

# User Manual

# Academic

# Management System

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Group members:-

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## **Table of contents**

1. Project setup
2. Welcome page
3. Student forgot password
4. Student registration
5. Student home
6. Academic calendar
7. Time table
8. Student status
9. Fee status
10. Student profile
11. Core subject
12. Course coordinator
13. Semester results
14. Complete subjects
15. Dean/admin login
16. Dean/admin forgot password
17. Dean/admin registration
18. Dean/admin home
19. Academic calendar
20. Time table
21. Search student
22. View student information
23. Search result
24. View student marks
25. Student profile update
26. Update marks
27. Course coordinator
28. Search subject

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## **Project Setup:-**

Prerequisite:-

- a. One web browser ( google Chrome, Mozilla Firefox)
- b. Node.js on local system
- c. Mongodb on local system

Project Setup :-

- a. First unzip the file(zip file name :- Academic Management System in code folder) and take the folder to the location where you want to set up our project.
- b. Then copy the folder location and open your command prompt
- c. now using folder location open the folder in command prompt
- d. Type below instructions to install some technologies for our project

npm init (to initialize npm package)

then write package name :- ams

Press enter until you reach (is this OK ? ) checkpoint

Type yes and then press enter

Now type some commands on cmd

“npm install express”

“npm install express -session”

“npm install ejs”

“npm install mongoose”

- e. now type the command “node server.js” in command prompt
- f. then open your mongodb compass there in your localhost:27017 you find a new schema with name “AMS”.
- g. open the AMS schema and made 3 collection with name

-marks

-subjects

-users

- h. now open each table one by one and using the “insert document” option of “add data” dropdown open json files present in database folder of our project.

Open marks.json in marks collection

Open subjects.json in subjects collection

Open users.json in users collection

And save it after uploading each collection

- i. Now restart the server using command node server.js
- j. Now go to one of the working browser and type “localhost:3000”

The home screen appears on your system.

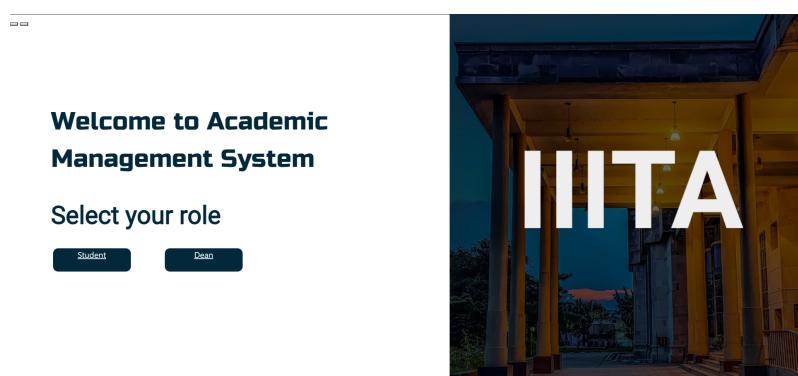
Role	Username	Password
Student	iit2019111@iiita.ac.in	123456

	iit2019141@iiita.ac.in	123456
	<a href="#">iit2019109@iiita.ac.in</a>	123456
	iit2019149@iiita.ac.in	123456
Admin	admin@iiita.ac.in	admin

## 1. Welcome page

This is the home screen of our webpage from where the user can select the role and move to the login screen of his/her corresponding role.

First we will proceed to student part of our portal



## 2. Student login

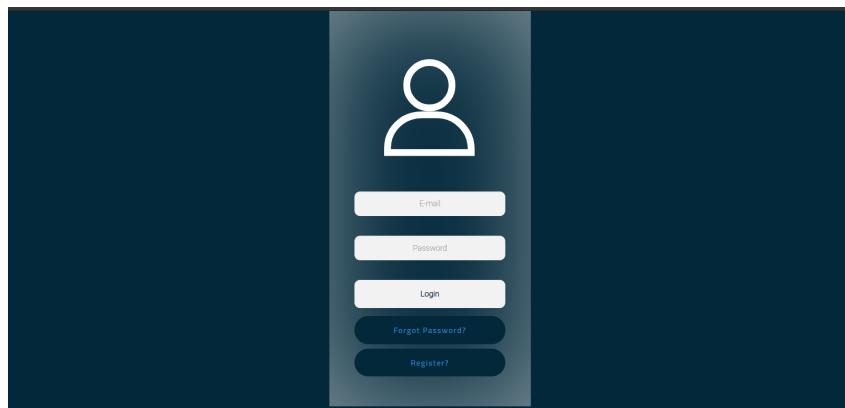
It is necessary to login to the portal in order to use it. After the setup of the project, the user is taken to the login screen from the welcome page.

This is valid for both the users..

Valid credentials to login into the portal as a student

*Email Id- [iit2019109@iita.ac.in](mailto:iit2019109@iita.ac.in)*

*password-123456*



To reset password, the users need to tap on the button “Forgot Password”

To create a new account, Click on the button “Register”

### **3. Student forgot password page**

This is the forgotten password page for the student in case he has forgotten his/her login credentials. He can set a new password and can then login into the application with the new password.

