



Department Of CSE/IT
Jaypee Institute of Information Technology University, Noida

MINOR PROJECT-2

JIIT Project Portal

GROUP NO - 121

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Under the supervision of:

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We extend our sincere thanks to a few of our seniors who continuously helped us throughout the project and without their guidance, this project would have been an uphill task.

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Declaration

We hereby declare that this submission is our work and that, to the best of our knowledge and beliefs, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma from a university or other institute of higher learning, except where due acknowledgement has been made in the text.

Date :: May 13,2022

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Certificate

This is to certify that the project report entitled **JIIT Project Portal**, submitted to the Department of CSE, Jaypee Institute of Information Technology, Noida, in partial fulfilment for the award of the degree of B.Tech in CSE, is a record of bonafide work carried out by

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under my supervision and guidance. All help received by them from various sources has been duly acknowledged. No part of this report has been submitted elsewhere for the award of any other degree.

Signature of Supervisor :

Name of Supervisor: Dr Ashish Mishra

Designation: Assistant Professor (Senior Grade)

Date: 13/05/2022

Abstract

The purpose of the JIIT Project Portal is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

JIIT Project Portal, as described above, can lead to an error-free, secure, reliable and fast management system that can assist the students, mentors and Admin to concentrate on their other activities rather than concentrating on the record-keeping. Thus it will help the college in better utilization of resources. The college can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant while being able to reach the information

The aim is to automate its existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements so that their valuable data information can be stored for a longer period with easy access and manipulation of the same. Basically, the project describes how to manage good performance and better services for the students and mentors.

1. Introduction

The JIIT Project Portal has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the college to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error messages while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, this all proves a user-friendly Project Management System, as described above, can lead to an error-free, secure, reliable, and fast management system. It can assist the user to concentrate on their other activities rather than concentrating on the record-keeping. Thus, it will help the college in better utilization of resources.

Every organization, whether big or small, has challenges to overcome and manage the information of assignment projects, students, mentors, deadlines, and bugs. Every Project Management System has different needs; therefore, we design an exclusive **JIIT Project Portal** that is adapted to our college's requirements. This is designed to assist in strategic planning and will help the students, mentors, and the Admin to work together to achieve the task assigned to them.

The students will be able to see the mentors assigned to them, interact with them, and ask their doubts from them. The students will be able to submit their assignments from time to time within the given deadline, failing that would result in their marks deduction. The mentors will be able to interact with the team of students assigned to them, help them with their doubts, and assign them their projects within the given deadline. The admin will be able to monitor the progress report of both students and mentors and help both in case needed. He will have the right to view all project reports and he can alert anyone if someone is not working properly or not doing the task by the given deadline.

2. Objective

The main objective of the Project on the IIIT Project Portal is to manage the project assignment between student mentors and Admin. They all work together to get the desired output. The purpose of the project is to build an application program to reduce the manual work for managing the student assignment project, bugs and tasks. It tracks all the details about the deadline, submission, marks, groups, mentors, doubts and interaction.

Functionalities:

- ❖ Provides the project management system well-coordinated between students, mentors and the Admin.
- ❖ It assigns the project team to related mentors with shared responsibilities between them and an Admin to control and monitor both the students and the mentors.
- ❖ It tracks all the information on the Assignment Project, Bugs, deadlines, submissions, doubts, help etc.
- ❖ The portal allows the students to interact with the mentors, ask them questions and submit the given assignments to them within the allotted time.
- ❖ The portal allows the mentors to view the team of students assigned to them and assign them their project with some deadline, solve the doubts of the concerned team and help and monitor their progress.
- ❖ The portal allows the Admin to monitor the progress of both the students and the mentors. The admin can view all project reports and alert them if he finds someone is not working properly.

3. Problem Statement

Making a proper and well-coordinated IIIT Project Portal:

The trivial way of managing project reports and assigning mentors and keeping track of progress and deadlines is a cumbersome task. It requires a lot of paperwork and effort which leads to the wastage of resources. In the old method, there is no one to keep a check on both students and mentors if they are doing their work properly and without any cheating. There is also a communication gap between the students and mentors and both are not able to help each other properly within the given time. There is also a chance of misplacing the reports or the progress which leads to wastage of time and hard work.

4. Related Work

There are many trivial ways of managing projects which do have some problems. These methods focus on managing projects using old and inefficient methods. There is a lot of paper wastage and useless resource consumption. There is a communication gap between the authority, management and the students. There is no common platform for all which can be easily used to do required tasks.

We need some solution to make this way of project management easy and fast for everyone. We have created JIIT Project Portal to improve the trivial way of project management. It is a common platform that seamlessly integrates the mentors and students.

5. Requirement Analysis

There are some requirements that users have to fulfil to access all the features of this portal. Some of the requirements are listed below:

Internet Connection:

Users must have an active internet connection in order to connect to our portal.

JIIT Project Portal URL:

Users must have this website URL <https://jiit-project-portal.herokuapp.com/> and credentials so as to access this platform. The objective of the Project on the JIIT Project Portal is to manage the project assignment between student mentors and Admin. They all work together to get the desired output. The purpose of the project is to build an application program to reduce the manual work for managing the student assignment project, bugs and tasks. It tracks all the details about the deadline, submission, marks, groups, mentors, doubts and interaction.

6. Detailed Design

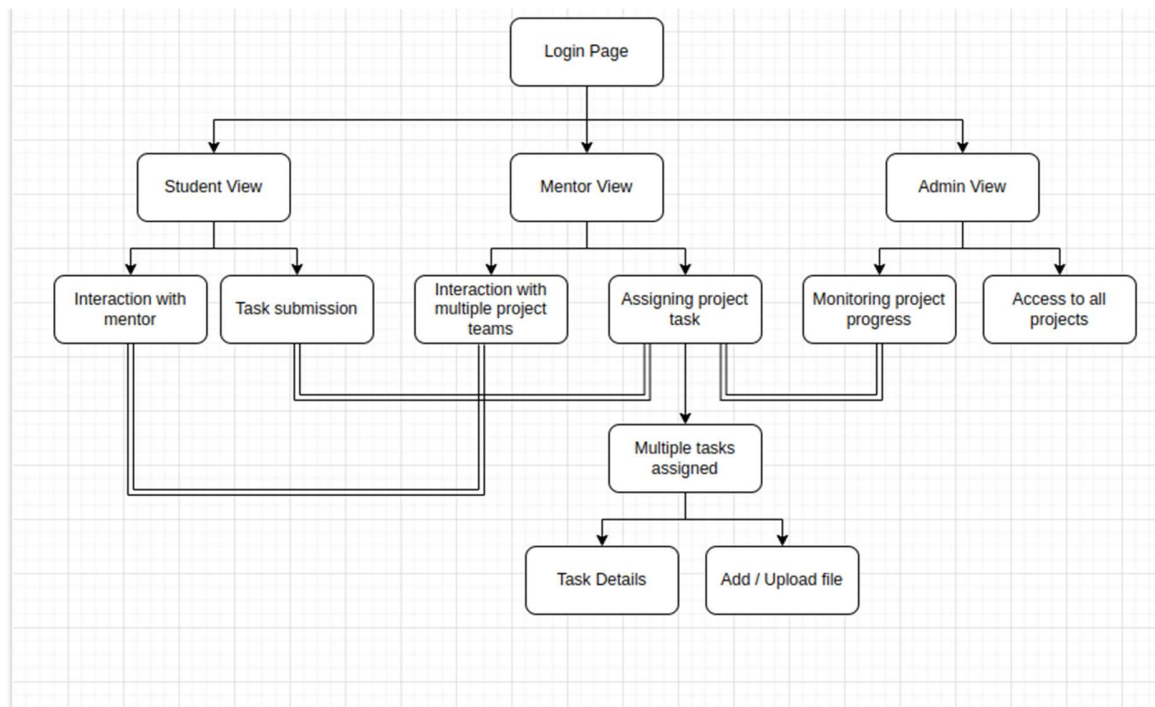


Fig 6.1(Detail design of project)

The Detailed Design of the project consists of a login page and different dashboards for **students** and **mentors**. Admin dashboard has been designed where they can see and manage all projects. As shown in Fig 6.1 our website has 3 dashboards each with different views and access. The dashboard shows all the projects. From students' perspectives they can only view the projects they are involved in and it is also the same case for mentors. In each project, certain tasks are assigned by mentors to the students. Students can upload the files regarding it. This creates a seamless platform for students and mentors to discuss the project. It also allows the admin to monitor the progress of every project.

