



USER MANUAL

RAVI AND FRIENDS

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INTRODUCTION

Welcome to Sahara – an academic management and collaboration platform designed to streamline course management, announcements, assignments, and communication among professors, TAs, and students. Sahara caters especially to project-oriented courses, providing dedicated tools to manage team assignments, project submissions, and collaborative workflows. This manual guides you through the website's features and explains how to perform common tasks.

SOFTWARE OVERVIEW

Our platform supports 3 types of users,

1. Administrators/Professors
2. Teaching Assistants (TAs)
3. Students

Each role is equipped with a tailored set of capabilities, granting access to a comprehensive array of features as outlined in our SRS Document.

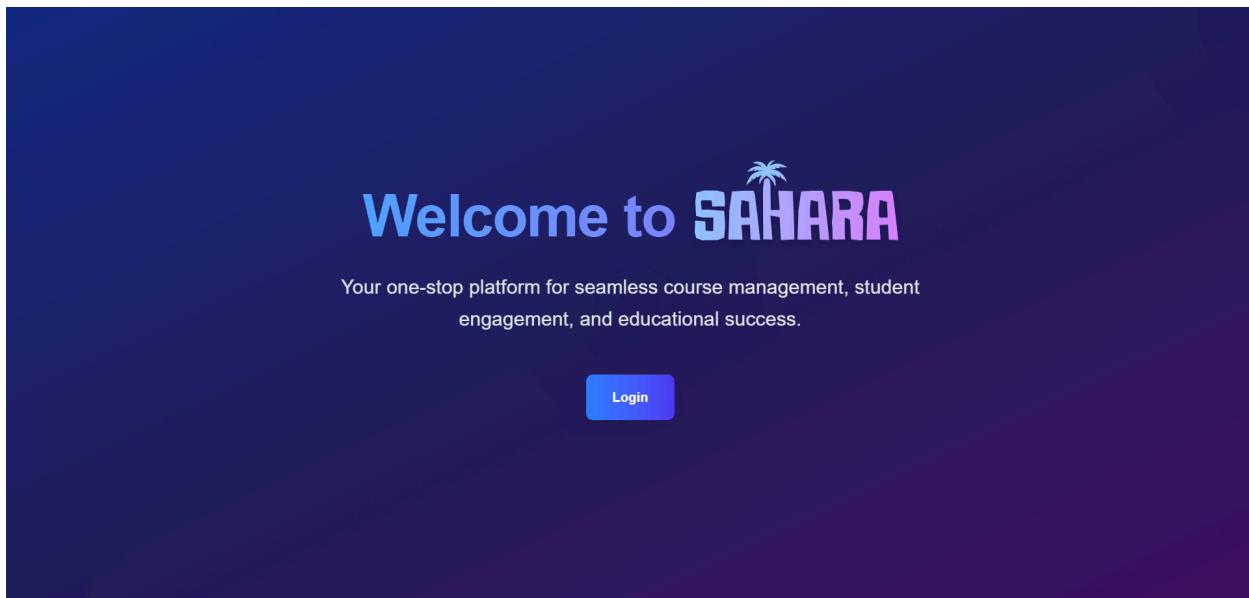
The website's intuitive, user-friendly interface ensures that every user can navigate with ease.

Should any difficulties arise, the User Manual is available to provide clear guidance for optimal use of the platform.

SYSTEM REQUIREMENTS

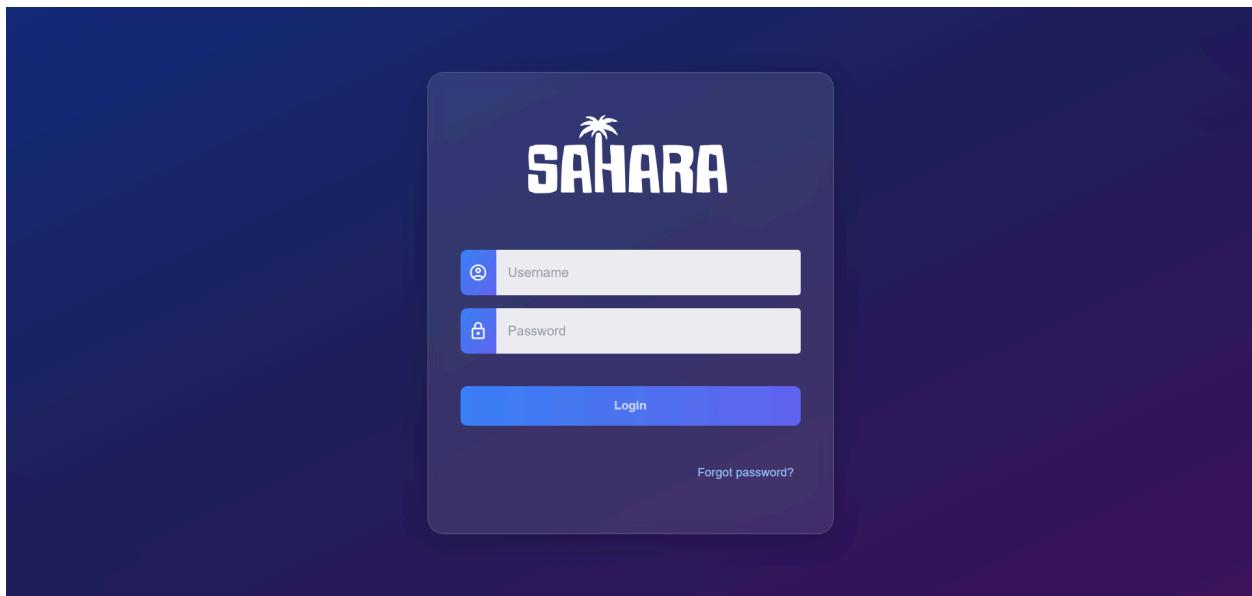
Sahara is a web-based application, so all you need is a modern web browser connected to the institute wi-fi network . For the best experience, we recommend using a PC or laptop rather than a mobile device. Sahara is hosted at 172.27.16.252:2213

REGISTRATION AND LOGIN



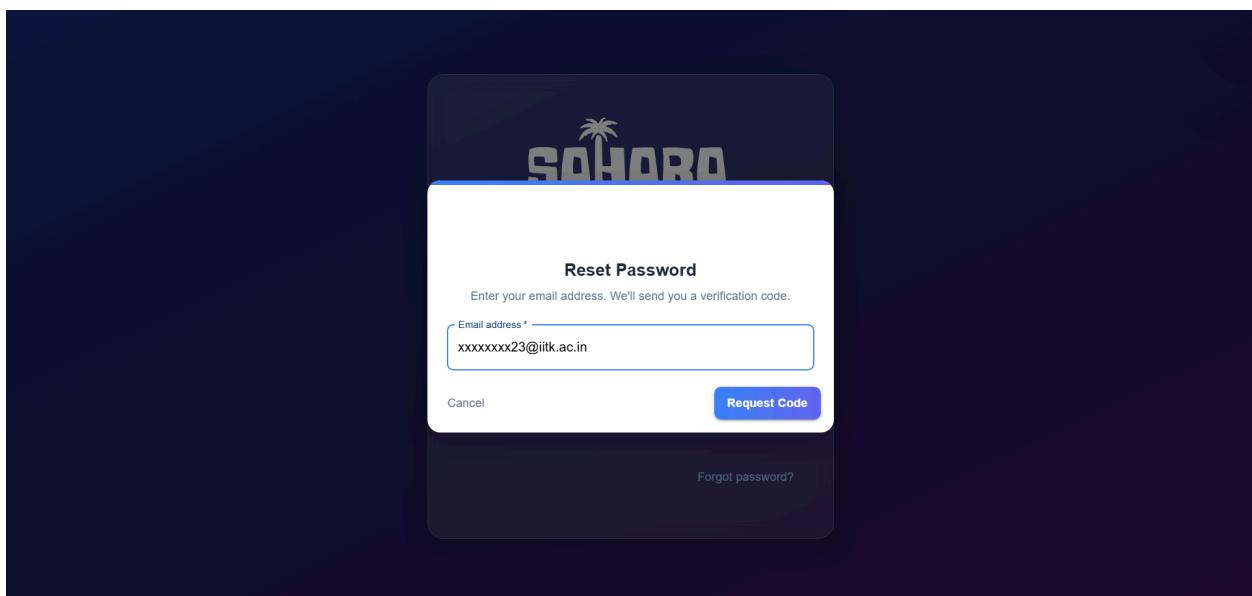
1. User Registration

Both Student users and TA users have to be registered on the platform by the Professor/Administrator. Once the Student/TA has been registered on the platform by the Professor, the Student/TA will have to use the “Forgot Password” feature to set their own password.

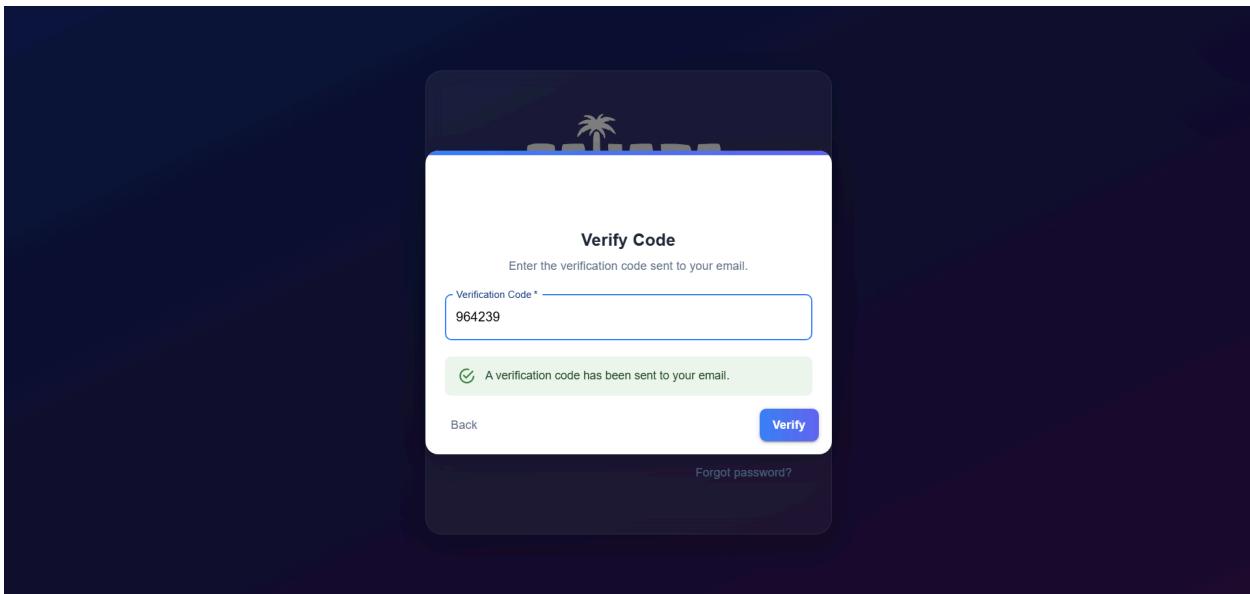


2. Forgot Password

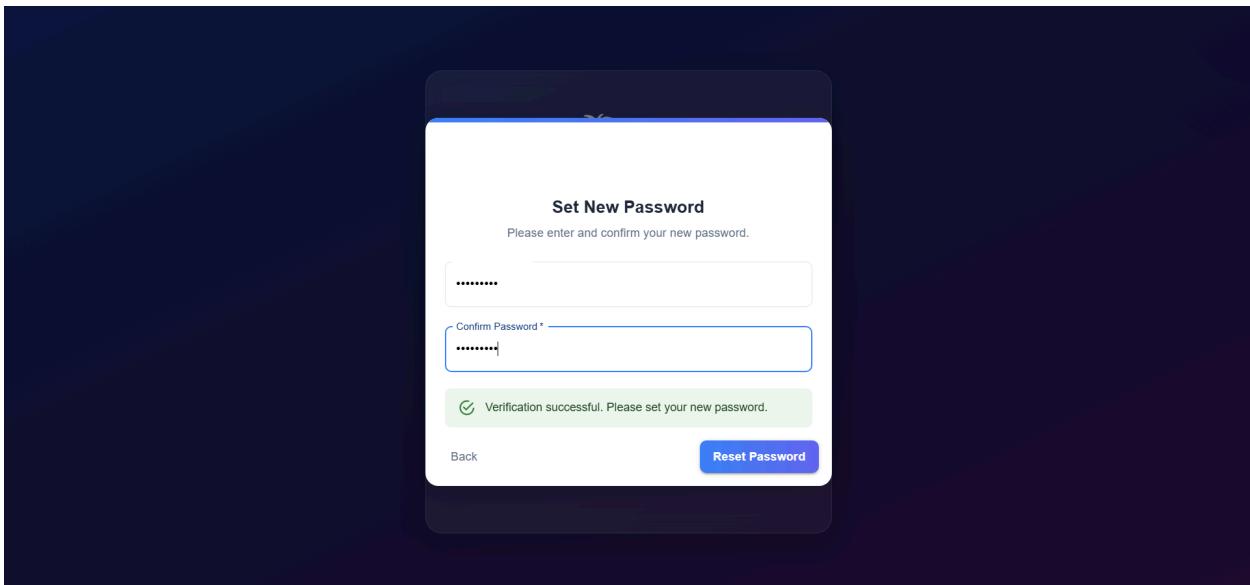
On clicking on the “Forgot Password” button on the login page to either set their password for the first time or to change their password in case they’ve forgotten it, they are prompted to enter the email id with which they have been registered for the course.



They are then sent a unique verification code to the registered email id that they entered. On correctly entering the code, they will then be prompted to enter their new password and to confirm it.

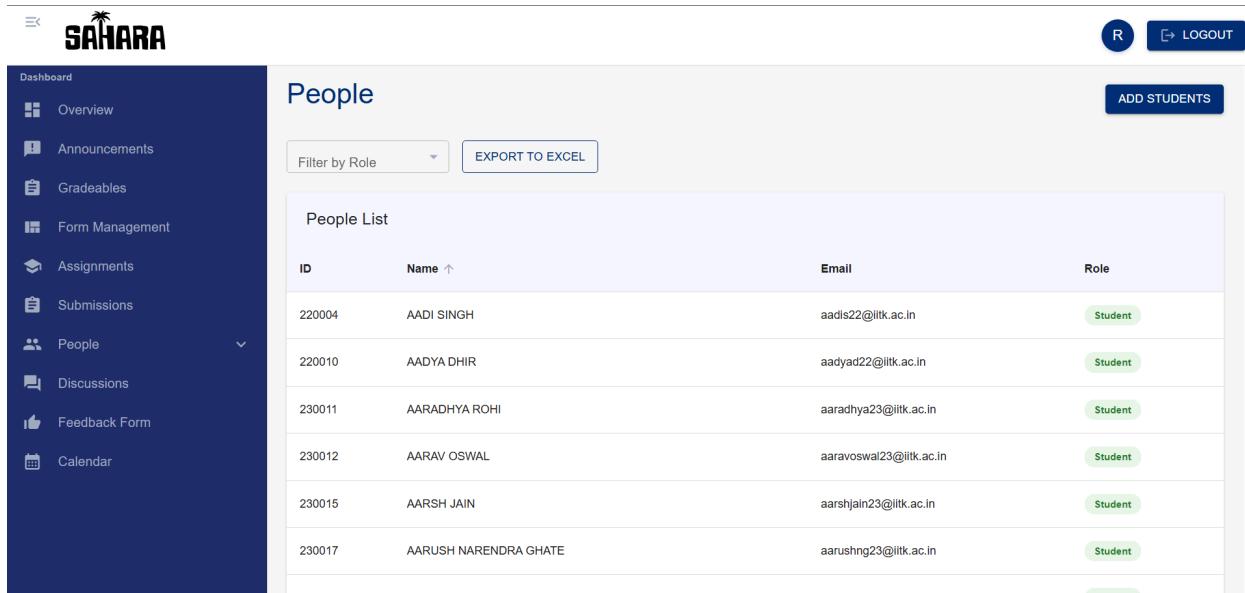


Once the user has confirmed their new password, this will be set as the password for their account.



3. Registering Users

Once the Professor/Administrator has logged into his account, they can navigate to the People's tab in the sidebar to upload a csv file containing Student and TA information to add Students and TAs respectively.



The screenshot shows the SAHARA application interface. The left sidebar contains navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People (which is currently selected), Discussions, Feedback Form, and Calendar. The main content area is titled "People" and displays a "People List". It includes a "Filter by Role" dropdown, an "EXPORT TO EXCEL" button, and a "ADD STUDENTS" button at the top right. The table below lists student information:

ID	Name ↑	Email	Role
220004	AADI SINGH	aadis22@iitk.ac.in	Student
220010	AADYA DHIR	aadyad22@iitk.ac.in	Student
230011	AARADHYA ROHI	aaradhy23@iitk.ac.in	Student
230012	AARAV OSWAL	aaravoswal23@iitk.ac.in	Student
230015	AARSH JAIN	aarshjain23@iitk.ac.in	Student
230017	AARUSH NARENDRA GHATE	aarushng23@iitk.ac.in	Student

First, the professor/admin has to navigate to the “People” page. Then, click on the “ADD STUDENTS” option available at the top right corner of the page.

Dashboard

- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

Add Students

Attach .csv file

Expected CSV Columns: RollNo, Name, Email

UPLOAD

Created Users
No users created yet.

Errors
No errors.

Click on the *Paper-Clip Icon* to choose a csv file to upload from the personal PC of the user.

Dashboard

- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

Add Students

CS253 2025 Projects - All.csv

Expected CSV Columns: RollNo, Name, Email

Successfully selected file: CS253 2025 Projects - All.csv

UPLOAD

Please select a CSV file first

Created Users
No users created yet.

Errors
No errors.

Once the selected file is displayed by the page as “Successfully selected file: Name_of_file”, click on the “UPLOAD” button present just below the message to upload the list.

Note that the csv file uploaded must have headers “RollNo”, “Name”, and “Email”. Any additional columns are fine and will be ignored.

Also note that already added users can’t be added again and only new students will be added.

The screenshot shows the SAHARA platform's 'Add Students' feature. The sidebar on the left lists various administrative functions. The main page is titled 'Add Students' and includes a file upload section. After a successful upload, it displays a green box for 'Created Users' and a pink box for 'Errors' containing a list of failed attempts due to existing usernames.

Once added, they will be visible in the “People”->”Users” page.

To add additional Teaching Assistants, the professor/admin can navigate to “People”->”Teaching Assistants” page and click on the “ADD TAS” button to add more Teaching Assistants.

The image shows the SAHARA application interface. The left sidebar contains a navigation menu with the following items:

- Dashboard
- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
 - Users
 - Teaching Assistants
 - Teams
 - Discussions
 - Feedback Form
 - Calendar

The main content area is titled "Teaching Assistants". It features a "Filter by Skills:" section with the following filters selected: Java, MongoDB, Node.js, Python, React, and Spring Boot. The "Filter Mode:" dropdown is set to "OR".

A "TA List" table displays two entries:

S. No.	Name	Email	Skills
1	Hemang Mohanlal Khatri	hemangmkhatri@cse.iitk.ac.in	React, Node.js, Python
2	Jeswaanth Gogula	jeswaanth@cse.iitk.ac.in	Java, Spring Boot, MongoDB

On the right side, there are three buttons: "ADD TAS", "TA SKILLS FORM", and "TA-TEAM PAIRING".

On clicking the button, there is a page to add a csv file containing Teaching Assistant information similar to the previous “**ADD USERS**” functionality.

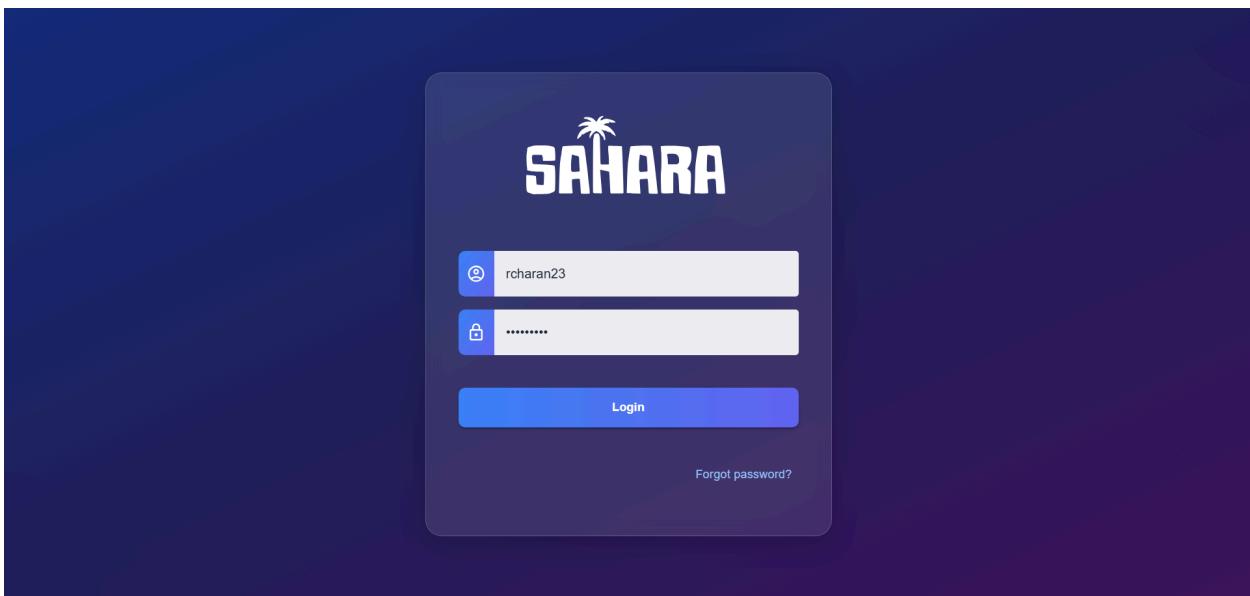
The screenshot shows the SAHARA platform's user interface. On the left is a dark blue sidebar with various navigation options: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People (selected), Users, Teaching Assistants, Teams, Discussions, Feedback Form, and Calendar. The main content area has a white header with the title "Add Teaching Assistants". Below the header is a form with a "Attach .csv file" input field, a "UPLOAD" button, and a note "Expected CSV Columns: Name, Email". To the right of the input field are two colored boxes: a green box labeled "Created TAs" with the message "No TAs created yet." and a pink box labeled "Errors" with the message "No errors.". In the top right corner of the main area, there is a blue circular icon with a white letter "R" and a "LOGOUT" button.

Follow a procedure similar to the “**ADD USERS**” functionality to add Teaching Assistants.

Note that the csv file must contain headers “Name” and “Email”.

4. User Login

Once the user has set their password using the forgot password feature, in order to login, they have to enter their correct Username and Password in the Username and Password fields. If the Username and Password are both valid and are correct, the user will be able to login into their account by clicking on the “Login” button placed right below the Username and Password fields to login into their account.



On successful login, they will land on the respective dashboards for their user type.

PROFESSOR'S FEATURES

1. Dashboard
2. Announcements
3. Gradeables
4. Form Management
5. Assignments
6. Submissions
7. People
8. Discussions
9. Feedback Form
10. Calendar
11. Profile Page

TA'S FEATURES

1. Dashboard
2. Announcements
3. Gradeables
4. Assignments
5. Submissions
6. People
7. Discussions
8. Feedback Form
9. Calendar
10. Profile Page

STUDENT'S FEATURES

1. Dashboard
2. Announcements
3. Team
4. Submissions
5. Assignments
6. Forms
7. Discussions
8. Feedback Form
9. Calendar
10. Profile Page

1. Dashboard/Overview

On successful login, the user lands on the Dashboard. On the dashboard page, the professor will be able to view all recent announcements. Some features of the dashboard are as follows:

- **Recent announcements** are visible and clickable. Clicking on any particular announcement opens the Announcements page and expands that particular announcement.
- Active Teams, Number of deadlines and new discussions are displayed.
- **Pending Gradeables** are displayed beside Recent Announcements.
- Clicking “**View All**” on either Pending Gradeables or Recent Announcements opens the respective pages.

The screenshot shows the SAHARA dashboard. At the top, there's a blue header bar with the text "Good Evening, Root" and a sub-instruction "Stay organized and manage your project work efficiently". Below this is a white content area. On the left, a sidebar menu lists various dashboard sections: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has four summary cards: "Pending Grading 0", "Active Teams 12", "This Week 3 Deadlines", and "New Discussions 5". Below these are two expandable sections: "Pending Gradeables" (which shows "No pending gradeables") and "Recent Announcements" (which lists "Mid Semester Examination Mar 28", "Quiz Grades Released Mar 28", and "Library Management System Mar 28"). A "LOGOUT" button is located in the top right corner.

They also have a sidebar with the following options,

1. Overview
2. Announcements
3. Gradeables
4. Form management
5. Assignments
6. Submissions
7. People
8. Discussions
9. Feedback Form
10. Calendar

They can click on any of the 10 available options present on the sidebar to navigate to the respective page. Clicking **Overview** on any page takes the user back to the dashboard. Each page is described in more detail below.

The screenshot shows the SAHARA dashboard. At the top, there is a header with a profile icon, the word "SAHARA", and a "LOGOUT" button. A red arrow points to the "LOGOUT" button. On the left, a sidebar menu is displayed with a red border around it, listing the following items:

- Dashboard
- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

The main content area features a blue header with the text "Good Evening, User" and the subtext "Stay organized and manage your project work efficiently". Below this, there are four summary cards:

- Pending Grading: 0
- Active Teams: 12
- This Week: 3 Deadlines
- New Discussions: 5

Below these cards are two sections:

- Pending Gradeables:** No pending gradeables. (A "View All" link is present.)
- Recent Announcements:** Test Announcement (Today, 10:45 PM) and Shell Scripting Announcement (Today, 10:10 PM). (A "View All" link is present.)

