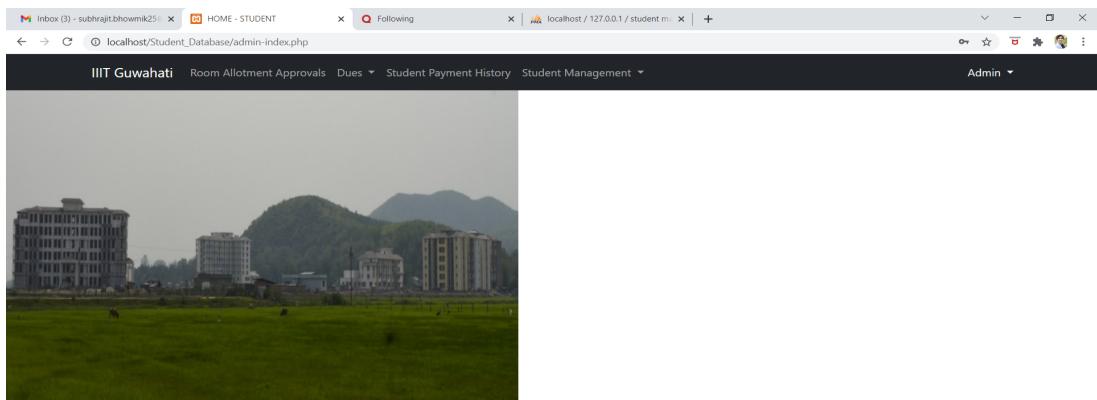
**Table creation query:**

```
CREATE TABLE `payment` (
  `Pay_Id` bigint(20) NOT NULL,
  `Pay_Type` varchar(255) NOT NULL,
  `Roll_Number` bigint(20) NOT NULL,
  `Due_Id` bigint(20) NOT NULL,
  `Amount` decimal(10,0) NOT NULL,
  `Date_of_Payment` varchar(255) NOT NULL
);
```

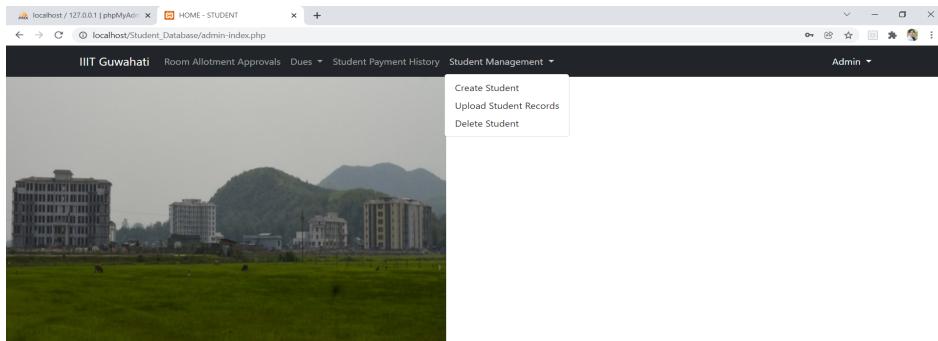
**USE CASES:**

**ADMINISTRATOR(ADMIN):**

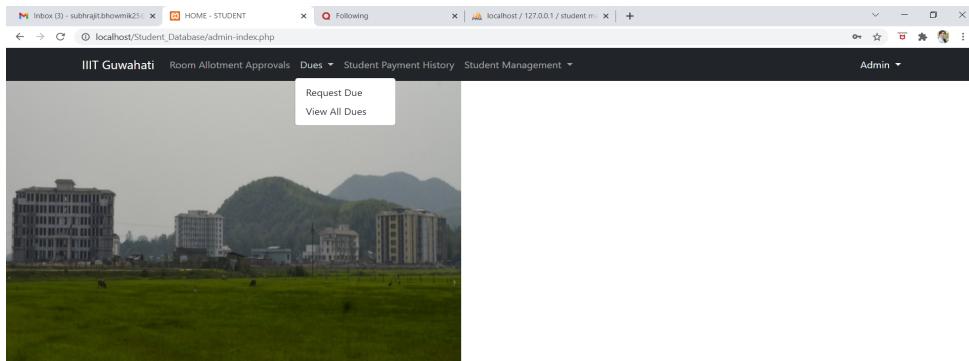
**1) Welcome Page:**



2) Admin can choose to create or upload students' info as a file or delete student:



3) Admin can request or view dues:



