

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM 590014



Mobile Application Development Report on

“BMSCE Department App”

By

ASHISH CHANDER (1BM17CS148) SHREYANK D JAIN (1BM17CS097)

RAVI PRAKASH N (1BM17CS074)

Under the Guidance of

Namratha M

Assistant Professor, Department of CSE

BMS College of Engineering

Mobile Application Development carried out at



Department of Computer Science and Engineering

BMS College of Engineering

(Autonomous college under VTU)

P.O. Box No.: 1908, Bull Temple Road, Bangalore-560 019

January-May 2020

BMS COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the mobile application development titled “College Management App” has been carried out by **ASHISH CHANDER(1BM17CS148)**, **SHREYANK D JAIN(1BM17CS097)**, **RAVI PRAKASH N(1BM17CS074)** during the academic year 2019-2020.

Signature of the guide

Namratha M

Assistant Professor

Department of Computer Science and Engineering
BMS College of Engineering, Bangalore

BMS COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



DECLARATION

We, ASHISH CHANDER(1BM17CS148), SHREYANK D JAIN(1BM17CS097), RAVI PRAKASH N (1BM17CS074), students of 6th Semester, B.E, Department of Computer Science and Engineering, BMS College of Engineering, Bangalore, hereby declare that, this mobile application development work entitled "College Management Application" has been carried out by us under the guidance of Namratha M, Assistant Professor, Department of CSE, BMS College of Engineering, Bangalore during the academic semester January-May 2020

We also declare that to the best of our knowledge and belief, the development reported here is not from part of any other report by any other students.

Signature

ASHISH CHANDER (1BM17CS148)

SHREYANK D JAIN(1BM17CS097)

RAVI PRAKASH N (1BM17CS074)

1. Introduction:

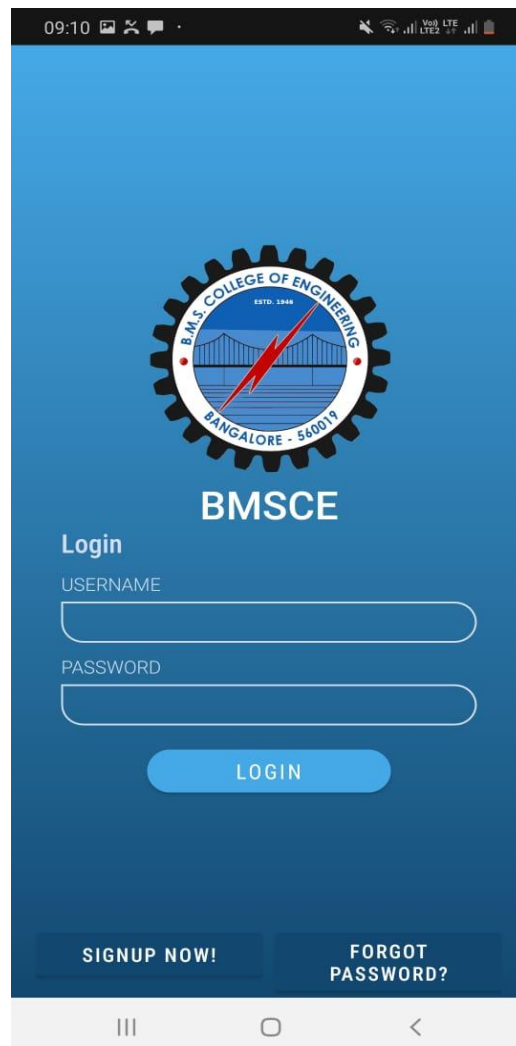
This app is designed to enable easier communication between the students of a class and their respective teachers. One of the few problems faced by students is searching for a study material sent by the faculty, link to register for a workshop or a contest or crossing the deadline to register for a contest. The student may have to go through different platforms on the internet like gmail, whatsapp or edmodo to name a few to find the links to workshops or contests and study materials sent by the college and browse through various different mails, messages and posts. This may become a tedious time consuming task. To resolve this, the app provides a platform where materials can be shared, links to workshop can be shared and announcements by the teachers can be made through posts. The students can also set a reminder to make sure everything is finished before the due dates like registering for an event (contest or workshop) .

A user can log into the app as a teacher or as a student. Logging in as a student, the user must join a class his/her teaching faculty has created. On joining the class, the student get access to all the materials and posts, details of workshops and contests posted by the faculty of that class. The student can set reminders on each of the events too. The app also uses firebase to enable student's interaction with teachers in the form of a chat window.