A few things to note at this step:

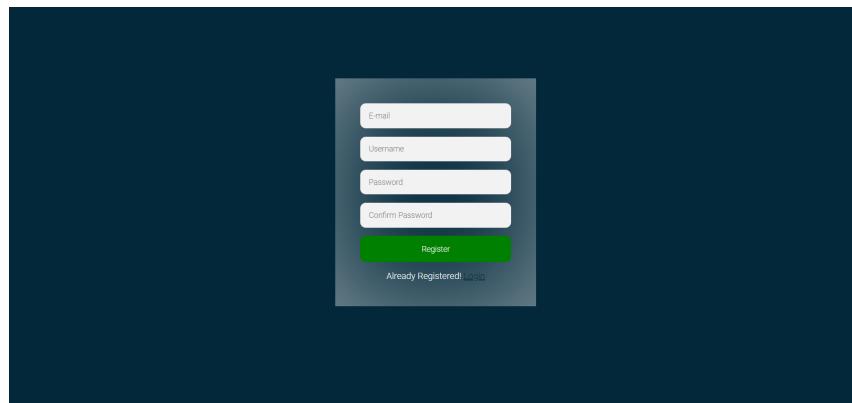
a)-There are three input fields one is for email one is for new password and one is for confirm password.



#### **4. Student Registration page**

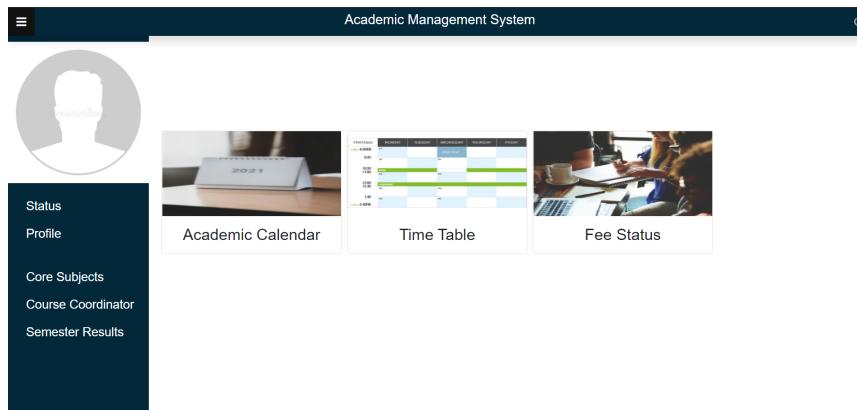
This is the student registration page for the student to register into the portal. Users can set a new username and password and can then login into the application using the credentials.

When the student, who is using the application, enters the credentials and clicks on the ‘Login’ button on Login screen, he/she is redirected into the student home page.



## 5. Student home page

If the student enters the correct or registered credentials then this home page screen will appear.



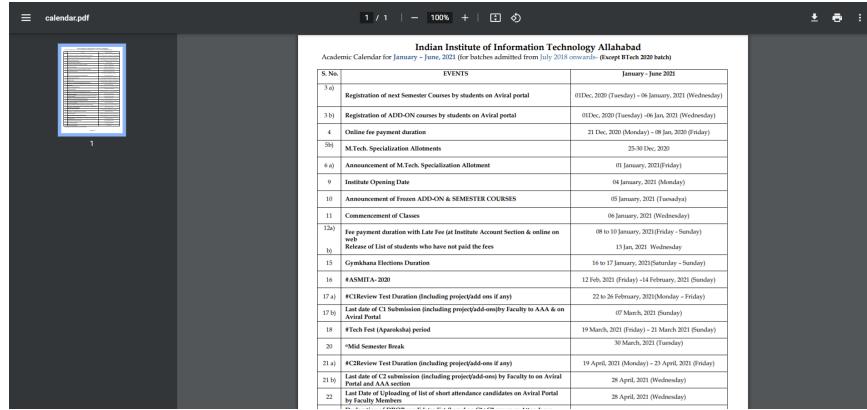
A few things to note at this step:

- a. Using sidebar it is easier for user to jump from any one particular page to another page
- b. The cards in the middle show frequent details like “Academic Calendar” etc.
- c. There is one sign out option at top right using which you can easily logout from the portal.

## 6. Academic calendar

In the home screen the student can view the current academic calendar,

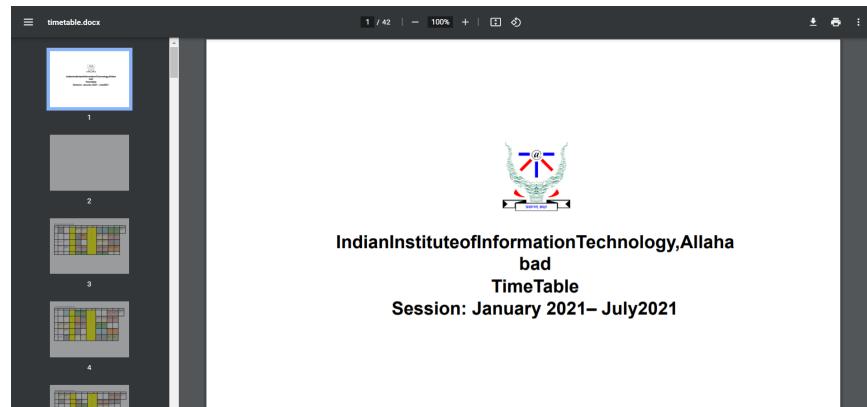
When the student clicks on the academic calendar, he is redirected to the academic calendar of that particular batch which is in the form of a PDF document.



## 7. Class time table

In the home screen the student can view the time table.

When the student clicks on the class timetable, he is redirected to the timetable of that particular semester which is in the form of a PDF document.