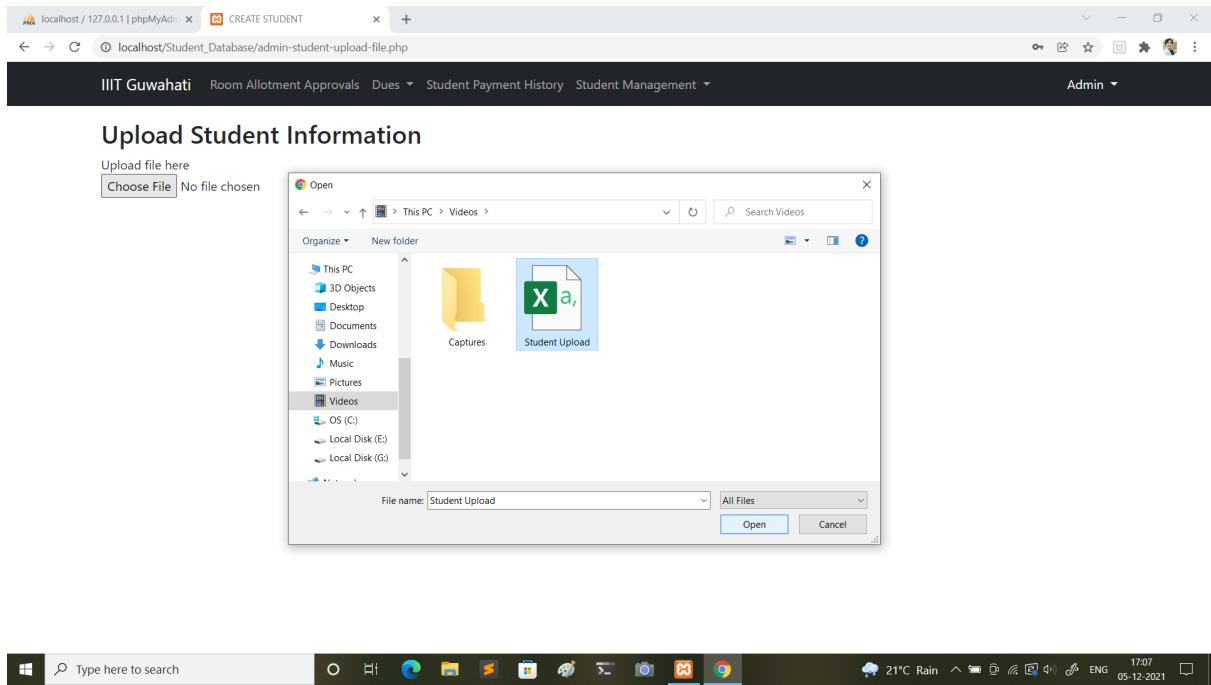
4)a) Admin when creating a new student entry:

The screenshot shows a Windows desktop environment with a web browser window open. The browser title bar reads "CREATE STUDENT". The main content area is a "Create Student Form" with the following fields:

- Roll Number
- First Name
- Last Name
- Address
- Gender: Select your choice
- Category: Select your choice
- Department: Select your choice
- Programme: Select your choice
- Mobile Number

The browser's address bar shows "localhost/Student\_Database/admin-create-student.php". The system tray at the bottom right indicates it's 26°C Haze, 14:26, and the date is 01-12-2021.

4) b) Admin when uploading student data as a file:



4) Admin has the flexibility to view student data and also delete any, in combined functionality:

Roll Number	Name	Address	Gender	Category	Department	Programme	Mobile	Email ID	Action
2102042	Subhrajit Bhowmik	420xyz	Male	M.Tech	CSE	Full Time	9804985605	subhrajit.bhowmik21@iiitg.ac.in	<button>DELETE</button>
2102043	Hinata Hyuuga	1st street, Konoha-03	Female	B.Tech	ECE	Full Time	786	hinata@iiitg.ac.in	<button>DELETE</button>
2102044	Naruto Uzumaki	2B,Hokage Square, Konoha-06	Male	PhD	CSE	Part Time	1234	naruto@iiitg.ac.in	<button>DELETE</button>



6) Say, Admin now wants to register a due for Student with Roll Number 2102044:

Roll Number	2102044
Due Type	Mess Dues
Due Amount	13
Due Date	18-09-2021
<input type="button" value="Submit"/>	



7) After registering the due, now Admin views all dues:

Inbox (4) - subhrajit.bhowmik25@gmail.com DUES HISTORY Following localhost / 127.0.0.1 / student management +

localhost/Student\_Database/admin-dues-view.php

IIIT Guwahati Room Allotment Approvals Dues Student Payment History Student Management Admin

### Dues History

Due Id	Roll Number	Type of Due	Amount Payable	Paid Amount	Amount to be Paid	Due Date	Status
478630	2102044	Mess Dues	13	0	13	2021-09-18	Pending Approval