The user also has an option to logout of his account at any time by clicking on the “LOGOUT” button present at the top right corner of every page. The sidebar can be contracted by clicking the “Collapse Menu” button on the top left of the screen.

2. Announcements

The Announcements page is meant for the instructor to create announcements which will be visible to all users.

This page has a “Create Announcement” button on the top right. On clicking this button, the user will be able to create a new announcement. The following fields exist for creating a new announcement,

1. Title (Compulsory)
2. Description (Compulsory)
3. File attachment (Optional)

The screenshot shows the 'Course Announcements' page. At the top, there is a header with a megaphone icon and the text 'Course Announcements'. Below it, a sub-header says 'View and manage course announcements'. On the right, there is a blue button labeled '+ Create Announcement'. The main content area displays four announcements:

- Mid Semester Examination** - Root Admin • March 28, 2025 at 07:44 PM
- Quiz Grades Released** - Root Admin • March 28, 2025 at 07:44 PM
- Library Management System** - Root Admin • March 28, 2025 at 07:39 PM
- Shell Scripting Announcement**

On the far left, there is a sidebar with a 'Dashboard' section containing links: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. Above the sidebar, there is a small message: 'Click to go back, hold to see history' and a 'SAHARA' logo. At the top right, there are 'R' and 'LOGOUT' buttons.

Create New Announcement

Title *

Announcement Content *



Rich-text Tool Bar

B I Lists & Quote HyperLink Undo/Redo





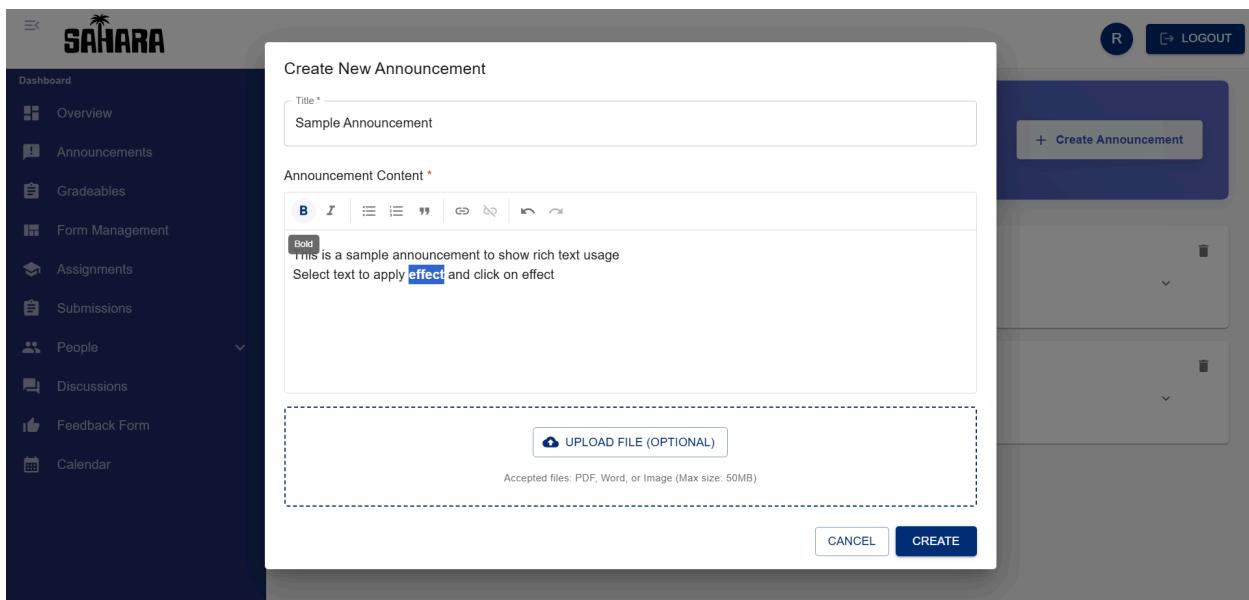
UPLOAD FILE (OPTIONAL)

Accepted files: PDF, Word, or Image (Max size: 50MB)

CANCEL CREATE

The description field has a “rich-text” feature that the user can use to include the following features in their description - bold, italics, adding links, quotations, lists etc.

To apply effects to a part of the description text, the user has to select the text and click on the required feature option available at the top edge of the description box.



To cancel the announcement creation, the user must click either on the cancel button or outside the announcement creation box. To upload, simply click create. Note that an announcement cannot be created unless both title and description are filled.

The user will also be able to **delete** an announcement by clicking on the red trash can icon available next to each announcement.

The screenshot shows the SAHARA platform's course announcements section. On the left is a dark sidebar with various navigation options like Dashboard, Overview, Announcements, Gradeables, etc. The main area is titled "Course Announcements" with a subtitle "View and manage course announcements". A "Create Announcement" button is visible. In the center, there are several announcement cards. One card for "Mid Semester Exam Dates" is selected and has a delete confirmation dialog box over it. The dialog box contains the text "Delete Announcement" and "Are you sure you want to delete this announcement? This action cannot be undone.", with "CANCEL" and "DELETE" buttons. Other visible announcements include "Quiz Grade", "Library Management System", and "Shell Scripting Announcement".

The user will also be able to view all previously added announcements. The user can click on the downward arrow next to each announcement to view each announcement in more detail.

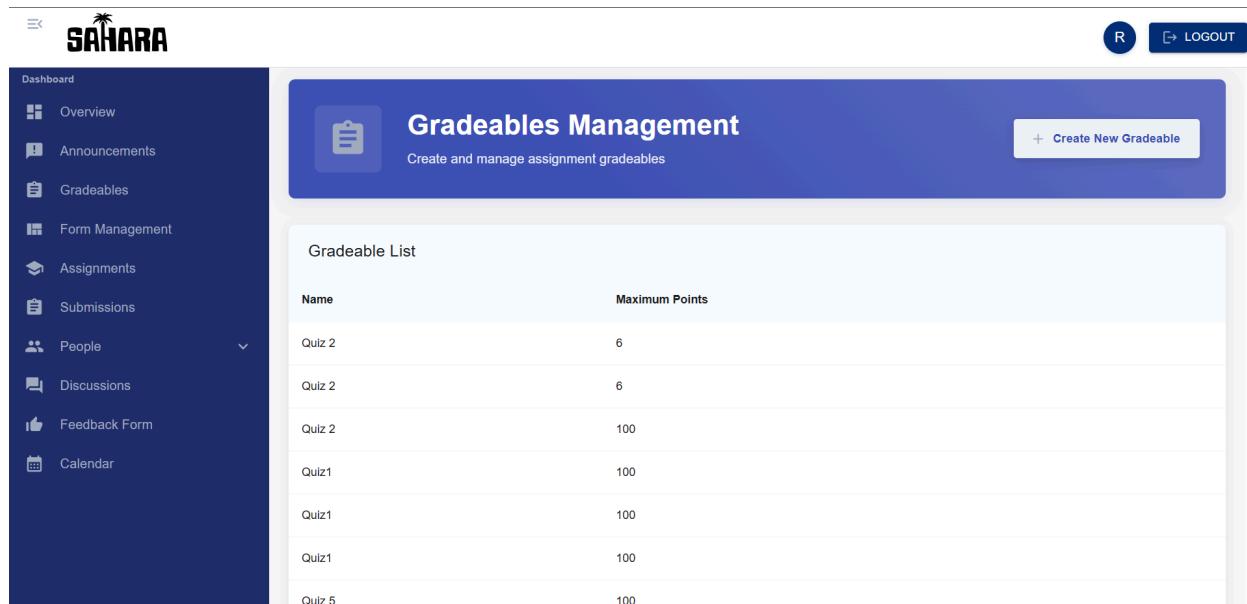
This screenshot shows a detailed view of an announcement from the SAHARA platform. The sidebar on the left is identical to the previous one. The main content area shows an announcement titled "Library Management System" by "Root Admin" on March 28, 2025, at 07:39 PM. Below this, another announcement titled "Shell Scripting Announcement" by "Root Admin" on March 28, 2025, at 07:27 PM is shown. The "Shell Scripting Announcement" card is expanded, revealing its content. It starts with "Dear Students," followed by "I have released the **shell scripting assignment**. It is *attached below*". It then lists two bullet points: "• The deadline for submitting the assignment is March 28 (Friday) Midnight." and "• You have to submit the assignment through GRADESCOPE.". Below this, it says "The assignment has been prepared by your TA Aakashdeep Singh. You may directly email him (aakashdeepsingh@cse.iitk.ac.in) if you have any questions." and "Best, Indranil". At the bottom of the expanded card are two buttons: "Download Attachment" and "View Attachment".

On clicking the “**View attachment**” button for each announcement, the attached file is opened in a new tab in the browser. On clicking “**Download Attachment**”,

the system prompts the user to select a location to download the file to on their device.

3. Gradeables

The Gradeables page displays a list of tests with their name and maximum scorable points. On clicking any row of the list, a new page loads which provides great detail of the statistics of the quiz.



The screenshot shows the SAHARA application's Gradeables Management page. The left sidebar has a dark blue background with white icons and text for Dashboard, Overview, Announcements, Gradeables (which is selected), Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area has a light blue header with the title "Gradeables Management" and a sub-header "Create and manage assignment gradeables". A "Create New Gradeable" button is in the top right of the header. Below the header is a table titled "Gradeable List" with columns "Name" and "Maximum Points". The table contains the following data:

Name	Maximum Points
Quiz 2	6
Quiz 2	6
Quiz 2	100
Quiz1	100
Quiz1	100
Quiz 5	100

Some of the features available for viewing each test in Gradeables page are:

- Histogram graph displaying No. of Students vs Marks
- Exact count in graph presented when mouse is hovered over a bar
- List of marks achieved by each student
- Sorting the list by Roll No, Name or Score
- Mean, mode, median and variance of the test at the bottom of the page

Quiz 2
204 student submissions

Mean Score: 5.66

Student ID	Name ↑	Score
220004	AADI SINGH	5
220010	AADYA DHIR	5
230011	AARADHYA ROHI	4
230012	AARAV OSWAL	6
230015	AARSH JAIN	6
230017	AARUSH NARENDRA GHATE	4
220020	AAYUSH GAUTAM	6

Score Distribution

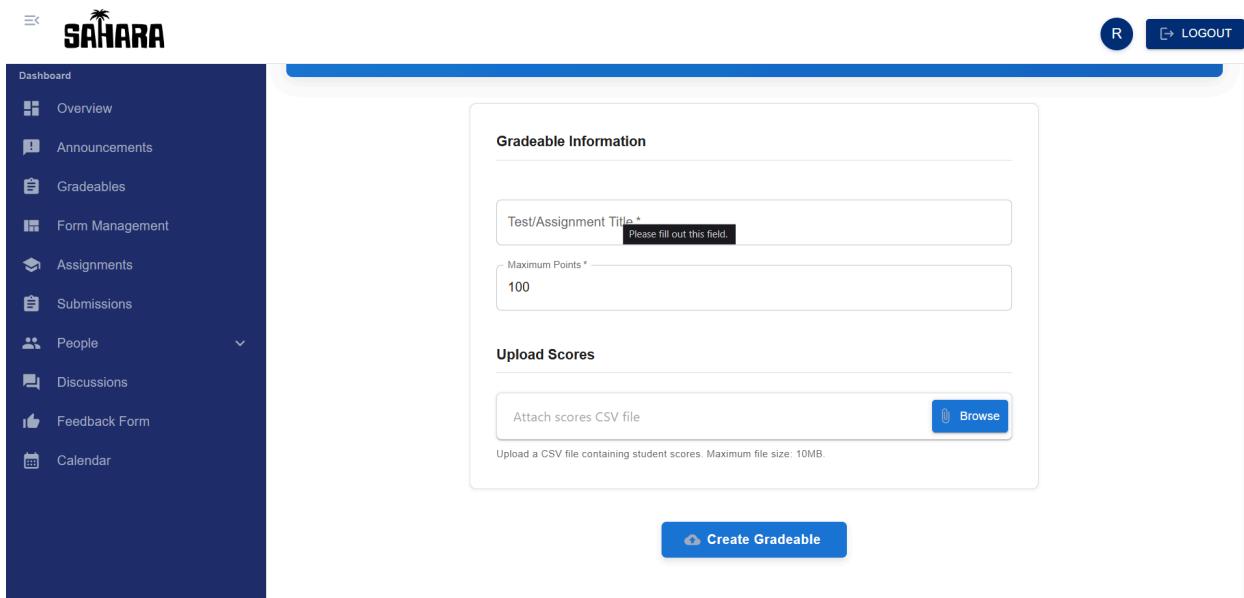
Score Statistics

Mean Score 5.66	Median Score 6.00	Mode Score 6.00	Variance 45.55
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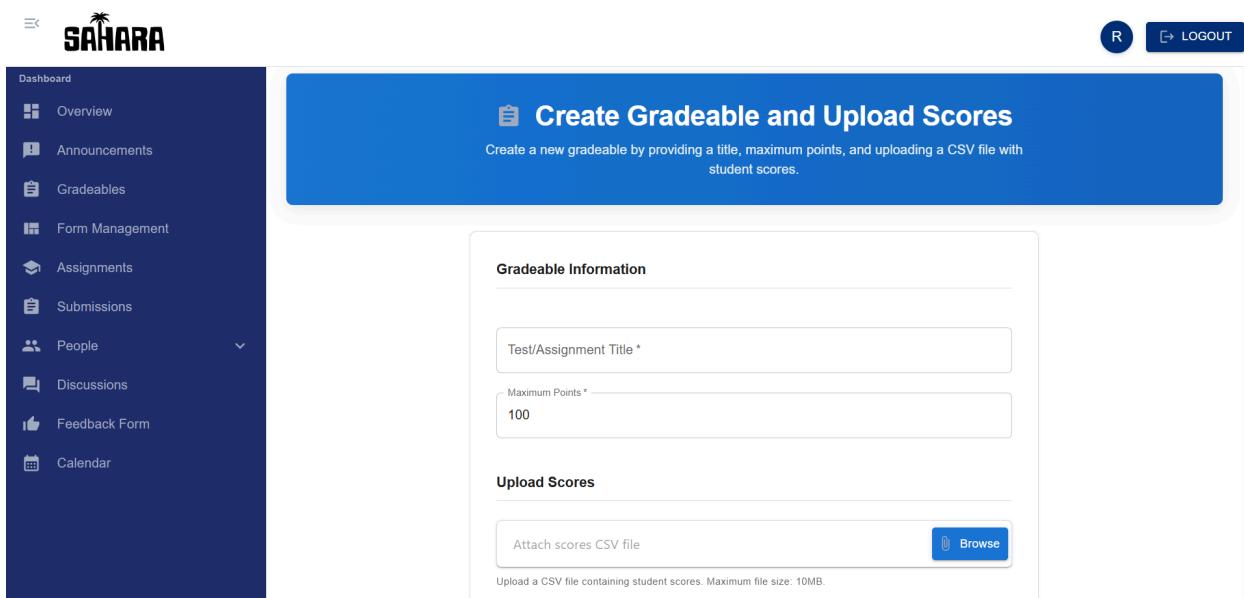
The user can create gradeables by clicking on the “**Create New Gradeable**” button at the top right of the screen. On clicking it, a new screen loads, prompting the user for the following:

- **Gradeable information:** Title of Test/Assignment (required) and Maximum Points (required).

- CSV file containing student scores (required). On clicking the “**Browse**” button, the user is prompted to upload a file from their device.
- Finally, clicking the “**Create Gradeable**” option at the bottom of the page uploads the provided information (if in correct format).



The screenshot shows the SAHARA application's dashboard on the left and a specific form on the right. The form is titled "Gradeable Information" and contains fields for "Test/Assignment Title" (with a placeholder "Please fill out this field.") and "Maximum Points" (set to 100). Below this is a section titled "Upload Scores" with a "Browse" button and a note about CSV file upload requirements. At the bottom is a blue "Create Gradeable" button.



The screenshot shows a modal window titled "Create Gradeable and Upload Scores" with the sub-instruction "Create a new gradeable by providing a title, maximum points, and uploading a CSV file with student scores." The modal contains the same "Gradeable Information" and "Upload Scores" sections as the previous screenshot, along with the "Create Gradeable" button.

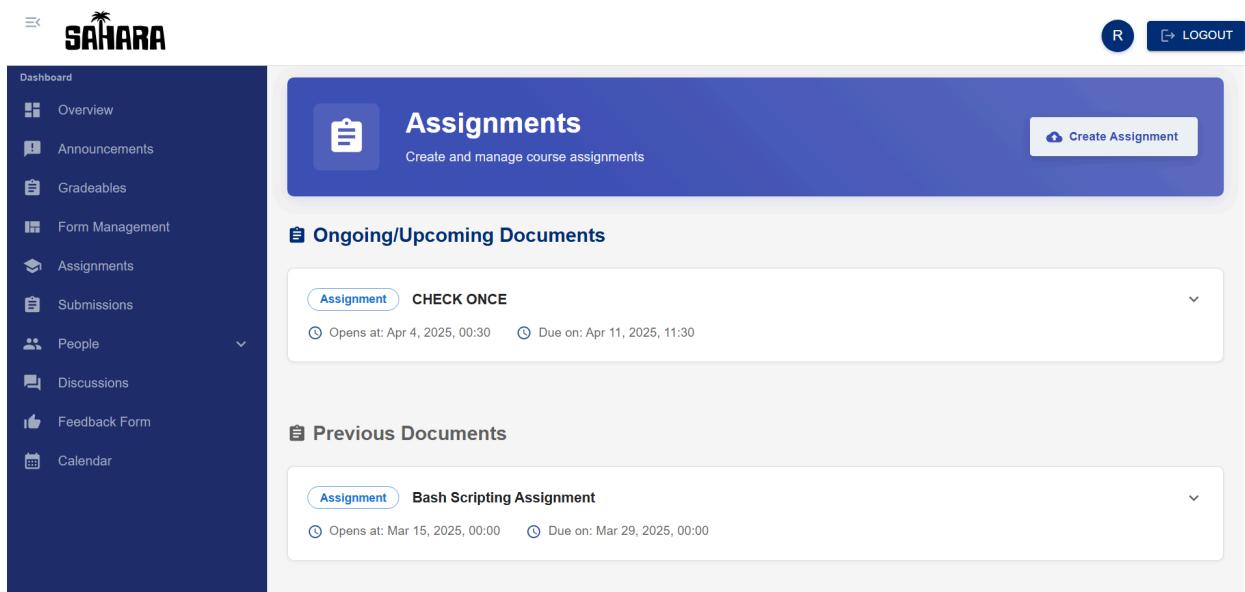
4. Form Management

The screenshot shows the 'Course Home / Forms' page. At the top, there's a 'Forms Progress' section with a 0% completion rate, 0 of 5 forms completed, and 5 forms remaining. Below this is a 'Past Forms' section containing four entries, each with a 'Form' button, a deadline (Apr 4, 2025, 23:59), and a score (-/-). The sidebar on the left includes links for Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar.

The screenshot shows the 'Create Form' page. It features a 'Create Form' header, a 'Form Title' input field, a 'Set Deadline' field set to '04/05/2025 11:59 PM' with a calendar icon, and a 'JSON Input' text area. A 'SUBMIT' button is located at the bottom right of the form. The sidebar on the left is identical to the one in the previous screenshot.

The Forms page displays a list of both active and past forms for professors. A "Create Form" button is located in the top right corner, which navigates to the form creation interface when clicked. The feature to fetch form responses has not been implemented yet.

5. Assignments



The screenshot shows the SAHARA platform's Assignments page. At the top, there is a navigation bar with a logo, user profile icon, and 'LOGOUT' button. On the left, a sidebar menu lists various features: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (which is the current page), Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has a blue header with the title 'Assignments' and a sub-header 'Create and manage course assignments'. A 'Create Assignment' button is in the top right of this header. Below the header, there are two sections: 'Ongoing/Upcoming Documents' and 'Previous Documents'. Each section contains a list of assignments with their titles, due dates, and metadata. For example, the first assignment in the 'Ongoing/Upcoming Documents' section is titled 'Assignment' and has a 'CHECK ONCE' status, opening at April 4, 2025, at 00:30 and due on April 11, 2025, at 11:30. The 'Previous Documents' section lists an assignment titled 'Bash Scripting Assignment' that opened on March 15, 2025, at 00:00 and is due on March 29, 2025, at 00:00.

- The **Assignments** page provides professors with a comprehensive overview of all assignments created to date. Each assignment entry in the list displays the following metadata:
- **Assignment Title**
- **Issued Date**
- **Due Date**

Each assignment entry includes a **collapsible toggle (expand icon)** that, when activated, reveals additional information such as:

- **Detailed Description**
- **Action Controls:**
 - **Edit** – Opens an editable form to modify assignment details.
 - **Delete** – Permanently removes the assignment from the system after confirmation.

The screenshot shows the SAHARA Learning Management System (LMS) dashboard. The top navigation bar includes a logo, user profile icon, and 'LOGOUT' button. The left sidebar contains a 'Dashboard' menu with options: Overview, Announcements, Gradeables, Form Management, Assignments (selected), Submissions, People, Discussions, Feedback Form, and Calendar. The main content area is titled 'Assignments' with the sub-section 'Ongoing/Upcoming Documents'. It displays a single assignment card for 'Assignment' titled 'CHECK ONCE'. The card shows the opening date (Apr 4, 2025, 00:30), due date (Apr 11, 2025, 11:30), description ('CHECK ONCE'), system instructions ('You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.'), and results ('Results will be available after Apr 11, 2025, 11:30'). Action buttons at the bottom include 'View All Submissions', 'Update Assignment', and 'Delete Assignment'.

This screenshot shows the same SAHARA LMS dashboard and sidebar as the previous one. The main content area now displays a different assignment card for 'Assignment' titled 'Bash Scripting Assignment'. This card shows the opening date (Mar 15, 2025, 00:00), due date (Mar 29, 2025, 00:00), description ('Bash Scripting Assignment'), system instructions ('You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.'), and results ('Results will be available after Mar 29, 2025, 00:00'). Action buttons at the bottom include 'View All Submissions', 'Update Assignment', and 'Delete Assignment'.

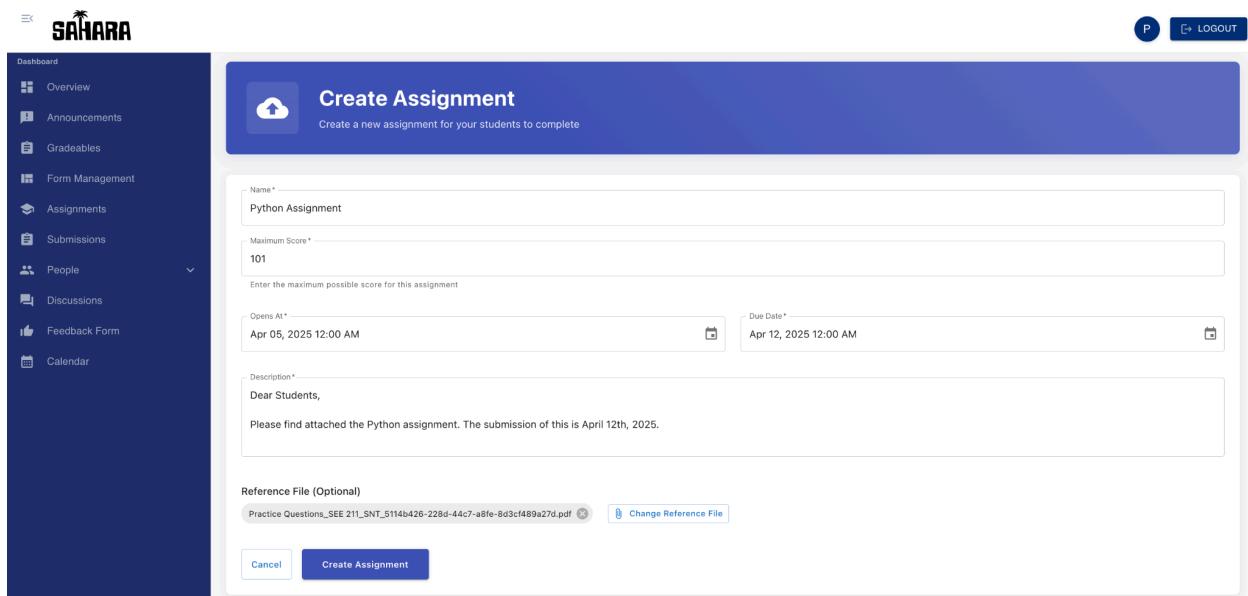
Creating a New Assignment

A "New Assignment" button is located at the top-right corner of the interface.

Clicking this button navigates the user to an assignment creation form, structurally similar to the *Submittables* module. In this form, the professor can input:

- **Assignment Title**
- **Detailed Description**
- **Due Date**
- **Optional File Attachment** – Professors can upload a reference or sample file to illustrate the expected structure or content of the submission.

Upon clicking the "Create Assignment" button, the new assignment is saved and immediately reflected in the main assignments list.



The screenshot shows the SAHARA platform's assignment creation interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (selected), Submissions, People, Discussions, Feedback Form, and Calendar. The main area has a blue header bar with the title 'Create Assignment' and a sub-instruction 'Create a new assignment for your students to complete'. Below the header are several input fields:

- Name*: Python Assignment
- Maximum Score*: 101
- Opens At*: April 05, 2025 12:00 AM
- Due Date*: April 12, 2025 12:00 AM
- Description*: Dear Students,
Please find attached the Python assignment. The submission of this is April 12th, 2025.
- Reference File (Optional): A file named 'Practice Questions_SEE 211_SNT_5114b426-228d-44c7-a8fe-8d3cf489a27d.pdf' is listed with a 'Change Reference File' button.