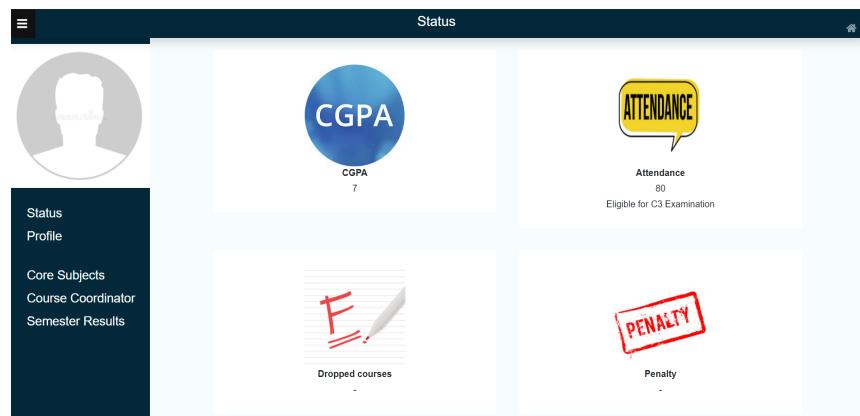
## 8. Student Status

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “status”, he/she is redirected to the page that contains the information such as CGPA, attendance, dropped courses and penalty.

A few things to note at this step:

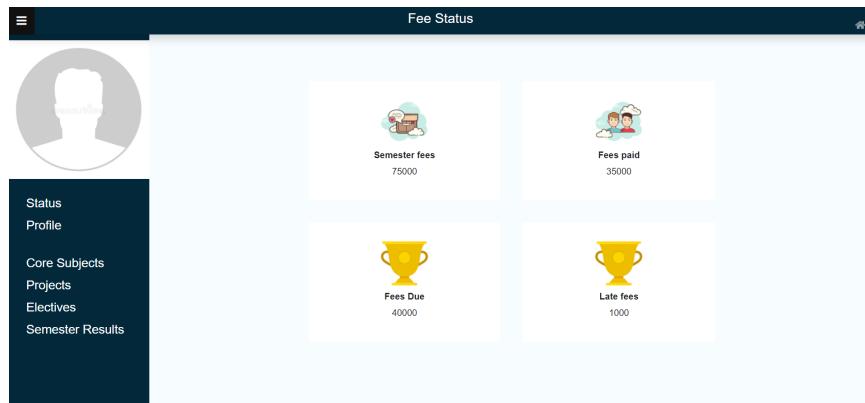
- a. The navbar is also provided with the home button on top right.
- b. The sidebar present at the home page is also visible at the student status page so that he/she can route to any facility provided through the sidebar.



## 9. Fee Status

In the home screen the student is provided with the card to view it's fee status.

When the student clicks on the fee status, he is redirected to the fees status of that particular semester.



A few things to note at this step:

- The navbar is also provided with the home button on top right.
- The sidebar present at the home page is also visible at the student fee status page so that he/she can route to any facility provided through the sidebar.

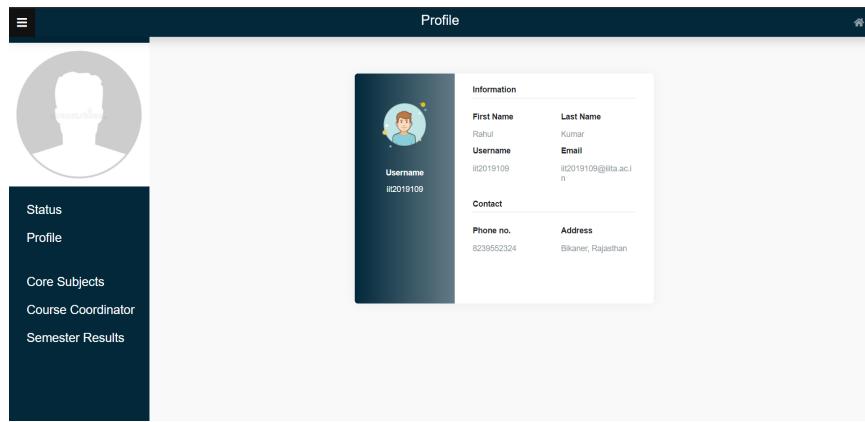
## 10.Student Profile

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “profile”, he/she is redirected to the page that contains the entire profile of general information about the student.

A few things to note at this step:

- The navbar is also provided with the home button on top right.
- The sidebar present at home page is also visible at the student profile page so that he/she can route to any facility provided through the sidebar.



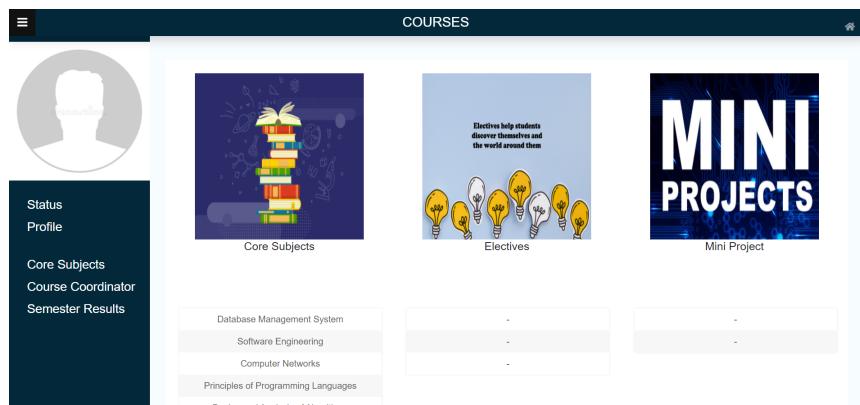
## 11. Core Subject

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “Core Subjects” he/she is redirected to the page that contains all the subjects, electives and projects.

A few things to note at this step:

- The navbar is also provided with the home button on top right.
- The sidebar present at home page is also visible at the core subject page so that he/she can route to any facility provided through the sidebar.



## 12. Course Coordinator

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “Course Coordinator”. He/She is redirected to the page that contains the list of all the coordinators, and clicking on any one of them redirects you to their profile page.