The project is divided into the following two sections -:

1) UI Design-:

This phase consists of the user interface through which students and mentors are going to interact with the database and assign tasks to students using the website. The technology used for designing the front end of the applications is **React**.

2) Database design:-

This phase consists of all the Login for the Users and Mentors. We store all the projects in the institute and all the tasks related to each project as separate collections. In the database, we are also storing files that are uploaded by either users or mentors. The database is a necessary component of any application as it is used to store all the data regarding the website. It will store the data like project titles, project members, tasks, files uploaded by students etc. We have used MongoDB for our database.

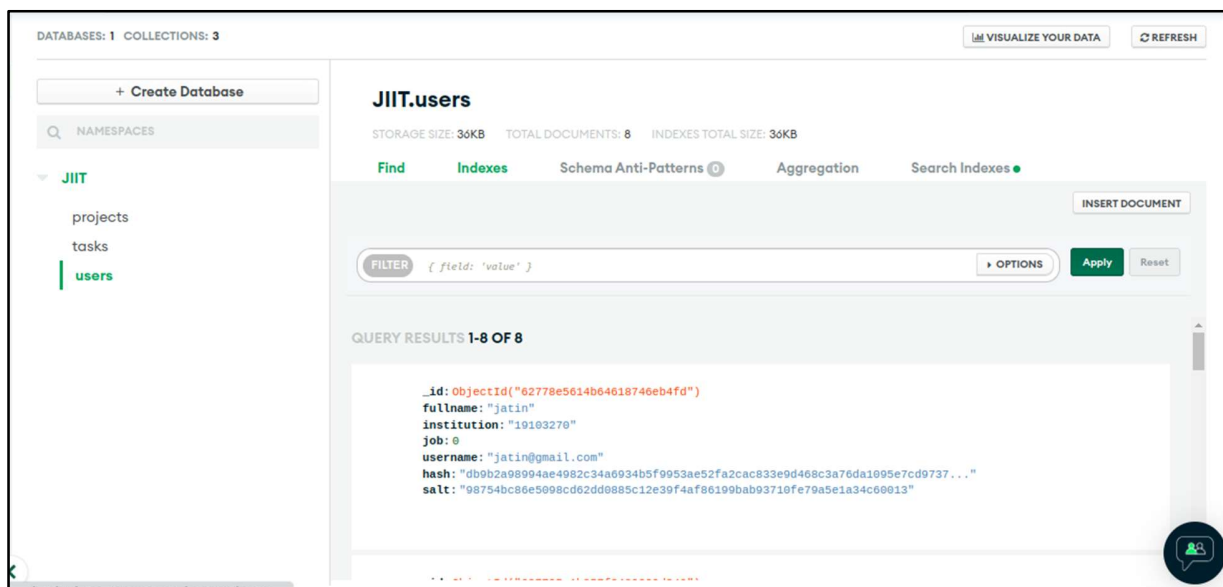


Fig 6.2 (Users database)

As shown in Fig 6.2. The image consists of the email of the users, name, institute, job, and hash value. In Users, collection job value signifies:-

- 0 means students
- 1 means mentor
- 2 means admin

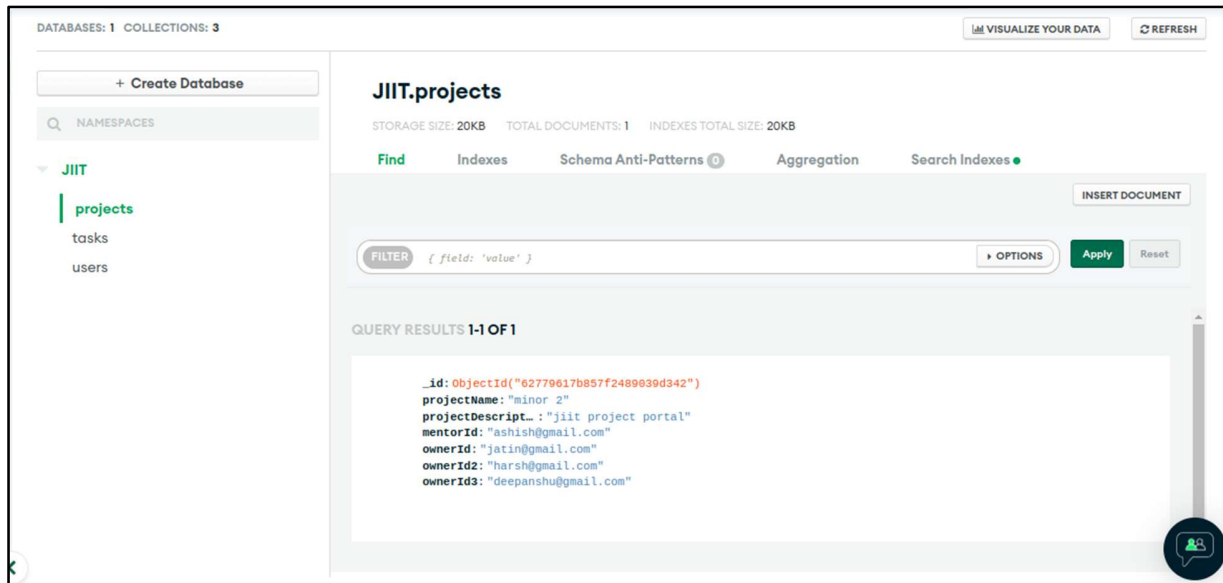


Fig 6.3 (Projects database)

As shown in Fig 6.3. The image consists of a project collection. This collection consists of all the projects and details regarding a project. It consists of details like project name, mentor id, student ids and project description.

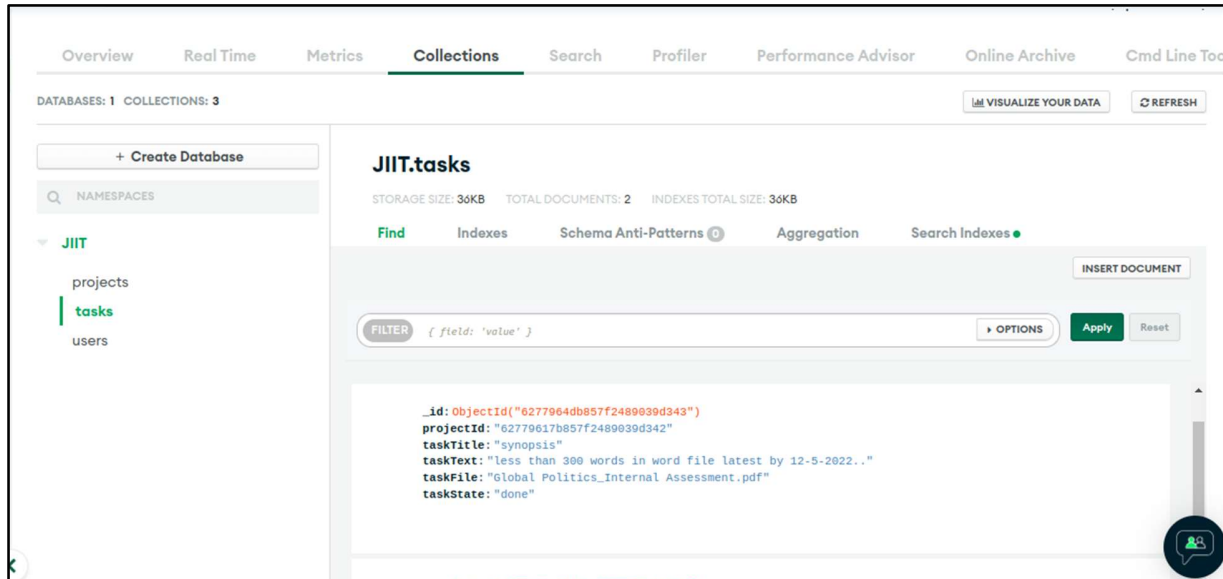


Fig 6.4 (Files stored in the database)

As shown in Fig 6.4. All the tasks related to a project i.e. task title, task description etc. are stored in Mongo along with file names related to a particular task. These files are stored on the server for ease of use.