At the bottom are 'Cancel' and 'Create Assignment' buttons.

Upon clicking the "Update Assignment" button, the user can now edit the assignment.

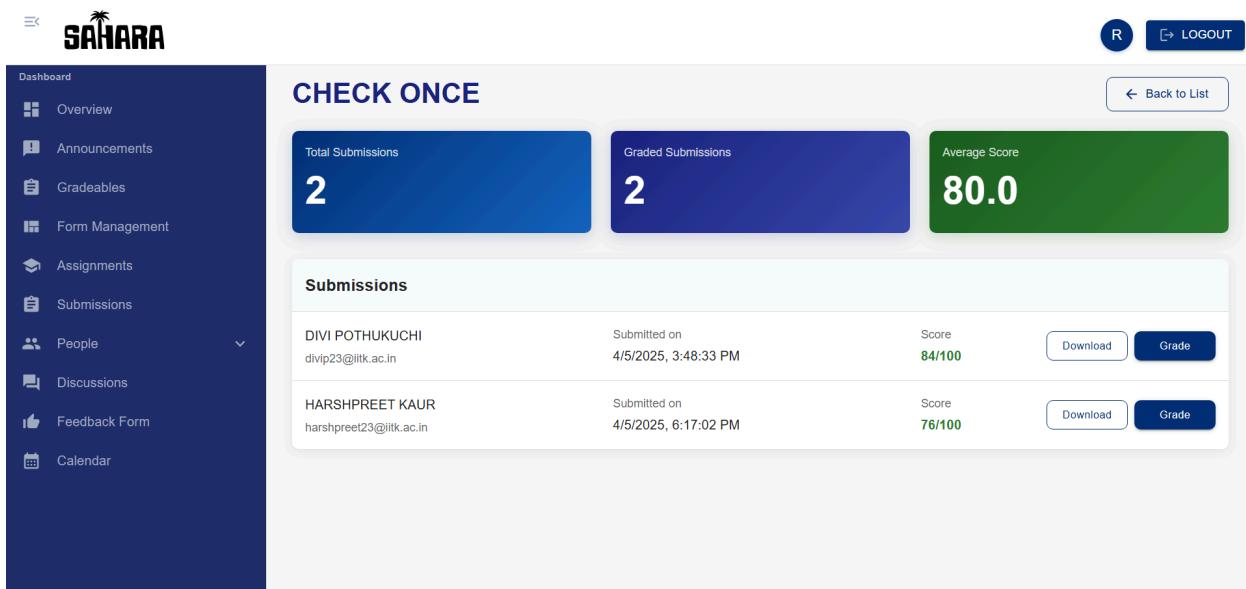
The screenshot shows the SAHARA platform's assignment update interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area has a blue header bar with a pencil icon and the title "Update Assignment". Below it, a sub-header says "Update the details of your assignment". The form fields include:

- Title ***: PYTHON ASSIGNMENT !!!!!!
- Deadline ***: 11/04/2025, 06:30 PM
- Opens At (Optional)**: 04/04/2025, 06:30 PM
- Description ***: Dear Students,
Please find attached the Python assignment. The submission of this is April 12th, 2025.

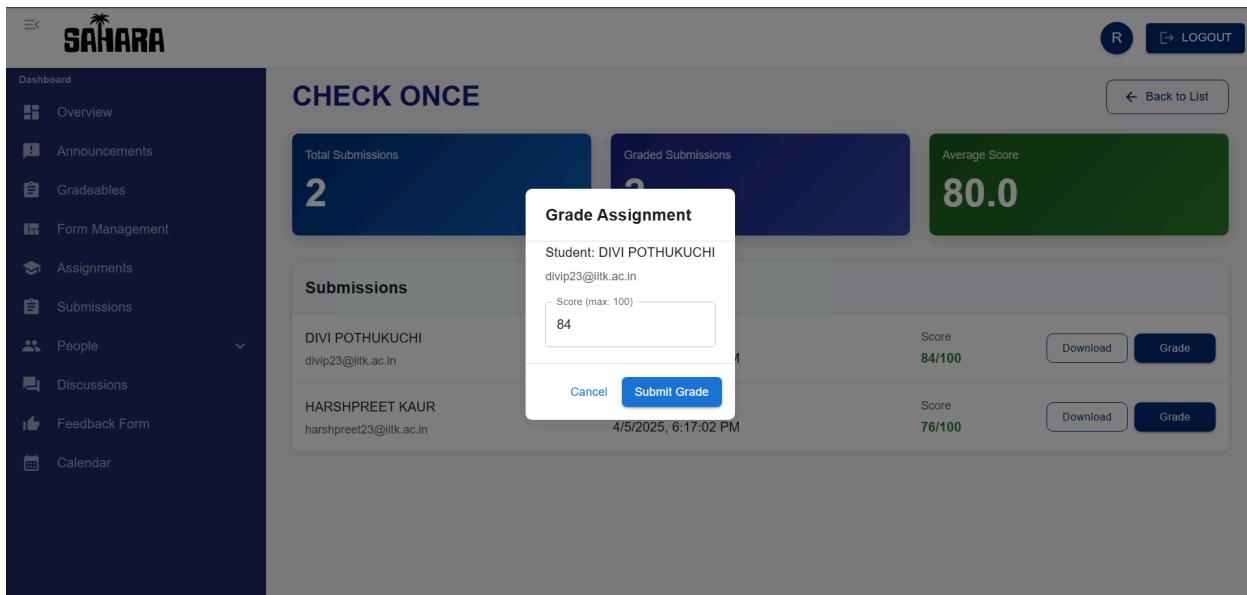
 At the bottom right are "Cancel" and "Update Assignment" buttons.

Upon clicking the "**View All Submissions**" button, the user is directed to a page with statistics regarding the submissions, like:

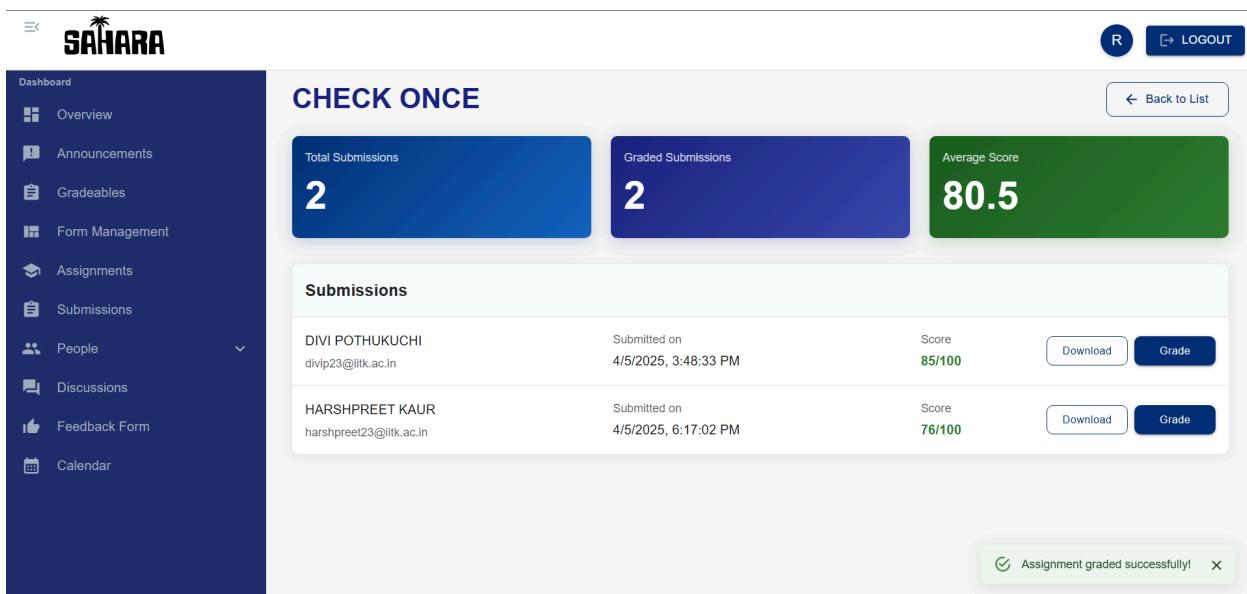
- Number of total submissions
- Number of graded submissions
- Average Score



On clicking the “Grade” button, the user will be able to grade the selected student’s assignment submission.



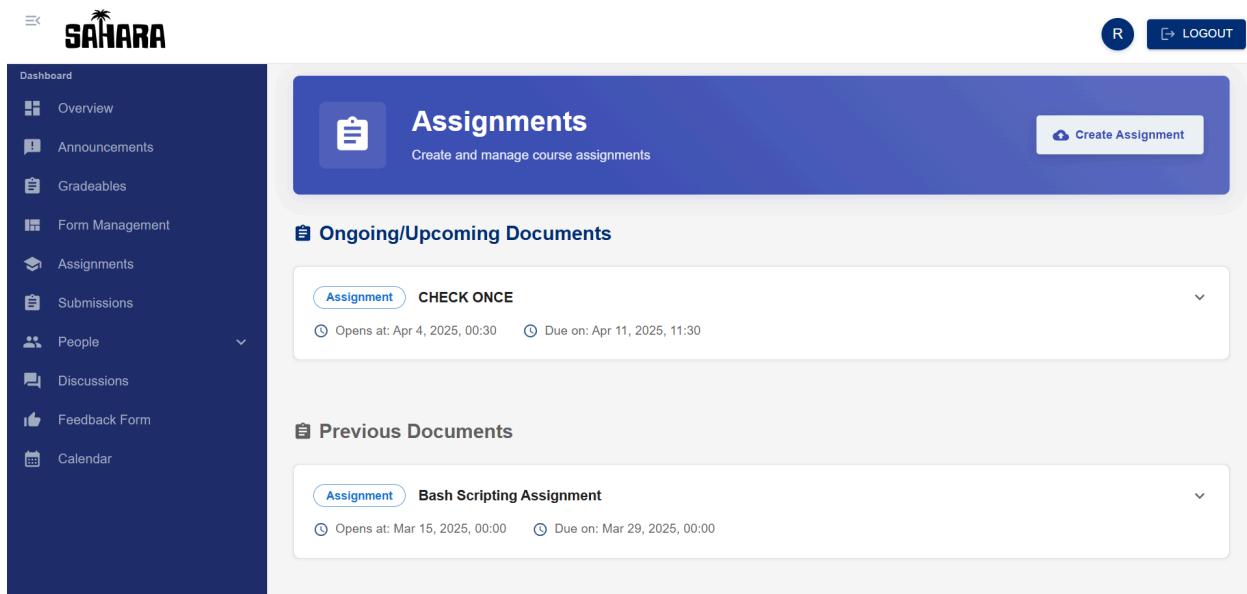
Once the student has been graded/scored, click on the “Submit Grade” button to confirm and save the grade. Once the change has been saved, the user gets a success message.



6. Submissions

The **Submissions Management Interface** provides professors with a comprehensive view of all required document submissions, categorized by team and/or individual students. Each submission entry includes the following metadata:

- **Title** of the submission.
- **Opening date/time** (when the submission becomes accessible to students).
- **Due date/time** (deadline for submission).



The screenshot shows the SAHARA platform's assignments management interface. At the top, there is a navigation bar with a logo, user profile, and a 'LOGOUT' button. On the left, a sidebar menu lists various features: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (which is currently selected), Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has a blue header titled 'Assignments' with the sub-instruction 'Create and manage course assignments'. Below this is a section titled 'Ongoing/Upcoming Documents' containing an assignment entry for 'Assignment' titled 'CHECK ONCE' with a due date of April 11, 2025, 11:30. Another section titled 'Previous Documents' shows an entry for 'Assignment' titled 'Bash Scripting Assignment' with a due date of March 29, 2025, 00:00. Each document entry has a small expandable panel icon (a triangle) to its right.

Each submission row features an **expandable panel**, accessible via a toggle arrow, which reveals additional assignment details such as:

- Submission description or guidelines.
- List of submitted files (if any).
- Associated metadata (e.g., who submitted, when it was submitted).

The screenshot shows the SAHARA platform interface. On the left is a dark sidebar with a navigation menu:

- Dashboard
- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

The main content area displays an assignment titled "Bash Scripting Assignment". It includes the following details:

- Assignment:** Bash Scripting Assignment
- Opens at:** Mar 15, 2025, 00:00
- Due on:** Mar 29, 2025, 00:00
- Description:** please solve this on time
- System Instructions:** You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.
- Results:** Results will be available after Mar 29, 2025, 00:00
- Reference Files:** shell_scripting_assignment_5d793725-ff31-47dc-8627-296b67d524c8.pdf

At the bottom are three buttons: "View All Submissions" (blue), "Update Assignment" (blue), and "Delete Assignment" (red).

On clicking “View All Submissions”, the following page is shown:

The screenshot shows the "Bash Scripting Assignment" page with the following statistics:

- Total Submissions: 0
- Graded Submissions: 0
- Average Score: -

The "Submissions" section contains the message: "No submissions yet. Submissions will appear here once students submit their work."

Professors are provided with administrative controls for each submission, including:

- **Update Submission:** Modify the assignment's properties.

- **Delete Submission:** Permanently remove the assignment and all associated submissions.

At the top-right corner of the interface, there is a “**Create New Submittable**” button. Clicking this opens a modal window (or a separate view) where the professor can define the following attributes for a new assignment:

- **Title/Heading:** The name of the submittable.
- **Maximum Score:** The total marks the assignment will be graded out of.
- **Opening Date/Time** and **Due Date/Time:** Scheduling information.
- **Description:** Additional instructions or context for the students.
- **Reference File (optional):** An attachable file that may contain a template, format guideline, or any reference material.

The screenshot shows the SAHARA LMS dashboard on the left and a 'Create Assignment' modal window on the right. The dashboard menu includes: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (selected), Submissions, People, Discussions, Feedback Form, and Calendar. The 'Create Assignment' modal has a blue header with an upload icon and the title 'Create Assignment'. Below it is a sub-header: 'Create a new assignment for your students to complete'. The form fields are: Name * (empty), Maximum Score * (100), Opens At * (empty), Due Date * (empty), and Description * (empty). The top right of the modal has a 'Logout' button.

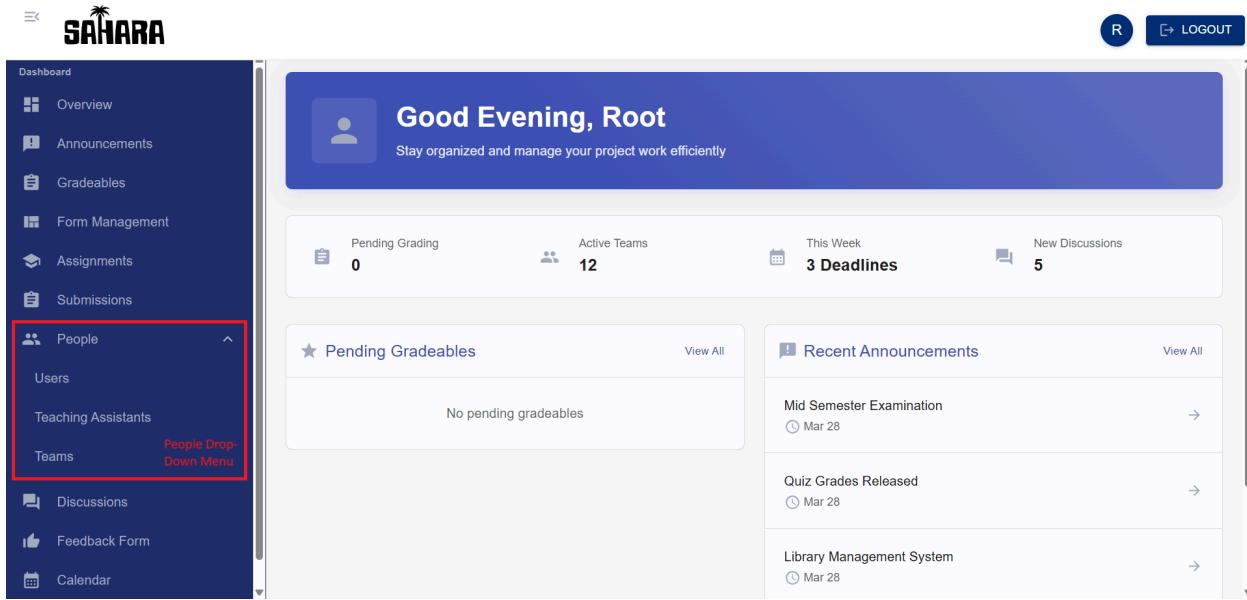
The screenshot shows the SAHARA software interface. On the left is a dark blue sidebar with a white header containing the word 'SAHARA' and a small sun icon. Below the header is a navigation menu with the following items: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The 'Assignments' item is currently selected. The main area of the screen displays a 'Create Assignment' dialog box. Inside the dialog box, there are several input fields: 'Maximum Score *' with the value '100', 'Enter the maximum possible score for this assignment'; 'Opens At *'; 'Due Date *'; 'Description *'; and a 'Reference File (Optional)' section with a 'Upload Reference File' button. At the bottom of the dialog box are two buttons: 'Cancel' and 'Create Assignment'.

After configuring the above fields, clicking the “**Create Submittable**” button finalizes and publishes the new assignment, making it available to students according to the specified schedule.

7. People

The **People** page for professors is organized into three primary tabs, each offering distinct functionality:

1. **Users**
2. **Teaching Assistants**
3. **Teams**



1. Users Tab

This tab provides a comprehensive list of all users enrolled in the course.

Features:

- **User Listing:** Displays detailed information of all registered students.
- **Data Export:** Option to export the user list to an Excel (.xlsx) file for offline access or record-keeping.
- **Team Management Controls** (*located at the bottom of the user list*):
 - **Create Teams:** Allows the professor to bulk create teams by uploading a CSV file. The CSV must follow a predefined format (refer to documentation for template).
 - **View Team Details:** Navigates to a detailed view of all currently formed teams.

ID	Name ↑	Email	Role
220004	AADI SINGH	aadis22@iitk.ac.in	Student
220010	AADYA DHIR	aadyad22@iitk.ac.in	Student
230011	AARADHYA ROHI	aaradhyaa23@iitk.ac.in	Student
230012	AARAV OSWAL	aaravoswal23@iitk.ac.in	Student
230015	AARSH JAIN	aarshjain23@iitk.ac.in	Student
230017	AARUSH NARENDRA GHATE	aarushng23@iitk.ac.in	Student
220020	AAYUSH GAUTAM	aayushq22@iitk.ac.in	Student

2301	ta1	ta1@iitk.ac.in	TA
2310	ta10	ta10@iitk.ac.in	TA
2302	ta2	ta2@iitk.ac.in	TA
2303	ta3	ta3@iitk.ac.in	TA
2304	ta4	ta4@iitk.ac.in	TA
2305	ta5	ta5@iitk.ac.in	TA
2306	ta6	ta6@iitk.ac.in	TA
2307	ta7	ta7@iitk.ac.in	TA
2308	ta8	ta8@iitk.ac.in	TA
2309	ta9	ta9@iitk.ac.in	TA

Note: Students can also form teams independently via an invitation-based system, which is described under the student-side functionality.

Upon clicking **View Team Details**, professors are presented with:

- **Team Overview:** A tabulated view of all created teams, including team name, members, and any associated metadata.
- **Team Status Check:** If all enrolled students are assigned to a team, the system enables the option to proceed with **beta testing assignments** (peer review or testing across teams).
- **Data Export:** Option to download the complete team details as an Excel file.

The screenshot shows the SAHARA platform's interface. On the left is a dark sidebar with a navigation menu:

- Dashboard
- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

The main area is titled "Teams Overview" and contains the following sections:

- Team Formation Status:** Shows "Teams Formed: 26" and a "Due Date: 05-02-2025". A "CREATE NEW TEAM" button is located here.
- Formed Teams:** A table with columns: Team Number, Team Name, Members, and Action. A search bar above the table says "Search teams or members...".
- Beta-Test Pairs:** A section stating "No beta-test pairs have been created yet" with a "CREATE BETA-TEST PAIRS" button.

At the top right of the main area are a user icon (R) and a "LOGOUT" button.

The screenshot shows the SAHARA application dashboard. On the left, a sidebar menu lists various features: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area is divided into two sections: "Formed Teams" and "Beta-Test Pairs".

Formed Teams: This section displays a list of existing teams. Each team entry includes the team number, name, member count, and activity status. A search bar at the top allows filtering by team or member names.

Team Number	Team Name	Members	Activity
8	Ravi and Friends	11 Members (S, AO, +9)	
25	Team_Of_5	10 Members (T, I, +8)	
26	new_team	2 Members (P, P)	
17	Team 17	10 Members (AD, DDS, +8)	

Beta-Test Pairs: This section indicates that no beta-test pairs have been created yet. It features a "CREATE BETA-TEST PAIRS" button.

Following is displayed on clicking “Create New Team” under Team Formation Status:

The screenshot shows the "Teams Creation" page. The header includes the SAHARA logo and user navigation options. The main title is "Teams Creation" with a sub-instruction "Upload a CSV file to create multiple teams at once".

CSV File Upload: A form field labeled "Attach .csv file" has a "BROWSE" button next to it. Below the field, a note specifies the required CSV format: "The CSV file should be in the format: team name - member1 - member2 - ... - member10".

Action Button: A large blue button labeled "Upload and Create Teams" is centered below the upload field.

The user is expected to upload a CSV file in a valid format as mentioned.

2. Teaching Assistants

This tab presents a **comprehensive, searchable list of all Teaching Assistants (TAs)** along with their associated skill sets.

Key Features:

- **Skill-Based Filtering:**

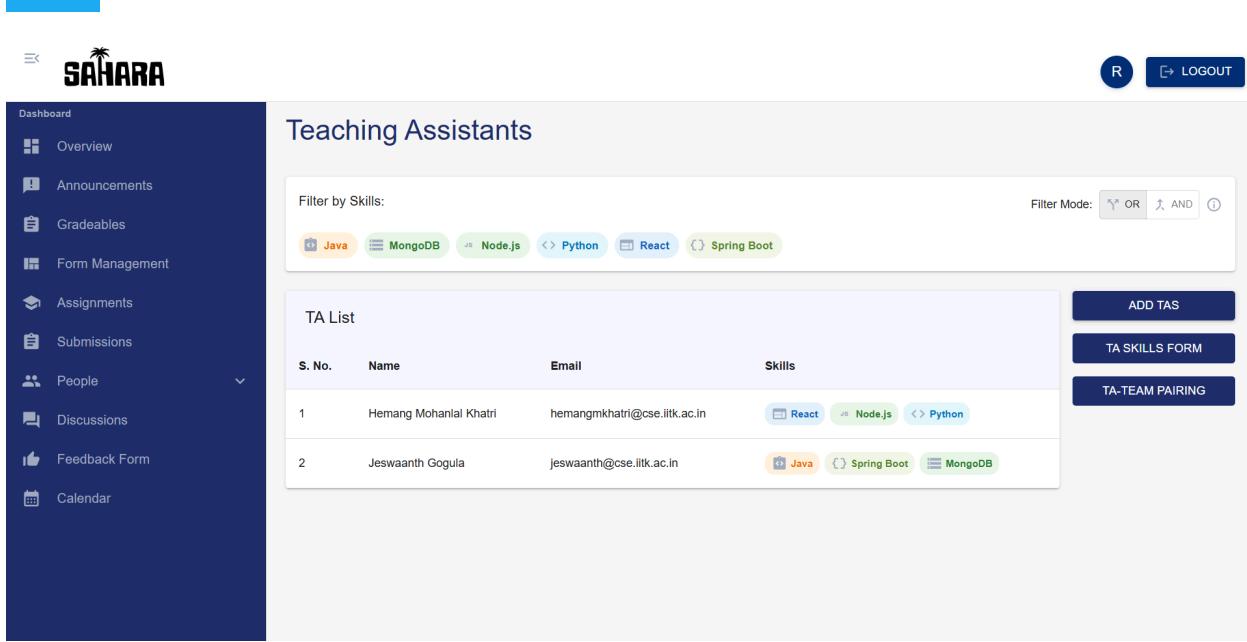
Users can filter the TA list based on selected skills using two logical filter modes:

- **OR Filter Mode:** Displays TAs who possess **at least one** of the selected skills.
- **AND Filter Mode:** Displays TAs who possess **all** of the selected skills.

- **Dynamic Sorting:**

The list can be dynamically sorted to prioritize TAs based on relevance to the selected skill criteria.

This feature enables professors to efficiently identify and assign TAs based on expertise relevant to course requirements or project domains.

