

# **College Space**

Submitted in partial fulfillment of the requirements of the  
degree

## **BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING**

By

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# CERTIFICATE

This is to certify that the Mini Project entitled “ **College Space** ” is a bonafide work of **Viren Agicha (2003005)**, **Md. Rashid Aziz (2003013)**, **Vidhi Batra (2003016)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of “**Bachelor of Engineering**” in “**Computer Engineering**”.

(**Prof. Tasneem Mirza**)  
Supervisor

(**Dr. Tanuja Sarode**)  
Head of Department

(**Dr. G. T. Thampi**)  
Principal

# Mini Project Approval

This Mini Project entitled “College Space” by **Viren Agicha (2003005), Md. Rashid Aziz (2003013), Vidhi Batra (2003016)** is approved for the degree of **Bachelor of Engineering in Computer Engineering**.

## Examiners

1.....  
(Internal Examiner Name &Sign)

2.....  
(External Examiner name &Sign)

Date:

Place:

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Md. Rashid Aziz 2003013

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# Chapter 1

## Introduction

This chapter explains the aim, objectives and scope of the proposed system.

### 1. Introduction

College space is a web-site where the teachers can interact with the students by posting notices/messages. Teachers can create groups or teams according to the student's division or branch. After creating a team teacher can set a meeting, where they can give lectures using features like screen sharing, chat, audio/video call etc.

Here teachers can upload books. They will also have a facility to upload their notes and set assignments for a particular team. Only those students who are added in the team can access the meet scheduled by that particular team admin i.e. teacher, providing more security from the online spammers.

### 2. Motivation

During online lectures teachers had to go through a lot of struggle and had to remove students that weren't invited for the meet, who entered the meeting by clicking the link. And students had to switch through apps (whatsapp, teams, google docs) collecting all the material needed for studying, so we thought of solving these problems as it would make life much easier for teachers and students. One more reason was the learning process and the experience that we would gain.

### 3. Problem Statement & Objectives

To build an educational-oriented website, which can be used by a college or school to connect with students for online lectures and having other features like setting assignments, uploading books/notes, posting notices etc. (providing more security) and removing the third party services such as MS Teams/Zoom.

Objectives:

1. To provide a web-site through which students and teachers could connect
2. To provide the teachers with facilities like:
  - Posting (Broadcast) notices.
  - Uploading books/notes.
  - Setting meetings and assignments.
3. To provide the students a place where they could find all the information about the semesters.

4. To free up space by removing third party apps like MS teams/Zoom.
5. To provide a more secure and educational oriented web-site.

#### **4. Organization of the Report**

This report consists of three chapters. The first chapter deals with introduction of the topic, problem statement, motivation behind the topic and objectives. The second chapter is the Literature Survey. It includes all the research work done related to this topic. All information related to study of existing systems as well as learning of new tools is mentioned in this chapter. The third chapter is about the proposed system which is used in this project. The block diagram, techniques used, hardware and software used screenshots of the project are presented in this chapter. All the documents related to development of this project are mentioned in References



# Chapter 2

## Literature Survey

This chapter explains the concepts used in this project, study of existing system and contribution of this project

### 2.1 Survey of ExistingSystem

**Skype** is a proprietary telecommunications application operated by Skype Technologies, a division of Microsoft, best known for videoconferencing and voice calls. Skype supports conference calls, video chats, and screen sharing

**Zoom Meetings** (commonly shortened to Zoom, and stylized as zoom) is a proprietary videotelephony software program developed by Zoom Video Communications.

Features include one-on-one meetings, group video conferences, screen sharing, and the ability to record meetings and have them automatically transcribed.

### 2.2 Limitation of existing system

- Requires space and RAM in the machine on which it's running
- They are more inclined towards companies and large co-operations
- They are not personalized
- Not adaptable according to colleges need

### 2.3 Mini Project Contribution

- Our project is made for college use
- Our website can run on any machine that has google

# Chapter 3

## Proposed System

This chapter consists of detailed description about the methodology used, the hardware and software components, the tools used and also the screenshots of the project

### 3.1 Introduction

Write about the programming language, tools, technology that you have used.

### 3.2 Architecture

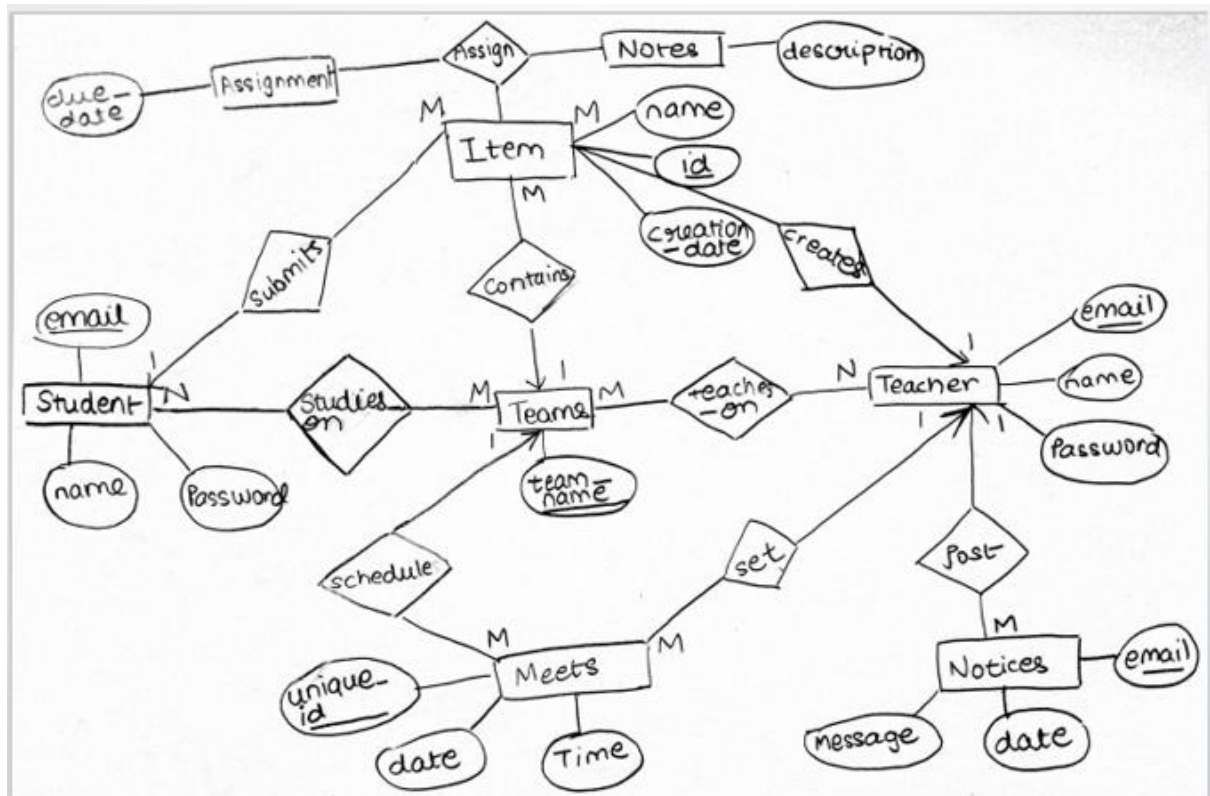


Fig 1.1 ER Diagram

### 3.3 Algorithm and Process Design

#### 1. Formulating the Problem statement:

It has been observed that, most of the time meets of colleges are hijacked by spams, to avoid these condition we came up with an idea of more personalized web application similar to existing ones with more features and adaptability.