A user logged in as a teacher can create a class which the students join. The teacher can upload the study materials, make announcements and post links and details of upcoming events which the students of a specific class are eligible to enroll.

The app also provides reset password feature to users registered as student or teacher.

2.Home Page before login:



The user must provide the registered username and password. The entered details are checked with respect to their account and logged in accordingly. If a user has forgotten the password , he/she can reset the password to a new one by clicking on the “forgot password” button.

A user who is yet to register on the platform can do do by clicking on the “signup now!” button.

The following images show the events that occur when a user clicks each of these buttons

i) Signing up:

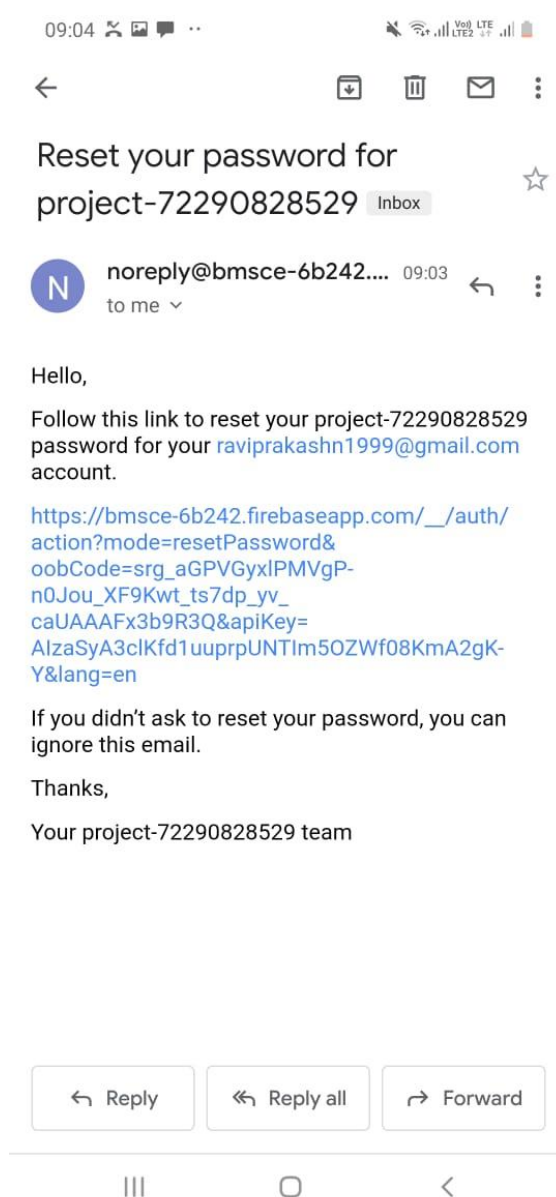
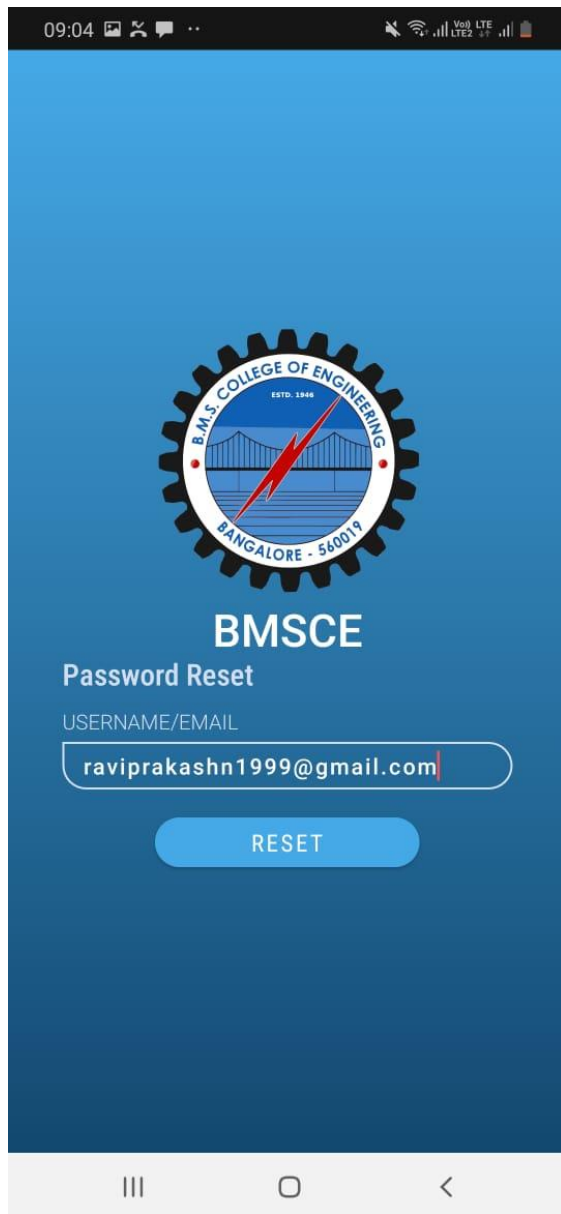
The image displays two side-by-side screenshots of a mobile application interface for BMSCE (Bangalore Mahatma Society College of Engineering). Both screens show the 'Register' page with the college's logo at the top. The left screenshot, taken at 08:44, shows the registration form with empty input fields. The right screenshot, taken at 09:02, shows the same form with the following details entered:

- USERNAME: Raviprakash
- USN: 1BM17CS001
- EMAIL ID: raviprakashn1999@gmail.com
- PASSWORD: (masked with dots)
- CONFIRM PASSWORD: (masked with dots)
- SEMESTER: 1
- SECTION: A
- CONTACT NUMBER: (empty)

At the bottom of each screen is a blue button labeled 'SIGN UP!'. The app's status bar at the top of each screen shows the time, signal strength, and battery level.

The sign up page consists of fields which include the college details of the student namely USN, email ID, user name, password to login, confirm password, semester, section and contact number. Each of these details excluding the password are stored as details of the student after the login. Clicking on the “sign up!” button take the user to the home page after login.

ii) Forgot Password:



Clicking on the forgot password button takes the user to a page (depicted by the image on the left) where the user enters an email ID to receive a link to reset the password via mail in his inbox. The image on the right shows the mail received which has the link to reset the password.

09:05



sce-6b242.firebaseio.com

50



Reset your password

for **raviprakashn1999@gmail.com**

New password



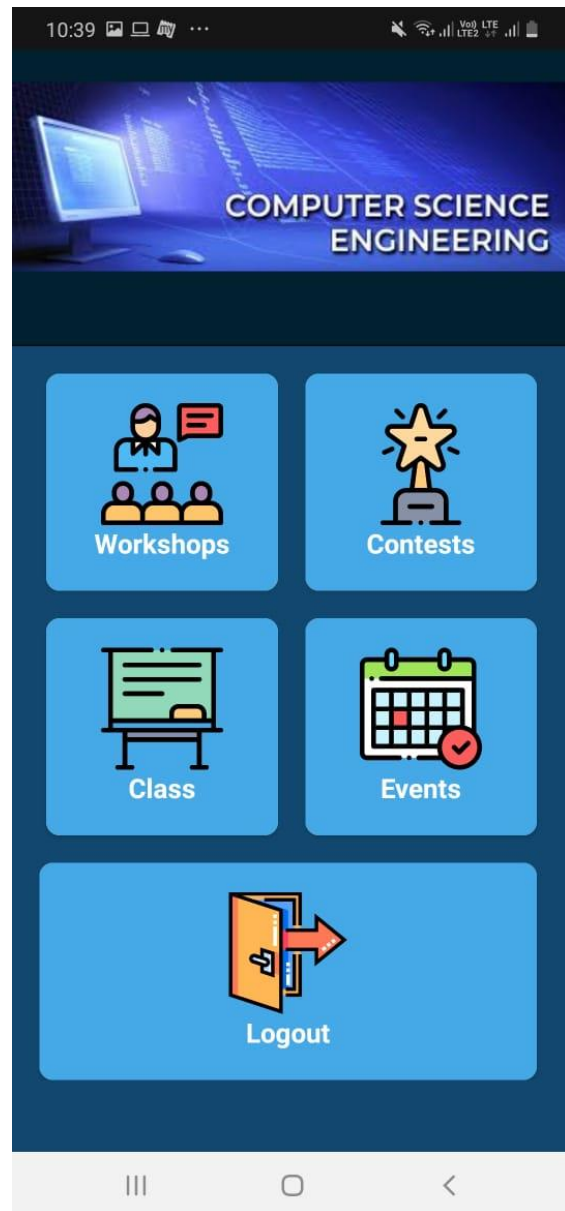
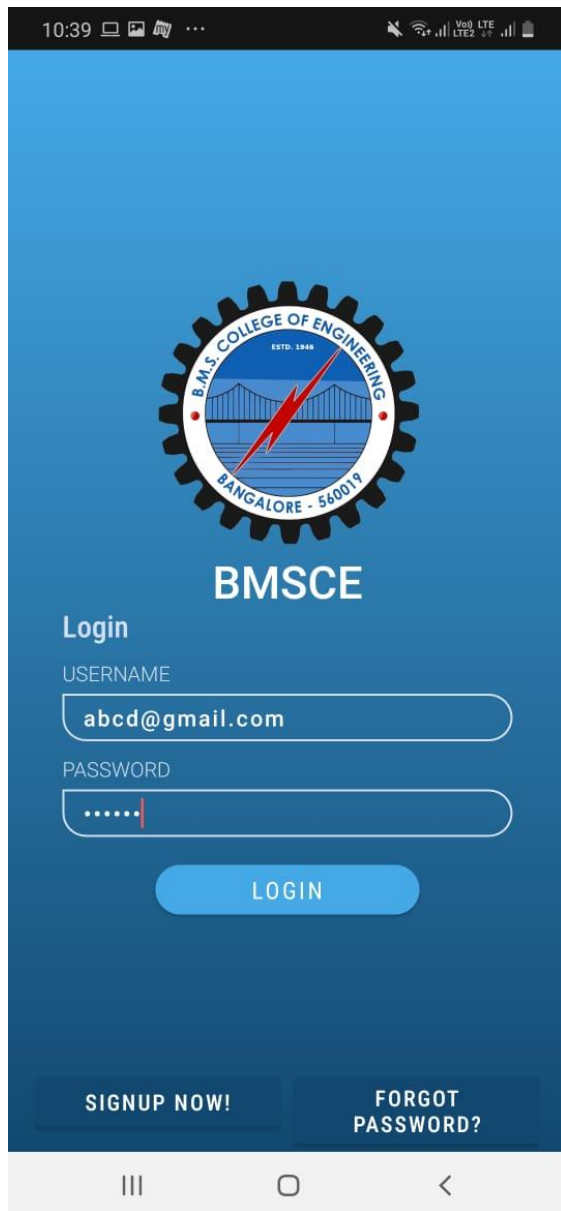
SAVE



