

# InstiOverflow

## Software Lab

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

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# Contents

# **1 Introduction**

InstiOverflow is a webapp similar to stackoverflow exclusively for IITB. In this anybody from IITB can post question by selecting appropriate Subject like Machine Learning, Software Lab, Systems etc and others can answer it.

In this user have to select subject from the list provided in dashboard, and then he/she will see Questions, Tags of particular question, Number of Answers in that particular question, Number of Comments and Time of when it was posted. He/She will also see Add Question Button Using this he/she can post questions of that particular subject.

Questions/Answers/Comments can be deleted only by the person who posted it. Others cannot delete the questions posted by someone else. This project will facilitate peer to peer discussion which is lacking in this online semester.

# **2 Motivation**

We have observed that the most lacking thing in this online semester is peer to peer discussion. Though there exists Moodle discussion forum, but there is no peer to peer discussion going on there. The person who asked the question expects TAs or the Professor to answer. So its not facilitating peer to peer discussions. Another solution was to use whatsapp but it has a huge drawback that after certain period of time, the context of discussion changes to something else.

Peer to Peer discussion is important because it helps to understand the concepts better and also helps us to see the problem with multiple dimensions.

Due to this online semester, we have faced that there is lack of discussion among peers. Our project aims at creating a global discussion forum in which students throughout the institute can participate and this will motivate discussion between peers

## 3 Dependencies

### Back-end

- handling server requests: 'Node.js with Express.js Framework'
- Database: 'MySQL'
- API tested using: 'POSTMAN'

### Front-end

- Front-end Framework: 'React.js (with Redux and react-router)'
- Styling: 'SASS' and 'BOOTSTRAP'

## 4 Using InstiOverflow

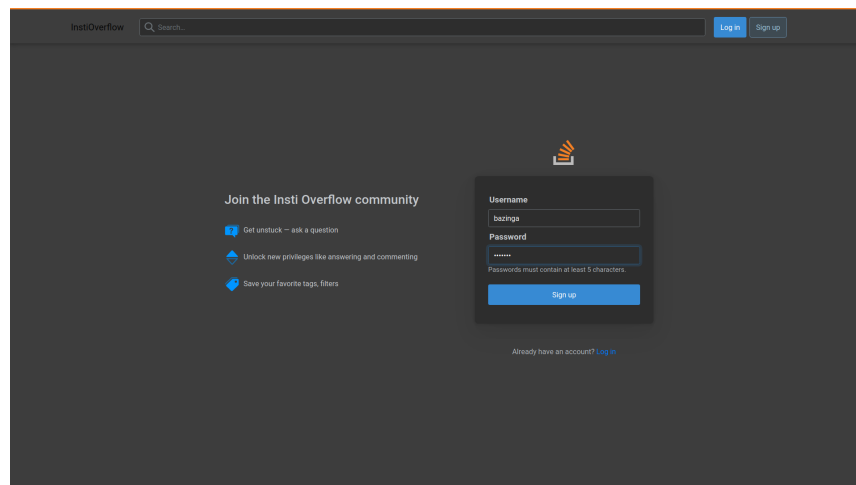
To use Instioverflow you need to install the following dependencies using following commands in ubuntu

- Install node and npm ...
  - sudo apt install nodejs
  - node -v (check version of node)
  - sudo apt install npm
  - npm -v (check version of npm)
- Install mysql ...
  - sudo apt update
  - sudo apt install mysql-server
- setup mysql user and server ...
  - sudo mysql

- mysql>ALTER USER 'root@localhost' IDENTIFIED WITH mysql\_native\_password BY mysql@123; (change password of root mysql@123 in this case)
- mysql>SET GLOBAL sql\_mode=(SELECT REPLACE(@@sql\_mode,'ONLY\_FULL\_GROUP\_BY',''));
  - mysql>flush privileges;
  - mysql>exit
  - mysql -u root -p
- Run these commands then -
  - npm install (Run this command in UI , API and instiOverflow folder)
- Run 'instiOverflow.sql' file in the mysql client
  - mysql -u root -p < instiOverflow.sql (user-root)
- Start the servers
  - npm run instioverflow