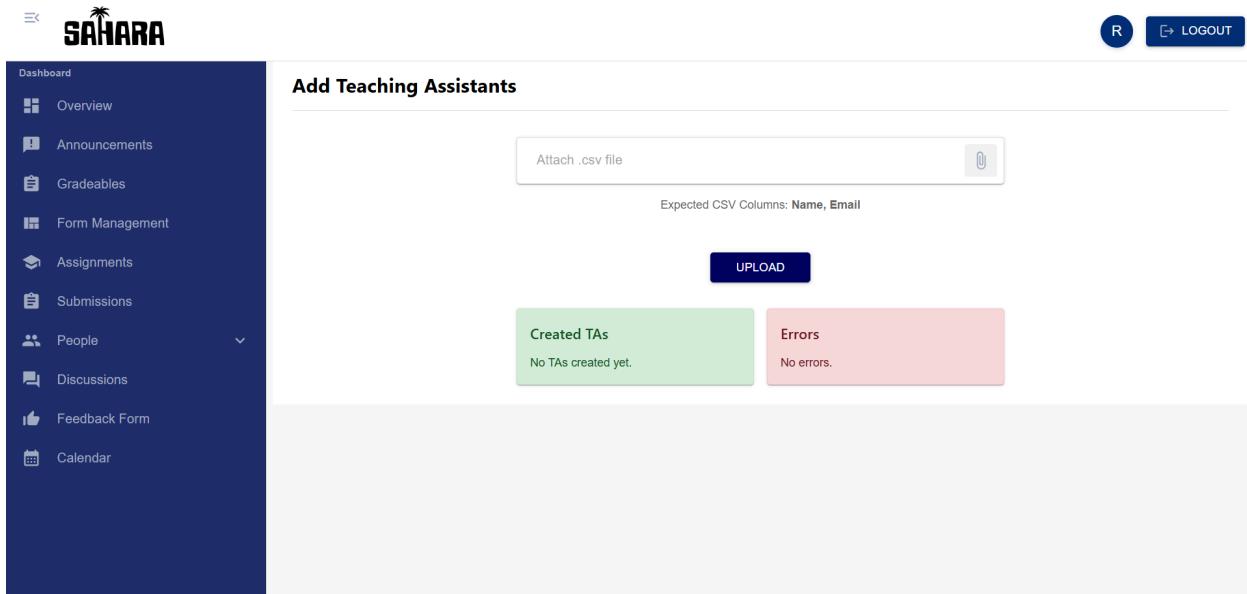


The screenshot shows the SAHARA platform's dashboard. On the left, there is a sidebar with various navigation options: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area is titled "Teaching Assistants". It features a "Filter by Skills:" section with buttons for Java, MongoDB, Node.js, Python, React, and Spring Boot. A "Filter Mode:" dropdown is set to "OR". Below this is a table titled "TA List" with columns for S. No., Name, Email, and Skills. Two entries are listed:

S. No.	Name	Email	Skills
1	Hemang Mohanlal Khatri	hemangmikhatri@cse.iitk.ac.in	React, Node.js, Python
2	Jeswaanth Gogula	jeswaanth@cse.iitk.ac.in	Java, Spring Boot, MongoDB

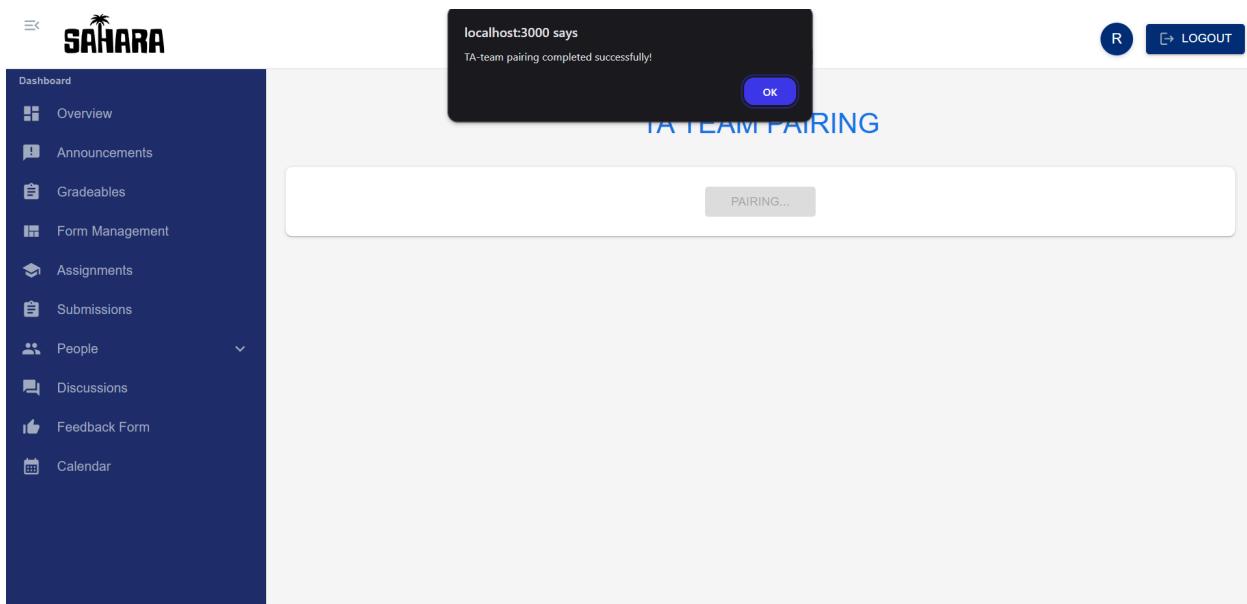
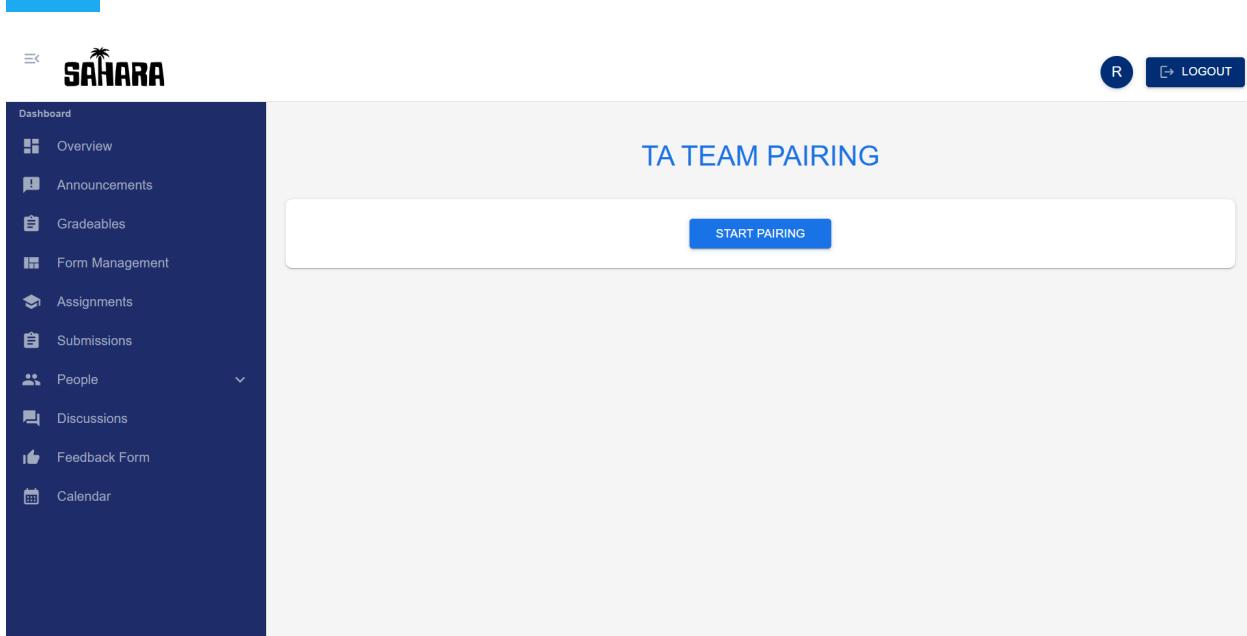
On the right side of the main content area, there are three buttons: "ADD TAS", "TA SKILLS FORM", and "TA-TEAM PAIRING".

Following page is displayed on clicking “Add TAs” button:



The screenshot shows the "Add Teaching Assistants" form. The sidebar on the left is identical to the one in the previous screenshot. The main form has a title "Add Teaching Assistants". It includes a "Attach .csv file" input field with a "UPLOAD" button below it. A note says "Expected CSV Columns: Name, Email". Below the input field, there are two sections: "Created TAs" (green background) and "Errors" (pink background). The "Created TAs" section contains the message "No TAs created yet." and the "Errors" section contains the message "No errors."

The user is expected to upload a CSV file with the mentioned format.



3. Teams

Within the **Teams** section, the TA Allocation interface allows professors to manage and assign Teaching Assistants (TAs) to student teams.

Functionality Overview:

- **Automated Allocation:**

By specifying the desired **number of TAs per team** and clicking the "**Allocate TAs**" button, the system automatically distributes available TAs across all teams based on predefined criteria (e.g., availability, skill match, or random distribution).

Team ID	Team Name	Skills	Assigned TAs	Actions
1	Team 1	Python, Spring Boot, React	(ta4) (ta5)	
2	Team 2	Python, Java, MongoDB	(ta2) (ta8)	
3	Team 3	Python, Spring Boot, MongoDB	(ta3) (ta7)	
4	Team 4	Node.js, MongoDB, React	(ta2) (ta8)	

- **Team Overview Table:**

A structured table is displayed, listing:

- **Team ID**
- **Team Name**
- **Aggregated Team Skills**
- **Assigned TA(s)**

Team ID	Team Name	Skills	Assigned TAs	Actions
1	Team 1	Python, Spring Boot, React	(ta4) (ta5)	
2	Team 2	Python, Java, MongoDB	(ta2) (ta8)	
3	Team 3	Python, Spring Boot, MongoDB	(ta3) (ta7)	
4	Team 4	Node.js, MongoDB, React	(ta2) (ta8)	

This interface ensures both flexibility and control in TA-team assignments, supporting scalable and skill-aligned team supervision.

Team ID	Team Name	Skills	Assigned TAs	Actions
1	Team 1	Python, Spring Boot, React	(ta2) (ta3)	
2	Team 2	Python, Java, MongoDB	(ta2) (ta10)	
3	Team 3	Python, Spring Boot, MongoDB	(ta6) (ta7)	
4	Team 4	Node.js, MongoDB, React	(ta9) (ta10)	

- **Manual Override (Edit Mode):**

An "Edit" option is provided for each team, enabling professors to manually modify or override TA assignments as needed.

The screenshot shows the SAHARA application's Teams Management interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area has a title "Teams Management" and a sub-section "TA Allocation". A modal window titled "Edit TA Assignments" is open over a table of teams. The table has columns for Team ID, Team Name, Assigned TAs, and Actions. Team 1 is selected, showing assigned TAs ta2 and ta3. The modal contains a dropdown menu with options ta1, ta2, ta3, ta4, ta5, ta6, ta7, ta8, ta9, and ta10. At the bottom of the modal are "CANCEL" and "SAVE CHANGES" buttons. In the top right corner of the main area, there is a button to "Allocate TAs".

This screenshot is similar to the previous one but shows a different selection in the "Edit TA Assignments" modal. The dropdown menu now highlights "ta1". The rest of the interface, including the team list table and the top right "Allocate TAs" button, remains the same.

TA Allocation

Edit TA Assignments

Assigned TAs: ta2, ta3, ta6, ta7

Team ID	Team Name	Skills	Assigned TAs	Actions
1	Team 1	Python, Spring Boot, React	(ta2) (ta3)	
2	Team 2	Python, Java, MongoDB	(ta2) (ta10)	
3	Team 3	Python, Spring Boot, MongoDB	(ta6) (ta7)	
4	Team 4	Node.js, MongoDB, React	(ta9) (ta10)	

TA Allocation

Assign teaching assistants to student teams

TA assignments updated successfully

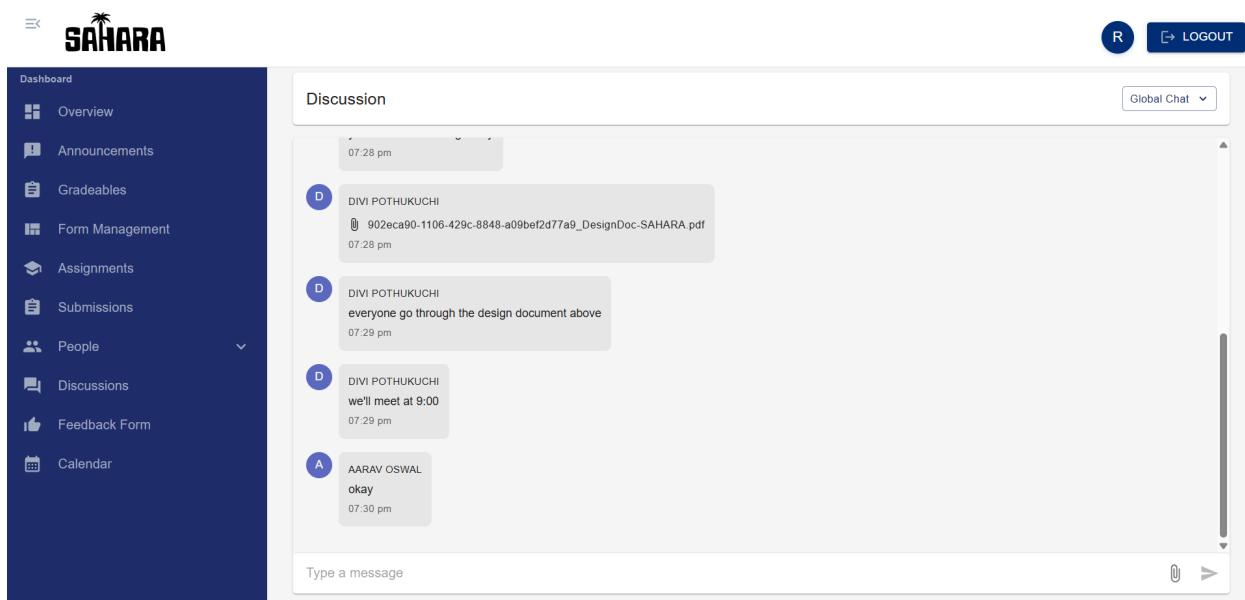
Team ID	Team Name	Skills	Assigned TAs	Actions
1	Team 1	Python, Spring Boot, React	(ta2) (ta3) (ta6) (ta7)	
2	Team 2	Python, Java, MongoDB	(ta2) (ta10)	
3	Team 3	Python, Spring Boot, MongoDB	(ta6) (ta7)	
4	Team 4	Node.js, MongoDB, React	(ta9) (ta10)	

8. Discussions

The **Global Chat** feature is accessible to the professor and includes all registered users in a shared communication space.

Each message in the chat is:

- Displayed with an attached **timestamp** indicating when it was sent.
- Capable of including **document attachments**, allowing users to share relevant files seamlessly.
- Grouped by **date headers**, which are prominently displayed at the top center of the chat window to indicate the day on which the messages were sent.



The screenshot shows the SAHARA platform interface. On the left is a dark blue sidebar menu with white icons and text, listing: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. At the top right are a user icon (R), a dropdown menu, and a "LOGOUT" button. The main area is titled "Discussion" and shows a list of messages. A timestamp "07.28 pm" is at the top of the message list. Below it are four messages:

- DIVI POTHUKUCHI 902eca90-1106-429c-8848-a09bef2d77a9_DesignDoc-SAHARA.pdf 07.28 pm
- DIVI POTHUKUCHI everyone go through the design document above 07.29 pm
- DIVI POTHUKUCHI we'll meet at 9:00 07.29 pm
- AARAV OSWAL okay 07.30 pm

At the bottom of the message list is a input field with placeholder text "Type a message" and a send button with a paper airplane icon.

The screenshot shows the SAHARA platform interface. On the left is a dark blue sidebar with various navigation options: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area is titled "Discussion" and shows a message thread between users D, A, and AARAV OSWAL. User D posted a file at 07:28 pm. User D then posted another message at 07:29 pm. User A responded at 07:30 pm. Below the messages is a text input field "Type a message" with a send button. In the top right corner, there are user profile icons and a "LOGOUT" button. A "Global Chat" sidebar on the right lists several channels: Team Ravi and Friends TA Channel, Team Team 2 TA Channel, Team Team 18 TA Channel, Team Team 17 TA Channel, Team Team 7 TA Channel, Team Team 9 TA Channel, and Team Testing 2's Team TA Channel.

This screenshot shows the same SAHARA platform interface, but the "Global Chat" sidebar is replaced by a "Team Ravi and Friends TA Channel" dropdown menu. The main discussion thread is identical to the one in the first screenshot, with user D posting a file and a message, and user A responding. The "Type a message" input field is present at the bottom.

This setup enables organized, real-time communication with full visibility across all users and supports both textual and document-based interactions.

9. Feedback Form

The **Team Feedback Overview** page serves as a centralized dashboard for monitoring feedback from submissions across all teams. For each team, the interface displays:

- The total number of members who have submitted their feedback.
- The timestamp of the most recent submission.
- A status summary to quickly assess completion progress.

The screenshot shows the 'Team Feedback Overview' page for the 'SAHARA' team. The left sidebar contains navigation links for Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area is titled 'Team Feedback Overview' and displays a table with two rows. The table has columns for 'Team Name', 'Submissions', 'Last Submission', and 'Actions'. The first row shows 'Ravi and Friends' with 7 submissions, last submitted on 4/5/2025, and a 'VIEW DETAILS' button. The second row shows 'Team 2' with 1 submission, last submitted on 4/2/2025, and a 'VIEW DETAILS' button. There is also a 'EXPORT ALL MATRICES' button in the top right corner.

Team Name	Submissions	Last Submission	Actions
Ravi and Friends	7	4/5/2025	VIEW DETAILS
Team 2	1	4/2/2025	VIEW DETAILS

Each team's feedback data can be explored in depth by clicking the "**View Details**" button. This opens a modal window containing a **feedback matrix**, where:

- Rows represent feedback submitters.
- Columns represent team members being evaluated.
- Each cell contains the percentage contribution assigned by the submitter to a peer.

The screenshot shows a modal window titled "Team Feedback Details - Ravi and Friends". The left sidebar contains navigation links: Dashboard, Overview, Announcements, Gradeables, Form Manager, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area displays a "Feedback Matrix" table with 11 columns: Submitter, AARAV OSWAL, ACHYUTH HARIKRISHNA WARRIER, ASHIK STENNY, DIVI POTUKUCHI, HARSHPREET KAUR, POTHUGANTI NIKHIL, R.CHARAN, RAVI ARORA, SPANDAN PATI, and VEDHANTH BALASUBRAMANIAN. The rows represent individual submissions from each member. The table includes submission dates and percentages. An "EXPORT MATRIX" button is located at the top right of the table.

Submitter	AARAV OSWAL	ACHYUTH HARIKRISHNA WARRIER	ASHIK STENNY	DIVI POTUKUCHI	HARSHPREET KAUR	POTHUGANTI NIKHIL	R.CHARAN	RAVI ARORA	SPANDAN PATI	VEDHANTH BALASUBRAMANIAN
ASHIK STENNY 3/28/2025	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
ACHYUTH HARIKRISHNA WARRIER 3/28/2025	5%	5%	20%	10%	10%	10%	10%	10%	10%	10%
RAVI ARORA 3/31/2025	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
AARAV OSWAL 4/3/2025	22.14%	5%	6.9%	10.05%	12.4%	7.9%	9.6%	4.9%	11.01%	10.1%
SPANDAN PATI 4/4/2025	0.69%	0.69%	6.9%	6.9%	6.9%	0.69%	6.9%	1.32%	0.01%	69%
DIVI POTUKUCHI	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%

CLOSE

The matrix is accompanied by statistical metrics for each team member, including:

- **Mean percentage** received from peers.
- **Variance**, indicating the spread or consistency of received feedback.
- **Individual submission timestamps**, allowing traceability and time-based analysis.

The screenshot shows a modal window titled "Team Feedback Details - Ravi and Friends". The left sidebar contains navigation links: Dashboard, Overview, Announcements, Gradeables, Form Manager, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area displays "Detailed Submissions" for each team member. Each submission is shown in a box with the submitter's name, the date and time of submission, and a close button.

- Submission by ASHIK STENNY
Submitted on: 3/28/2025, 2:24:37 PM
- Submission by ACHYUTH HARIKRISHNA WARRIER
Submitted on: 3/28/2025, 2:26:22 PM
- Submission by RAVI ARORA
Submitted on: 3/31/2025, 5:31:27 PM
- Submission by AARAV OSWAL
Submitted on: 4/3/2025, 9:46:22 PM
- Submission by SPANDAN PATI
Submitted on: 4/4/2025, 6:12:26 PM

CLOSE

Additionally, the platform provides an **Export to XLSX** feature, which generates a comprehensive spreadsheet containing:

- All feedback submissions across teams.
- Percentage allocations per team member.
- Team-level grouping for easier analysis.
- Metadata such as submission times and contributors.

This export facilitates offline analysis, record-keeping, or further processing in data tools like Excel or Google Sheets.

10. Calendar

Professors have the capability to create two types of events within the system:

1. **Global Events** – Visible to all users enrolled in the course.
2. **Personal Events** – Private events visible only to the professor who created them.

The screenshot shows the SAHARA dashboard with a sidebar containing links like Overview, Announcements, Gradeables, etc. The main area features a calendar for April 2025. A blue box highlights 'Global Events', a green box highlights 'Team Events', and an orange box highlights 'Personal Events'. Specific events are shown in boxes: 'Meet with team 8' (Wednesday, April 9) and 'Last day to Make Teams' (Wednesday, April 9) are in yellow boxes; 'Python Assignment' (Thursday, April 17) is in a blue box.

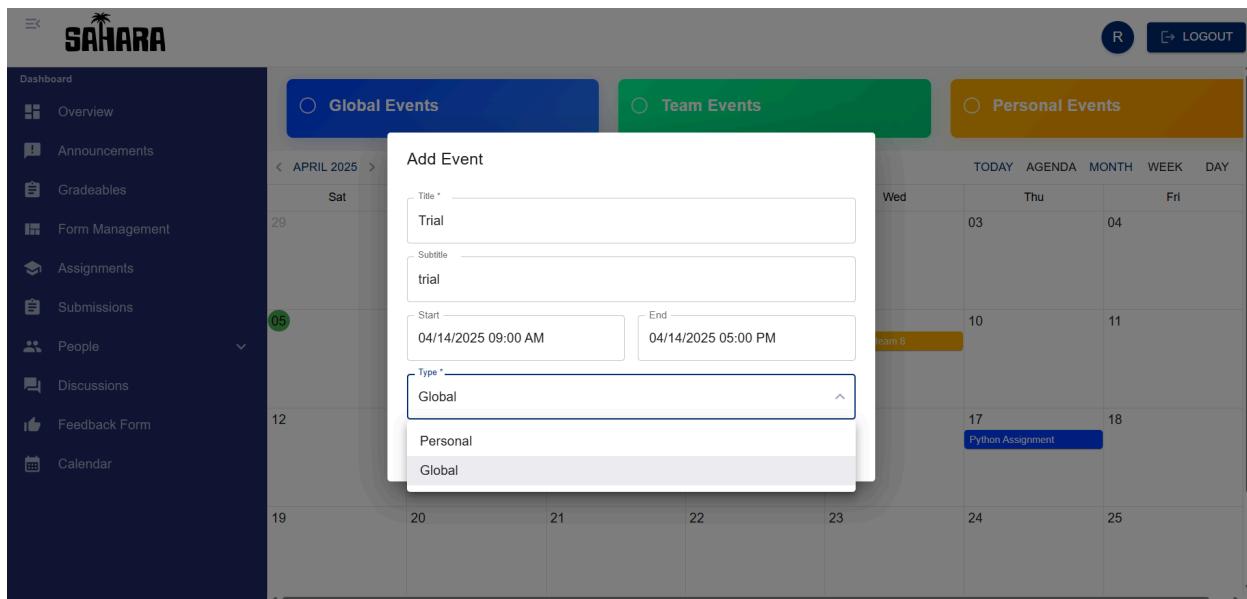
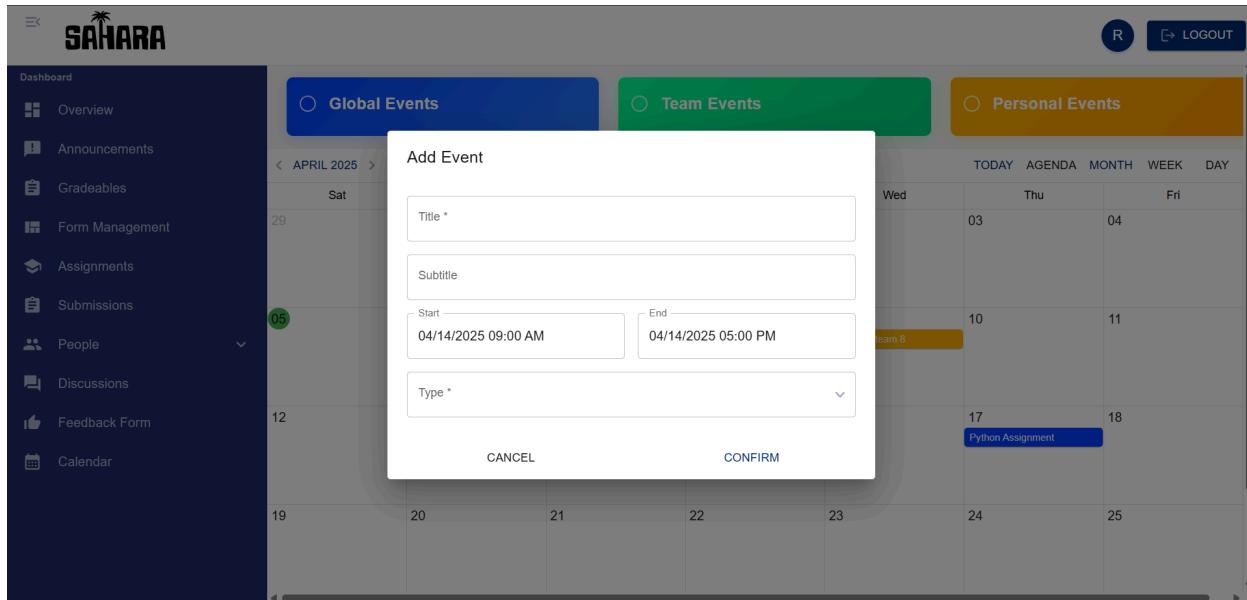
Each event can be viewed more in detail when clicked. Each event can be deleted/modified by the user.