On clicking the link sent via mail, the user is taken to this page where he can type in the new password without errors.

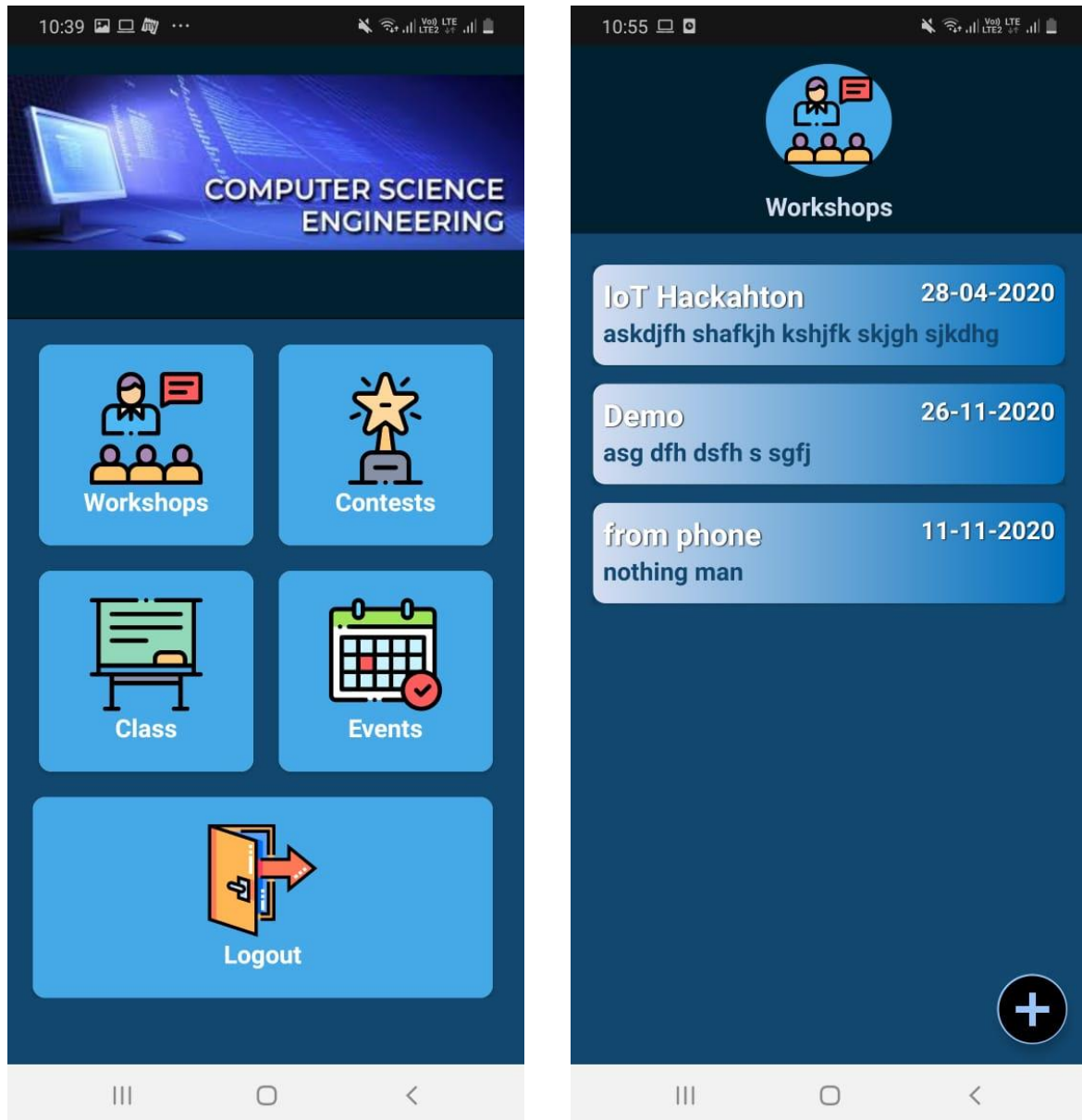
3.Login as a teacher:

i)Home Page After Login:



The teacher's login is as shown above. On entering the valid details, the user is directed to the home page of the teachers as shown on the right.

ii) Uploading Workshop and its Details:



The home page consists of 5 buttons. The workshop button directs the user to a page displaying the title of all workshops uploaded in the form of buttons as shown in the image on the right. A new workshop can be added on clicking on the “+”

button. It directs the user to a form where the details of the workshop to be added are to be filled.

The image displays two mobile application screens for workshop management.

Left Screen: Add New Workshop

- Header:** Features an icon of three people and the title "Add New Workshop".
- Form Fields:**
 - WORKSHOP TITLE
 - WORKSHOP CODE
 - WORKSHOP DETAILS
 - LAST DATE TO REGISTER
 - WORKSHOP DATE
 - SELECT WOKSHOP ATTACHMENTS
- Buttons:** A "BROWSE" button (dark blue) and a "Select Extension" button (light blue) are positioned below the attachments field. An "UPLOAD" button (dark blue) is at the bottom.

Right Screen: IoT Hackathon

- Header:** Displays the workshop title "IoT Hackathon", the "Last Date to Enroll" as "28-04-2020", and two buttons: "REGISTER" and "SET REMAINDER".
- Workshop Date:** Shown as "10-06-2020".
- Description:** A text block containing placeholder text: "askdjfh shafkjh kshjfk skjgh sjkdhg kshfkjsh fkjhsdjkf hskdhfjksh kh sdfkjhsdhfkjshdfjkh hdfkjshf uiwui nvjns jkhkfhwelhf kjshdfjkhsdkjf jsndjksnch sahfkawjrkfasdhkfv hasjk fawgasgasgarsr r fgasfgar w asgafhe ryey aertg".
- Attachments:** Two buttons with PDF icons are shown: "a1" and "details".
- Bottom:** A circular button with a "+" sign is located in the bottom right corner.

A new workshop can be added by filling the details of the workshop in the form and clicking on "upload" button.

On clicking on one of these buttons, the details of the workshop are shown in the form of text. Any additional information regarding the workshop can be added in the post

in the form of a pdf or other available extensions. The “+” button directs the user to a page where the user can upload a file for into the workshop’s details.