A few things to note at this step:

- a. navbar is also provided with the home button on top right.
- b. The sidebar present at home page is also visible at the Course Coordinator page so that he/she can route to any facility provided through sidebar.

The screenshot shows a web page titled "Course Coordinators". On the left, there is a sidebar with a user profile picture and links: "Status", "Profile", "Core Subjects", "Course Coordinator", and "Semester Results". The main content area is titled "Professor's Profile" and displays a grid of seven cards, each representing a professor with their name, title, research interests, and a small profile picture. The cards are arranged in two rows: three in the top row and four in the bottom row.

Professor	Title	Research Interests
Agarwal, Dr. Sonali	Ph.D.	Twin Support Vector Machine, Support Vector Machine
Agrawal, Prof. Anupam	Ph.D.	Image & Vision Processing, Computer Graphics
Dr. Anshu S. Anand	Ph.D.	Parallel and Distributed Computing: Software Transactional Memory
Chaurasiya, Dr. Vijay Kumar	Ph.D.	Wireless and Mobile Networks
Dr. Anjali Gautam	Ph.D.	Biomedical Image Analysis, Image Processing
Dr. Mohammed Javed	Ph.D.	Image Processing, Pattern Recognition, Data Compression
Dr. Rahul Kala	Ph.D.	
Dr. Triloki Pant	Ph.D.	
Dr. Jagpreet Singh	Ph.D.	

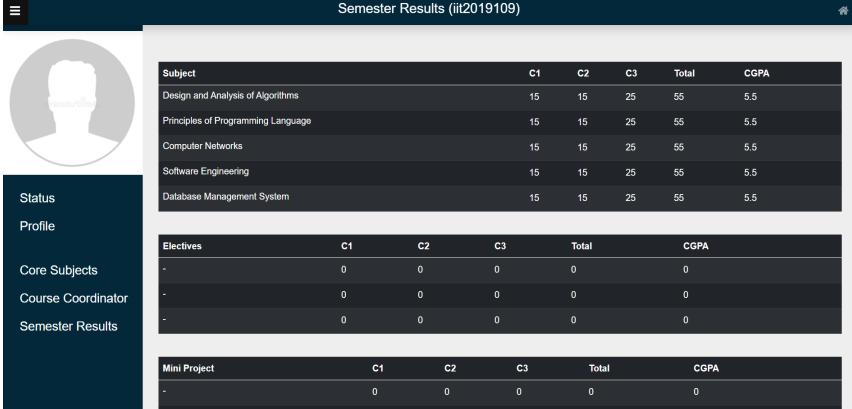
## 13. Semester Results

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “Semester Results”. he/she is redirected to the page that contains the component-wise marks of all the subjects, electives and projects. Further, these results can be downloaded in png format.

A few things to note at this step:

- a. navbar is also provided with the home button on top right.
- b. The sidebar present at home page is also visible at the Semester Results page so that he/she can route to any facility provided through sidebar.



The screenshot shows a user interface titled "Semester Results (iit2019109)". On the left is a dark sidebar with a profile picture placeholder and links: Status, Profile, Core Subjects, Course Coordinator, and Semester Results. The main content area displays a table for "Subject" with columns C1, C2, C3, Total, and CGPA. All rows show values of 15, 15, 25, 55, and 5.5 respectively. Below this is another table for "Electives" with three rows, all showing 0s across the columns. At the bottom is a table for "Mini Project" with one row showing 0s across the columns.

Subject	C1	C2	C3	Total	CGPA
Design and Analysis of Algorithms	15	15	25	55	5.5
Principles of Programming Language	15	15	25	55	5.5
Computer Networks	15	15	25	55	5.5
Software Engineering	15	15	25	55	5.5
Database Management System	15	15	25	55	5.5

Electives	C1	C2	C3	Total	CGPA
-	0	0	0	0	0
-	0	0	0	0	0
-	0	0	0	0	0

Mini Project	C1	C2	C3	Total	CGPA
-	0	0	0	0	0

## 14. Complete Subjects

In the home screen the student has been provided with multiple options in the sidebar.

When the student clicks on the “Complete Subjects”. he/she is redirected to the page that contains the semester-wise subjects of all the semesters.

A few things to note at this step:

- a. navbar is also provided with the home button on top right.
- b. The sidebar present at the home page is also visible at the Complete Subjects page so that he/she can route to any facility provided through the sidebar.

Semester-wise Subjects	
Semester One	Semester Two
LAL	DM
POE	UMC
PFC	COA
PHY	DS
ITP	PCE
FE	POE

Semester Three	Semester Four

## 15. Dean/Admin Login

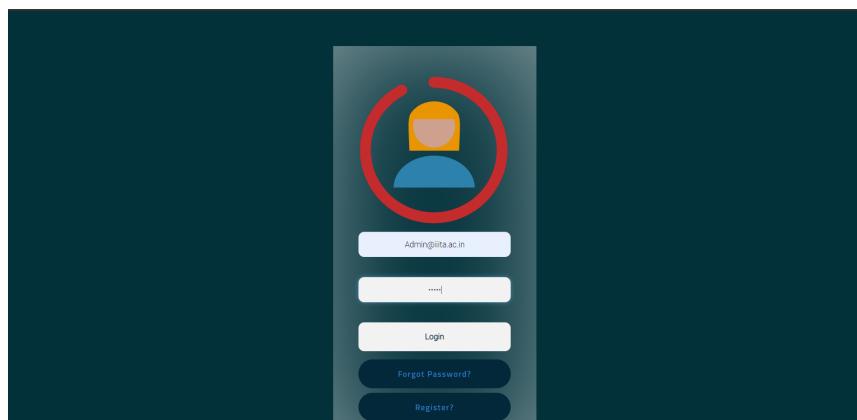
It is necessary to login to the portal in order to use it. After the setup of the project, the user is taken to the login screen from the welcome page.