The screenshot shows the same dashboard layout as the first one, but with a modal window overlaid on the 'Last day to Make Teams' event (April 9, Wednesday). The modal has a blue header 'Last day to Make Teams', a date range '08 April 2025 09:00 AM - 08 April 2025 05:00 PM', and a text area containing 'Wow'.

Event Creation Workflow:

- Events can be created by selecting a specific date on the calendar interface, which triggers a **modal window (event creation sub-window)**.
- Within the modal, the professor can input:

- **Event Title**
- **Event Description**
- **Event Type (Global or Personal)**
- **Start and End Time / Deadline**
- **Additional Notes or Attachments (optional)**



Following page is displayed on clicking “Month”:

The screenshot shows the SAHARA application's calendar interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area has three tabs at the top: Global Events (blue), Team Events (green), and Personal Events (orange). Below the tabs is a date range selector showing '< APRIL 2025 >'. At the bottom right are buttons for TODAY, AGENDA, MONTH, WEEK, and DAY. The calendar grid shows events for the week starting Monday, April 14. Events include 'Last day to Make Teams' (blue circles) on Tuesday, Wednesday, and Thursday, 'Meet with team 8' (yellow circle) on Wednesday, and 'Trial' (blue circle) on Monday.

Following page is displayed on clicking “Week”:

This screenshot shows the weekly agenda view for April 5-11, 2025. The sidebar and top navigation are identical to the previous screenshot. The date range is set to '05 - 11 APR 2025'. The main area displays a grid where each row represents a hour from 09:00 AM to 02:00 PM, and each column represents a day from Saturday (05) to Friday (11). Events are color-coded: blue for Global Events and orange for Personal Events. The 'Last day to Make Teams' event is shown in blue for Tuesday, April 8, and the 'Meet with team 8' event is shown in orange for Wednesday, April 9.

Following is the “Agenda” page:

The screenshot shows the SAHARA application's calendar interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area has three tabs at the top: Global Events (blue), Team Events (green, selected), and Personal Events (orange). Below the tabs, a date range selector shows '05 - 11 APR 2025'. At the bottom right are buttons for TODAY, AGENDA, MONTH, WEEK, and DAY. The calendar grid shows events for Tuesday, April 8, and Wednesday, April 9. On Tuesday, there are three blue circular icons labeled 'Last day to Make Teams' from 09:00 AM to 05:00 PM. On Wednesday, there is one yellow circular icon labeled 'Meet with team 8' from 09:00 AM to 05:00 PM.

Following is the page displayed on clicking “**Day**”: (Note- a personal event was added to 5th April).

The screenshot shows the SAHARA application's calendar interface for April 5th. The sidebar and tabs are identical to the previous screenshot. The date selector shows '05 APRIL 2025'. The 'DAY' button at the bottom right is selected. The calendar grid shows a single yellow-highlighted event from 09:00 AM to 05:00 PM, labeled 'It's today 5th April 09:00 AM - 05:00 PM'. The rest of the day is empty.

Once submitted, the event is stored in the system and rendered on the calendar view according to its visibility scope.

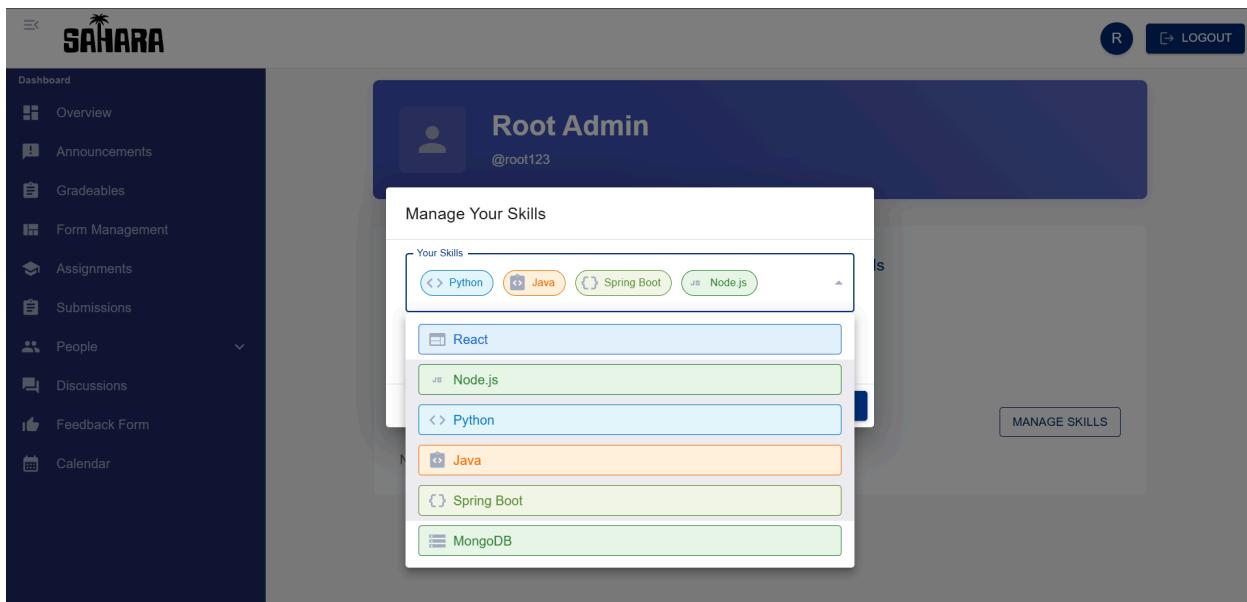
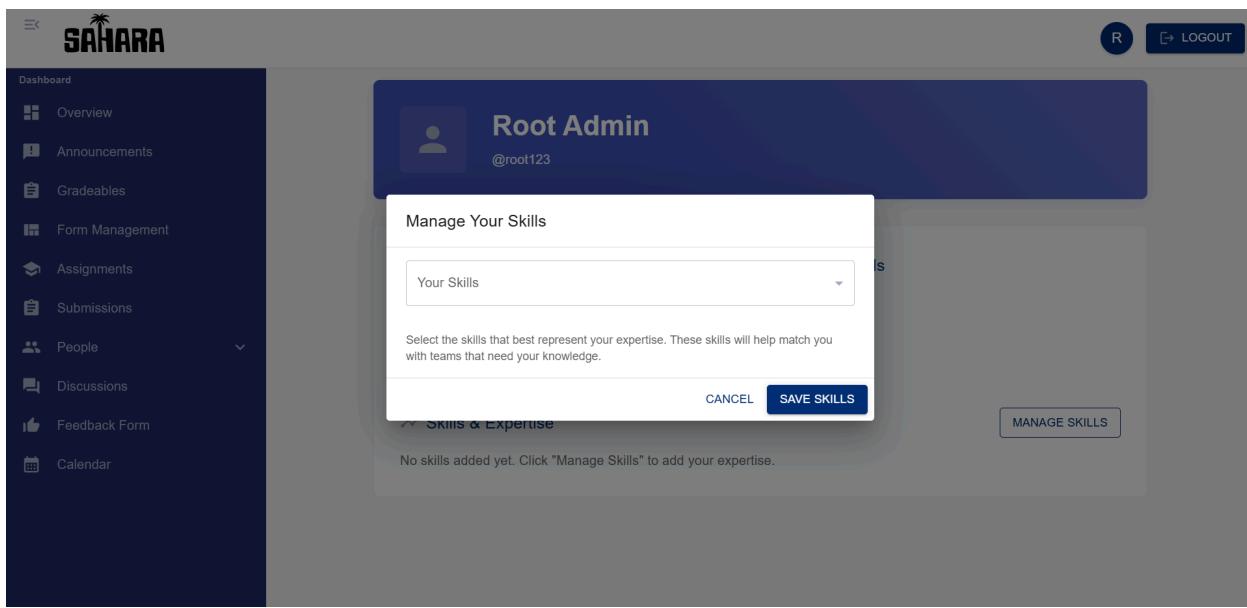
11. Profile Page

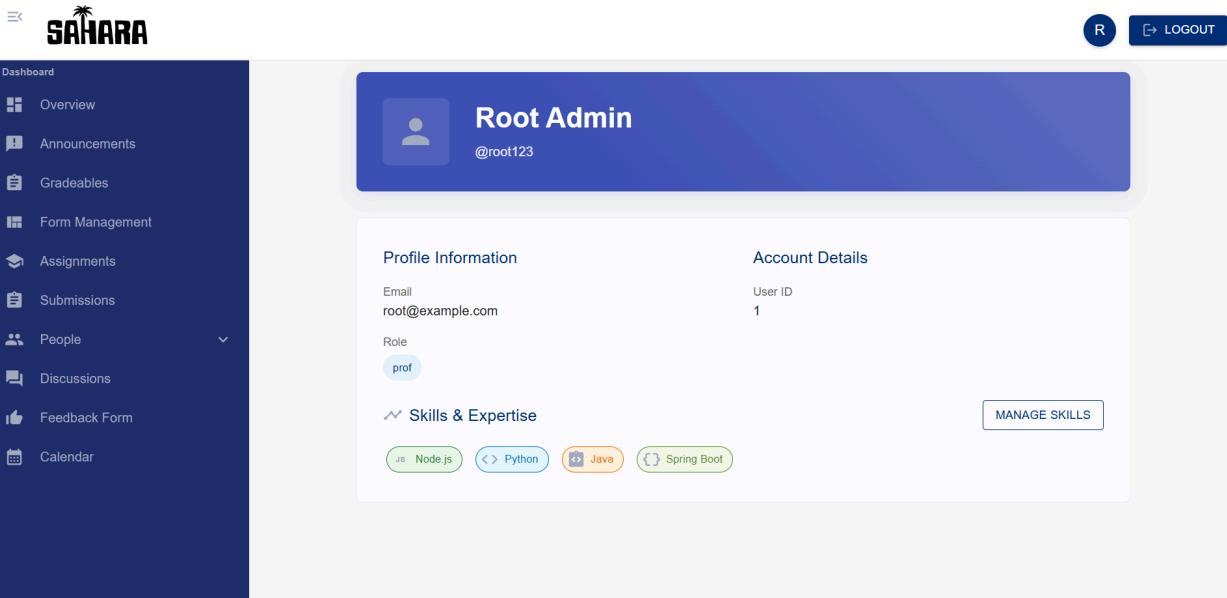
The professor can access their personal profile by clicking on the **avatar icon** located in the top-right corner of the interface. This action opens the **Profile Page**, which displays key user-specific information including:

- **Email ID**
- **User ID**
- **Role (e.g., Professor)**
- **Skills and Areas of Expertise**

A "Manage Skills" button is provided, enabling the professor to update, add, or remove their listed skills and expertise. All changes are reflected in real-time and stored persistently within the system.

The screenshot shows the SAHARA application's profile page. At the top, there is a navigation bar with a logo, a search bar, and a user menu. Below the navigation is a sidebar with various dashboard links. The main content area features a large blue header box with the user's name, email, and a profile picture. The main content area is divided into sections: 'Profile Information' (Email: root@example.com, Role: prof) and 'Account Details' (User ID: 1). There is also a section for 'Skills & Expertise' with a note: 'No skills added yet. Click "Manage Skills" to add your expertise.' A 'MANAGE SKILLS' button is located in this section.





The image shows a screenshot of a web application interface for 'SAHARA'. At the top right, there is a user icon with the letter 'R' and a 'LOGOUT' button. On the left, a dark sidebar menu titled 'Dashboard' lists various options: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area features a blue header bar with a user icon and the text 'Root Admin @root123'. Below this, the 'Profile Information' section displays the email 'root@example.com' and role 'prof'. The 'Account Details' section shows the User ID '1'. A 'Skills & Expertise' section is expanded, showing four selected skills: Node.js, Python, Java, and Spring Boot. A 'MANAGE SKILLS' button is located in the top right corner of this section.

- Overview
- Announcements
- Gradeables
- Form Management
- Assignments
- Submissions
- People
- Discussions
- Feedback Form
- Calendar

Root Admin
@root123

Profile Information

Email
root@example.com

Role
prof

Account Details

User ID
1

Skills & Expertise

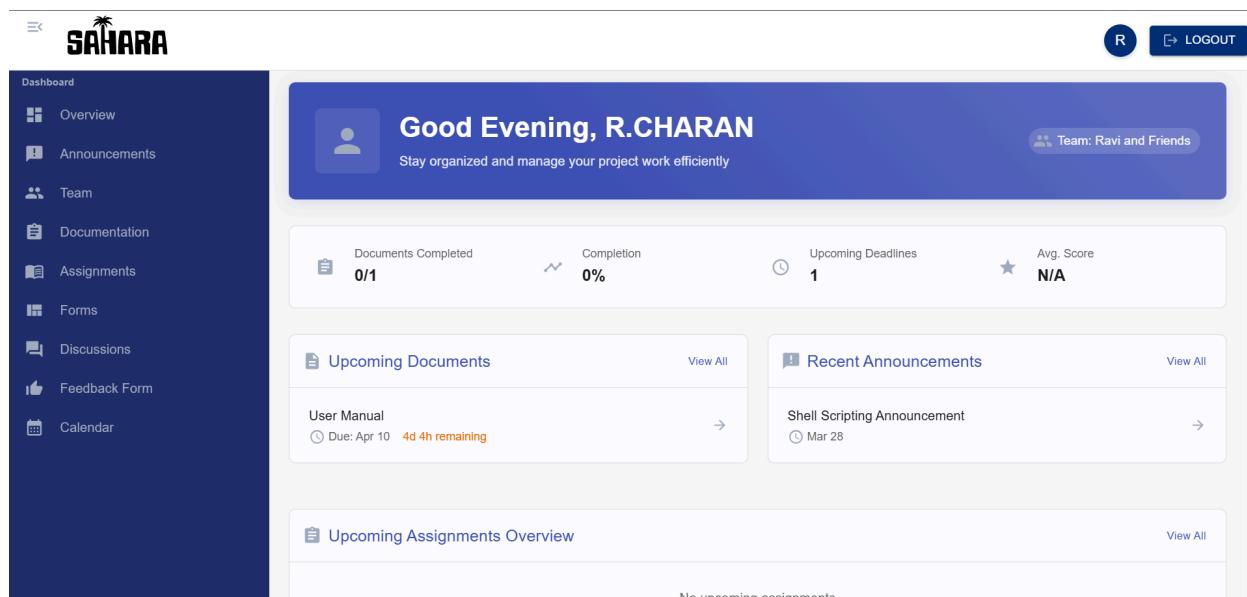
Node.js Python Java Spring Boot

MANAGE SKILLS

STUDENT'S FEATURES

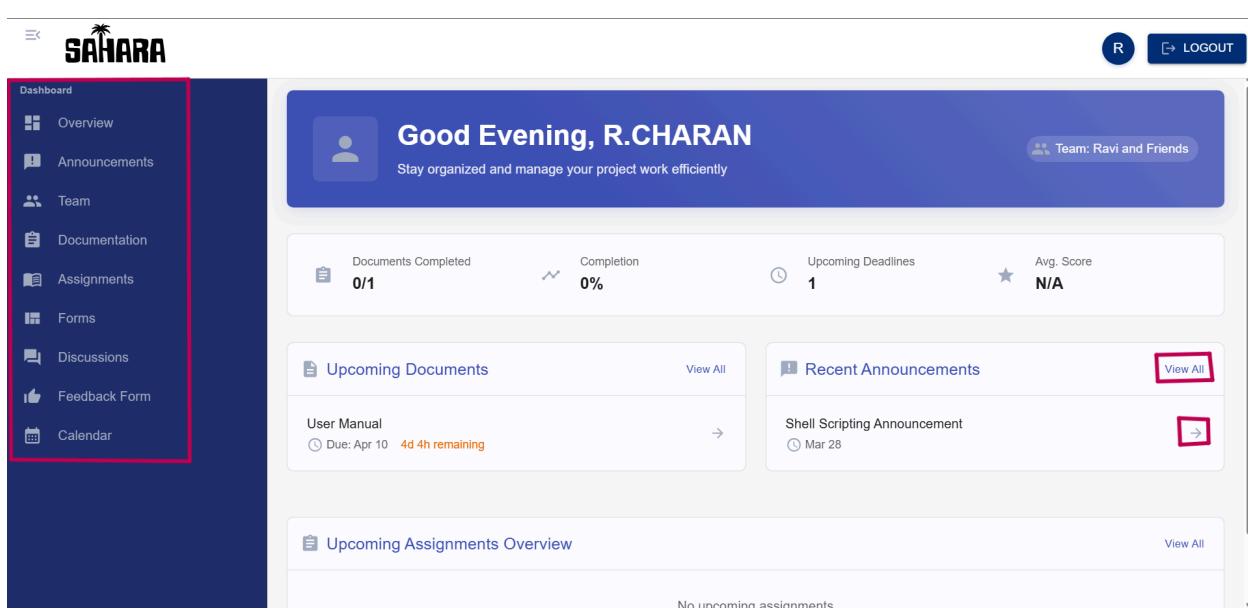
1. Dashboard

On successful login, the user lands on the Dashboard. On the dashboard page, the student will be able to see 3 Quick-View boxes - Recent Announcements, Upcoming Deadlines and Upcoming Assignments Overview.



They can click on the “View All” option available next to the title of each quick view box to navigate to the respective pages, which can otherwise be accessed by clicking on the same pages from the sidebar.

Additionally, the user can also click on any particular Document/Assignment/Announcement on the dashboard to view the chosen option in more detail.

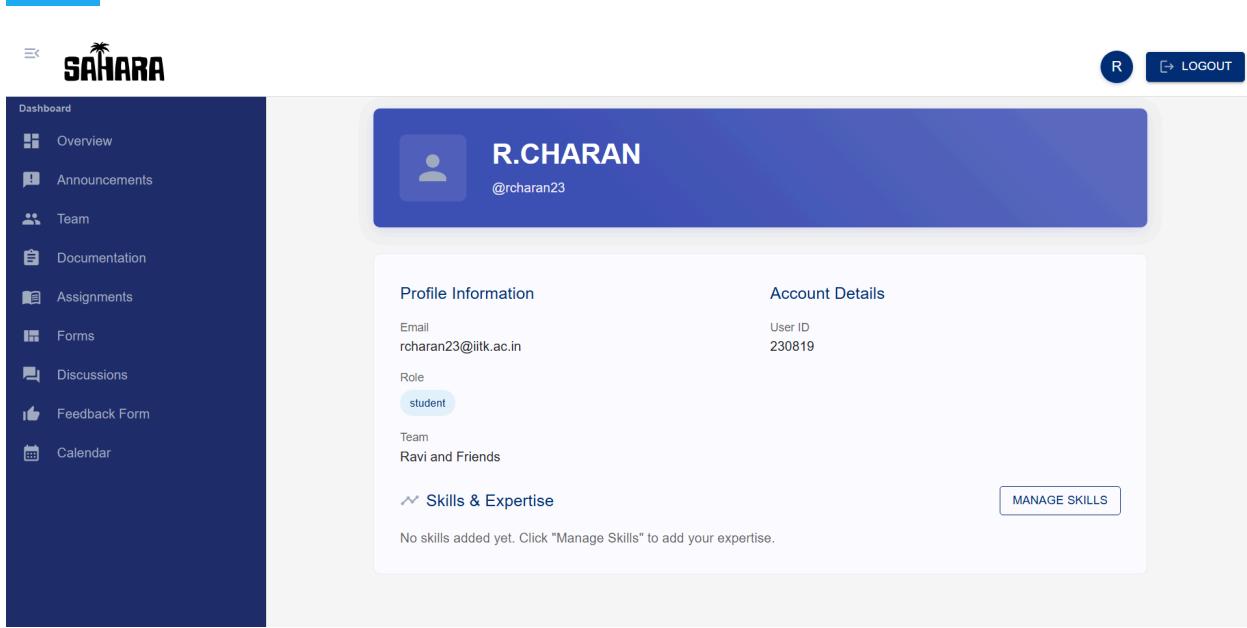


They also have a sidebar with the following options,

1. Dashboard
2. Announcements
3. Team
4. Documentation
5. Assignments
6. Forms
7. Discussions
8. Feedback Form
9. Calendar

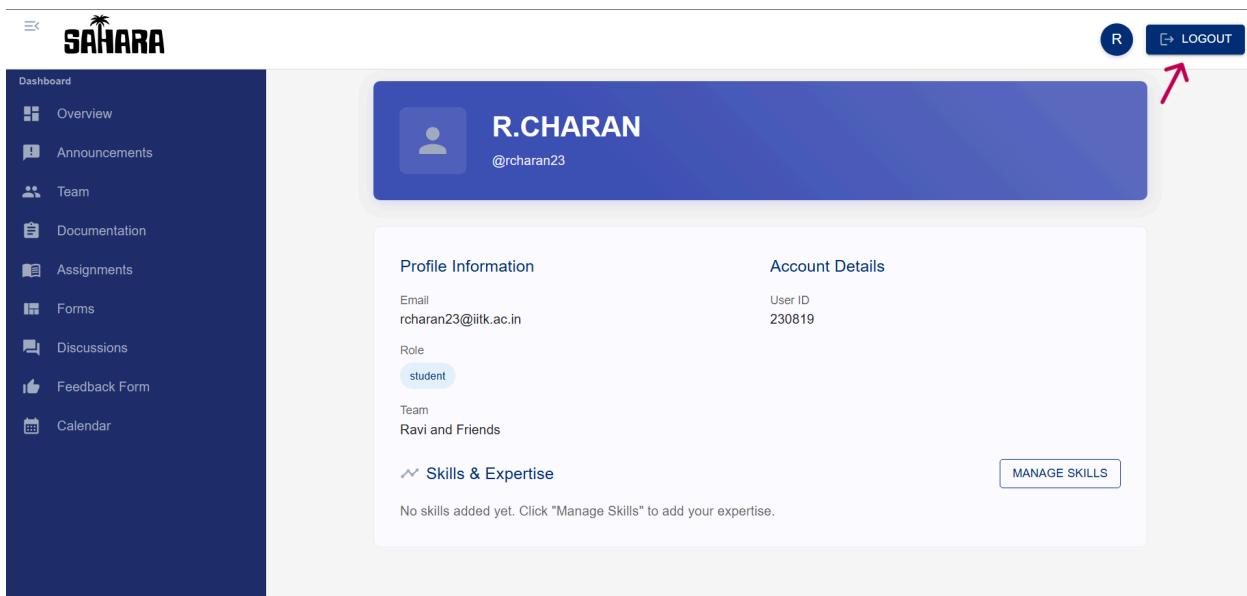
They can click on any of the 9 available options present on the sidebar to navigate to the respective page. Each page is described in more detail below.

The user also has an option to view his/her profile page by clicking on the avatar icon at the top right corner of the page.



This screenshot shows a user profile page from the SAHARA platform. At the top right, there is a circular icon with the letter 'R' and a blue 'LOGOUT' button. The main header features a blue profile picture placeholder and the name 'R.CHARAN' with the handle '@rcharan23'. The left sidebar contains a 'Dashboard' section with various icons and links: Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is divided into two columns: 'Profile Information' (Email: rcharan23@iitk.ac.in, Role: student, Team: Ravi and Friends) and 'Account Details' (User ID: 230819). Below these sections is a 'Skills & Expertise' section with a note: 'No skills added yet. Click "Manage Skills" to add your expertise.' A blue 'MANAGE SKILLS' button is located at the bottom right of this section.

The “logout” button is also present at the top right corner of every page.



This screenshot is identical to the one above, showing the user profile page for 'R.CHARAN'. However, it includes a red arrow pointing to the blue 'LOGOUT' button located at the top right of the page, highlighting its location.

2. Announcements

The screenshot shows the SAHARA platform's Course Announcements page. At the top right, there are user profile and logout icons. On the left, a sidebar menu lists various features: Dashboard, Overview, Announcements (which is selected and highlighted in blue), Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area has a blue header bar with a megaphone icon and the text "Course Announcements". Below it, a sub-header says "View course announcements". A single announcement card is visible, titled "Shell Scripting Announcement" by "Root Admin" on March 28, 2025, at 07:27 PM.

The Announcements page displays all announcements posted by the Professor and Teaching Assistants. Each announcement tab is clickable and on click, it expands to show detailed information.

This screenshot shows the same Course Announcements page, but the "Shell Scripting Announcement" card is now fully expanded. It contains a message from "Root Admin" dated March 28, 2025, at 07:27 PM. The message reads:

Dear Students,
I have released the **shell scripting assignment**. It is *attached below*.

- The deadline for submitting the assignment is March 28 (Friday) Midnight.
- You have to submit the assignment through GRADESCOPE.