10:56

Add Workshop Attachment

MATERIAL TITLE

SELECT FILE TO UPLOAD

BROWSE Select Extension

UPLOAD

11:14

Add Workshop Attachment

MATERIAL TITLE

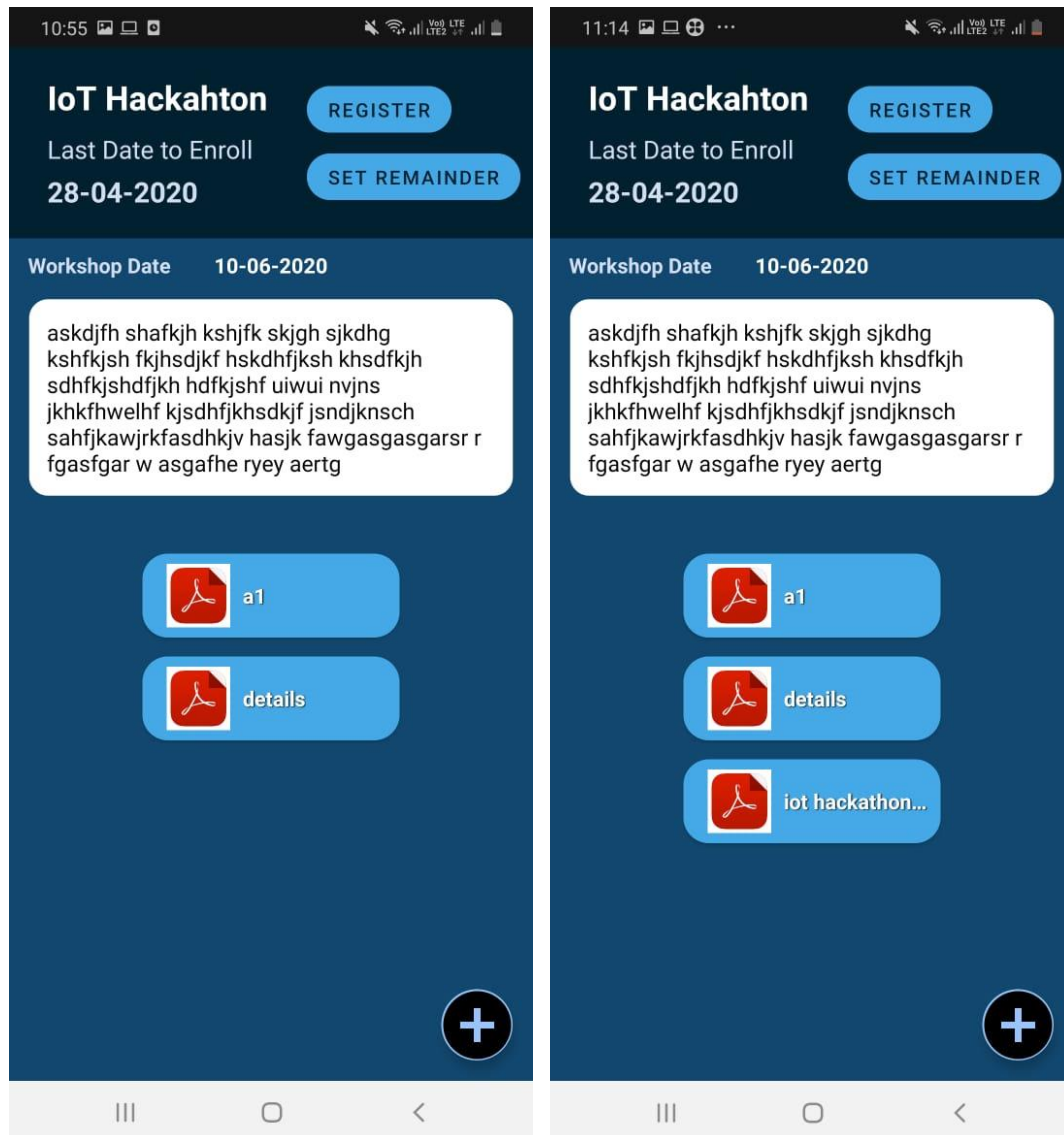