#### 2. Understanding the framework and requirements

It required a good database administration system, so for that we decided to use MySQL as database, as it is easy to use and for back-end work we used NodeJS as implementing video calling is very much efficient in this. For front-end we used hbs as a template engine, CSS for styling and JS for front-end scripting.

### **3. Identifying tools/technology to be used**

For running MySQL we needed a server, for Apache is one of the finest to provide it, so we get both server and database from a single software that is Xampp, it provide us Apache as a server and phpmyadmin as MySQL GUI, where we can work very easily. We also required a text editor to code with proper recommendation and error detection, for that we used VS CODE.

### **4. Finalizing the features to be included**

Features include:

- Teachers can create groups or teams according to student's division or branch.
- After creating a team teacher can set a meeting, where they can give lectures using features like screen sharing, chat, audio/video call etc.
- Here teachers can upload books.
- They will also have a facility to upload their notes and set assignment for a particular team.
- Only those students who are added in the team can access the meet scheduled by that particular team admin i.e. teacher, providing more security from the online spammers.

### **5. Development**

We first started with the front-end part, and then side-by-side started working on server side, and build the server using ExpressJS. Then we started with the creation of database and tables, connecting tables with the foreign key and ensuring proper flow of data from front-end to the back-end using JQuery. Used Express-fileupload for uploading of notes and assignment.

### **6. Testing**

We tested all kind of possibilities to ensure there are no bugs which would crash the website at the runtime.

### **7. Evaluation**

It a highly dynamic web application which uses all the modern tools for building a high profile website, and it also has a very vast scope of improvement with alot of additional features like poles, online test etc.

### 3.4 Details of Hardware & Software

1. RAM minimum - 2GB
2. Processor - i3
3. Software -
  - a. It requires a text editor on which we can code (we used VS Code).
  - b. We also require Google Chrome to run our website.