7. Implementation

7.1 Project Snapshots

a) Landing Page :

Our website starts with the following page that shows about JIIT and JIIT project portal features and gives us an option to access the login page.

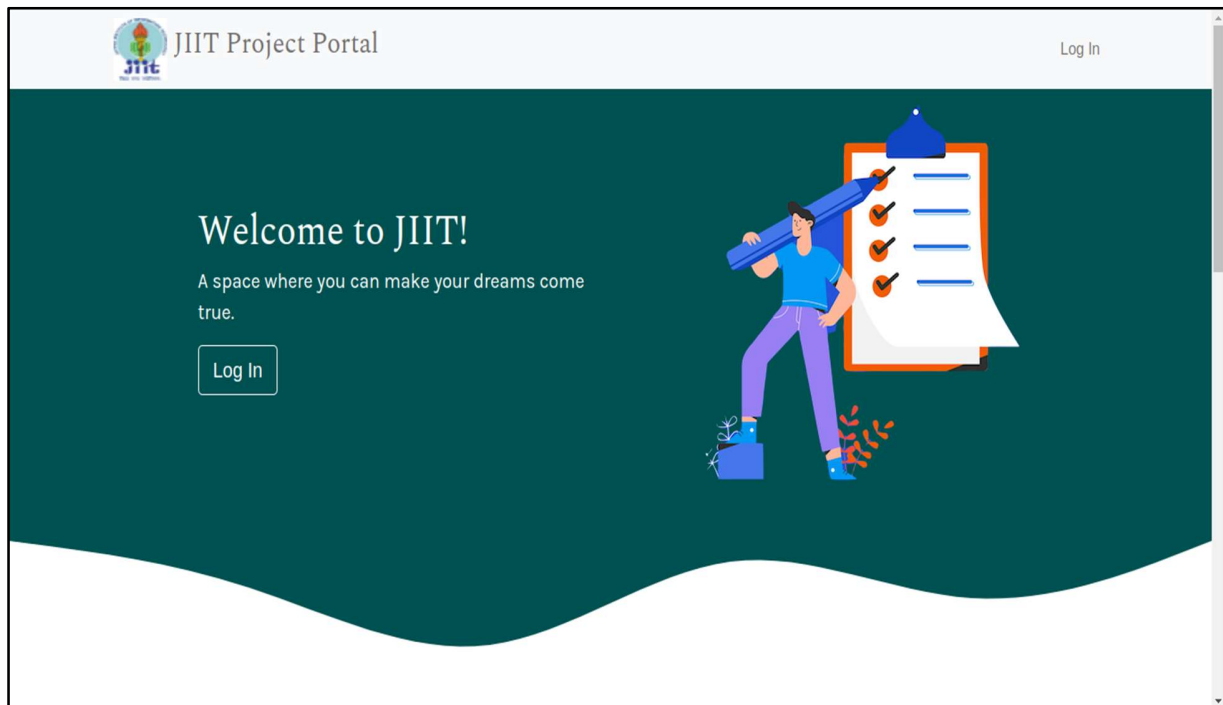
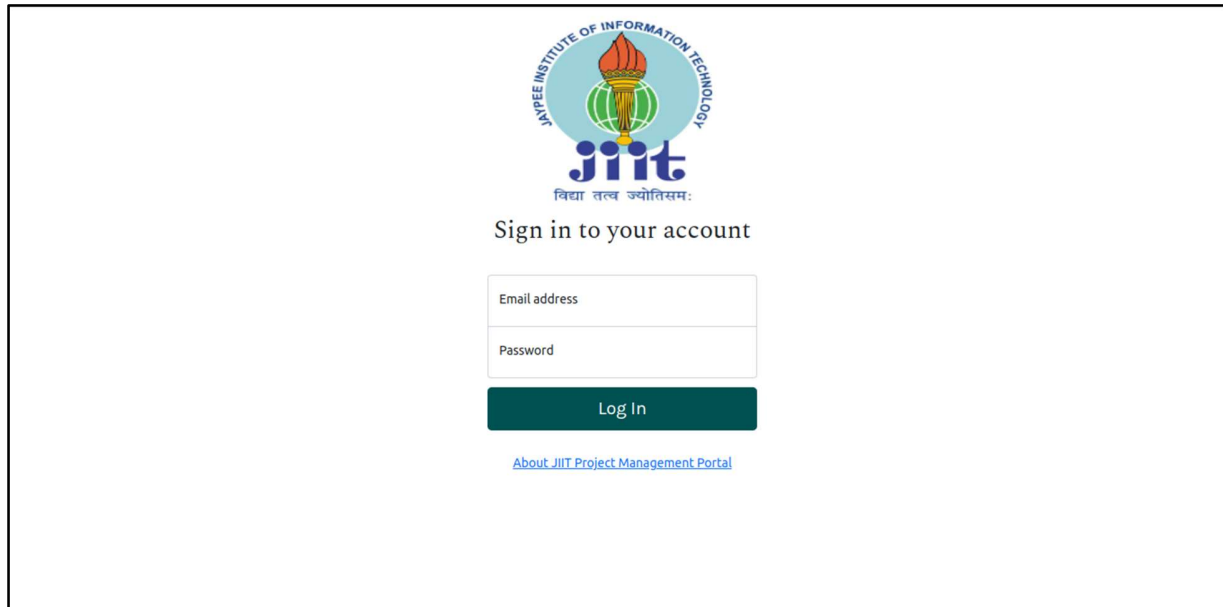


Fig 7.1.1 (Landing Page)

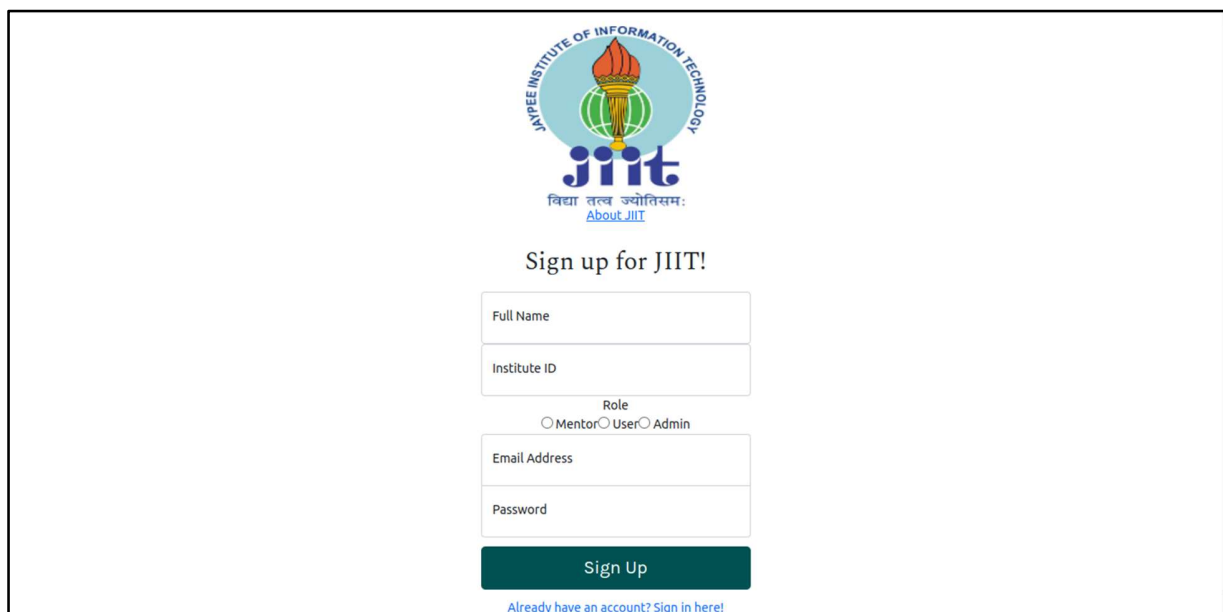
b) Login / Signup Page :

All Students, Mentors and Admin have a common option for logging in. Registration for new users can only be done by the admin. It allows the admin to create new accounts for both Students and Mentors.