iot hackathon rules

SELECT FILE TO UPLOAD

BROWSE .pdf

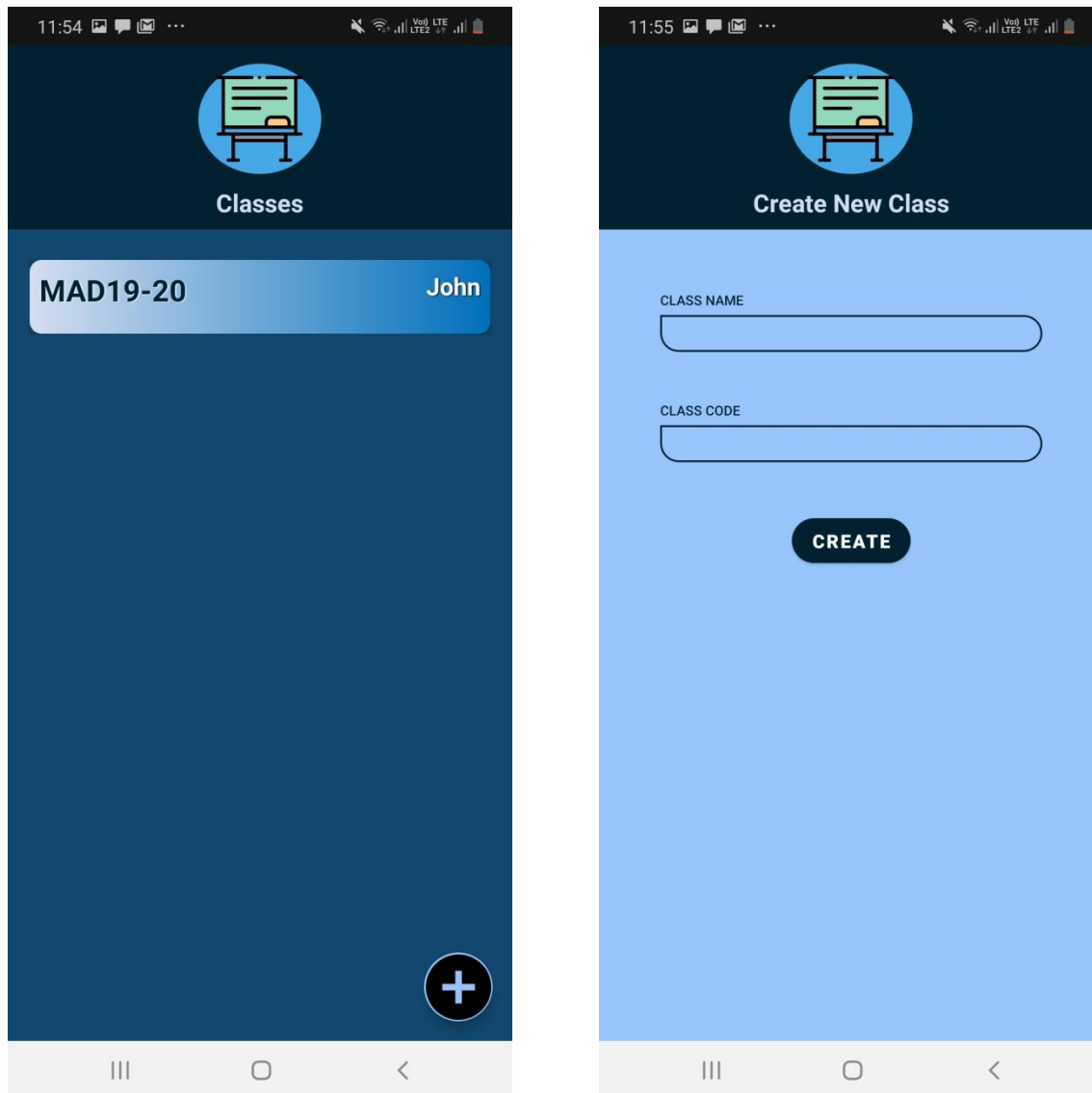
UPLOAD

The file is selected from the google drive storage and the extension is given accordingly.