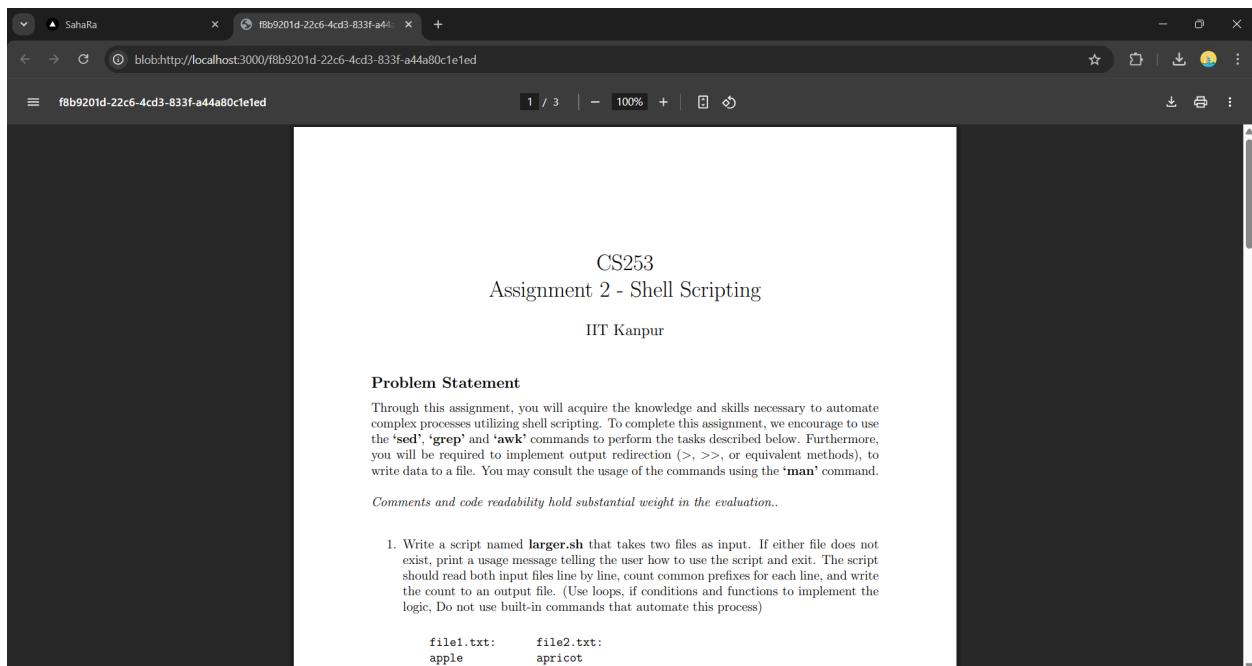
The assignment has been prepared by your TA Aakashdeep Singh. You may directly email him (aakashdeepsingh@cse.iitk.ac.in) if you have any questions.

Best,
Indranil

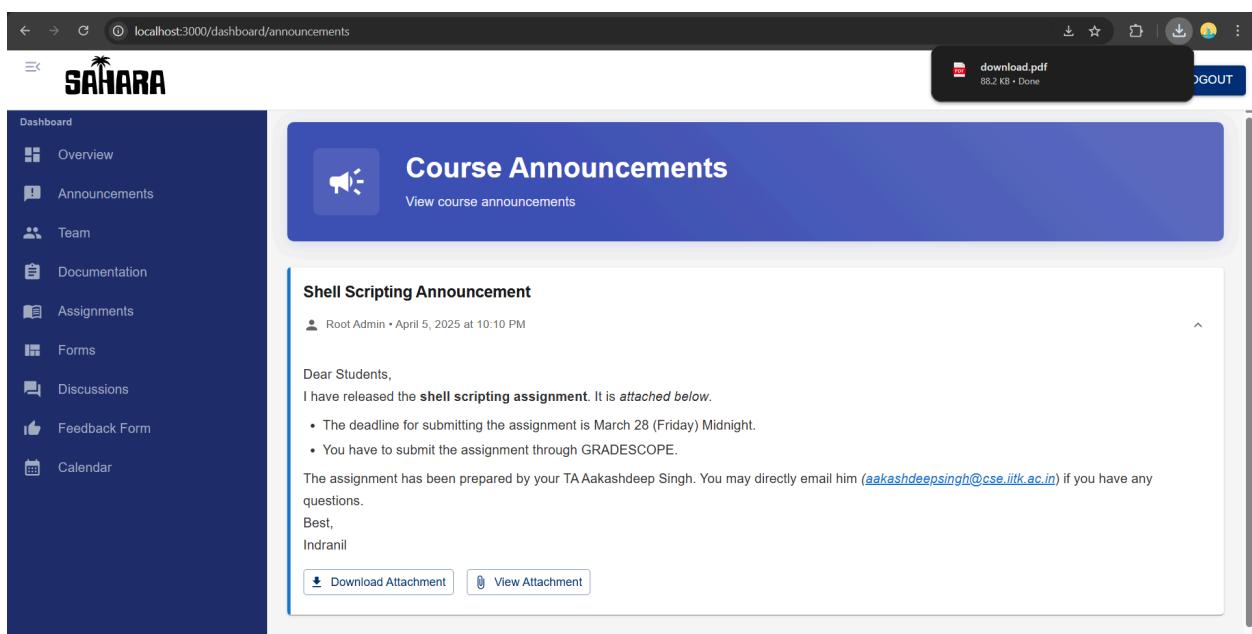
At the bottom of the expanded card, there are two buttons: "Download Attachment" and "View Attachment".

If there are any attached documents, two buttons become available:

- View attachment - Opens the attached document in a new browser tab for viewing



- Download - Opens a dialogue box for you to choose to where to download the attached file



3. Team

The screenshot shows the SAHARA platform's Team Members page. At the top, there is a navigation bar with a logo, user profile, and a 'LOGOUT' button. On the left, a sidebar menu lists various options: Dashboard, Overview, Announcements, Team (which is selected), Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is titled 'Team Members' and displays a team named 'Ravi and Friends' with 11 members. It includes a 'Manage Skills' section with buttons for Node.js, Java, React, and Spring Boot, and a table listing team members with their names and emails.

Name	Email
AARAV OSWAL	aaravoswal23@iitk.ac.in
ACHYUTH HARIKRISHNA WARRIER	achyuthw23@iitk.ac.in
ASHIK STENNY	ashiks23@iitk.ac.in

The Team page shows details of the student's team, including a list of team members and the required skills for the team project.

The student will be able to update the required skills for their project by clicking on the “MANAGE SKILLS” button. On clicking, they will be able to select the set of skills they require from a pool of total available skills to choose from.

The screenshot shows the SAHARA platform's interface. On the left is a dark sidebar with various navigation options like Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main area has a title "Ravi and Friends" with a gear icon. Below it is a "Manage Team Skills" dialog box. This dialog box contains a "Team Skills" section with four buttons: Node.js (green), Java (orange), React (blue), and Spring Boot (green). Below this is a list of skills: React, Node.js, Python, Java, Spring Boot, and MongoDB. Each skill is represented by a colored bar and a small icon. At the bottom right of the dialog box are "CANCEL" and "UPDATE SKILLS" buttons.

Once the required skills are chosen, the user has to click on the “UPDATE SKILLS” button to then save the changes made.

This screenshot is similar to the previous one but shows the "UPDATE SKILLS" button in a blue box, indicating it is the active or next step. The rest of the interface is identical to the first screenshot.

The student will also be able to edit the name of the group by clicking on the *Edit/Pen Icon* present just next to the current team name.

The screenshot shows the SAHARA platform's 'Team Members' section. A modal window titled 'Edit Team Name' is open, showing the current team name 'Ravi and Friends'. Below the modal, a table lists three team members:

Name ↑	Email
AARAV OSWAL	aaravoswal23@iitk.ac.in
ACHYUTH HARIKRISHNA WARRIER	achyuthw23@iitk.ac.in
ASHIK STENNY	ashiks23@iitk.ac.in

They can then enter their new team name in the “Team Name” section and click on the “UPDATE NAME” button to save the new team name.

The student can also invite any other registered student who is not already a part of any group by clicking on the “Invite User to Team” button. They will then have to enter the User ID (Roll Number) of the student whom they wish to invite to the team.

The screenshot shows the SAHARA application's interface. On the left is a dark sidebar with various navigation options: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is titled "Team Members" and displays a team named "Ravi and Friends". A modal window titled "Invite User to Team" is open, containing a text input field for "User ID" and two buttons: "CANCEL" and "INVITE USER". Below the modal, a table lists three team members with their names and emails:

Name	Email
AARAV OSWAL	aaravoswal23@iitk.ac.in
ACHYUTH HARIKRISHNA WARRIER	achyuthw23@iitk.ac.in
ASHIK STENNY	ashiks23@iitk.ac.in

Then click on the “INVITE USER” button to invite the user with the entered roll number.

4. Documentation

The screenshot shows the SAHARA application's interface. On the left is a dark sidebar with various navigation options: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is titled "Project Progress" and shows a progress bar at 0% completion, indicating "0 of 1 documents submitted". Below this, a section titled "Ongoing/Upcoming Documents" lists an assignment titled "User Manual" with the following details: "Assignment" status, "User Manual" title, "Opens at: Apr 3, 2025, 20:30", and "Due on: Apr 10, 2025, 02:00".

The Documentation page lists all required document submissions for the course. Students can delete and re-upload submissions before the deadline.

The screenshot shows the SAHARA Learning Management System (LMS) interface. At the top right, there is a user profile icon with the letter 'R' and a 'LOGOUT' button. On the left, a dark sidebar menu titled 'Dashboard' includes links for Overview, Announcements, Team, Documentation (which is selected), Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area has a blue header bar with 'Project Progress' and '0%'. Below it, a message says '0 of 1 documents submitted' and '1 documents remaining'. The main content section is titled 'Ongoing/Upcoming Documents' and contains a single assignment entry:

Assignment User Manual
Opens at: Apr 3, 2025, 20:30 Due on: Apr 10, 2025, 02:00

Description
Dear Students, Please submit your user manual.

System Instructions
You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.

Question Files

This screenshot shows the same SAHARA LMS interface, but the main content area is focused on a specific assignment submission. The assignment details are identical to the one in the previous screenshot:

Assignment User Manual
Opens at: Apr 3, 2025, 20:30 Due on: Apr 10, 2025, 02:00

Description
Dear Students, Please submit your user manual.

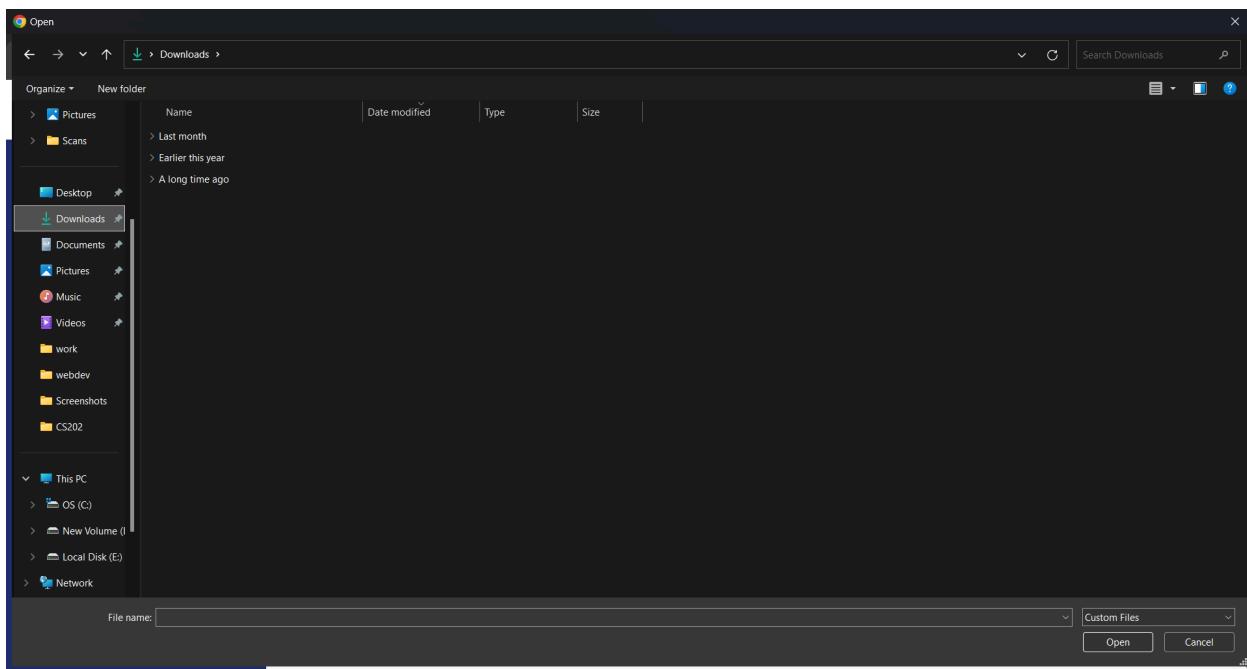
System Instructions
You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.

Question Files

[python_assignment_cs253_2025_41571f76-71a8-477b-a96c-7c81ce9f4eb2.pdf](#)

Results
Results will be available after Apr 10, 2025, 02:00

Submit Document



The screenshot shows the SAHARA dashboard with a sidebar on the left containing links like Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area displays an assignment submission page. It includes sections for Description (Dear Students, Please submit your user manual.), System Instructions (You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.), Question Files (python_assignment_cs253_2025_41571f76-71a8-477b-a96c-7c81ce9f4eb2.pdf), Uploaded Answer Files (Assign1-sol[1].pdf), and Results (Results will be available after Apr 10, 2025, 02:00). A red arrow points to the trash icon next to the uploaded file, and another red arrow points to the 'DELETE SUBMISSION' button at the bottom right.

The screenshot shows the SAHARA dashboard with a sidebar on the left containing links like Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area displays an assignment submission page. A confirmation dialog box is overlaid on the page, asking "localhost:3000 says Are you sure you want to delete this submission?". The dialog has OK and Cancel buttons. The background page content is identical to the one above, including the assignment details and the 'DELETE SUBMISSION' button.

The screenshot shows the SAHARA project progress dashboard. At the top, it displays "Project Progress" with a status of "0%" and "0 of 1 documents submitted". A blue button indicates "1 documents remaining". On the left sidebar, there are several navigation options: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is titled "Ongoing/Upcoming Documents" and lists an assignment titled "User Manual". It shows the assignment opens at April 3, 2025, 20:30 and is due on April 10, 2025, 02:00. The description asks students to submit their user manual. System instructions note an extra 10 minutes after the due time. A file named "python_assignment_cs253_2025_41571f76-71a8-477b-a96c-7c81ce9f4eb2.pdf" is attached. A green success message at the bottom right says "Submission deleted successfully!".

5. Assignments

The screenshot shows the SAHARA assignment progress dashboard. At the top, it displays "Assignment Progress" with a status of "0%" and "0 of 2 assignments submitted". A blue button indicates "2 assignments remaining". On the left sidebar, there are several navigation options: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area is titled "Upcoming/Ongoing Assignments" and lists an assignment titled "CHECK ONCE". It shows the assignment opens at April 4, 2025, 00:30 and is due on April 11, 2025, 11:30. Below this, under "Previous Assignments", there is another assignment titled "Bash Scripting Assignment" with a similar timeline.

Within the **Assignments** section, students can view a list of all active assignments assigned to them. Each entry displays key metadata, including:

- **Assignment Title**
- **Date Assigned**
- **Submission Deadline**

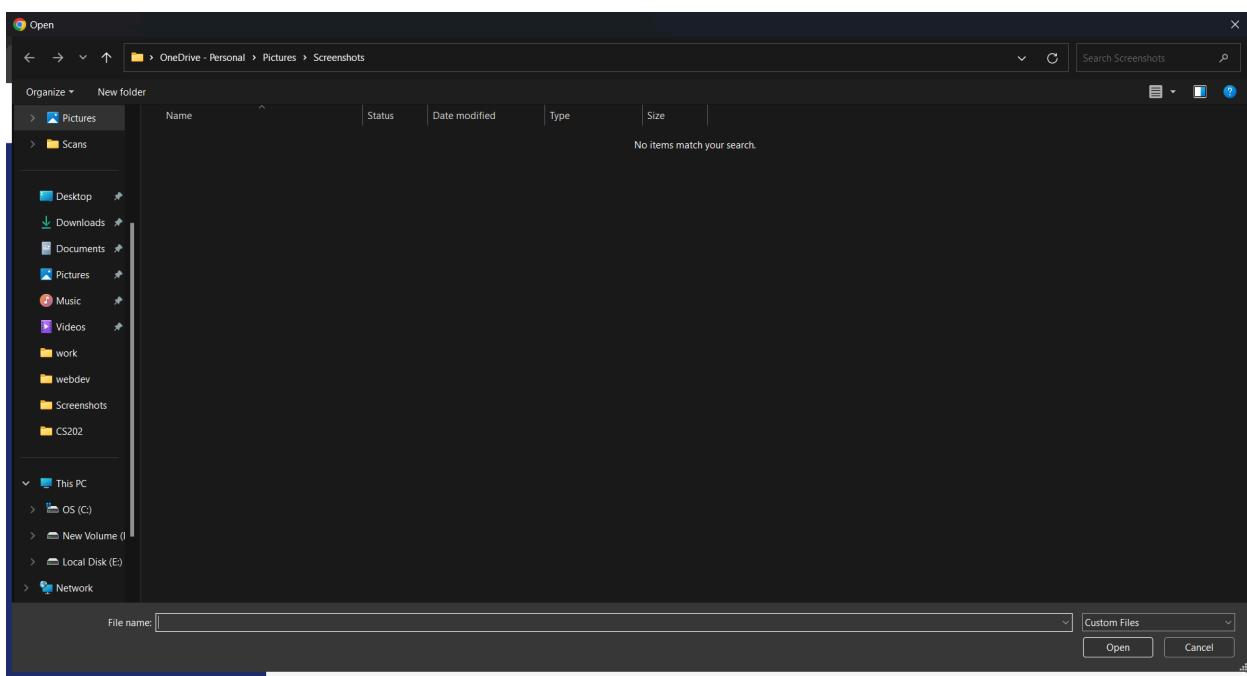
Each assignment item includes an expandable panel, accessible via a side arrow.

Expanding the panel reveals additional details such as:

- **Assignment Description**
- **Relevant Instructions or Notes**
- **Attached Reference Files (if any)**

The screenshot shows the SAHARA Learning Management System (LMS) interface. On the left is a dark sidebar menu with the following items: Dashboard, Overview, Announcements, Team, Documentation, Assignments (which is selected and highlighted in blue), Forms, Discussions, Feedback Form, and Calendar. At the top right are user profile and logout icons. The main content area displays an assignment titled "CHECK ONCE". The assignment details include: "Assignment" button, "CHECK ONCE", "Opens at: Apr 4, 2025, 00:30" and "Due on: Apr 11, 2025, 11:30". Below this are sections for "Description" (containing "CHECK ONCE"), "System Instructions" (noting an extra 10 minutes for late submissions), and "Results" (available after Apr 11, 2025, 11:30). A "SUBMIT ASSIGNMENT" button is located at the bottom right of the panel. At the very bottom of the main content area, there is a link labeled "Previous Assignments".

At the bottom of the expanded view, students have access to a "**Submit Assignment**" button. Clicking this opens a file upload interface where students can attach and submit their completed work.



All submissions are time stamped and validated against the specified deadline.

The student can resubmit their submission and also delete their submission
(multiple submissions are allowed)

The screenshot shows the SAHARA application interface. On the left is a dark blue sidebar with a navigation menu:

- Dashboard
- Overview
- Announcements
- Team
- Documentation
- Assignments
- Forms
- Discussions
- Feedback Form
- Calendar

The main content area displays an assignment titled "Assignment CHECK ONCE". It includes the following sections:

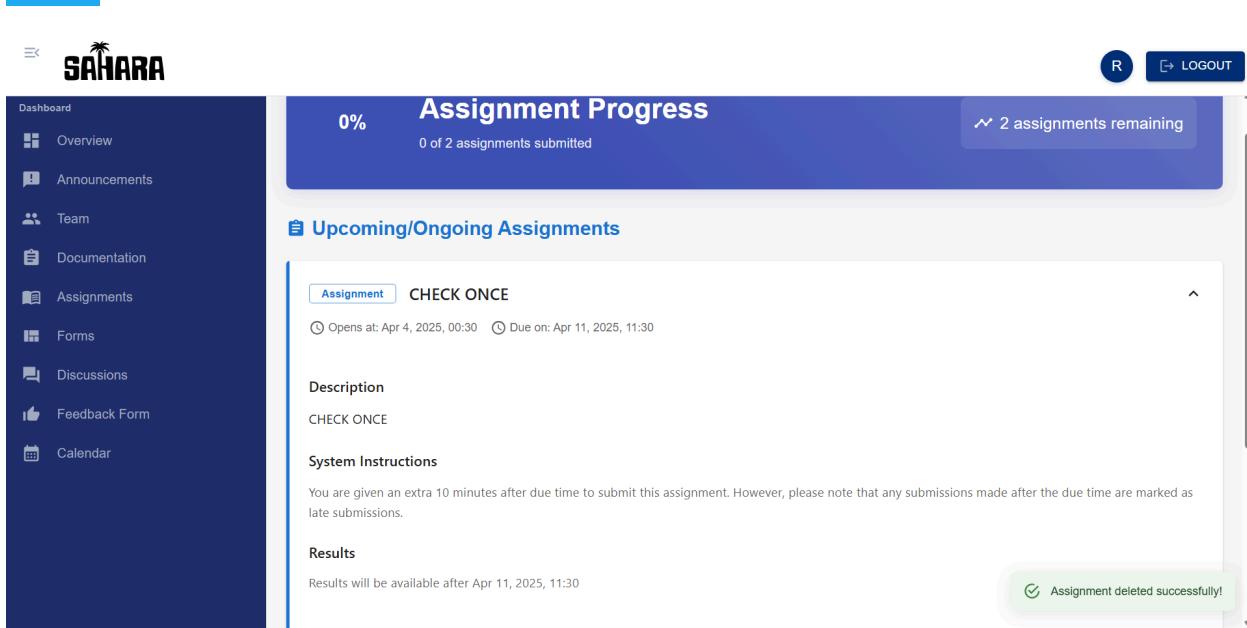
- Description:** CHECK ONCE
- System Instructions:** You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.
- Uploaded Answer Files:** A file named "Assign1-sol[1].pdf" is listed with a delete icon (red bin). A red arrow points to this icon.
- Results:** Results will be available after Apr 11, 2025, 11:30. A red arrow points to the "DELETE SUBMISSION" button below this section.

The screenshot shows the SAHARA application interface. The assignment details are identical to the previous screenshot. A confirmation dialog box is overlaid on the page, reading:

localhost:3000 says
Are you sure you want to delete this assignment?

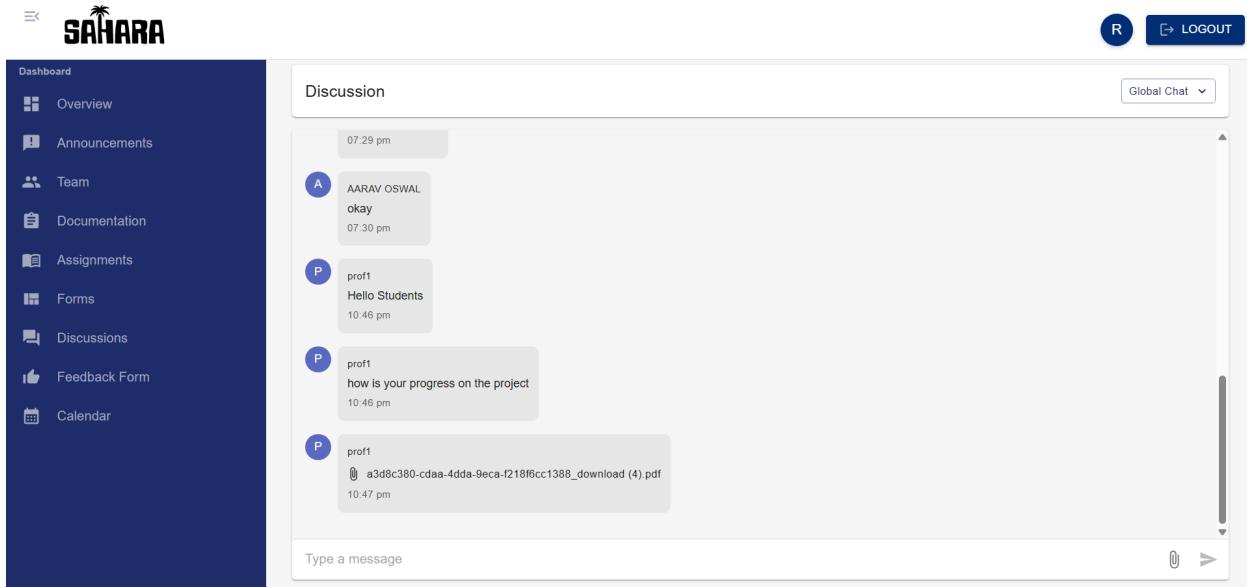
OK Cancel

The "OK" button is highlighted with a red circle. The "DELETE SUBMISSION" button in the main content area is also highlighted with a red circle.



The screenshot shows the Assignment Progress page of the SAHARA platform. At the top, there's a blue header bar with the title "Assignment Progress" and a progress bar showing "0%". Below the header, a message says "0 of 2 assignments submitted" and "2 assignments remaining". On the left, a sidebar menu lists various dashboard items: Overview, Announcements, Team, Documentation, Assignments (which is selected), Forms, Discussions, Feedback Form, and Calendar. The main content area displays an assignment titled "CHECK ONCE" with details: "Opens at: Apr 4, 2025, 00:30" and "Due on: Apr 11, 2025, 11:30". It includes sections for "Description" (CHECK ONCE), "System Instructions" (Note about late submissions), and "Results" (Availability after due date). A green success message at the bottom right says "Assignment deleted successfully!".

6. Discussions



The screenshot shows the Discussion page of the SAHARA platform. At the top, there's a blue header bar with the title "Discussion" and a "Global Chat" button. The main content area shows a conversation between two users: "AARAV OSWAL" and "prof1". The messages are as follows:

- AARAV OSWAL: okay
07:30 pm
- prof1: Hello Students
10:46 pm
- prof1: how is your progress on the project
10:46 pm
- prof1: [a3d8c380-cdaa-4dda-9eca-f218f6cc1388_download \(4\).pdf](#)
10:47 pm

At the bottom, there's a text input field for typing a message and a send button.

Upon accessing the **Discussions** section, students can navigate between three primary chat channels via a **dropdown menu** located at the top-right corner of the interface:

1. **Global Channel** – Includes all registered users within the course.
2. **Team + TA Channel** – Enables communication between team members and the assigned Teaching Assistant.
3. **Team-Only Channel** – Restricted to members of the student's own team.