The screenshot shows the login page for the JIIT Project Management Portal. At the top is the JIIT logo, which includes a circular emblem with a lamp and the text "JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY" and "jiit" below it, followed by the motto "विद्या तत्त्व ज्योतिषमः". Below the logo, the text "Sign in to your account" is displayed. There are two input fields: "Email address" and "Password". Below these fields is a dark green "Log In" button. At the bottom, there is a blue link that says "About JIIT Project Management Portal".

Fig 7.1.2 (Login Page)



The screenshot shows the signup page for the JIIT Project Management Portal. It features the same JIIT logo as the login page. Below the logo, the text "Sign up for JIIT!" is displayed. There are four input fields: "Full Name", "Institute ID", "Email Address", and "Password". Between the "Institute ID" and "Email Address" fields, there is a "Role" section with three radio buttons: "Mentor", "User", and "Admin". Below the input fields is a dark green "Sign Up" button. At the bottom, there is a blue link that says "Already have an account? Sign in here!".

Fig 7.1.3 (SignUp Page)

c) Profile :

This page shows the profile of the user along with the most recent projects in which the user is involved. The profile shows the user name, role, institution id and emails the user.

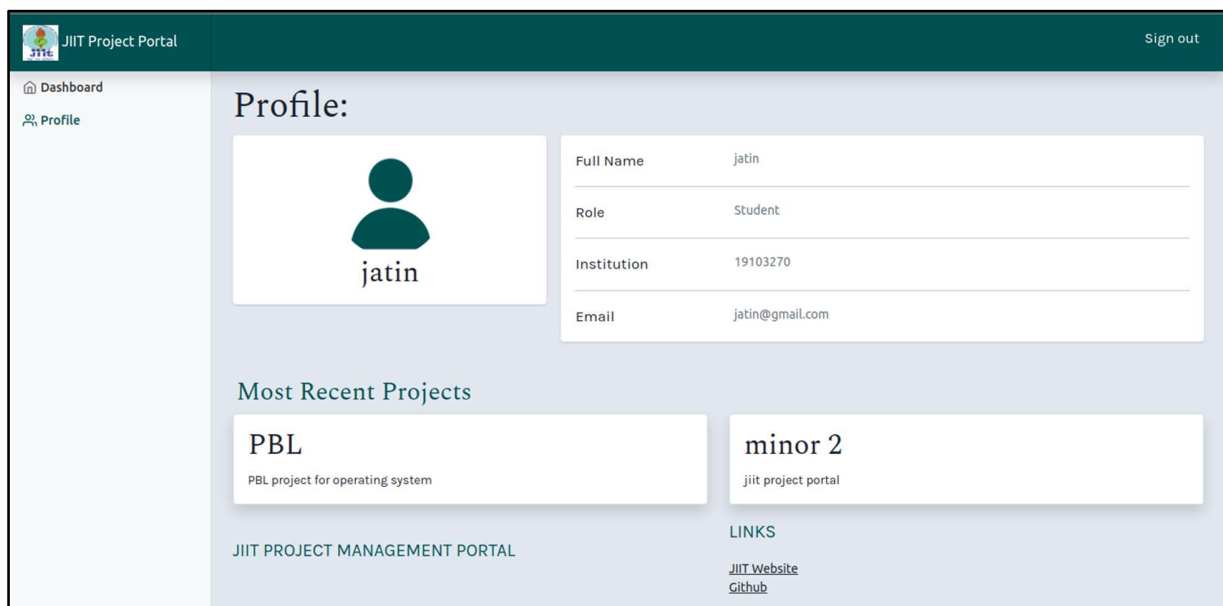
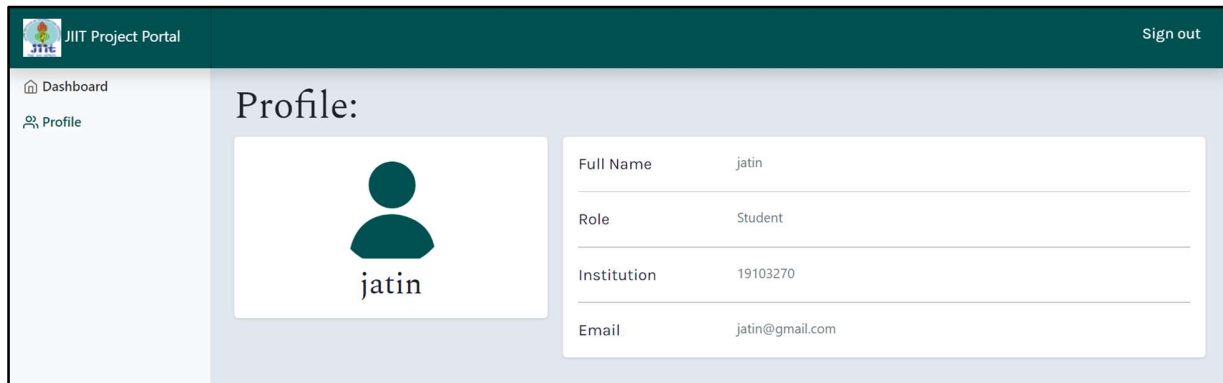


Fig 7.1.4 (Profile Page)

d) Dashboard:

After successful login by a user, he reaches the dashboard of the website. It shows all projects that the user has access to. This page has different views for a different set of users. For example:- a mentor and admin can create a new project while a student can't do so. Similarly, an admin can add a new user to access the portal while the other two can't do so.

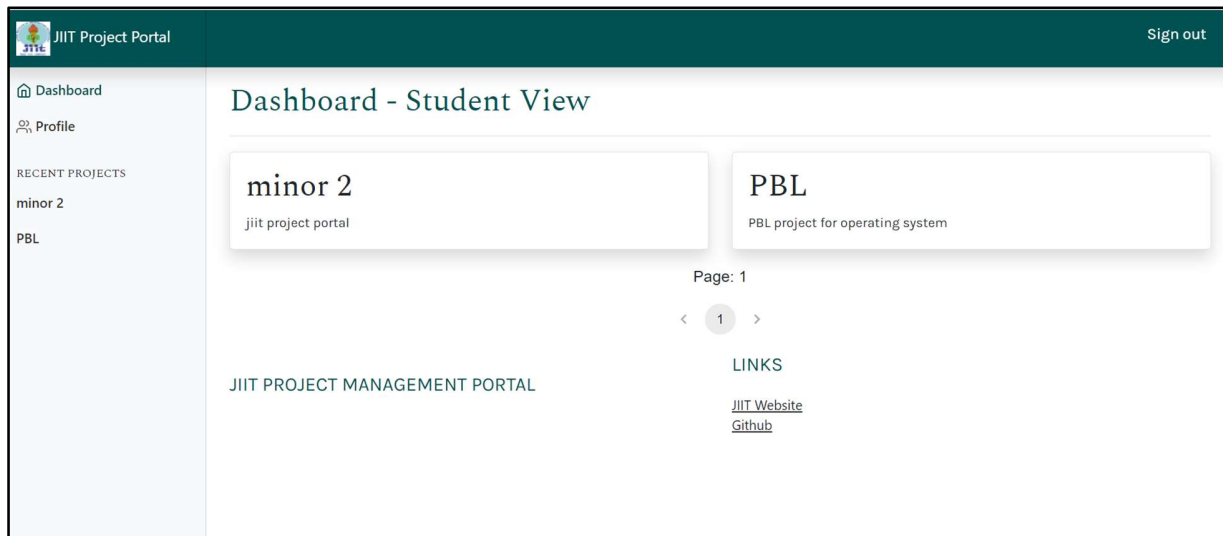


Fig 7.1.5 (Dashboard Student View)