### 3.5 Results

#### Student Pages

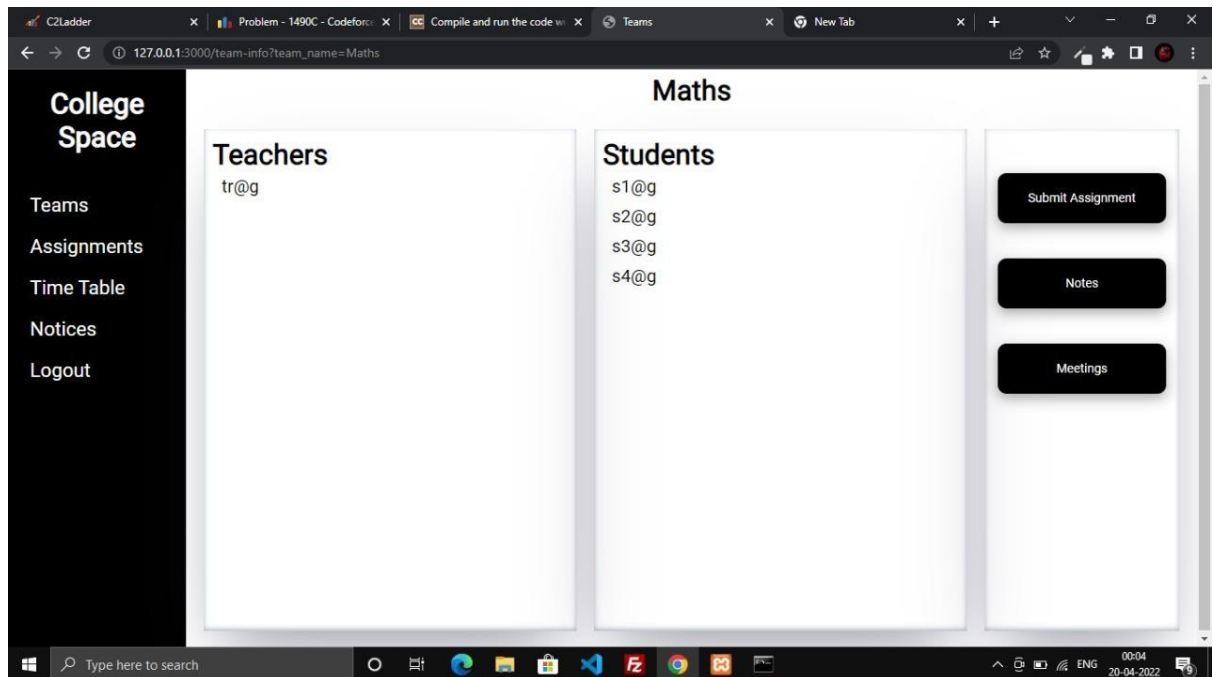


Fig 2.1 Team-Info section

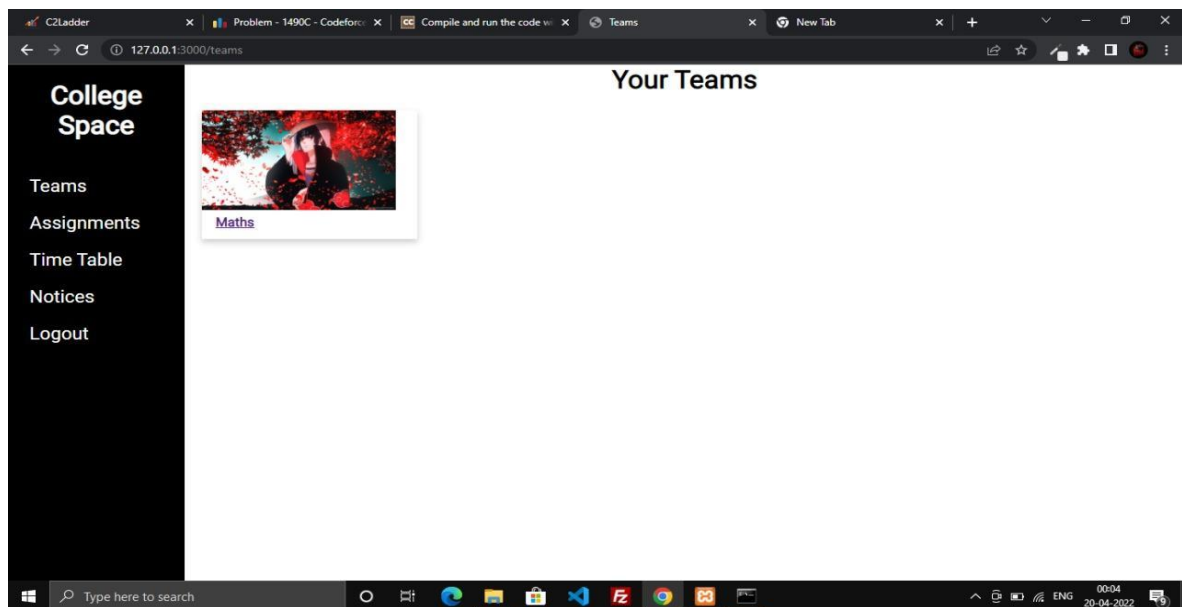


Fig 2.2 All Teams View

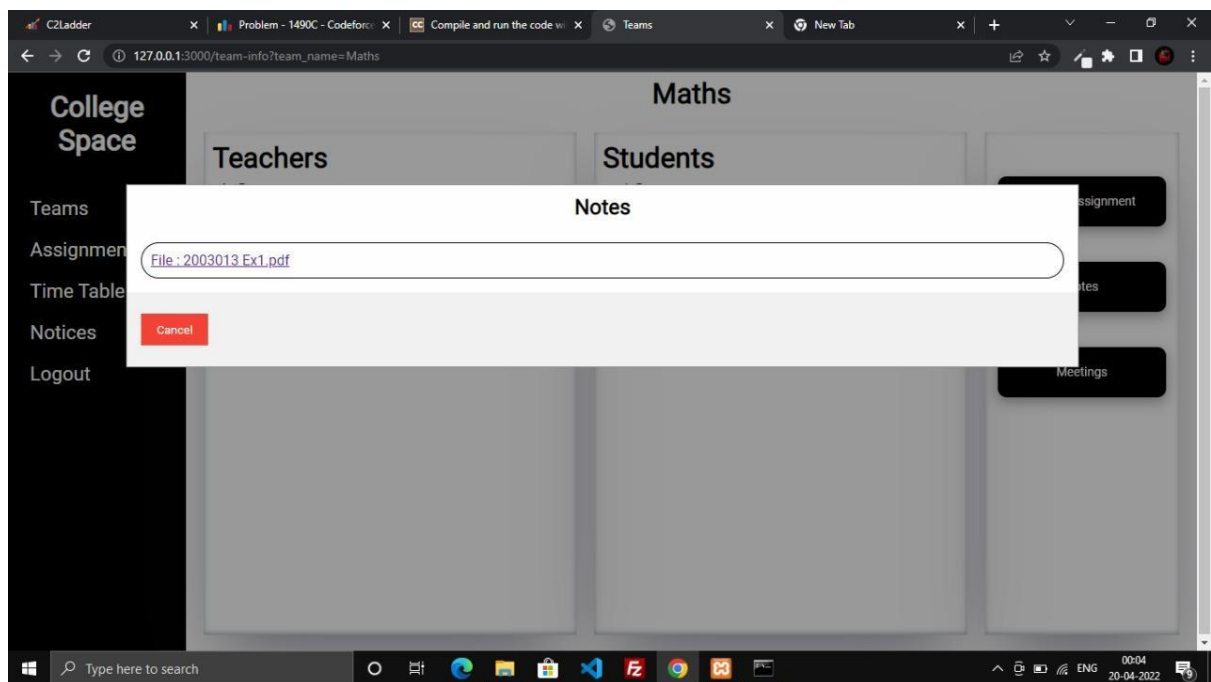


Fig 2.3 Notes uploaded by teachers

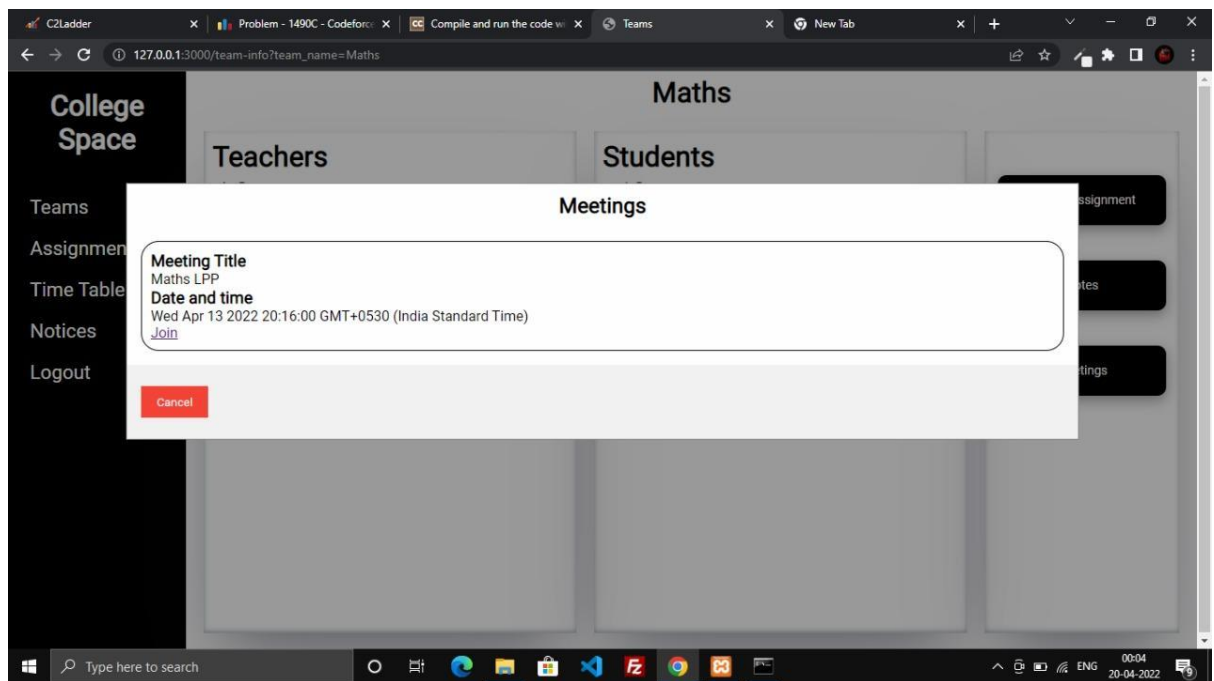


Fig 2.4 Meetings scheduled by teachers

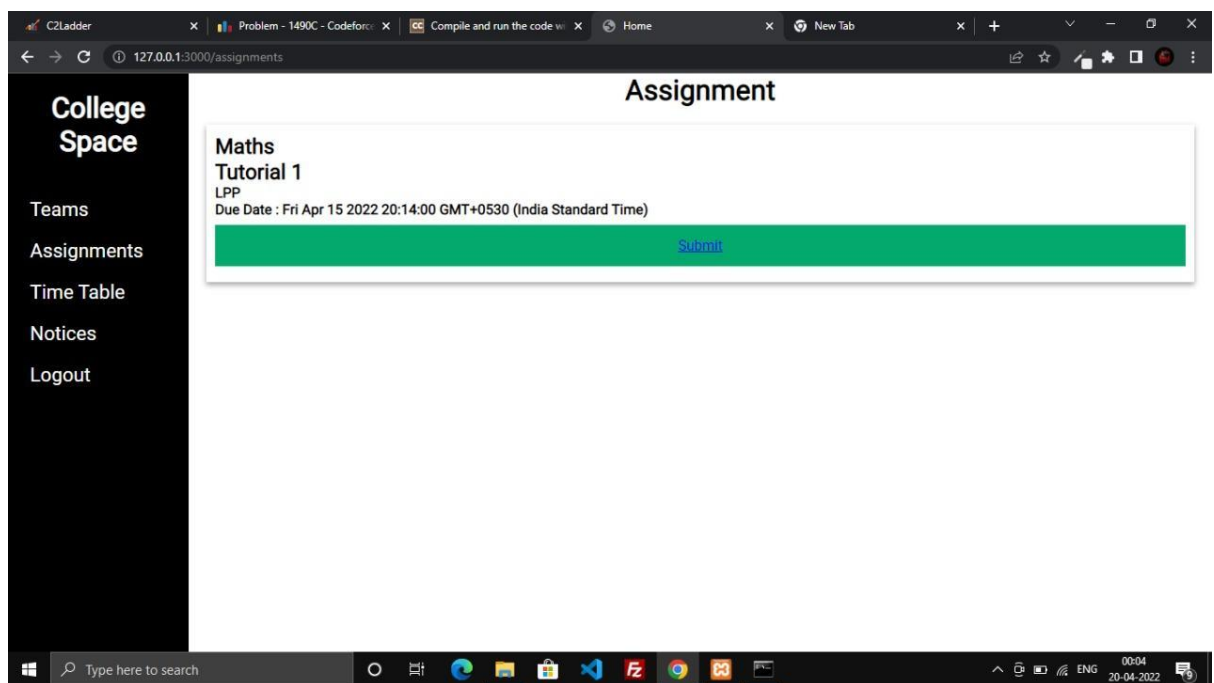


Fig 2.5 All the assignment at one place