The screenshot shows the SAHARA platform's interface. On the left is a dark blue sidebar with various navigation links: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions (which is the current page), Feedback Form, and Calendar. The main content area is titled 'Discussion' and shows a list of messages. The messages are as follows:

- AARAV OSWAL: okay (07:30 pm)
- prof1: Hello Students (10:46 pm)
- prof1: how is your progress on the project (10:46 pm)
- prof1: a3d8c380-cdaa-4dda-9eca-f218f6cc1388_download (4).pdf (10:47 pm)

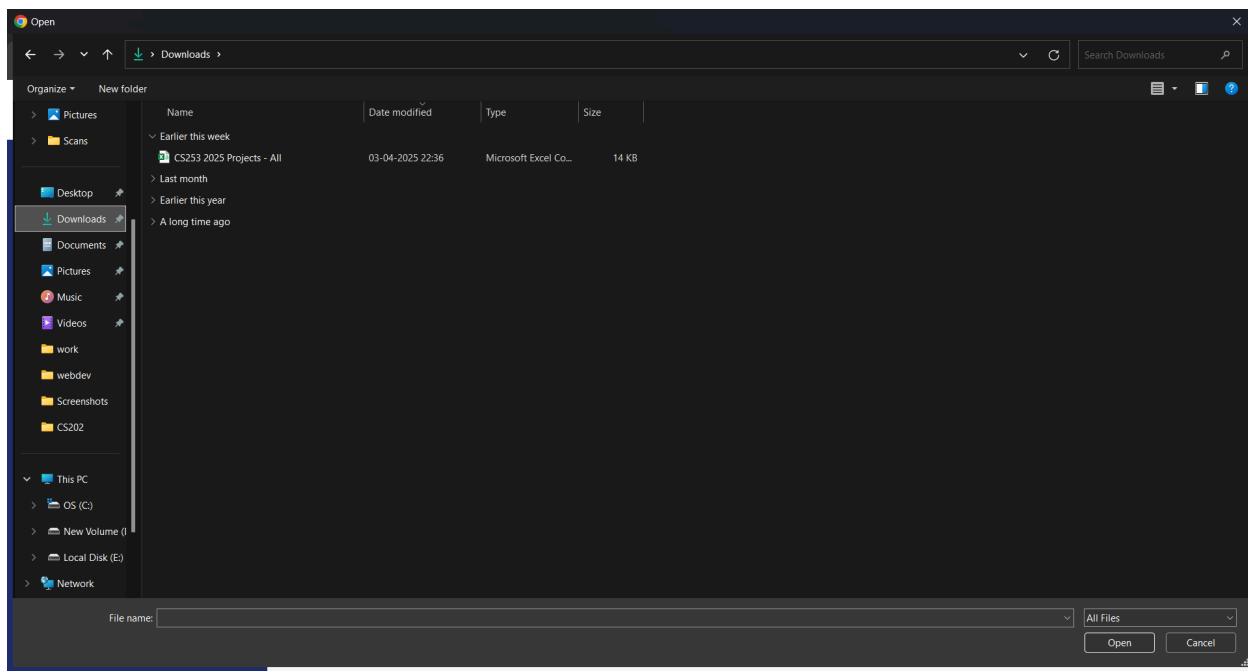
At the bottom of the message list is a text input field labeled 'Type a message' with a send button. In the top right corner, there is a user profile icon (R) and a 'LOGOUT' button. A dropdown menu is open, showing 'Global Chat' with three options: 'Global Chat', 'Team Team 8 Chat', and 'Team Ravi and Friends TA Channel'.

The messaging interface is designed to function like a standard real-time chat platform, supporting:

- **Threaded Conversations**
- **Time Stamped Messages**

The screenshot shows the SAHARA platform interface. On the left is a dark sidebar menu with various options: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main area is titled "Discussion" and contains a message from a user named "prof1" that reads: "hello students you can use this forum to communicate with your assigned ta". Below the message is a text input field labeled "Type a message" and a send button icon.

Additionally, users can **attach and share documents or files** directly within the chat, facilitating collaborative discussions and resource sharing.



All messages and attachments are persistently stored and contextually scoped to their respective channels.

7. Calendar

The screenshot shows the SAHARA platform's calendar view for April 2025. The left sidebar includes links for Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main area has tabs for Global Events (selected), Team Events, and Personal Events. The calendar grid shows dates from April 29 to May 4. Specific events are highlighted: 'Testing Meet' (green) on April 13, 'Trial' (blue) on April 14, 'Last day to Make Teams' (blue) on April 08, 'Our First Team Event' (green) on April 22, and 'Python Assignment' (blue) on April 17. Navigation buttons at the top right include R, LOGOUT, TODAY, AGENDA, MONTH, WEEK, and DAY.

Students have access to a unified calendar view that displays three categories of deadlines:

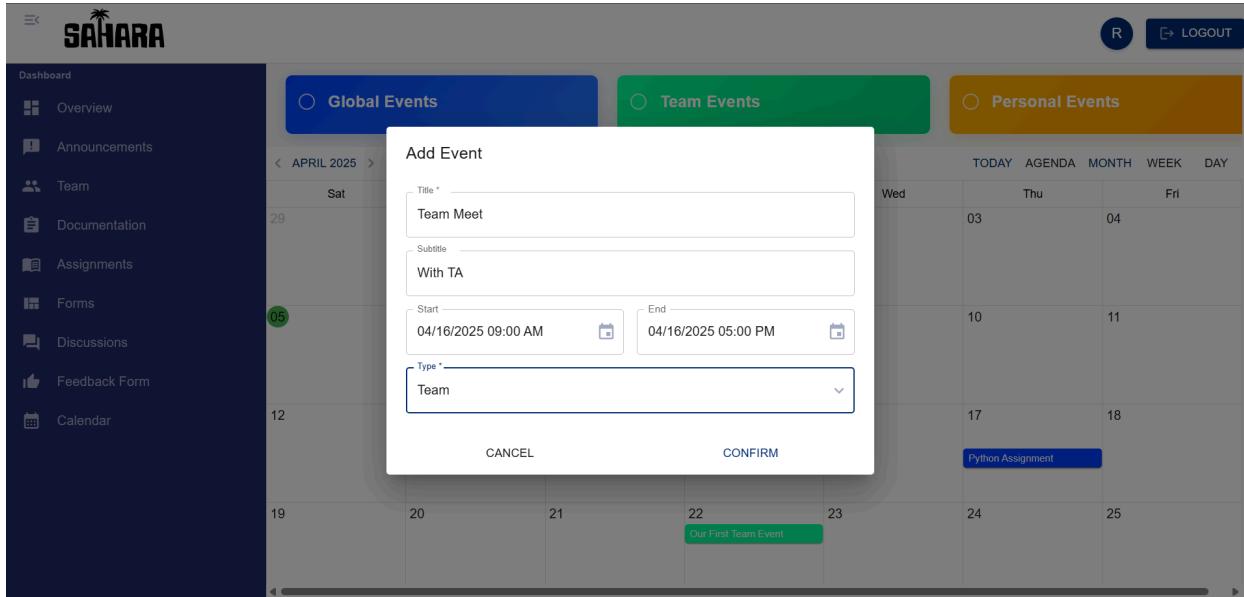
- **Global Deadlines** – System-wide events created by professors; read-only access.
- **Team Deadlines** – Events shared within the student's assigned team; view and create access.
- **Personal Deadlines** – Private events visible only to the student; full create and manage access.

Event Creation Workflow:

Students can create **Team** and **Personal** events by selecting a specific date on the calendar. This action opens an **event creation modal**, where users can input:

- **Event Title**
- **Description**
- **Deadline or Date Range**

- **Event Type** (Team or Personal)
- **Optional Notes or Attachments**



Global deadlines remain non-editable and are managed exclusively by professors.

8. Feedback Form

The screenshot shows the SAHARA platform interface. The left sidebar contains navigation links: Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form (which is highlighted in blue), and Calendar. The main content area is titled "Team Contribution Feedback - Ravi and Friends". It displays a table with columns: "Team Member", "Contribution Percentage (%)", and "Remarks". The table rows list team members with their contribution percentages set to 0 and a "Add remarks" button next to each row.

Team Member	Contribution Percentage (%)	Remarks
student1	0	Add remarks
AARAV OSWAL	0	Add remarks
ACHYUTH HARIKRISHNA WARRIER	0	Add remarks
ASHIK STENNY	0	Add remarks
DIVI POTHUKUCHI	0	Add remarks
HARSHPREET KAUR	0	Add remarks
POTHUGANTI NIKHIL	0	Add remarks

Upon accessing the **Feedback Form**, students are required to evaluate the contributions of each team member by:

- **Allocating a percentage value** representing individual contribution.
- **Providing optional textual remarks** for each team member.

The screenshot shows a user interface for a feedback form. On the left is a dark sidebar with a navigation menu containing links like Dashboard, Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The main content area displays a list of six team members with their names, scores, and a 'Add remarks' field. The scores are: DIVI POTHUKUCHI (10), HARSHPREET KAUR (8.5), POTHUGANTI NIKHIL (10), R.CHARAN (You) (10), RAVI ARORA (10), and SPANDAN PATI (9.5). Below this is a 'Total' row showing '98.00%' with a note 'Total must equal 100%'. At the bottom is a 'SUBMIT FEEDBACK' button.

Member	Score	Action
DIVI POTHUKUCHI	10	Add remarks
HARSHPREET KAUR	8.5	Add remarks
POTHUGANTI NIKHIL	10	Add remarks
R.CHARAN (You)	10	Add remarks
RAVI ARORA	10	Add remarks
SPANDAN PATI	9.5	Add remarks
VEDHANTH BALASUBRAMANIAN	0	Add remarks
Total	98.00%	Total must equal 100%

Key functionalities and constraints:

- The form enforces a **hard validation rule**: the total percentage across all team members must **sum to exactly 100%** before submission is permitted.
- This is a **one-time submittable form**. Once submitted, the form becomes **read-only**.
- If the student revisits the page post-submission, the form fields are disabled and the **submitted data**, along with the **timestamp of submission**, is displayed at the top of the page for reference.

The screenshot shows a user interface for a platform called SAHARA. On the left is a dark blue sidebar with a menu:

- Dashboard
- Overview
- Announcements
- Team
- Documentation
- Assignments
- Forms
- Discussions
- Feedback Form
- Calendar

The main area displays a list of users with their scores and a success message.

DIVI POTHUKUCHI	10	Add remarks
HARSHPREET KAUR	8.5	Add remarks
POTHUGANTI NIKHIL	10	Add remarks
R.CHARAN (You)	10	Add remarks
RAVI ARORA	10	Add remarks
SPANDAN PATI	9.5	Add remarks
VEDHANTH BALASUBRAMANIAN	02	Add remarks
Total	100.00%	

A green notification bar at the bottom right says "Feedback submitted successfully!" with a checkmark icon.

This ensures fairness, accountability, and transparency in peer evaluations during team-based assignments or projects.

9. Profile Page

The screenshot shows the SAHARA application's profile page. At the top right, there is a user icon with the letter 'H' and a 'LOGOUT' button. The main header displays the name 'HARSHPREET KAUR' and the handle '@harshpreet23'. On the left, a dark sidebar menu titled 'Dashboard' lists various features: Overview, Announcements, Team, Documentation, Assignments, Forms, Discussions, Feedback Form, and Calendar. The central content area is divided into sections: 'Profile Information' (Email: harshpreet23@itk.ac.in, Role: student, Team: Ravi and Friends), 'Account Details' (User ID: 230464), and 'Skills & Expertise' (React, Node.js, Python, MongoDB). A 'MANAGE SKILLS' button is located at the bottom right of the skills section.

The student can access his personal profile by clicking on the **avatar icon** located in the top-right corner of the interface. This action opens the **Profile Page**, which displays key user-specific information including:

- **Email ID**
- **User ID**
- **Role (e.g., Student)**
- **Skills and Areas of Expertise**

A "**Manage Skills**" button is provided, enabling the professor to update, add, or remove their listed skills and expertise. All changes are reflected in real-time and stored persistently within the system.

TA'S FEATURES

1. Dashboard

On successful login, the user lands on the Dashboard. On the dashboard page, the ta will be able to view all recent announcements. Some features of the dashboard are as follows:

- **Recent announcements** are visible and clickable. Clicking on any particular announcement opens the Announcements page and expands that particular announcement.
- Active Teams, Number of deadlines and new discussions are displayed.
- **Pending Gradeables** are displayed beside Recent Announcements.
- Clicking “**View All**” on either Pending Gradeables or Recent Announcements opens the respective pages.

They also have a sidebar with the following options,

1. Overview
2. Announcements
3. Gradeables
4. Assignments
5. Submissions
6. People
7. Discussions
8. Feedback Form

9. Calendar

The screenshot shows the SAHARA application's dashboard. At the top right, there is a user icon with a dropdown arrow and a "LOGOUT" button. On the far left is a dark sidebar with a collapse menu icon at the top. Below it is a list of ten items: Dashboard, Overview, Announcements, Gradeables, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has a blue header bar with the text "Good Evening, User" and a graduation cap icon. Below this, a message says "Grade submissions and provide guidance to students". The main content area contains several cards: "Pending Grading" (0), "Active Teams" (12), "This Week" (3 Deadlines), and "New Discussions" (5). There are also sections for "Pending Gradeables" (No pending gradeables) and "Recent Announcements" (Test Announcement, Shell Scripting Announcement).

They can click on any of the 10 available options present on the sidebar to navigate to the respective page. Clicking **Overview** on any page takes the user back to the dashboard. Each page is described in more detail below.

The user also has an option to logout of his account at any time by clicking on the “LOGOUT” button present at the top right corner of every page. The sidebar can be contracted by clicking the “**Collapse Menu**” button on the top left of the screen.

2. Announcements

The Announcements page displays all announcements posted by the Professor and Teaching Assistants. Each announcement tab is clickable and on click, it expands to show detailed information.

The screenshot shows the SAHARA Learning Management System (LMS) interface. At the top left, there is a blue horizontal bar with a small white icon. Below it, a dark blue header bar contains the text "Click to go back, hold to see history" and the SAHARA logo. On the right side of the header are user profile icons and a "LOGOUT" button. The main content area has a light blue background. On the left, a sidebar titled "Dashboard" lists various management functions: Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The "Announcements" link is currently selected, indicated by a blue border. The main content area is titled "Course Announcements" and includes a sub-header "View and manage course announcements". A "Create Announcement" button is located in the top right corner of this section. Below this, four announcement cards are listed: "Mid Semester Examination" (Root Admin, March 28, 2025 at 07:44 PM), "Quiz Grades Released" (Root Admin, March 28, 2025 at 07:44 PM), "Library Management System" (Root Admin, March 28, 2025 at 07:39 PM), and "Shell Scripting Announcement". Each card has a small trash can icon in its top right corner.

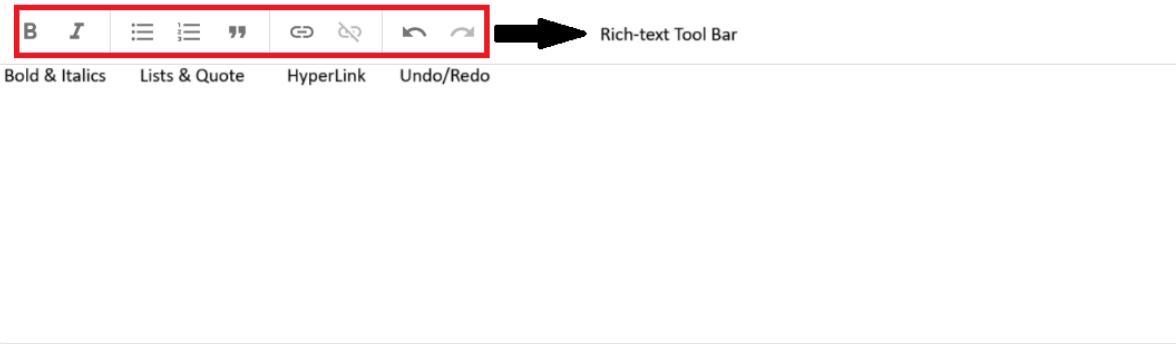
If there are any attached documents, two buttons become available:

- View attachment - Opens the attached document in a new browser tab for viewing
- Download - Opens a dialogue box for you to choose to where to download the attached file

Create New Announcement

Title *

Announcement Content *

A screenshot of a web-based rich-text editor interface. At the top, there is a toolbar with various icons for bold, italic, lists, quotes, links, and undo/redo. Below the toolbar is a large text area for input. A red box highlights the first two icons in the toolbar (bold and italic). An arrow points from the text "Rich-text Tool Bar" to the right side of the toolbar. Below the text area, there is a dashed-line box containing an "UPLOAD FILE (OPTIONAL)" button with a cloud icon and the text "Accepted files: PDF, Word, or Image (Max size: 50MB)". At the bottom right are "CANCEL" and "CREATE" buttons.

Rich-text Tool Bar

B I Lists & Quote HyperLink Undo/Redo

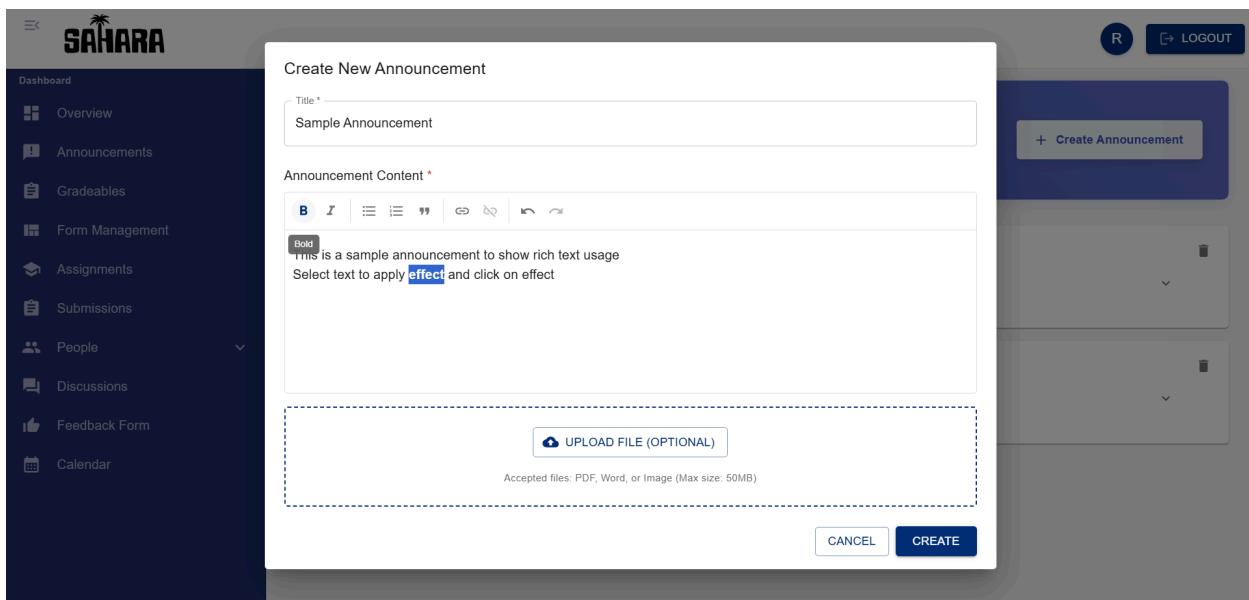
UPLOAD FILE (OPTIONAL)

Accepted files: PDF, Word, or Image (Max size: 50MB)

CANCEL CREATE

The description field has a “rich-text” feature that the user can use to include the following features in their description - bold, italics, adding links, quotations, lists etc.

To apply effects to a part of the description text, the user has to select the text and click on the required feature option available at the top edge of the description box.



To cancel the announcement creation, the user must click either on the cancel button or outside the announcement creation box. To upload, simply click create. Note that an announcement cannot be created unless both title and description are filled.

The user will also be able to **delete** an announcement by clicking on the red trash can icon available next to each announcement.

The screenshot shows the SAHARA platform's course announcements section. On the left is a dark sidebar with various navigation options like Dashboard, Overview, Announcements, Gradeables, etc. The main area is titled "Course Announcements" with a subtitle "View and manage course announcements". It lists several announcements:

- "Mid Semester Exam Dates" by Root Admin, March 28, 2025 at 07:44 PM
- "Quiz Grade" by Root Admin, March 28, 2025 at 07:44 PM
- "Library Management System" by Root Admin, March 28, 2025 at 07:39 PM
- "Shell Scripting Announcement" by Root Admin, March 28, 2025 at 07:27 PM

A modal dialog box is open over the "Quiz Grade" announcement, asking "Delete Announcement". It contains the message "Are you sure you want to delete this announcement? This action cannot be undone." with "CANCEL" and "DELETE" buttons.

The user will also be able to view all previously added announcements. The user can click on the downward arrow next to each announcement to view each announcement in more detail.

This screenshot shows the same SAHARA interface, but the "Shell Scripting Announcement" has been expanded to show its full content. The announcement text reads:

Dear Students,
I have released the **shell scripting assignment**. It is *attached below*.
• The deadline for submitting the assignment is March 28 (Friday) Midnight.
• You have to submit the assignment through GRADESCOPE.

The assignment has been prepared by your TA Aakashdeep Singh. You may directly email him (aakashdeepsingh@cse.iitk.ac.in) if you have any questions.
Best,
Indranil

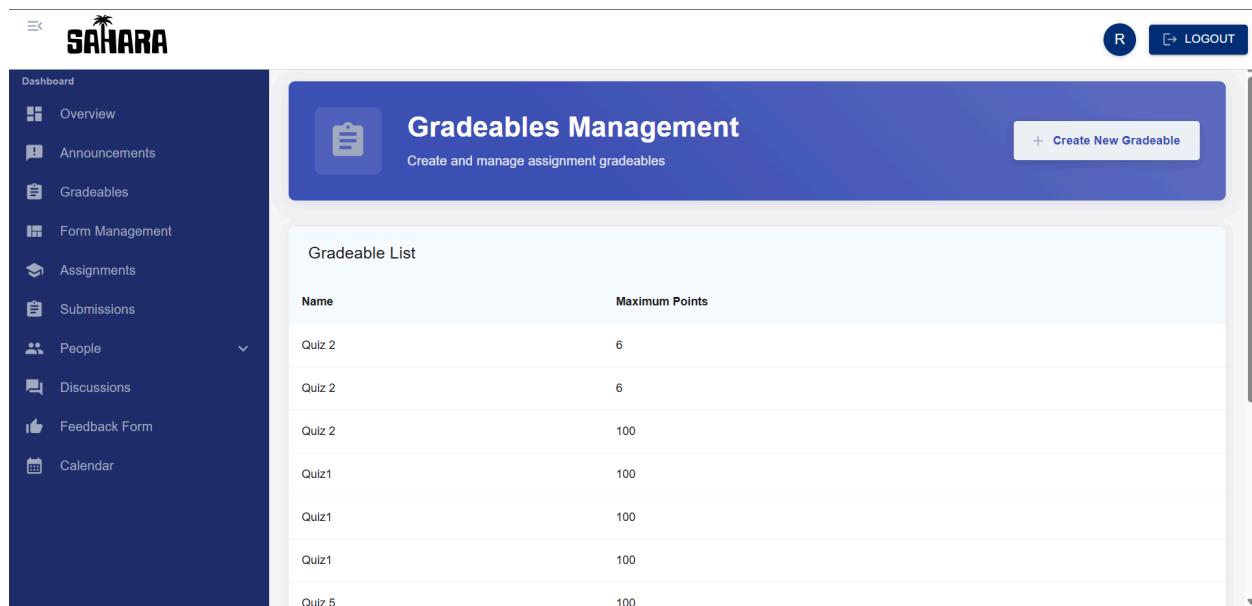
At the bottom of the expanded announcement, there are two buttons: "Download Attachment" and "View Attachment".

On clicking the “**View attachment**” button for each announcement, the attached file is opened in a new tab in the browser. On clicking “**Download Attachment**”,

the system prompts the user to select a location to download the file to on their device.

3. Gradeables

The Gradeables page displays a list of tests with their name and maximum scorable points. On clicking any row of the list, a new page loads which provides great detail of the statistics of the quiz.