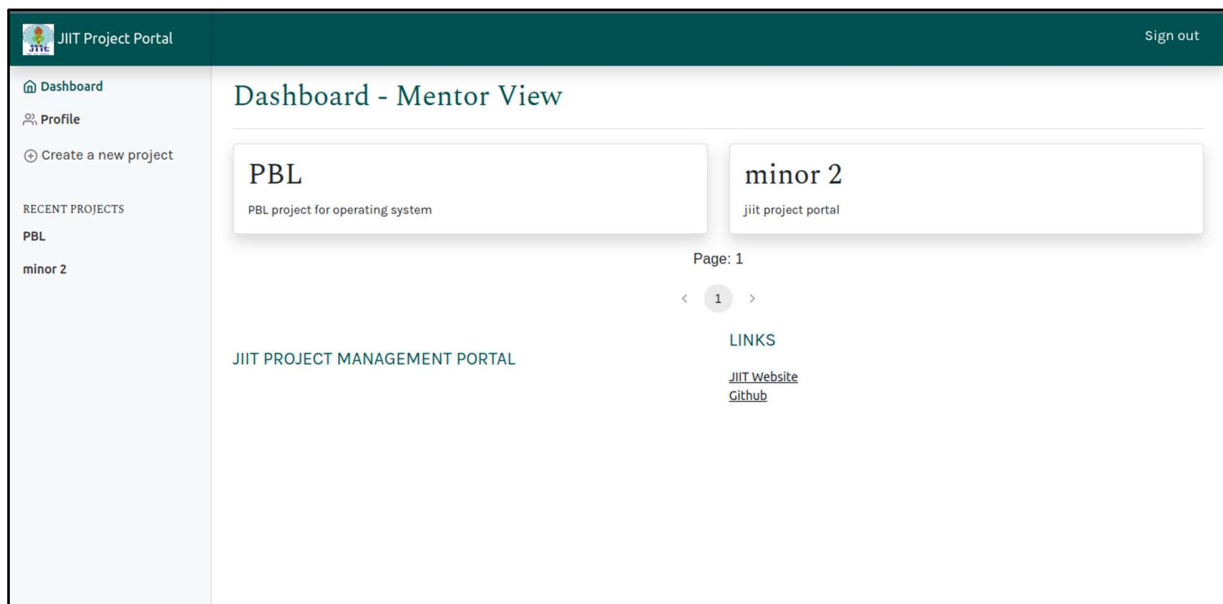


Fig 7.1.6 (Dashboard Mentor View)

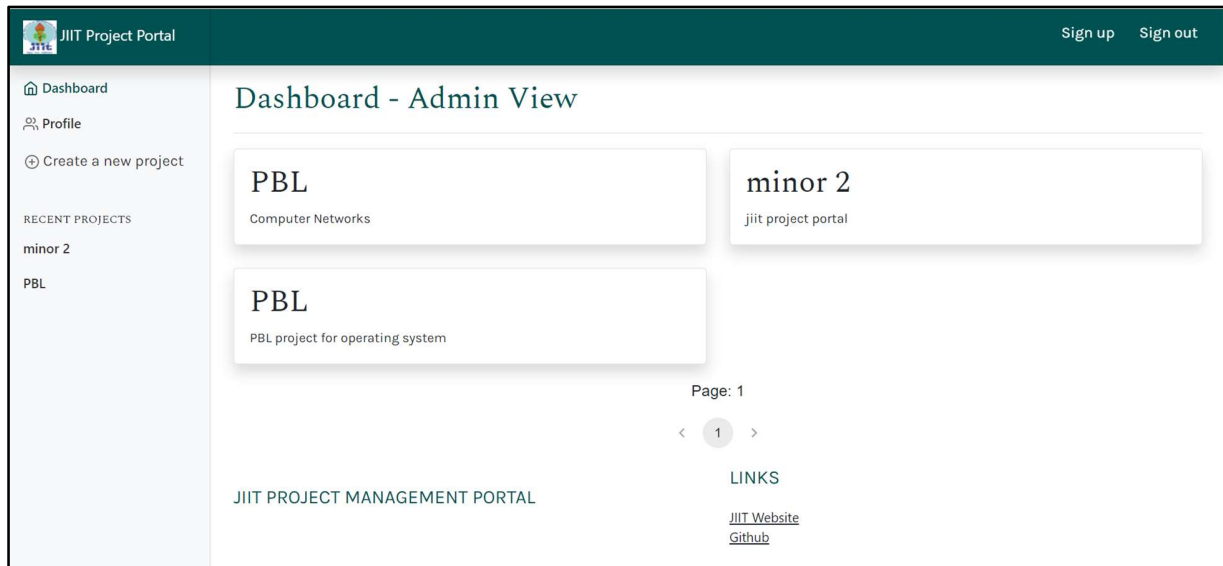


Fig 7.1.7 (Dashboard Admin View)

e) Create a new Project:

This modal allows the mentor/admin to register a new project with a group of size 3 members. The first member of this project will be the group leader. Project names and descriptions are also required to register a new project.

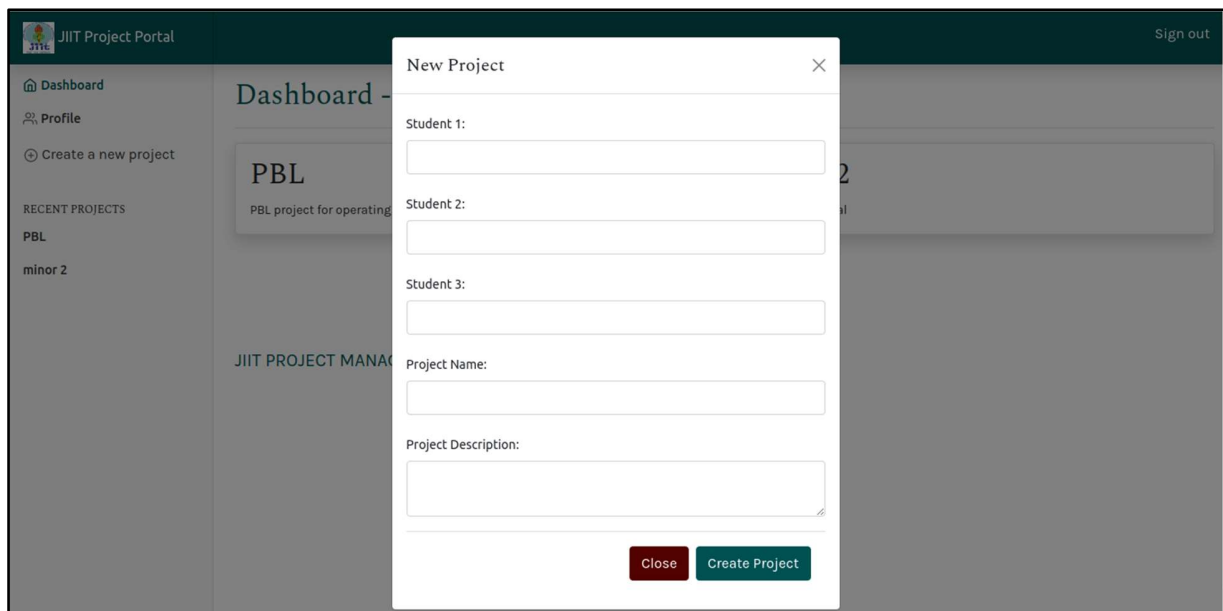


Fig 7.1.8 (Create New Project)

f) Project Details (Mentor / Admin view):

This page allows mentors to see the task assigned to students and the work completed by the students in response to the task assigned to them.