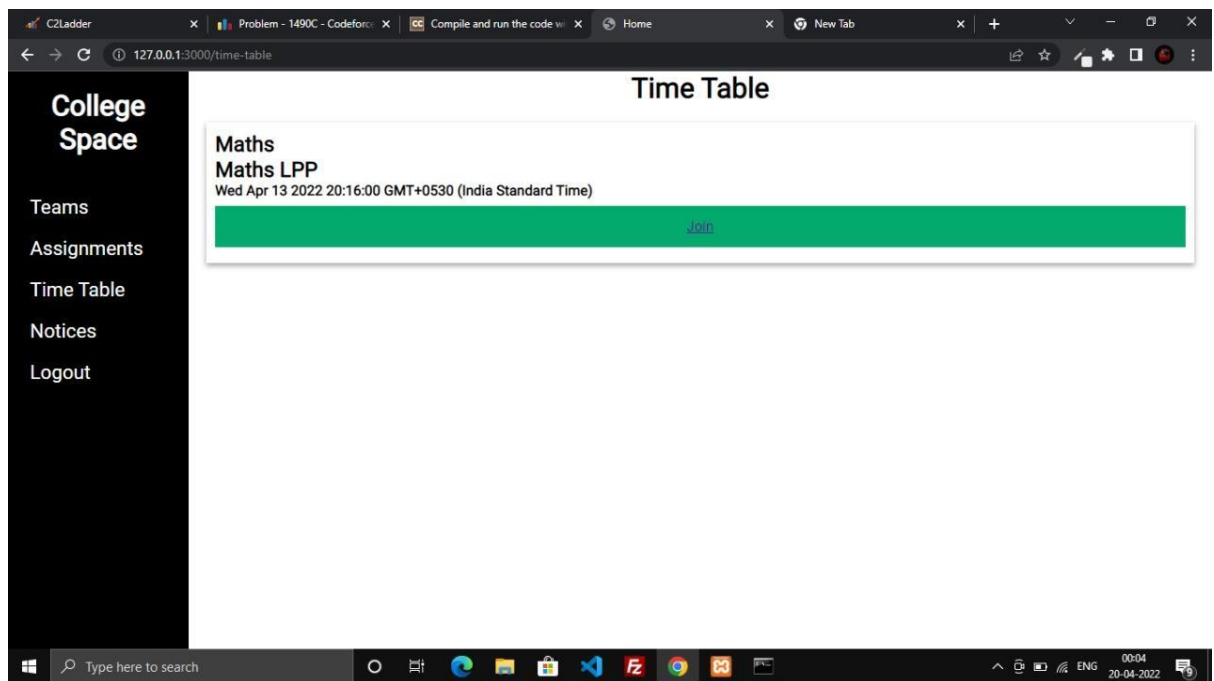


Fig 2.6 All the meetings schedules at one place

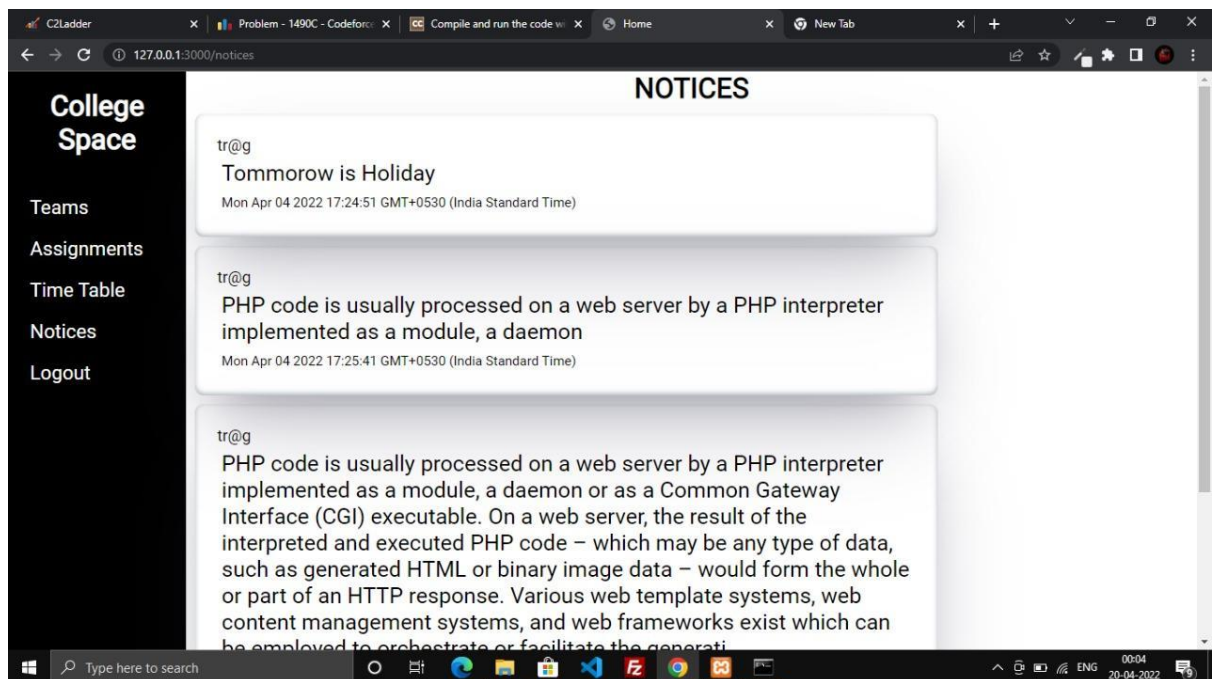


Fig 2.7 Student view of notices section

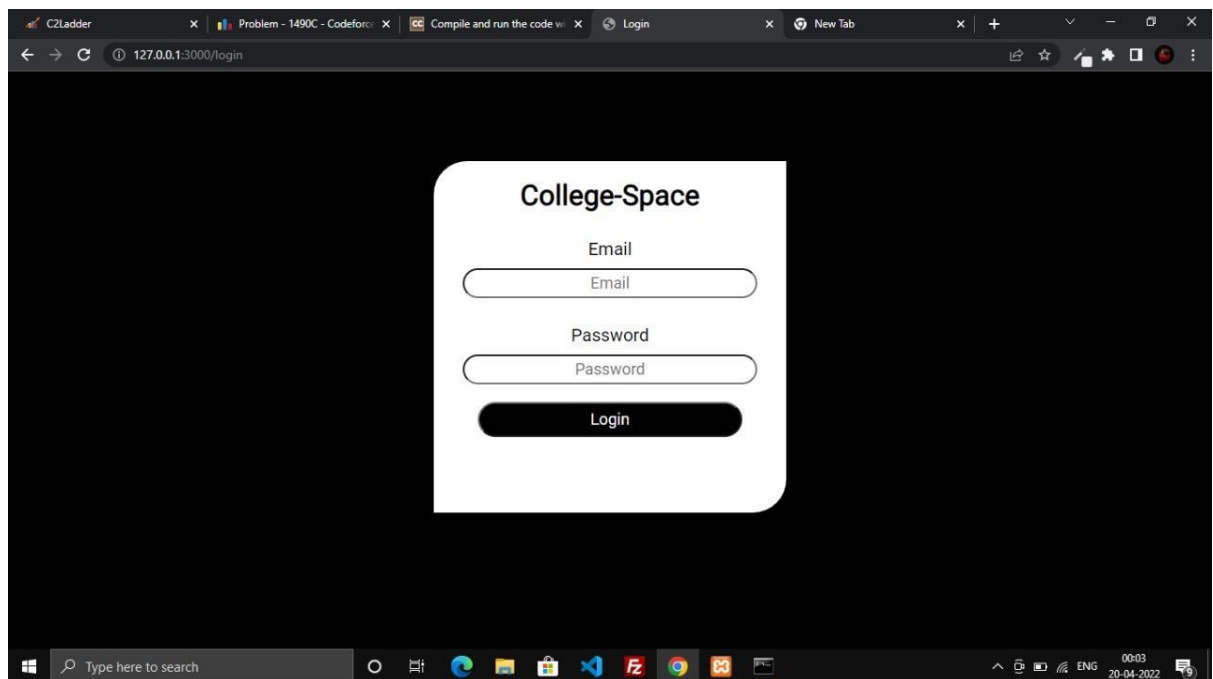


Fig 2.8 Login Page

## Teacher Pages

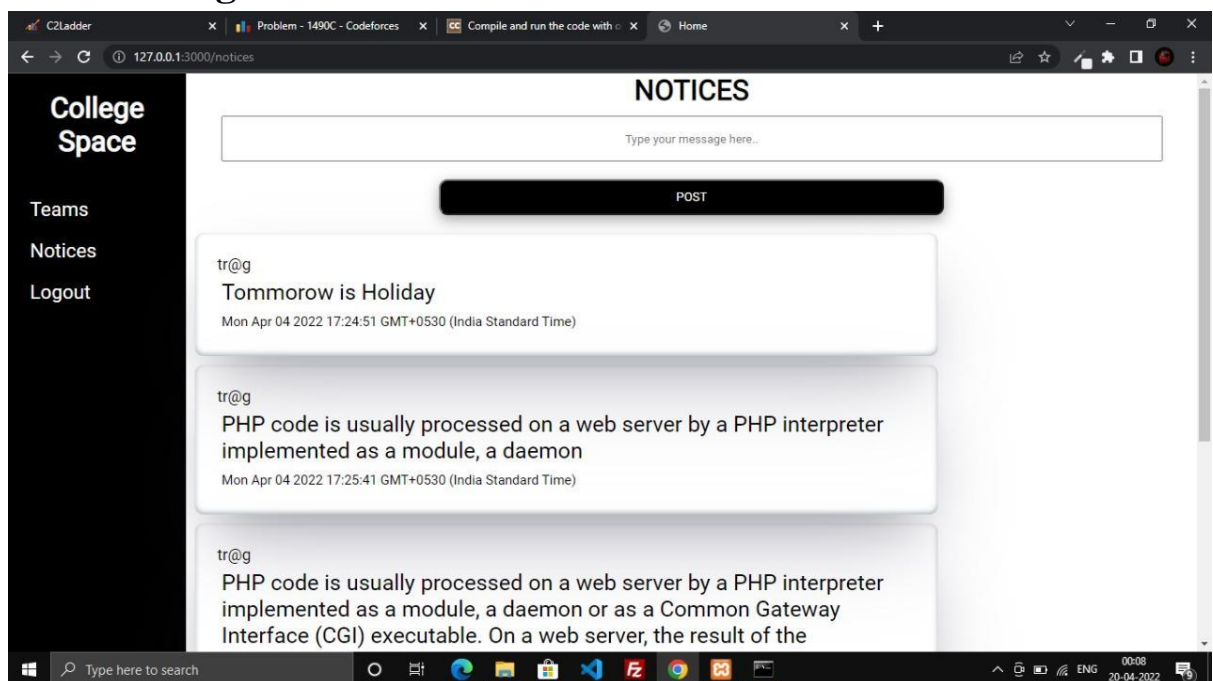


Fig 3.1 Teacher Notices View



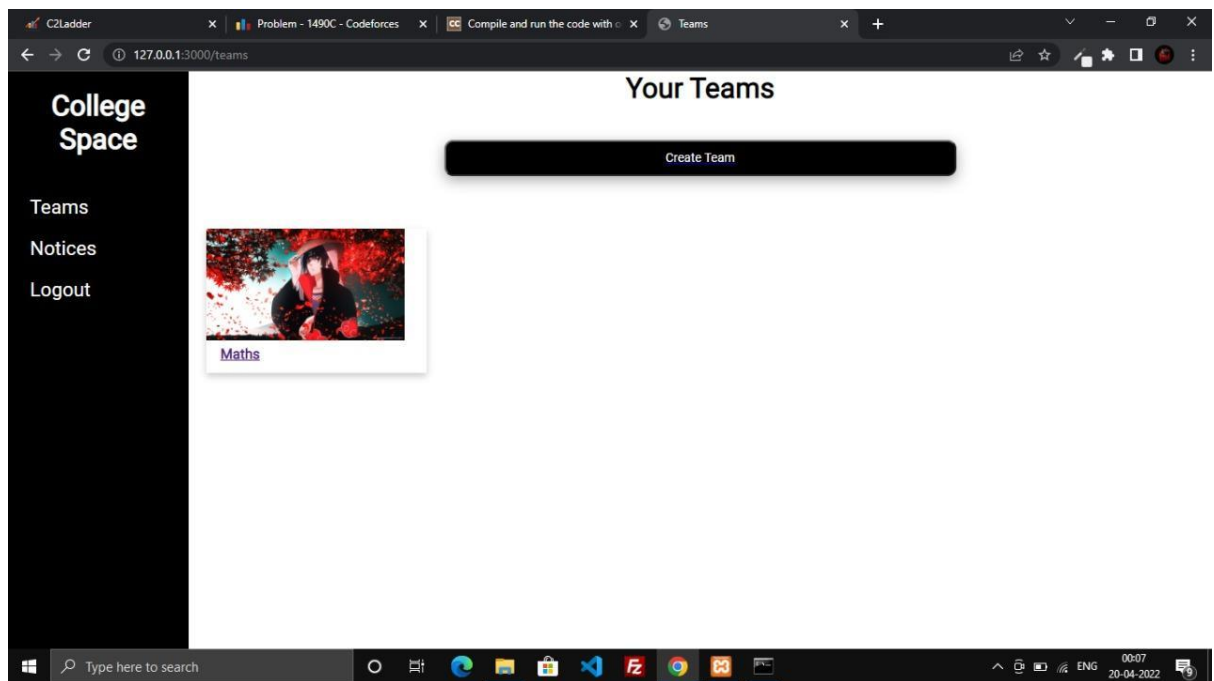


Fig 3.2 Teachers all Teams and Create Team Option