This is valid for both the users..

Valid credentials to login into the portal as an admin

*Email Id- admin@iiita.ac.in*

*password-admin*

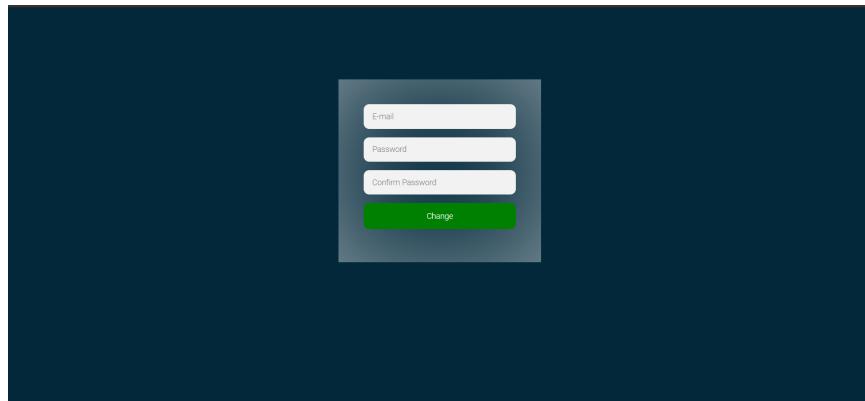


## 16. Dean/Admin Forgot Password

This is the forgotten password page for the dean/admin in case he has forgotten his/her login credentials. He/She can set a new password and can then login into the application with the new password.

A few things to note at this step:

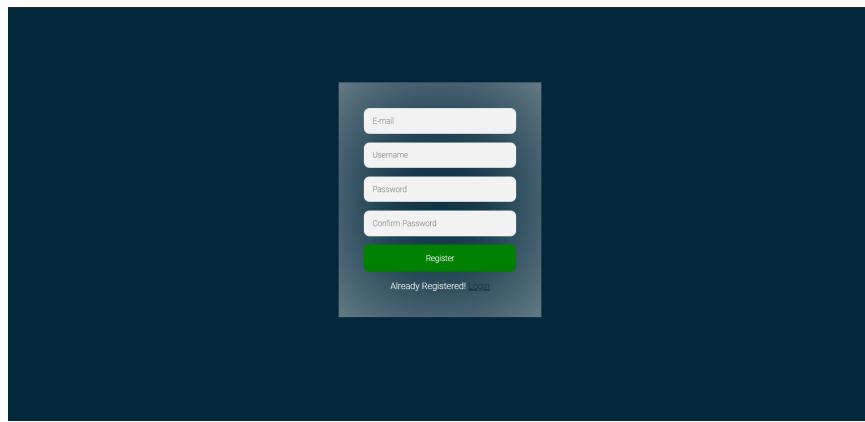
a)-There are three input fields one is for email one is for new password and one is for confirm password.



## 17.Dean/Admin Registration

This is the dean/admin registration page for the dean/admin to enable the dean/admin to register himself into the system and use it's features. He can set a new username and password and can then login into the application using the credentials.

When the dean/admin, who is using the application, enters the credentials and clicks on the 'Login' button on login screen, he is redirected into the next page, dean home page.

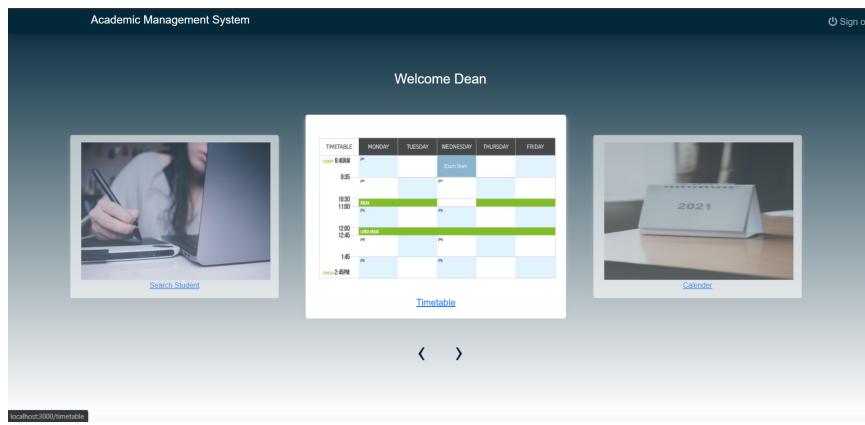


## 18.Dean/Admin Home

If the dean/admin enters the correct or registered credentials then this home page screen will appear.

A few things to note at this step:

- Using the sliding card feature it will be easier for user to select the facility (eg:- student search, academic calendar etc.)
- One navbar is provided with the signout option..



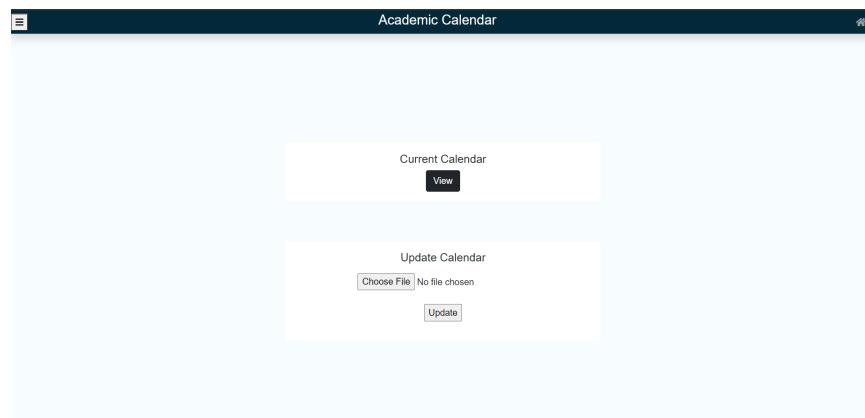
## 19.Academic calendar

When we click on the calendar, we are redirected to a page that contains two options :

- View calendar
- Update calendar

If the dean/admin doesn't upload any pdf from the computer, it shows a message-  
“Please upload a file.”

dean/admin can also view the current academic calendar and update the calendar from their local system.