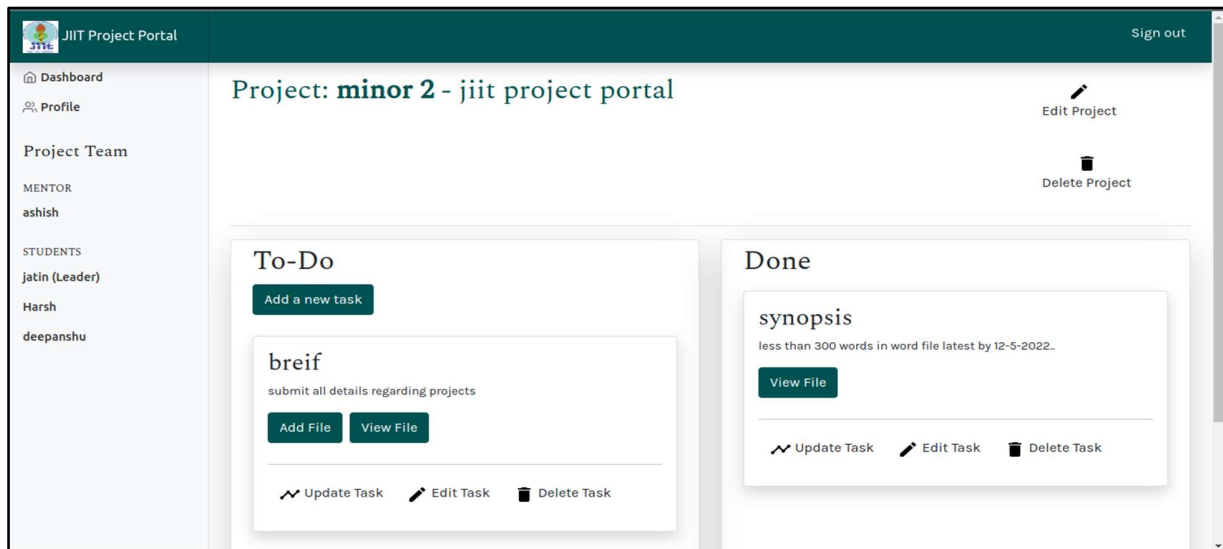


Fig 7.1.9 (Project Details Mentor/Admin View)

g) Edit project details

This form allows the mentor and admin to change the project's name and description. This feature is not accessible to the students.

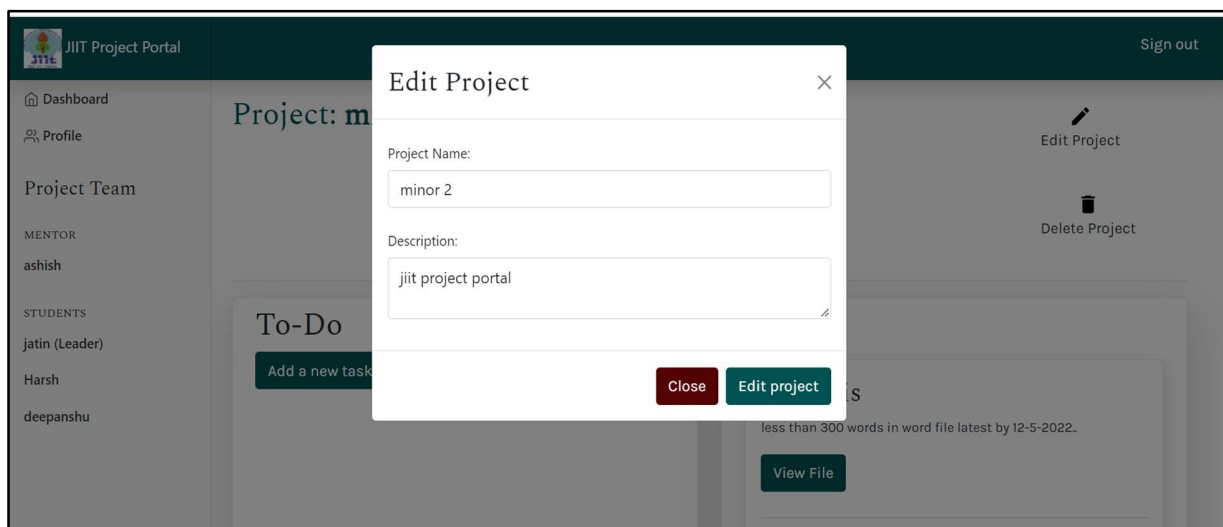


Fig 7.1.10 (Edit Project Modal)

h) Delete created project

This feature allows the mentor/admin to delete an entire project along with all the tasks and files associated with it.

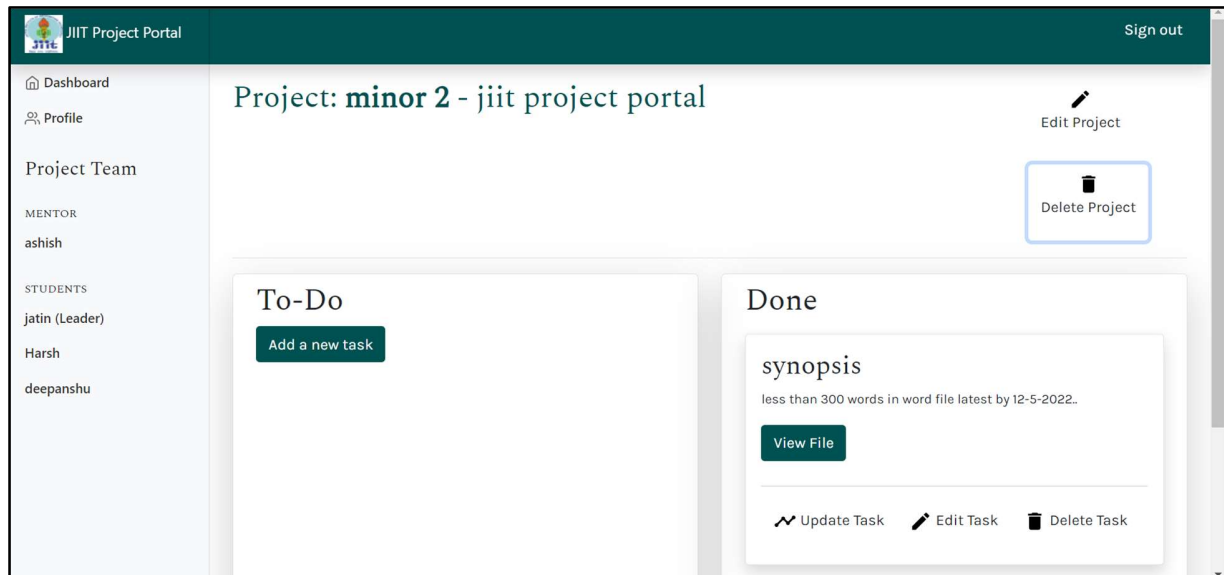


Fig 7.1.11 (Delete Project)

i) Add a new task

This form allows the mentor to upload a task associated with the project for the students. This task will be reflected in the to-do list of the students.