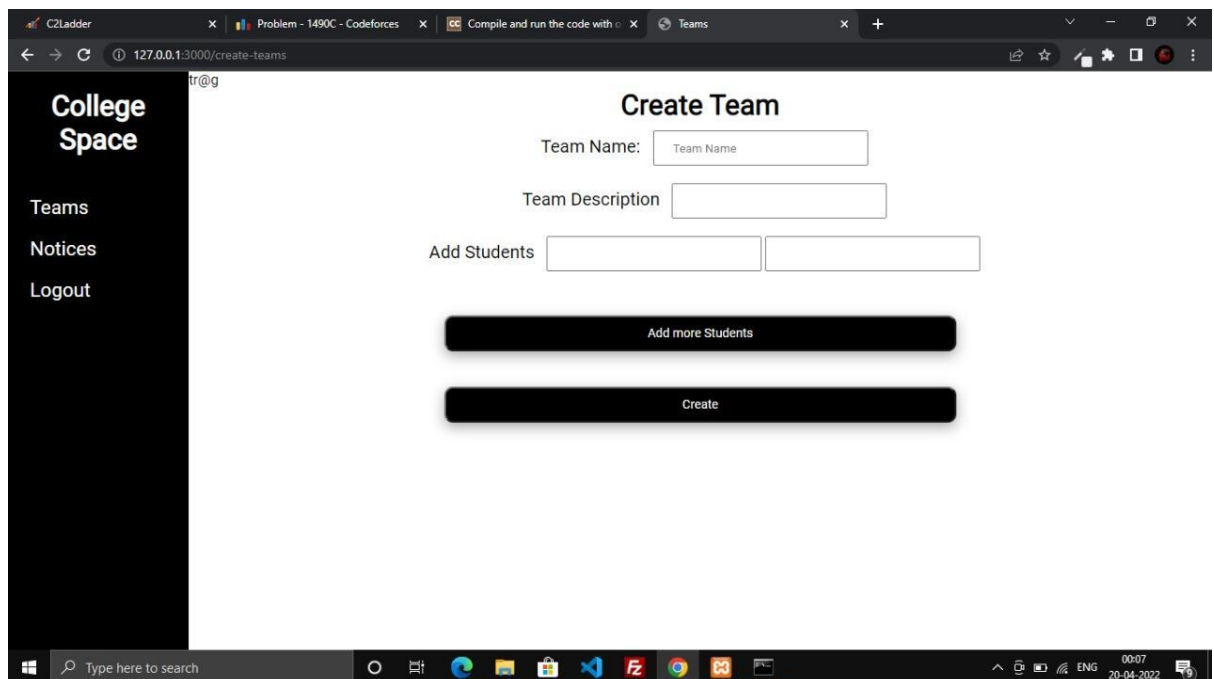


Fig 3.3 Create Team Form

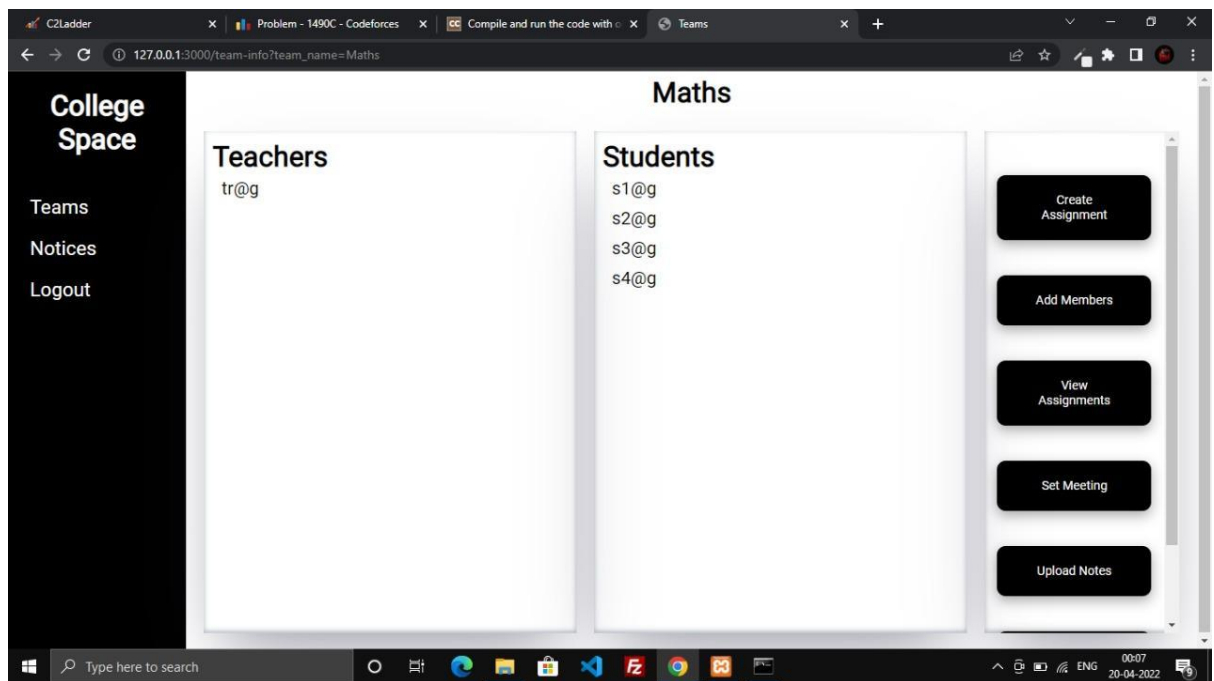


Fig 3.4 Teacher View of teams info

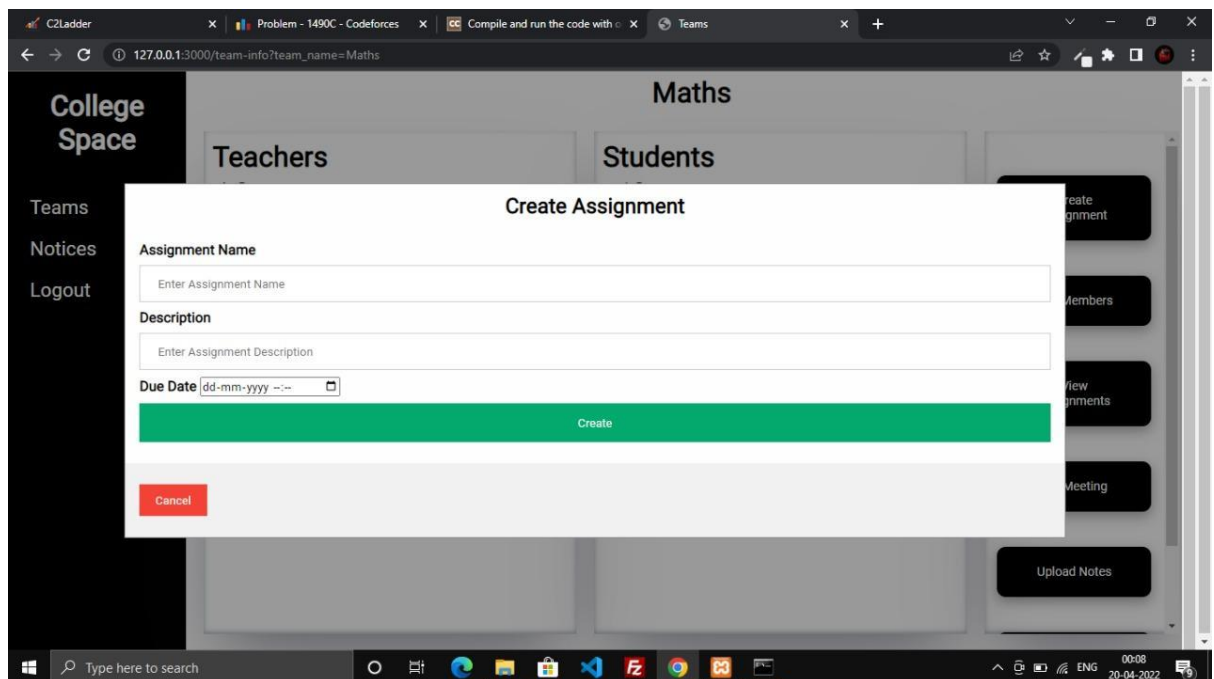


Fig 3.5 Assignment Creation Form

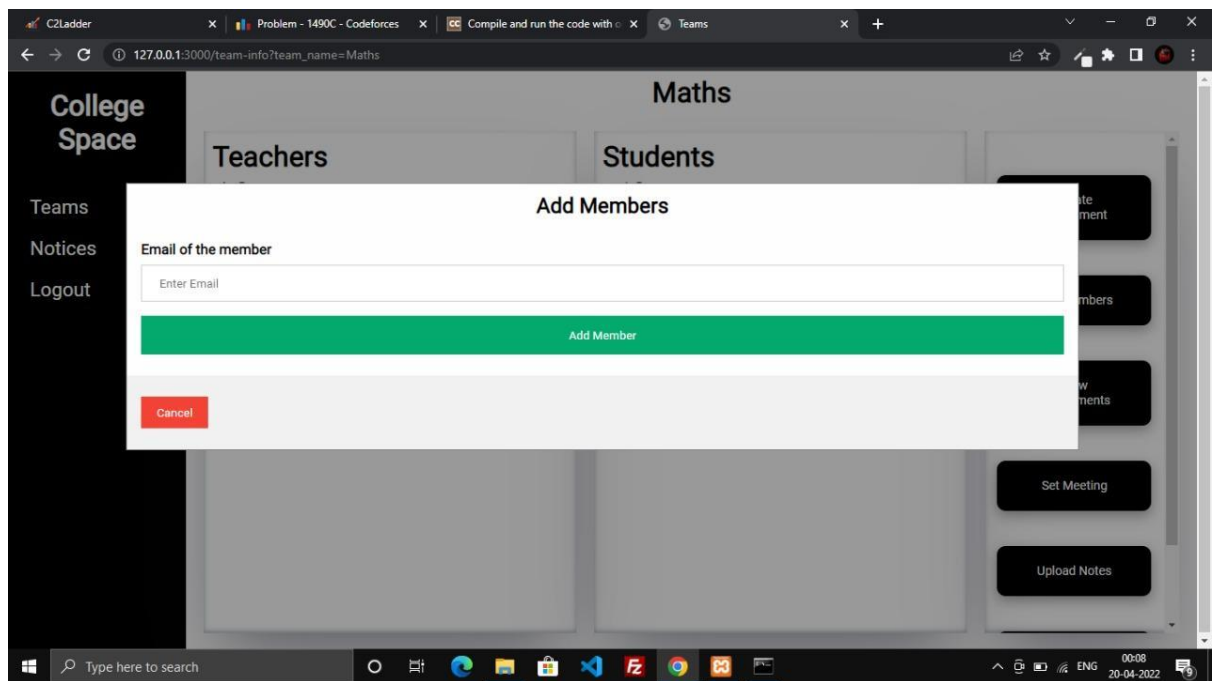


Fig 3.5 Adding members in team Form

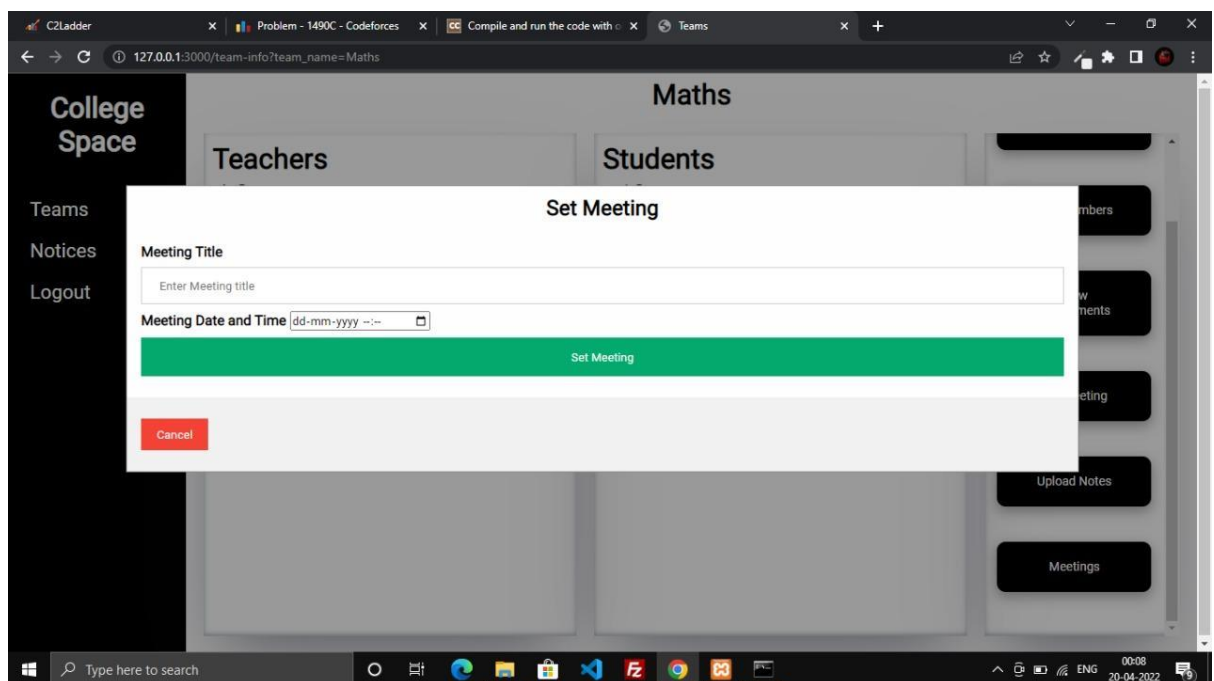


Fig 3.6 Setting up meeting

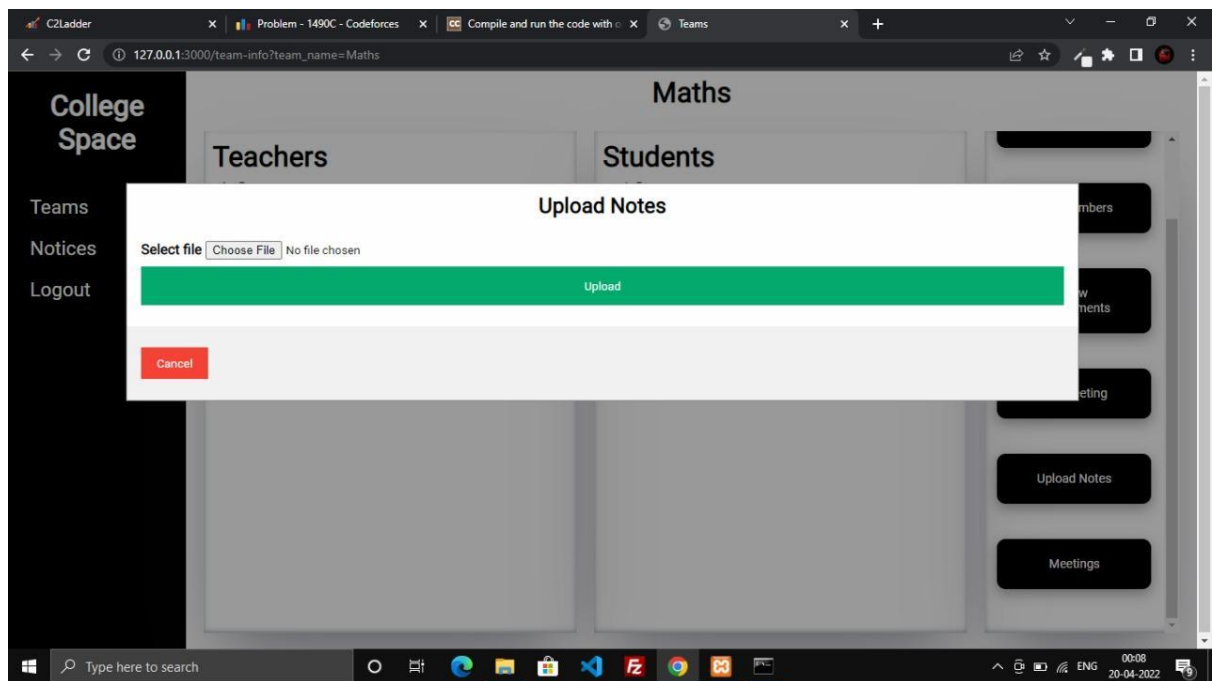


Fig 3.7 Uploading Notes

### 3.6 Conclusion and Future Work

Write conclusion and Future work in two different paragraphs.

### References

Format for references is given in this link:

<https://libguides.murdoch.edu.au/IEEE/all>

Depending on what reference you are using, whether it is a video or any article from a website, you need to select that format from the given link

**Note:** For each reference you need to write the citation. Example: If any paragraph or sentence you are copying as it is from the internet then that needs to be cited. At the end of the statement write the citation number[1] then given full stop.

**Note:** Mention page numbers in bottom right corner of every page. Start the report from introduction. Make a separate document for the pages before introduction because they will be numbered in Roman Number. **Contents will be page i, abstract will be page ii, acknowledgements will be page iii, list of figures will be page iv**  
No need for list of abbreviations, list of tables and list of symbols

**Note:** Try to write the whole report in your own words. Avoid copying from the internet.

**Note:** Font should be Times New Roman, Font size for headings will be 16, sub headings: 14, body: 12. Line spacing: 1.5