The screenshot shows the SAHARA application's Gradeables Management page. The left sidebar contains navigation links for Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has a header "Gradeables Management" with a sub-header "Create and manage assignment gradeables" and a "Create New Gradeable" button. Below this is a "Gradeable List" table with columns "Name" and "Maximum Points". The data in the table is as follows:

Name	Maximum Points
Quiz 2	6
Quiz 2	6
Quiz 2	100
Quiz1	100
Quiz1	100
Quiz1	100
Quiz 5	100

Some of the features available for viewing each test in Gradeables page are:

1. Histogram graph displaying No. of Students vs Marks
2. Exact count in graph presented when mouse is hovered over a bar
3. List of marks achieved by each student
4. Sorting the list by Roll No, Name or Score

5. Mean, mode, median and variance of the test at the bottom of the page

Quiz 2
204 student submissions

Mean Score: 5.66

Student ID	Name ↑	Score
220004	AADI SINGH	5
220010	AADYA DHIR	5
230011	AARADHYA ROHI	4
230012	AARAV OSWAL	6
230015	AARSH JAIN	6
230017	AARUSH NARENDRA GHATE	4
220020	AAYUSH GAUTAM	6

Score Distribution

Number of Students

0 2 3 4 5 6 100

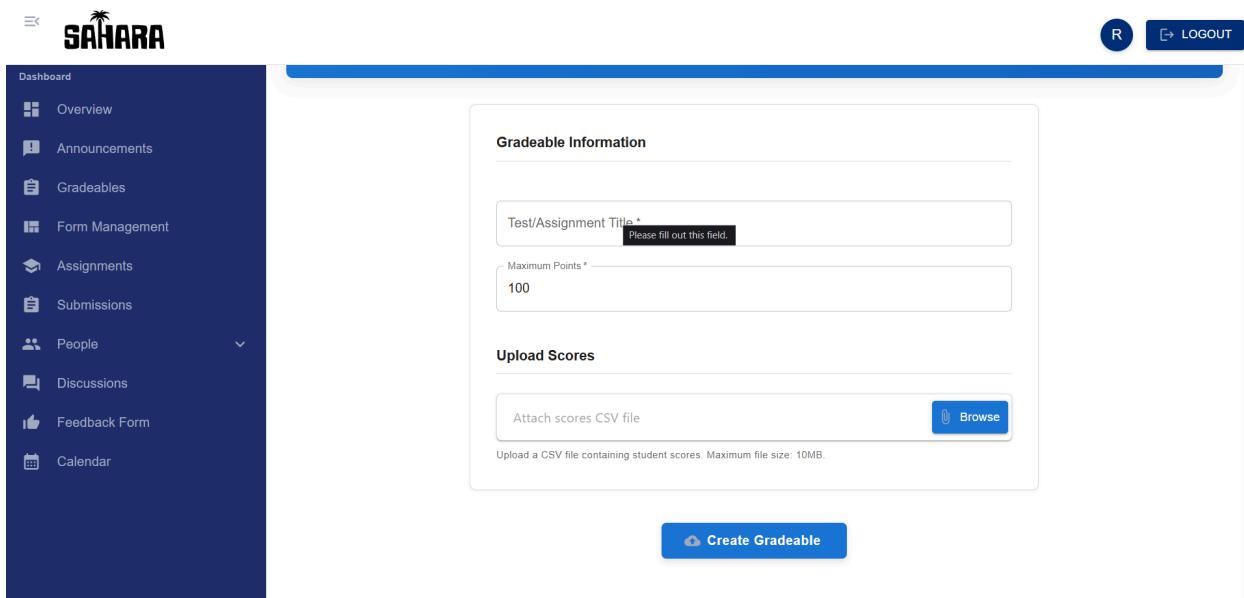
Student ID	Name ↑	Score
220004	AADI SINGH	5
220010	AADYA DHIR	5
230011	AARADHYA ROHI	4
230012	AARAV OSWAL	6
230015	AARSH JAIN	6
230017	AARUSH NARENDRA GHATE	4
220020	AAYUSH GAUTAM	6

Score Statistics

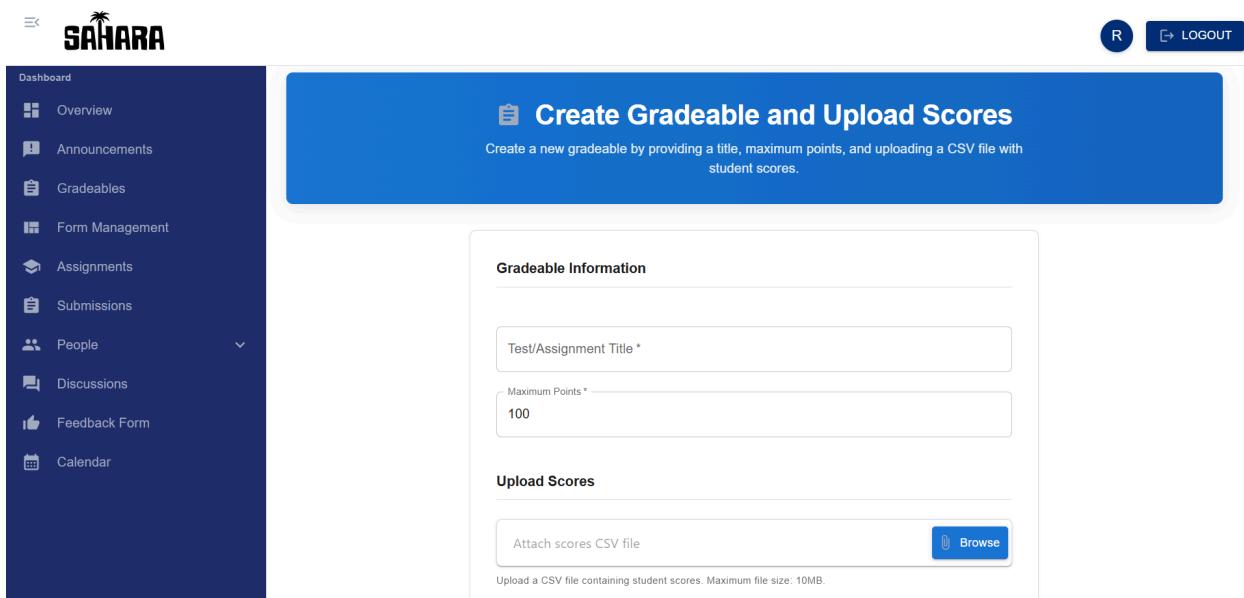
Mean Score 5.66	Median Score 6.00	Mode Score 6.00	Variance 45.55
---------------------------	-----------------------------	---------------------------	--------------------------

The user can create gradeables by clicking on the “**Create New Gradeable**” button at the top right of the screen. On clicking it, a new screen loads, prompting the user for the following:

- **Gradeable information:** Title of Test/Assignment (required) and Maximum Points (required).
- CSV file containing student scores (required). On clicking the “**Browse**” button, the user is prompted to upload a file from their device.
- Finally, clicking the “**Create Gradeable**” option at the bottom of the page uploads the provided information (if in correct format).



The screenshot shows the SAHARA dashboard with a sidebar on the left containing links like Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area is titled "Gradeable Information" and contains fields for "Test/Assignment Title" (with a placeholder "Please fill out this field.") and "Maximum Points" (set to 100). Below this is a "Upload Scores" section with a "Browse" button and a note about CSV file size. At the bottom is a blue "Create Gradeable" button.



The screenshot shows the SAHARA dashboard with a sidebar on the left. A blue modal window is open with the title "Create Gradeable and Upload Scores" and the sub-instruction "Create a new gradeable by providing a title, maximum points, and uploading a CSV file with student scores." Inside the modal is the same "Gradeable Information" form as the previous screenshot, including fields for title and points, an "Upload Scores" section, and a "Create Gradeable" button.

4. Assignments

The screenshot shows the SAHARA Learning Management System (LMS) interface. At the top right, there is a user profile icon with the letter 'R' and a 'LOGOUT' button. On the far left is a vertical sidebar with a dark blue header containing the 'SAHARA' logo, which includes a stylized palm tree icon. Below the header, the sidebar lists various navigation items: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (which is the active tab, indicated by a blue background), Submissions, People, Discussions, Feedback Form, and Calendar. The main content area has a light blue header bar with the title 'Assignments' and a sub-instruction 'Create and manage course assignments'. To the right of the title is a 'Create Assignment' button. The main content is divided into two sections: 'Ongoing/Upcoming Documents' and 'Previous Documents'. Each section contains a single assignment entry. The first entry in 'Ongoing/Upcoming Documents' is titled 'Assignment' and 'CHECK ONCE', with a note that it 'Opens at: Apr 4, 2025, 00:30' and 'Due on: Apr 11, 2025, 11:30'. The second entry in 'Previous Documents' is titled 'Assignment' and 'Bash Scripting Assignment', with a note that it 'Opens at: Mar 15, 2025, 00:00' and 'Due on: Mar 29, 2025, 00:00'. Each assignment entry includes a small expand/collapse icon to its right.

The **Assignments** page provides professors with a comprehensive overview of all assignments created to date. Each assignment entry in the list displays the following metadata:

- **Assignment Title**
- **Issued Date**
- **Due Date**

Each assignment entry includes a **collapsible toggle (expand icon)** that, when activated, reveals additional information such as:

- **Detailed Description**
- **Action Controls:**
 - **Edit** – Opens an editable form to modify assignment details.

- **Delete** – Permanently removes the assignment from the system after confirmation.

Assignments

Create and manage course assignments

Ongoing/Upcoming Documents

Assignment **CHECK ONCE**

Opens at: Apr 4, 2025, 00:30 Due on: Apr 11, 2025, 11:30

Description
CHECK ONCE

System Instructions
You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.

Results

View All Submissions Update Assignment Delete Assignment

Description
CHECK ONCE

System Instructions
You are given an extra 10 minutes after due time to submit this assignment. However, please note that any submissions made after the due time are marked as late submissions.

Results
Results will be available after Apr 11, 2025, 11:30

View All Submissions **Update Assignment** **Delete Assignment**

Previous Documents

Assignment **Bash Scripting Assignment**

Opens at: Mar 15, 2025, 00:00 Due on: Mar 29, 2025, 00:00

Creating a New Assignment

A "New Assignment" button is located at the top-right corner of the interface. Clicking this button navigates the user to an assignment creation form, structurally similar to the *Submittables* module. In this form, the professor can input:

- **Assignment Title**
- **Detailed Description**
- **Due Date**
- **Optional File Attachment** – Professors can upload a reference or sample file to illustrate the expected structure or content of the submission.

The screenshot shows the SAHARA software interface. On the left is a dark sidebar with navigation links: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments (highlighted in blue), Submissions, People, Discussions, Feedback Form, and Calendar. At the top right are a profile icon, a dropdown menu, and a 'LOGOUT' button. The main area has a blue header bar with a cloud icon and the text 'Create Assignment'. Below it, a sub-header says 'Create a new assignment for your students to complete'. The form fields include:

- Name*: Python Assignment
- Maximum Score*: 101
- Enter the maximum possible score for this assignment
- Opens At*: April 05, 2025 12:00 AM
- Due Date*: April 12, 2025 12:00 AM
- Description*: Dear Students,
Please find attached the Python assignment. The submission of this is April 12th, 2025.
- Reference File (Optional): A file named 'Practice Questions_SEE 211_SNT_5114b426-228d-44c7-a8fe-8d3cf489a27d.pdf' is uploaded.

At the bottom are 'Cancel' and 'Create Assignment' buttons.

Upon clicking the "Create Assignment" button, the new assignment is saved and immediately reflected in the main assignments list.

5. Submissions

The **Submissions Management Interface** provides professors with a comprehensive view of all required document submissions, categorized by team and/or individual students. Each submission entry includes the following metadata:

- **Title** of the submission.

- **Opening date/time** (when the submission becomes accessible to students).
- **Due date/time** (deadline for submission).

Each submission row features an **expandable panel**, accessible via a toggle arrow, which reveals additional assignment details such as:

- Submission description or guidelines.
- List of submitted files (if any).
- Associated metadata (e.g., who submitted, when it was submitted).
-

On clicking “**View All Submissions**”, the following page is shown:

Professors are provided with administrative controls for each submission, including:

- **Update Submission:** Modify the assignment’s properties.
- **Delete Submission:** Permanently remove the assignment and all associated submissions.

At the top-right corner of the interface, there is a “**Create New Submittable**” button. Clicking this opens a modal window (or a separate view) where the professor can define the following attributes for a new assignment:

- **Title/Heading:** The name of the submittable.
- **Maximum Score:** The total marks the assignment will be graded out of.
- **Opening Date/Time** and **Due Date/Time:** Scheduling information.
- **Description:** Additional instructions or context for the students.
- **Reference File (optional):** An attachable file that may contain a template, format guideline, or any reference material.

After configuring the above fields, clicking the “**Create Submittable**” button finalizes and publishes the new assignment, making it available to students according to the specified schedule.

6. People

ID	Name	Email	Role
220004	AADI SINGH	aadis22@iitk.ac.in	Student
220010	AADY A DHIR	aadyad22@iitk.ac.in	Student
230011	AARADHYA ROHI	aaradhyra23@iitk.ac.in	Student
230012	AARAV OSWAL	aaravoswal23@iitk.ac.in	Student
230015	AARSH JAIN	aarshjain23@iitk.ac.in	Student
230017	AARUSH NARENDRA GHATE	aarushrg23@iitk.ac.in	Student
220020	AAYUSH GAUTAM	aayushg22@iitk.ac.in	Student
230027	AAYUSH KUMAR	aayushk23@iitk.ac.in	Student

2347	pa6	pa6@gmail.com	Student
234	pa7	pa7@gmail.com	Student
232	pa8	pa8@gmail.com	Student
231	pa9	pa9@gmail.com	Student
3	prof1	prof1@gmail.com	Professor
2	student1	student1@gmail.com	Student
2301	ta1	ta1@iitk.ac.in	TA
2310	ta10	ta10@iitk.ac.in	TA
2302	ta2	ta2@iitk.ac.in	TA
2303	ta3	ta3@iitk.ac.in	TA
2304	ta4	ta4@iitk.ac.in	TA
2305	ta5	ta5@iitk.ac.in	TA
2306	ta6	ta6@iitk.ac.in	TA
2307	ta7	ta7@iitk.ac.in	TA
2308	ta8	ta8@iitk.ac.in	TA
2309	ta9	ta9@iitk.ac.in	TA

This tab provides a comprehensive list of all users enrolled in the course.

Features:

- **User Listing:** Displays detailed information of all registered students.
- **Data Export:** Option to export the user list to an Excel (.xlsx) file for offline access or record-keeping.
- **Team Management Controls** (*located at the bottom of the user list*):
 - **Create Teams:** Allows the ta to bulk create teams by uploading a CSV file. The CSV must follow a predefined format (refer to documentation for template).
 - **View Team Details:** Navigates to a detailed view of all currently formed teams.

Note: Students can also form teams independently via an invitation-based system, which is described under the student-side functionality.

Upon clicking **View Team Details**, professors are presented with:

- **Team Overview:** A tabulated view of all created teams, including team name, members, and any associated metadata.
- **Team Status Check:** If all enrolled students are assigned to a team, the system enables the option to proceed with **beta testing assignments** (peer review or testing across teams).
- **Data Export:** Option to download the complete team details as an Excel file.

Following is displayed on clicking “**Create New Team**” under Team Formation Status:

The user is expected to upload a CSV file in a valid format as mentioned.

7. Discussions

The screenshot shows the SAHARA LMS interface. On the left is a dark sidebar with a navigation menu:

- Dashboard
- Overview
- Announcements
- Gradeables
- Assignments
- Submissions
- People
- Discussions** (highlighted in blue)
- Feedback Form
- Calendar

The main area is titled "Discussion". It shows a list of messages from users "DIVI POTUKUCHI", "AARAV OSWAL", and "prof1". The messages are timestamped at 07:29 pm, 07:30 pm, 10:46 pm, and 10:47 pm. The message from "prof1" at 10:47 pm includes a file attachment: "a3d8c380-cdaa-4dda-9eca-f218f6cc1388_download (4).pdf". At the bottom of the discussion list is a text input field labeled "Type a message".

In the top right corner, there is a "LOGOUT" button and a dropdown menu labeled "Global Chat" which lists several channels:

- Global Chat
- Team Team 10 TA Channel
- Team Team 15 TA Channel
- Team Team 7 TA Channel
- Team Team 13 TA Channel

Upon accessing the **Discussions** section, tas can navigate between two primary chat channels via a **dropdown menu** located at the top-right corner of the interface:

- **Global Channel** – Includes all registered users within the course.
- **Team + TA Channel** – Enables communication between team members and the assigned Teaching Assistant.

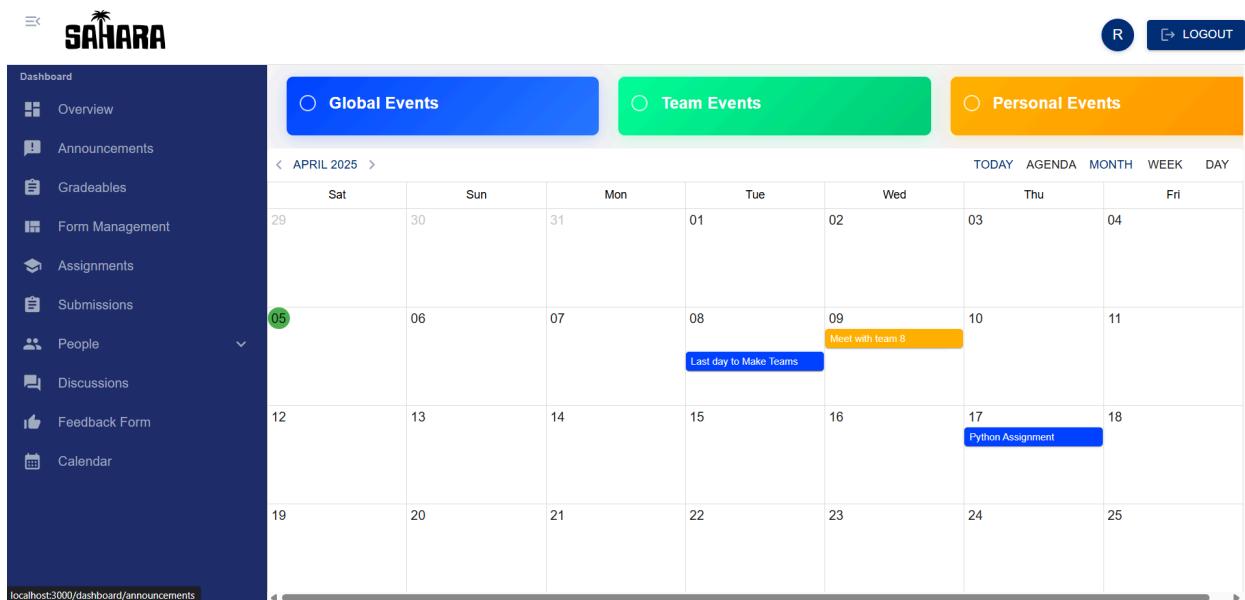
The messaging interface is designed to function like a standard real-time chat platform, supporting:

- **Threaded Conversations**
- **Time Stamped Messages**

Additionally, users can **attach and share documents or files** directly within the chat, facilitating collaborative discussions and resource sharing.

All messages and attachments are persistently stored and contextually scoped to their respective channels.

8. Calendar



The screenshot shows the SAHARA student dashboard with a sidebar on the left containing links like Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main area features a calendar for April 2025 with three tabs at the top: Global Events (blue), Team Events (green, selected), and Personal Events (orange). The calendar grid shows dates from 29 to 25. A green circle highlights the 05th. Two events are listed: 'Meet with team 8' on the 09th and 'Python Assignment' on the 17th. Navigation buttons at the bottom include arrows for month navigation and links for TODAY, AGENDA, MONTH, WEEK, and DAY.

Students have access to a unified calendar view that displays three categories of deadlines:

- **Global Deadlines** – System-wide events created by professors; read-only access.
- **Team Deadlines** – Events shared within the student's assigned team; view and create access.
- **Personal Deadlines** – Private events visible only to the student; full create and manage access.

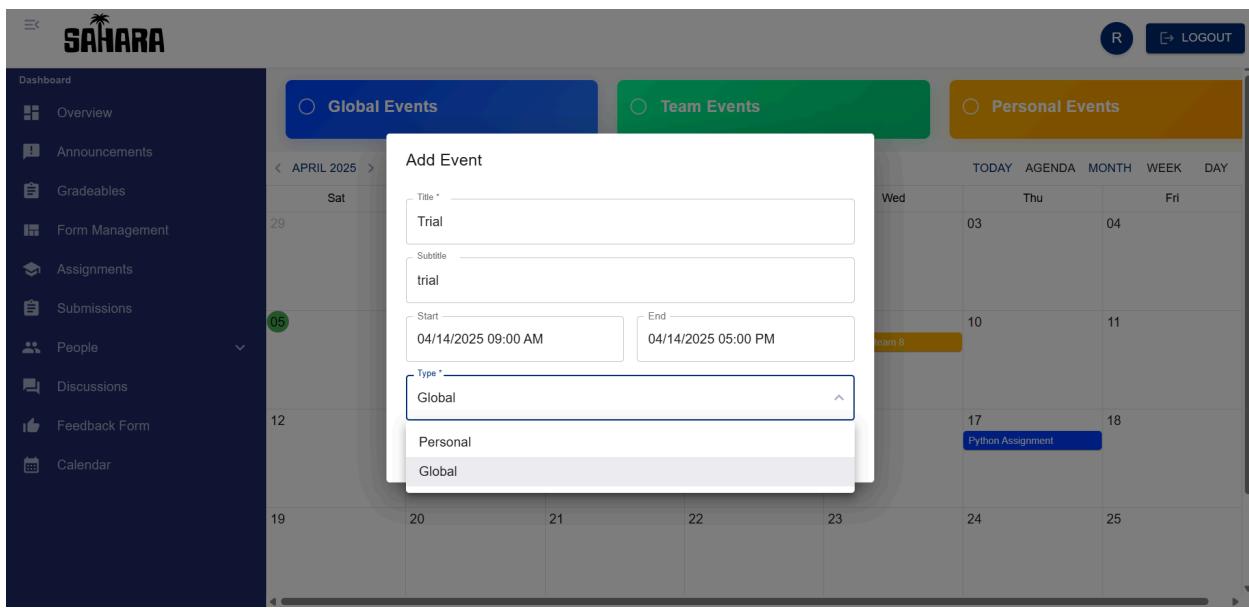
The screenshot shows the SAHARA application's dashboard. On the left is a dark sidebar with various menu items: Dashboard, Overview, Announcements, Gradeables, Form Management, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The Calendar section is expanded, showing the month of April 2025. The days are numbered from 29 to 30, 01 to 04, 05 to 11, 12 to 18, and 19 to 25. Specific dates are highlighted: April 9th has a yellow background and a green circle with the number '05'; April 17th has a blue background; and April 18th has a blue background. At the top right, there are user profile and logout buttons. Below the calendar, a modal window is open for April 9, 2025, titled "Last day to Make Teams". It includes a date range selector (08 April 2025 09:00 AM - 08 April 2025 05:00 PM) and a text area containing "Wow".

Event Creation Workflow:

TA's can create **Team** and **Personal** events by selecting a specific date on the calendar.

This action opens an **event creation modal**, where users can input:

- **Event Title**
- **Description**
- **Deadline or Date Range**
- **Event Type** (Team or Personal)
- **Optional Notes or Attachments**



Global deadlines remain non-editable and are managed exclusively by professors.

9. Feedback Form

Submitter	AARAV OSWAL	ACHYUTH HARIKRISHNA WARRIER	ASHIK STENNY	DIVI POTHKUCHI	HARSHPREET KAUR	POTHUGANTI NIKHIL	R.CHARAN	RAVI ARORA	SPANDAN PATI	VEDHANTH BALASUBRAMANIAN
ASHIK STENNY 28/03/2025	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
ACHYUTH HARIKRISHNA WARRIER 28/03/2025	5%	5%	20%	10%	10%	10%	10%	10%	10%	10%
RAVI ARORA 31/03/2025	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
AARAV OSWAL 03/04/2025	22.14%	5%	6.9%	10.05%	12.4%	7.9%	9.6%	4.9%	11.01%	10.1%
SPANDAN PATI 04/04/2025	0.69%	0.69%	6.9%	6.9%	6.9%	0.69%	6.9%	1.32%	0.01%	69%
DIVI POTHKUCHI 05/04/2025	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
R.CHARAN 05/04/2025	10%	10%	10%	10%	8.5%	10%	10%	10%	9.5%	2%
Mean	9.7%	7.2%	10.5%	9.6%	9.7%	8.4%	9.5%	8.0%	8.6%	17.3%
Variance	36.9%	11.9%	16.7%	1.2%	2.4%	10.4%	1.1%	10.6%	12.6%	453.1%

Detailed Submissions

Submission by ASHIK STENNY
Submitted on: 28/03/2025, 14:24:37

The **Team Feedback Overview** page serves as a centralized dashboard for monitoring feedback from submissions across all teams. For each team, the interface displays:

- The total number of members who have submitted their feedback.
- The timestamp of the most recent submission.
- A status summary to quickly assess completion progress.

Each team's feedback data can be explored in depth by clicking the "**View Details**" button. This opens a modal window containing a **feedback matrix**, where:

- Rows represent feedback submitters.
- Columns represent team members being evaluated.
- Each cell contains the percentage contribution assigned by the submitter to a peer.

The matrix is accompanied by statistical metrics for each team member, including:

- **Mean percentage** received from peers.
- **Variance**, indicating the spread or consistency of received feedback.
- **Individual submission timestamps**, allowing traceability and time-based analysis.

Additionally, the platform provides an **Export to XLSX** feature, which generates a comprehensive spreadsheet containing:

- All feedback submissions across teams.
- Percentage allocations per team member.
- Team-level grouping for easier analysis.
- Metadata such as submission times and contributors.

This export facilitates offline analysis, record-keeping, or further processing in data tools like Excel or Google Sheets.

10. Profile Page

The screenshot shows the SAHARA application's profile page for a user named 'ta1'. At the top, there is a blue header bar with the SAHARA logo and a search bar. Below the header, on the left, is a dark sidebar menu titled 'Dashboard' containing various navigation items such as Overview, Announcements, Gradeables, Assignments, Submissions, People, Discussions, Feedback Form, and Calendar. The main content area on the right displays the user's profile information. It includes a large blue banner at the top with the user's name 'ta1' and handle '@ta1'. Below this, the 'Profile Information' section shows the email 'ta1@iitk.ac.in' and the role 'ta'. The 'Account Details' section shows the User ID '2301'. Underneath, there is a section titled 'Skills & Expertise' which lists 'Java' and 'Spring Boot' with small icons. A 'MANAGE SKILLS' button is located in the bottom right corner of this section.

The TA can access their personal profile by clicking on the **avatar icon** located in the top-right corner of the interface. This action opens the **Profile Page**, which displays key user-specific information including:

- **Email ID**
- **User ID**
- **Role (e.g., TA)**
- **Skills and Areas of Expertise**

A "**Manage Skills**" button is provided, enabling the ta to update, add, or remove their listed skills and expertise. All changes are reflected in real-time and stored persistently within the system.