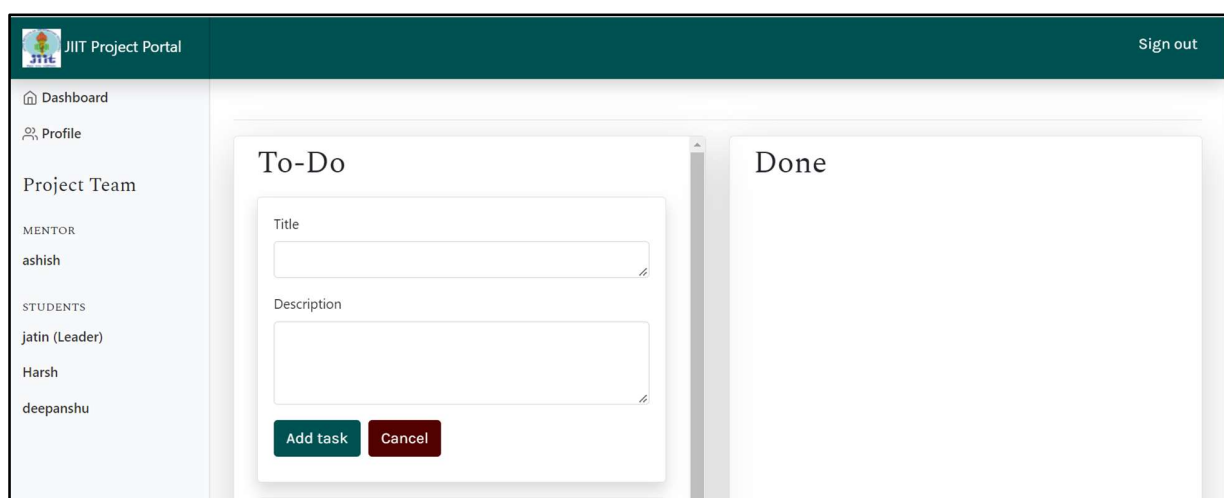


Fig 7.1.12 (Add Task Mentor View)

j) Add file:

This modal allows the students to upload a file in any format of their choice. Students can browse the file on their PC and upload them to the server. This file can be accessed by the View File button.

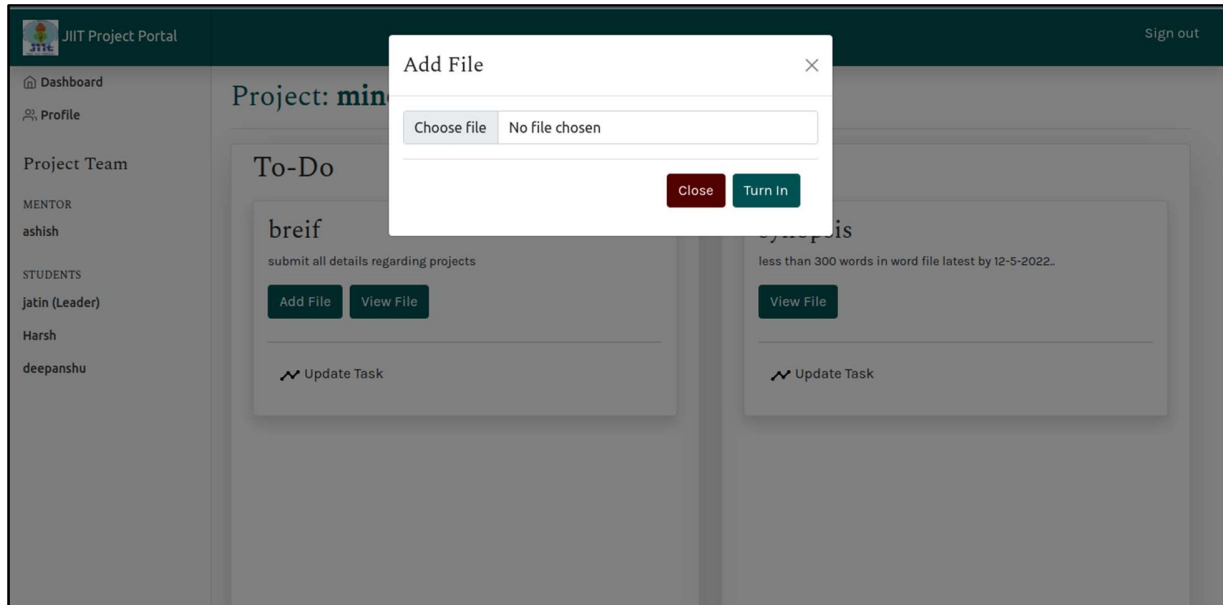


Fig 7.1.13 (Add File Modal)

k) Update existing task state:

This modal allows the students to update the progress of the task to To-Do or Done. If the task assigned to them is completed then they can change its state to done.

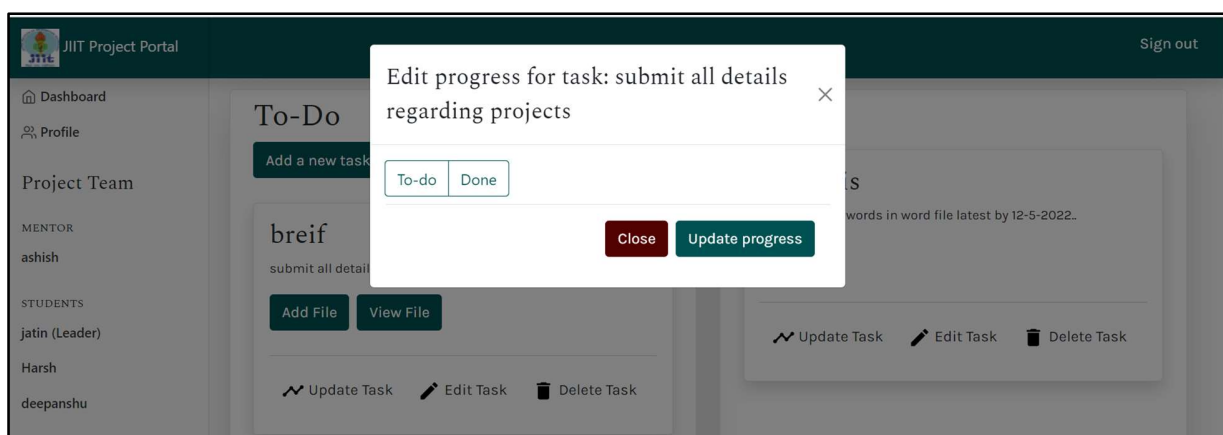


Fig 7.1.14 (Update Task Modal)

1) Edit task title and description

This modal allows the mentor to edit a task's title and description if there is some change in task guidelines. This feature can not be accessed by students.

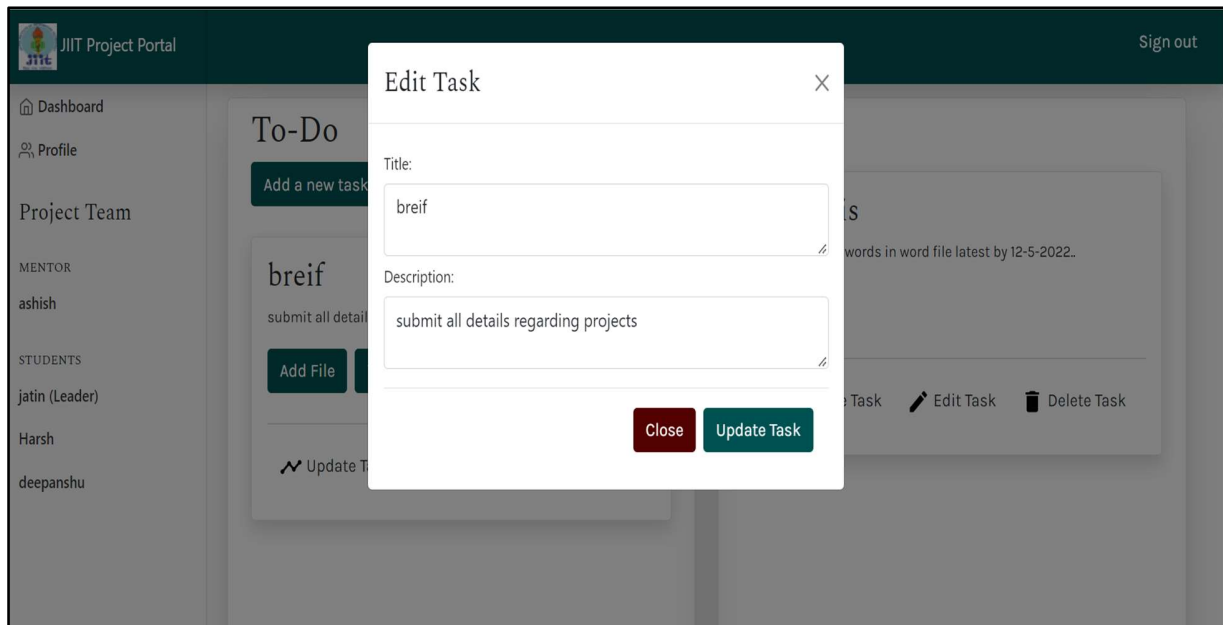


Fig 7.1.15 (Edit Task Mentor/Admin View)

m) Delete a created task

This feature allows the mentor to delete any task assigned by him to students. A toast shows up as a confirmation for a deleted task.