A few things to note at this step:

- a. navbar is also provided with the home button on top right.
- b. Admin can upload the calendar in pdf format from their local system. This shows that our project is able to interact with the local system.
- c. The uploaded pdf can be found in the calendar folder of our project.

## 20. Time table

When we click on the timetable, we are redirected to a page that contains two options :

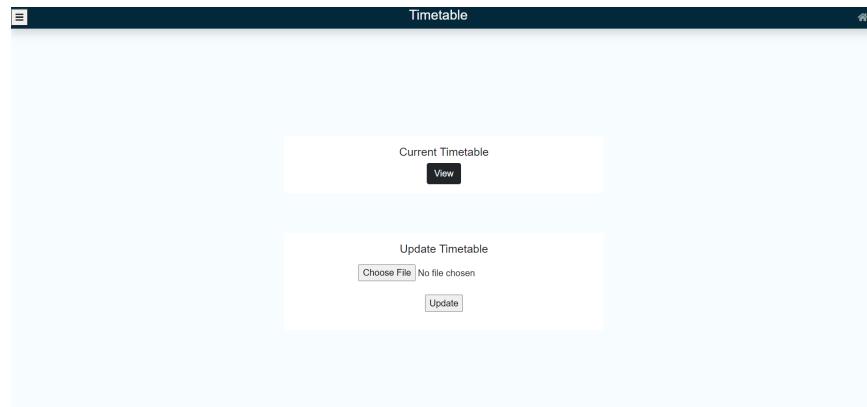
- View timetable
- Update timetable

If the dean/admin doesn't upload any pdf from the computer, it shows a message-  
“Please upload a file.”

dean/admin can also view the current timetable and update the timetable from their local system.

A few things to note at this step:

- a. navbar is also provided with the home button on top right.
- b. Admin can upload the timetable in pdf format from their local system. This shows that our project is able to interact with the local system.
- c. The uploaded pdf can be found in the timetable folder of our project.



## 21. Search Student

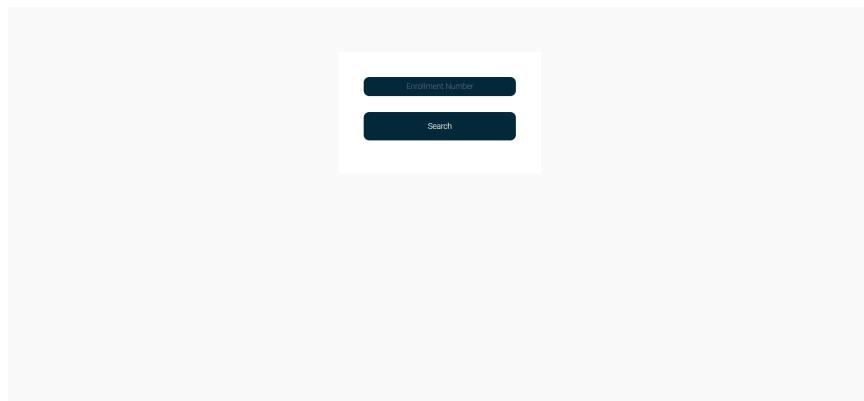
When we click on the feature search student on home page, we are redirected to a page that contains an option to enter the student username and search for that particular username

Roll no to search :- iit2019111

If the student entered by the dean is not present in the database , then it shows a message that the student is not registered.

A few things to note at this step:-

- a)- The input field does not have an autocomplete feature, means no garbage shows when we click on the input field.

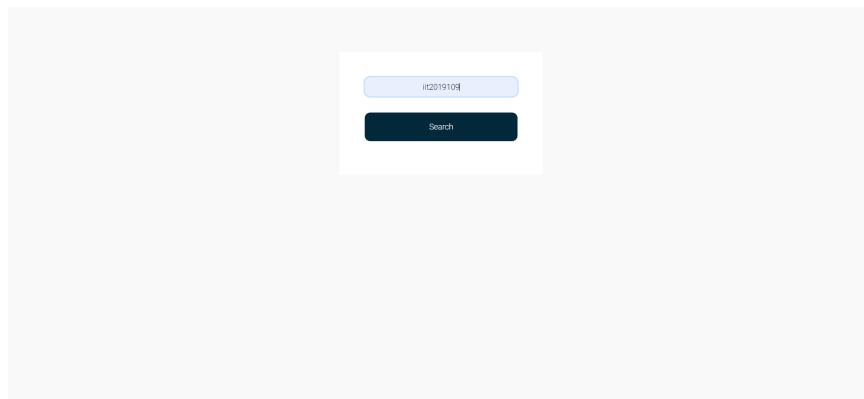


## 22. View Student Information

When we provide a valid username and search for it, we get all the general and academic information of the student including CGPA, attendance, fees status, etc.