8) Now suppose, Student with roll no. 2102044, whose name is Naruto Uzumaki, has logged into the portal and views his dues pending, and has the option to clear them in the same page:

Inbox (4) - subhranjit.bhowmik25@gmail.com DUES PENDING Following localhost / 127.0.0.1 / student.m... +

localhost/Student\_Database/student-dues-pending.php

IIT Guwahati Request New Room Room Allotment Status Dues Pending Payment History Naruto Uzumaki ▾

### Dues History

Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	0	13	2021-09-18	Pending Approval	<input type="text"/>	Select your choice ▾	<button>Pay</button>

9) Now suppose, Naruto Uzumaki partially pays his dues by cash:

Inbox (4) - subhrajit.bhowmik25 | DUES PENDING | Following | localhost / 127.0.0.1 / student m... | +

localhost/Student\_Database/student-dues-pending.php

IIIT Guwahati Request New Room Room Allotment Status Dues Pending Payment History Naruto Uzumaki

Dues History

Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	0	13	2021-09-18	Pending Approval	10	Cash	PAY



10) Again when Naruto tries to view his dues, he sees that he has partially paid his dues, and yet to pay the rest amount:

Inbox (4) - subhrajit.bhowmik25 | DUES PENDING | Following | localhost / 127.0.0.1 / student m... | +

localhost/Student\_Database/student-dues-pending.php

IIIT Guwahati Request New Room Room Allotment Status Dues Pending Payment History Naruto Uzumaki

Dues History

Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	10	3	2021-09-18	Partially Paid		Select your choice	PAY



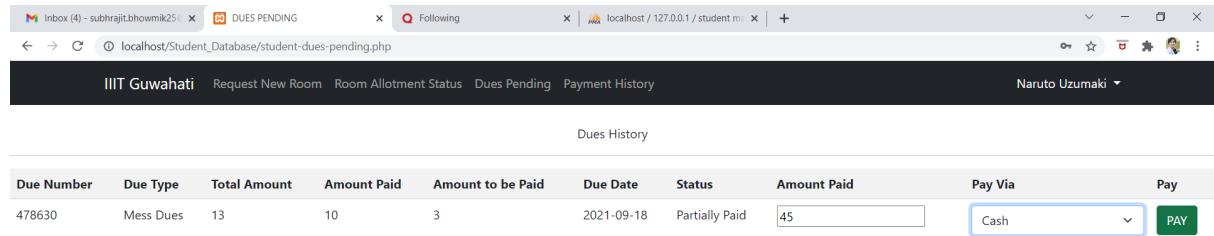
11) Now Admin logs in and checks Payment history, where he sees the payment by the above mentioned student:

The screenshot shows a web browser window with the title "PAYMENT HISTORY". The URL is "localhost/Student\_Database/admin-payment-history.php". The page header includes "IIIT Guwahati", "Room Allotment Approvals", "Dues", "Student Payment History", "Student Management", and "Admin". Below the header is a table titled "Payment History" with columns: Pay Id, Due Id, Roll Number, Payment Mode, Paid Amount, and Payment Date. A single row is displayed: Pay Id 7582050, Due Id 478630, Roll Number 2102044, Payment Mode Cash, Paid Amount 10, and Payment Date 2021-12-01.

12) Now Admin sees Dues history, which shows the same information as above, and also the fact that the payment is a partial one, and shows remaining amount to be paid:

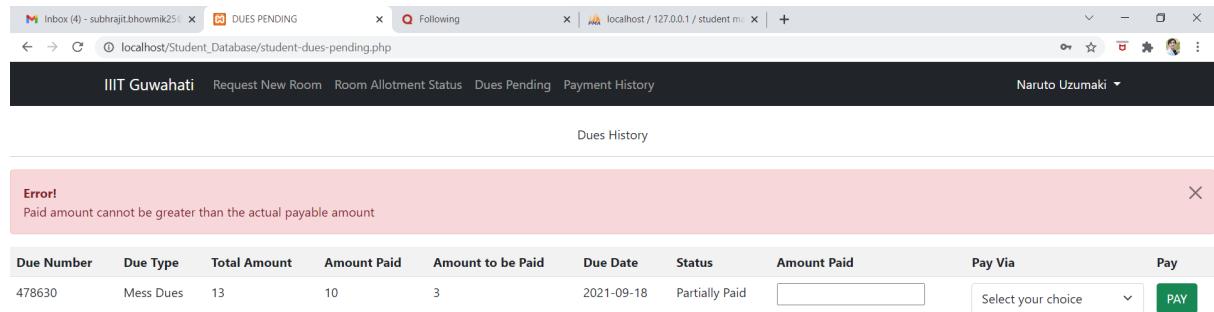
The screenshot shows a web browser window with the title "DUES HISTORY". The URL is "localhost/Student\_Database/admin-dues-view.php". The page header includes "IIIT Guwahati", "Room Allotment Approvals", "Dues", "Student Payment History", "Student Management", and "Admin". Below the header is a table titled "Dues History" with columns: Due Id, Roll Number, Type of Due, Amount Payable, Paid Amount, Amount to be Paid, Due Date, and Status. A single row is displayed: Due Id 478630, Roll Number 2102044, Type of Due Mess Dues, Amount Payable 13, Paid Amount 10, Amount to be Paid 3, Due Date 2021-09-18, and Status Partially Paid.