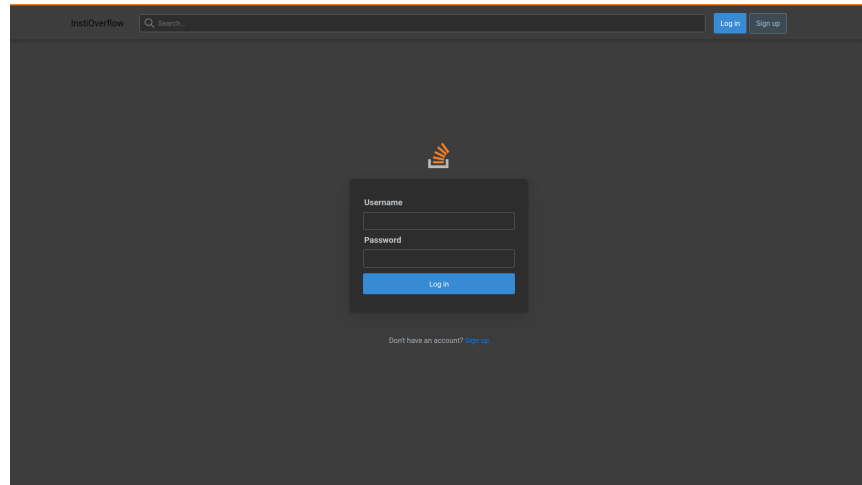
## 4.1 SignUp

Enter username and password to signup



## 4.2 SignIn

Enter username and password to signin



The screenshot shows the login interface of the InstiOverflow application. At the top, there is a header bar with the text "InstiOverflow" on the left, a search bar in the center, and "Log in" and "Sign up" buttons on the right. The main content area has a dark background. In the center, there is a white box containing a small icon of a book with a flame above it. Below the icon, there are two input fields labeled "Username" and "Password". A blue "Log in" button is positioned below the password field. At the bottom of the white box, there is a link that says "Don't have an account? Sign up".

## 4.3 Dashboard

Click on any subject

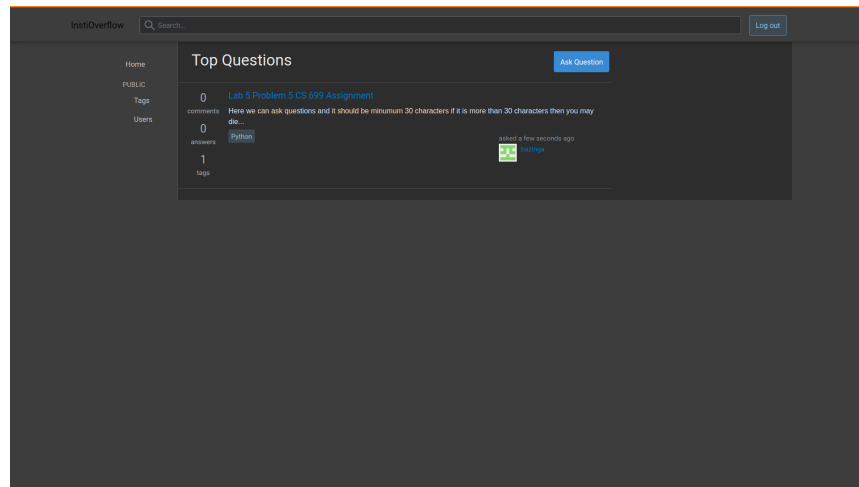


The screenshot shows the dashboard of the InstiOverflow application. At the top, there is a header bar with the text "InstiOverflow" on the left, a search bar in the center, and a "Log out" button on the right. Below the header, there is a list of subjects. Each subject is represented by a row with a course code and a description. The subjects are:

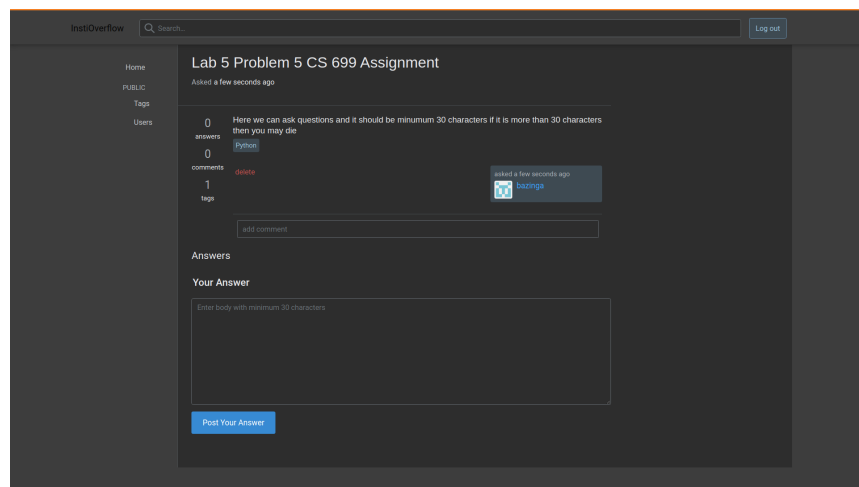
Course Code	Course Description
CS101	Computer Programming and Utilization
CS744	System Course
CS725	Machine Learning course
CS601	Algorithms course
CS699	Lab course
CS626	NLP course
CS726	Advanced Machine Learning course
CS602	Applied Algorithms
CS618	Program Analysis course

## 4.4 View Questions

Select Any Question

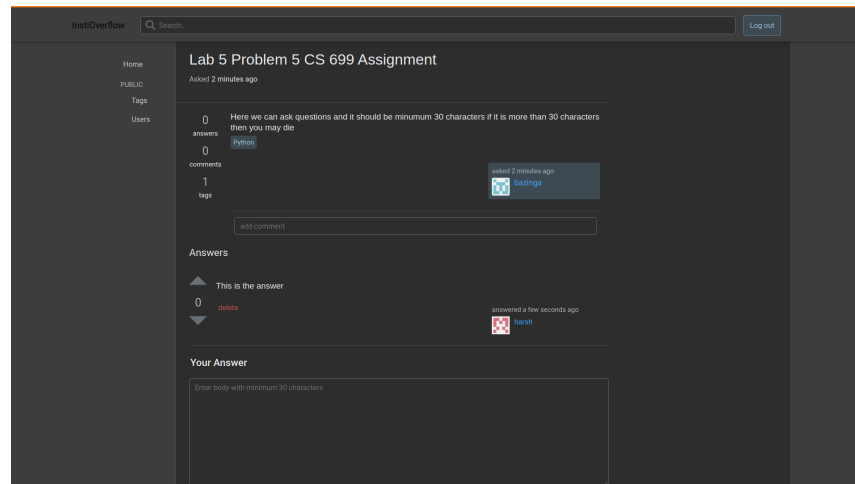


## 4.5 View Particular Question



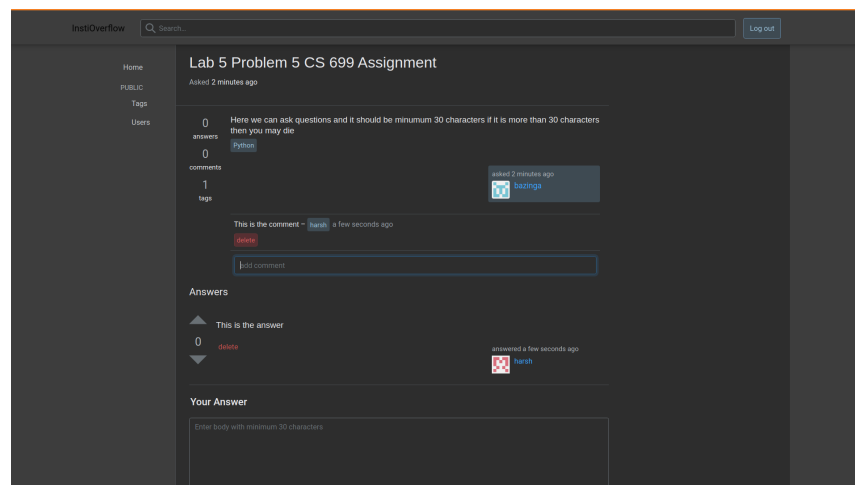
## 4.6 Answer

Enter Your Answer



## 4.7 Comment

You can also comment on question or answer





## 4.8 Add Question

You can Add Question by filling all the required fields

The screenshot shows the 'Ask your question' form in the InstiOverflow application. The form has a dark theme and includes the following fields and instructions:

- Title:** Be specific and imagine you're asking a question to another person. Example: Lab 5 Problem 5 CS 699 Assignment.
- Body:** Include all the information someone would need to answer your question. Example text: You are Mahesh Jaywardene, the coach of Mumbai Indians IPL team 2020. This year IPL starts from 19th september due to COVID19 pandemic, only limited no of matches were played globally. You as a coach, want to analyse as much data as you can. You have the data of CS 2200 which was played last month. Since you have only one week to analyse the data, you have decided to keep track of scores during IPL matches using a dictionary. Example code: 

```
{ "bat": { "Hemwayer": 99, "pooran": 36 }, "bow": { "patel": 86, "chase": 19 }, "out": { "open shankar": 41, "hannay": 63, "tussal": 101 } }
```

 Each player and match is represented by a string and the scores by integers.
- Tag Name:** Add up to 5 tags to describe what your question is about. Example: Python.

A 'Post your question' button is located at the bottom of the form.

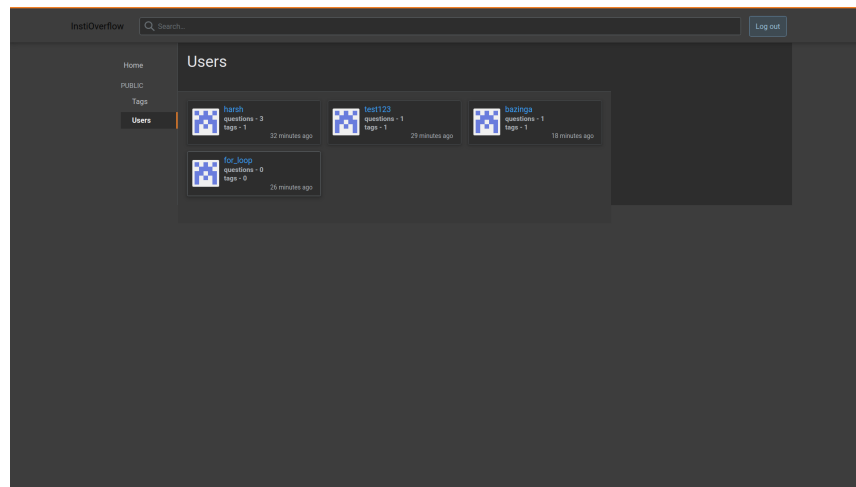
## 4.9 View Tags

The screenshot shows the 'Tags' page in the InstiOverflow application. The page has a dark theme and includes the following content:

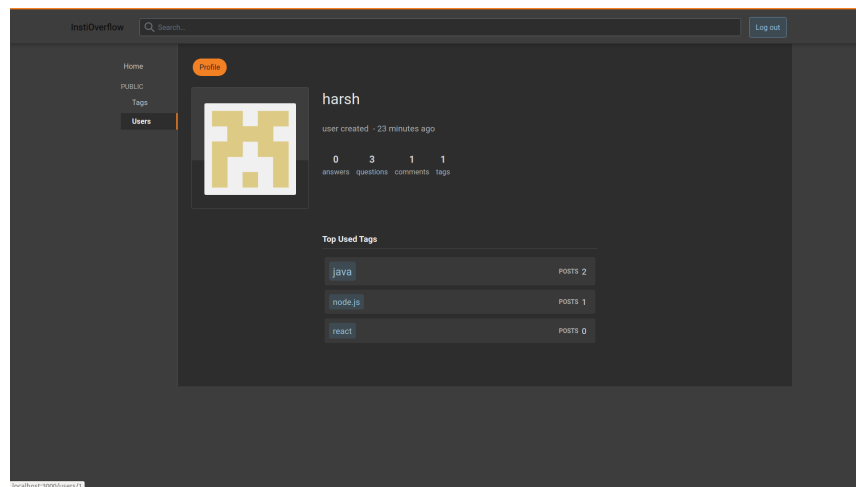
- Tags:** A tag is a keyword or label that categorizes your question with other, similar questions. Using the right tags makes it easier for others to find and answer your question.
- Tag Cards:** Three cards are displayed, each representing a tag and its associated questions and time added:

Tag	Questions	Added
Latex	3 questions	added 31 minutes ago
Ask	1 questions	added 23 minutes ago
Python	1 questions	added 10 minutes ago

## 4.10 View All Users



## 4.11 View Profile



## 5 Future Scope

As of now there is no such global discussion forum for our institute so our project can be extended so that it could be used by the students of our Institute.