A few things to note at this step:-

- a)- If we provide an invalid username, then the search is unsuccessful and the system prompts this message."{"Success":"This Username Is not registered!"}"
- b)- Admin can view general information about the searched student. his/her academic status, subjects at the present semester and fee status.
- c)-navbar is also provided with the home button on top right

A screenshot of a student information page titled "Student's Information". The page has a dark header with a "Home" icon. On the left, there is a sidebar with a user icon and the name "Rahul Kumar". Below the name are the roll number "iit2019109" and email "iit2019109@iita.ac.in". The main content area is divided into sections: "General Information", "Status", and "Subjects".

General Information	
First Name	: Rahul
Last name	: Kumar
Contact number	: 8299552324
Address	: Bikaner, Rajasthan

Status	
COPA	: 7
Attendance	: 80%
Dropped courses	: -
Penalty	: -

Subjects	
Core Subjects	
Database Management System	
Software Engineering	
Computer Networks	
Principles of Programming Languages	
Design and Analysis of Algorithms	

## 23. Search Result

When we click on the feature search result on home page, we are redirected to a page that contains an option to enter the student username and search for that particular username

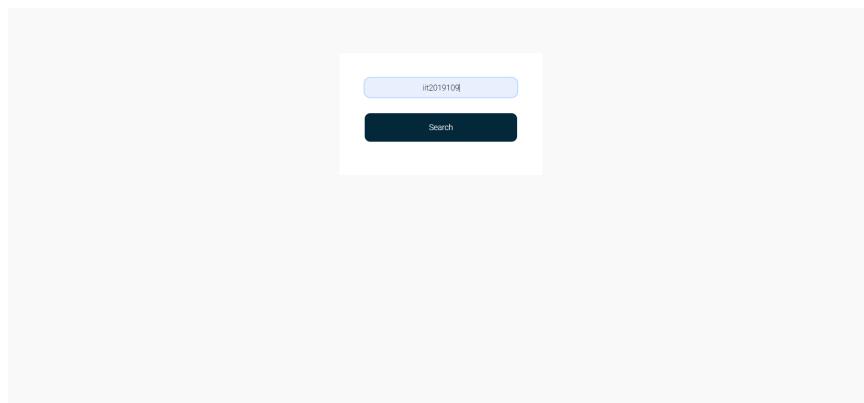
Roll no to search :- iit2019111

If the student entered by the dean is not present in the database , then it shows a message that the student is not registered.

If the student entered by the dean is not present in the database , then it shows a message that the student is not registered.

A few things to note at this step:

- a)- The input field does not have an autocomplete feature, means no garbage shows when we click on the input field.



## 24. View Student Marks

When we provide a valid username and search for it, we get the marks of that particular username in all the components of all the subjects, electives and projects.

If we provide an invalid username, then the search is unsuccessful and the system prompts this message.

A few things to note at this step:-

- a)- If we provide an invalid username, then the search is unsuccessful and the system prompts this message."{"Success":"This Username Is not registered!"}"
- b)- Admin can view marks of all the components of all the subjects of the searched username.
- c)-navbar is also provided with the home button on top right
- d)- If the searched username does not complete a particular subject then “-” is displayed as their marks

it2019109

Search

Core Subjects					
Subject Name	C1	C2	C3	Total	CGPA
Design and Analysis of Algorithms	15	15	25	55	5.5
Principles of Programming Language	15	15	25	55	5.5
Computer Networks	15	15	25	55	5.5
Software Engineering	15	15	25	55	5.5
Database Management System	15	15	25	55	5.5
Name	0	0	0	0	0

Electives					
Elective Name	C1	C2	C3	Total	CGPA
-	0	0	0	0	0
-	0	0	0	0	0
-	0	0	0	0	0

## 25. Student Profile Update

When we click on the feature “profile update” on home page, we are redirected to a page that contains a form to enter details like ( phone number, attendance, etc.) and username of the student whose details is to be updated . These fields can be filled there and the entered value is updated in the actual database.

If the student entered by the dean is not present in the database , then it shows a message that the username is not found.

Details to enter :-

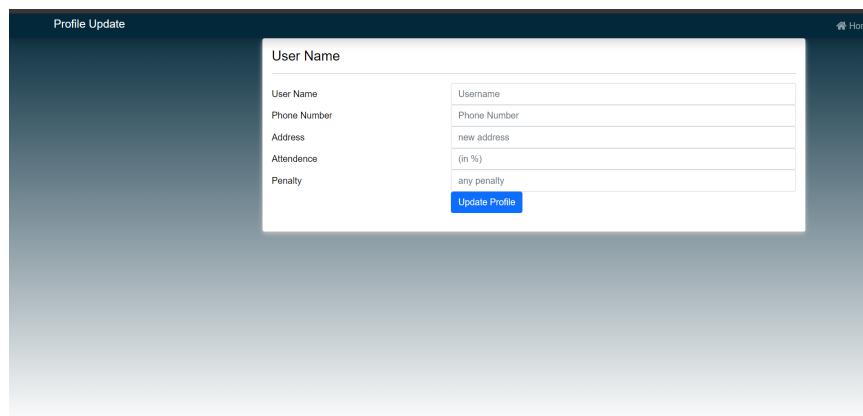
Username:- iit2019109

CGPA:- 8.5 (Current cgpa of this username is 9.0)

A few things to note at this step:-

- a. If the username and entered details is correct and the operation is successfully performed of update Then this message is displayed on screen :-  
*{"Success": "Profile Updated"}*
- b. If the username or entered details is incorrect then this message is displayed:-

*{"Error": "User Name not found"}*



## 26. Update marks

When we click on the feature “update marks ”on home page, we are redirected to a page that contains an input field to enter the username whose marks is to be updated.

Username to search :- *iit2019141*

After searching u will route to modify result screen there

Put “30” in input field of c1 Design and Analysis of Algorithms

And then press “Change” Button.