13) Now say Naruto Uzumaki log back in and tries to clear off his remaining due with a larger amount than expected( Expected=Rs. 3, Attempted amount=Rs.45 in the example):



Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	10	3	2021-09-18	Partially Paid	45	Cash	PAY

14) After the erroneous attempt to pay extra, the student gets the necessary error message:



Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	10	3	2021-09-18	Partially Paid		Select your choice	PAY



15) Now suppose the student clears off his remaining due with the correct amount:

Dues History

Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	10	3	2021-09-18	Partially Paid	3	Select your choice	PAY

16) Naruto now sees that all of his due has been cleared:

Dues History

Due Number	Due Type	Total Amount	Amount Paid	Amount to be Paid	Due Date	Status	Amount Paid	Pay Via	Pay
478630	Mess Dues	13	13	0	2021-09-18	Cleared		Select your choice	PAY

17) The student Naruto Uzumaki now checks his payment history:

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "PAYMENT HISTORY" and displays a table of payment records. The table has columns: Payment ID, Date of Payment, Due ID, Payment Mode, and Amount Paid. Two entries are listed:

Payment ID	Date of Payment	Due ID	Payment Mode	Amount Paid
7582050	2021-12-01	478630	Cash	10
4450133	2021-12-01	478630	Cash	3

The browser's address bar shows the URL: localhost/Student\_Database/student-payment-history.php. The top navigation bar includes links for "Request New Room", "Room Allotment Status", "Dues Pending", and "Payment History". On the right side of the header, it says "Naruto Uzumaki". The system tray at the bottom shows the date as 01-12-2021 and the time as 14:33.

18) Now suppose, another student with roll no. 2102043 named Hinata Hyuuga has logged in and attempts to raise a request for room allocation:

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "ALLOCATION REQUEST" and displays a form titled "Room Allocation Request form". The form has two dropdown menus: "Room Size" (set to "Single Bed") and "Air Conditioning" (set to "AC"). A "Submit" button is located below the dropdowns. The browser's address bar shows the URL: localhost/Student\_Database/allocation.php. The top navigation bar includes links for "Request New Room", "Room Allotment Status", "Dues Pending", and "Payment History". On the right side of the header, it says "Hinata Hyuuga". The system tray at the bottom shows the date as 01-12-2021 and the time as 14:33.

19) Now the student Hinata sees her room allotment status, which says her request is yet to be approved:

Allocation Number	Hostel Number	Room Number	Location	Type	Staying From	Staying To	Status	Last Activity On
3578590	1	1015	Girls Hostel	AC			Pending Approval	2021-12-01

20) Now say Admin logs in and checks Room allocation requests, and sees the request raised by Hinata, and has the discretion to approve or reject it.

Allocation Number	Hostel Number	Room Number	Roll Number	Location	Type	Status	Last Activity On	Staying From	Staying To	ACTION 1	ACTION 2
3578590	1	1015	2102043	Girls Hostel	AC	Pending Approval	2021-12-01	<input type="text" value="dd-mm-yyyy"/>	<input type="button" value="dd-mm-yyyy"/>	<input type="button" value="APPROVE"/>	<input type="button" value="REJECT"/>

21) Say, the Admin decides to approve the request, and decides on a time interval of the student's stay:

Allocation Number	Hostel Number	Room Number	Roll Number	Location	Type	Status	Last Activity On	Staying From	Staying To	ACTION 1	ACTION 2
3578590	1	1015	2102043	Girls Hostel	AC	Pending Approval	2021-12-01	18-09-2021	20-12-2021	<span style="background-color: #28a745; color: white; padding: 2px;">APPROVE</span>	<span style="background-color: #ffc107; color: black; padding: 2px;">REJECT</span>

22) Now the student Hinata logs back in, and sees in her portal, that her room allotment request has been approved:

Allocation Number	Hostel Number	Room Number	Location	Type	Staying From	Staying To	Status	Last Activity On
3578590	1	1015	Girls Hostel	AC	2021-09-18	2021-12-20	Approved	2021-12-01