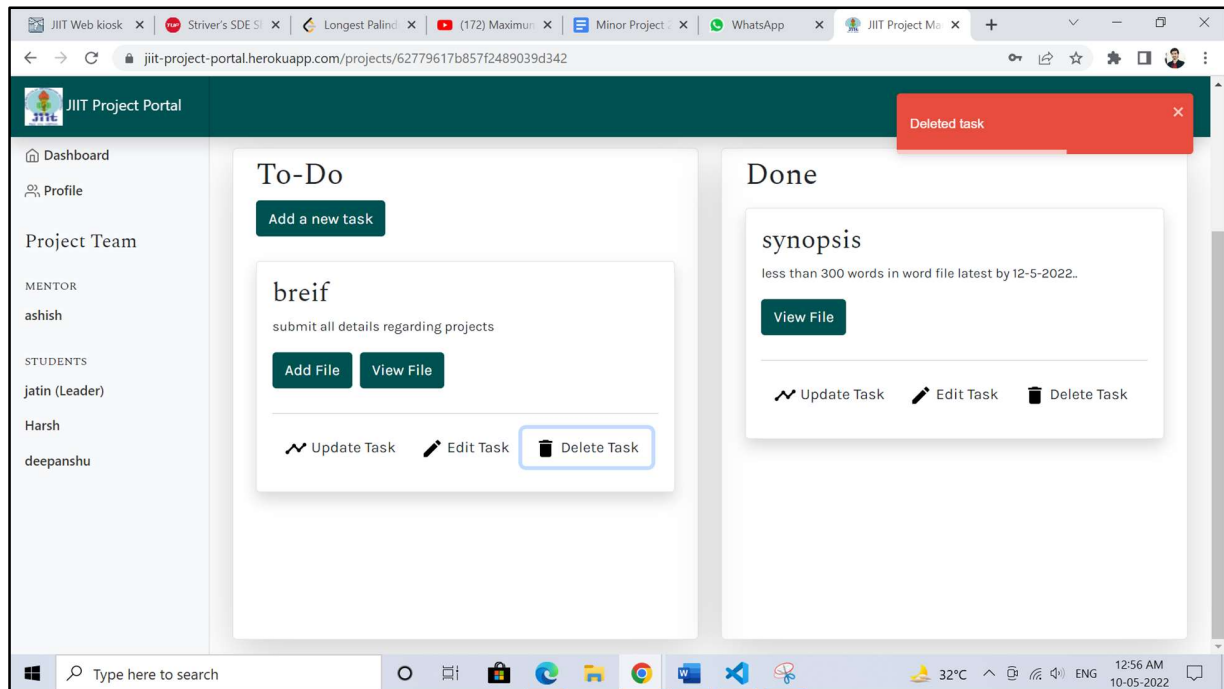


Fig 7.1.16 (Delete task toast)

n) Project Details (Student View):

This is the main page of a project. It contains the project name and description. It has 2 sections

- To-Do

This is the task assigned by the mentor to the students. It contains the task title and description. Students can upload files and view files. Files are uploaded to the server.

- Done

These are the tasks that are done by the students and mentors and students can view the file that they have uploaded.

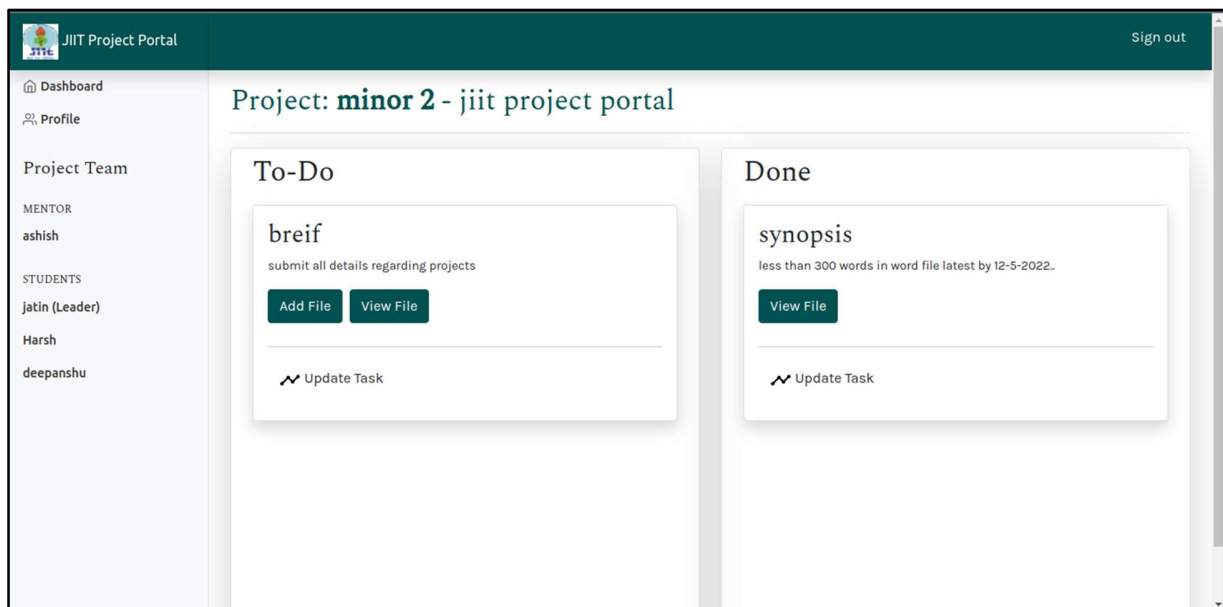


Fig 7.1.16 (Project Details)

8. Conclusion and Future Work

Our project is only a humble venture to satisfy the needs to manage their project work. Several user-friendly coding has also been adopted. This package shall prove to be a powerful package in satisfying the requirements of the college. The objective of the IIIT Project Portal is to manage the project assignment between student mentors and Admin. They all work together to get the desired output. The purpose of the project is to build an application program to reduce the manual work for managing the student assignment project, bugs and tasks. It tracks all the details about the deadline, submission, marks, groups, mentors, doubts and interaction.

In the end, it is concluded that we have made efforts on the following points:

- ❖ A description of the background and context of the project and its relation to work already done in the area.
- ❖ Made a statement of the aims and objectives of the project. The description of Purpose, Scope, and applicability.
- ❖ We define the problem on which we are working in the project.
- ❖ We describe the requirement Specifications of the system and the actions that can be done on these things.
- ❖ We understand the problem domain and produce a model of the system, which
- ❖ describes operations that can be performed on the system.
- ❖ We included features and operations in detail, including screen layouts.
- ❖ We designed user interfaces and security issues related to the system. Finally, the system is implemented and tested according to test cases.

Future Work

The future work of the project can be around:

- ❖ We can add automated assigning of the student teams with mentors on the basis of interest areas or first come first serve.
- ❖ We can add different viva mentors for taking student viva to increase more neutrality.
- ❖ We can also add plagiarism checkers to check the originality of the students' reports.

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