Current value for c1 design and analysis of algorithm is 15

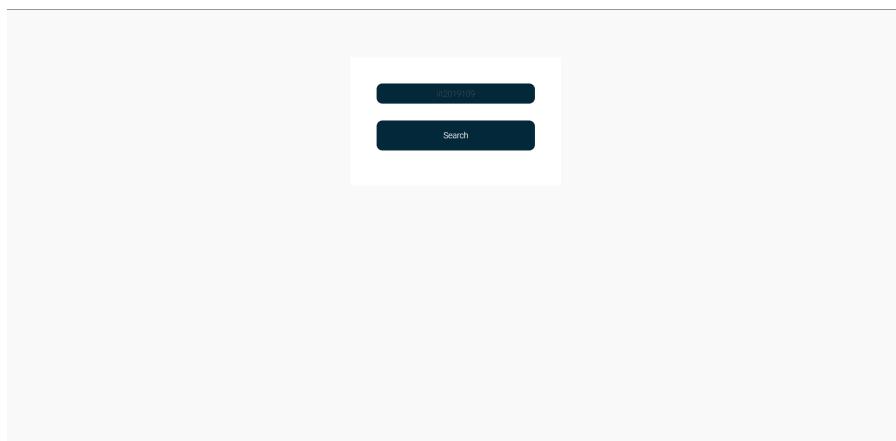
After update it will get converted into 30.

A few points to note:-

- a. If the username is correct and the operation is successfully performed of update Then this message is displayed on screen :- {"Success": "Marks Updated"}
- b. If the username or entered details is incorrect then this message is displayed:-

{"Success": "This User name Is not registered!"}

- c. navbar is also provided with the home button on top right



The screenshot shows a 'Modify Results' page with a table for entering marks. The table has columns for Subject (Database Management System, Software Engineering, Computer Networks, Principles of Programming Languages, Design and Analysis of Algorithms) and rows for C1, C2, and C3. The row for C1 contains the value 'IIT2019109' under the 'Roll Number' field.

Subject	C1	C2	C3
Database Management System			
Software Engineering			
Computer Networks			
Principles of Programming Languages			
Design and Analysis of Algorithms			

## 27.Course Coordinator

When we click on the feature “Course coordinator ”on home page, we are redirected to a page that contains card of all the course coordinators .

A few points to note:-

- By clicking on any card we can move to it's personal website or portfolio
- navbar is also provided with the home button on top right

The screenshot shows a 'Course Coordinators' page with cards for eight professors:

- Agarwal, Dr. Sonali Ph.D.**  
Research Interests: Twin Support Vector Machine, Support Vector Machine
- Agrawal, Prof. Anupam Ph.D.**  
Research Interests: Image & Vision Processing, Computer Graphics
- Dr. Anshu S. Anand Ph.D.**  
Research Interests: Parallel and Distributed Computing: Software Transactional Memory
- Chaurasiya, Dr. Vijay Kumar Ph.D.**  
Research Interests: Wireless and Mobile Networks
- Dr. Anjali Gautam Ph.D.**  
Research Interests: Biomedical Image Analysis, Image Processing
- Dr. Mohammed Javed Ph.D.**  
Research Interests: Image Processing, Pattern Recognition, Data Compression
- Dr. Rahul Kala Ph.D.**  
Research Interests: Multi-Robot Motion Planning, Mission Planning
- Dr. Triloki Pant Ph.D.**  
Research Interests: Satellite Image Analysis, Fractal Geometry for Imaging
- Dr. Jagpreet Singh Ph.D.**  
Research Interests: Parallel & distributed systems, Operating systems

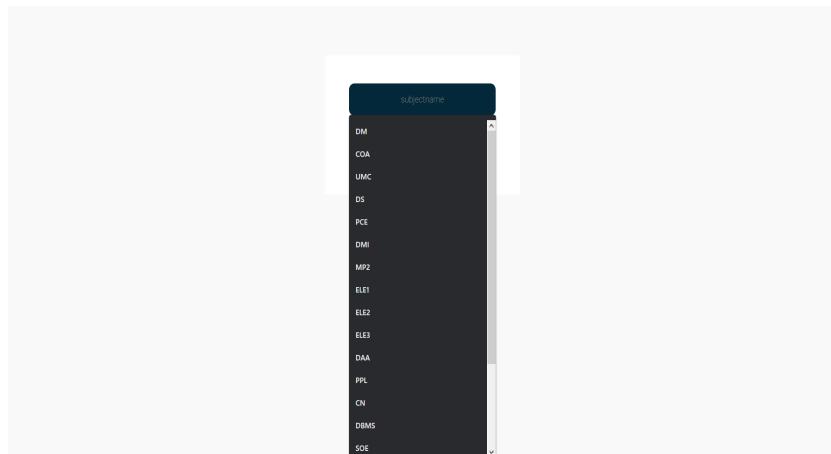
## 28.Search Subject

When we click on the feature “All Subjects ”on home page, we are redirected to a page that contains an input field to select the subject from dropdown and after select on :”Search” button. Then the details like enrolled students and L-T-P details get displayed on the screen.

Subject to choose from list :- “*DM*”

A few points to note:-

- a. The input field is provided with the dropdown that contains th list of all the subject means here we eliminate the garbage autocomplete issue and the issue of display message if wrong details is entered
- b. navbar is also provided with the home button on top right



Subjects

Home

**DM**

Lecture : 2  
Tutorial : 2  
Practical : 2  
**Objective :** To study

Enrolled Students

Roll number	Name
IIT2020099	KUNAL
IIT20219	TANU
IIT2020178	KRISHNA
IIT2020001	Akash