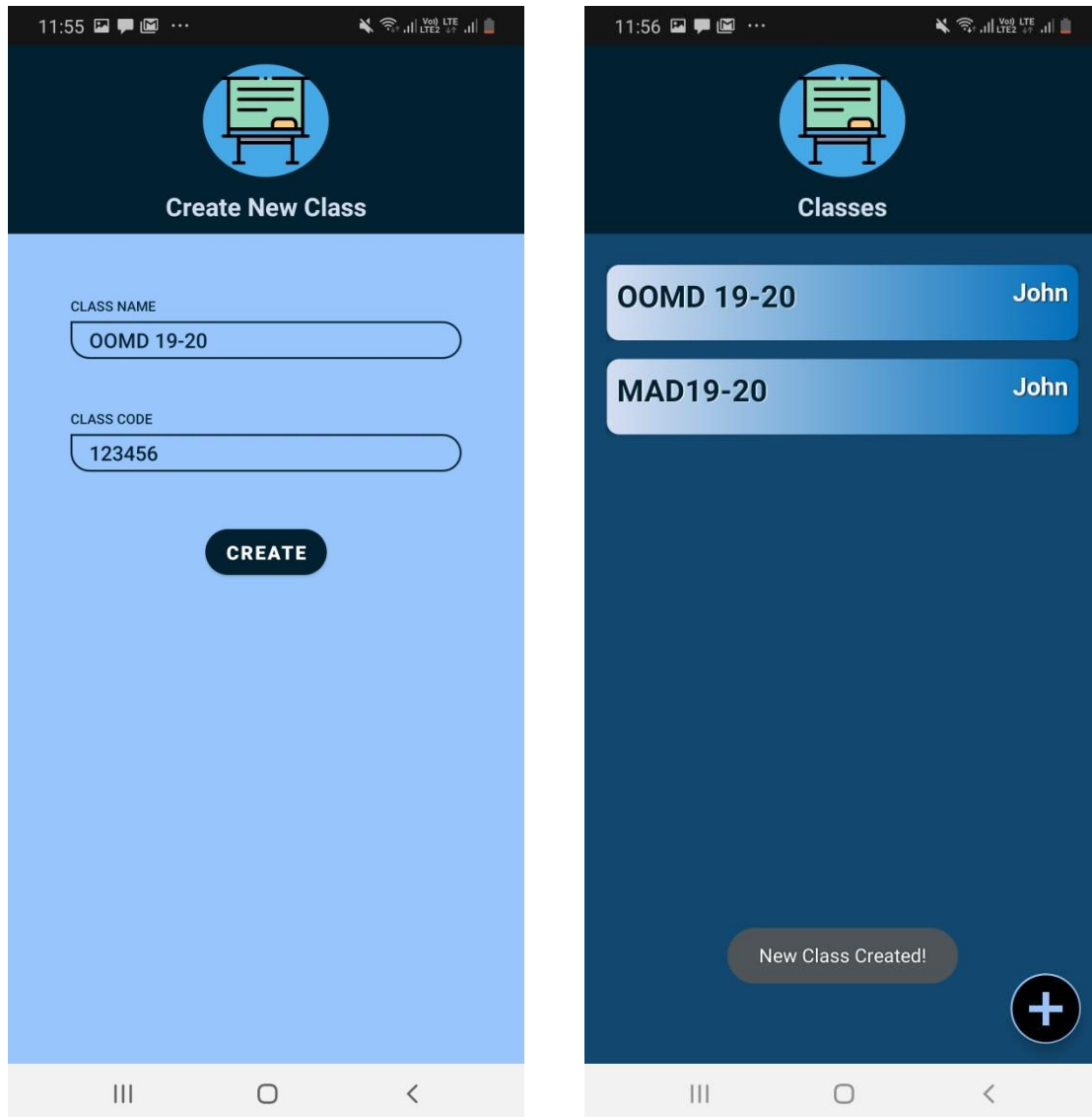
Uploading the file is successful once the file is displayed as a part of the information of the workshop. The above images show the details of the workshop before and after uploading the file. The “set remainder” button sets the remainder according to the given date of the workshop

iii) Creating classes:

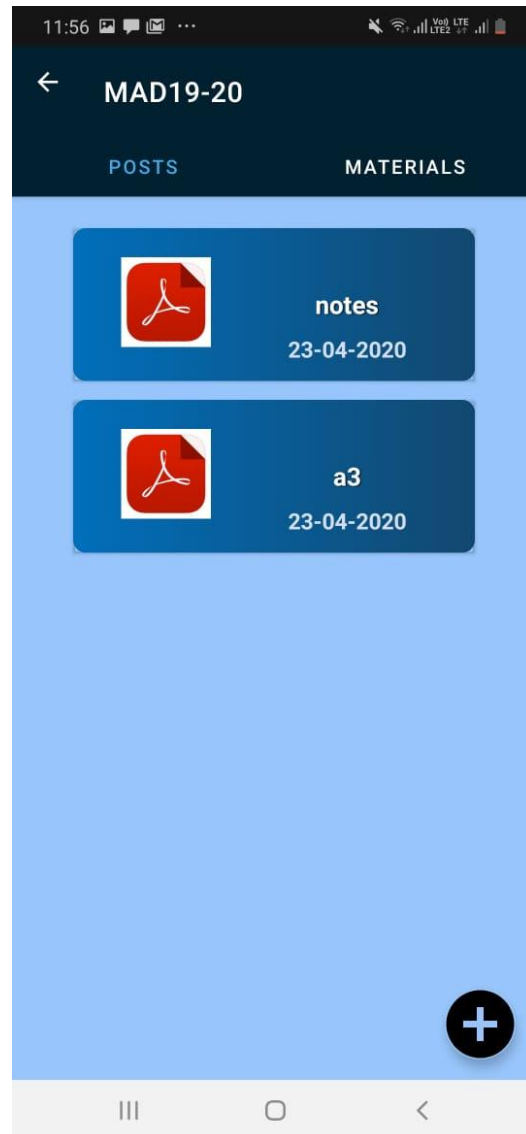
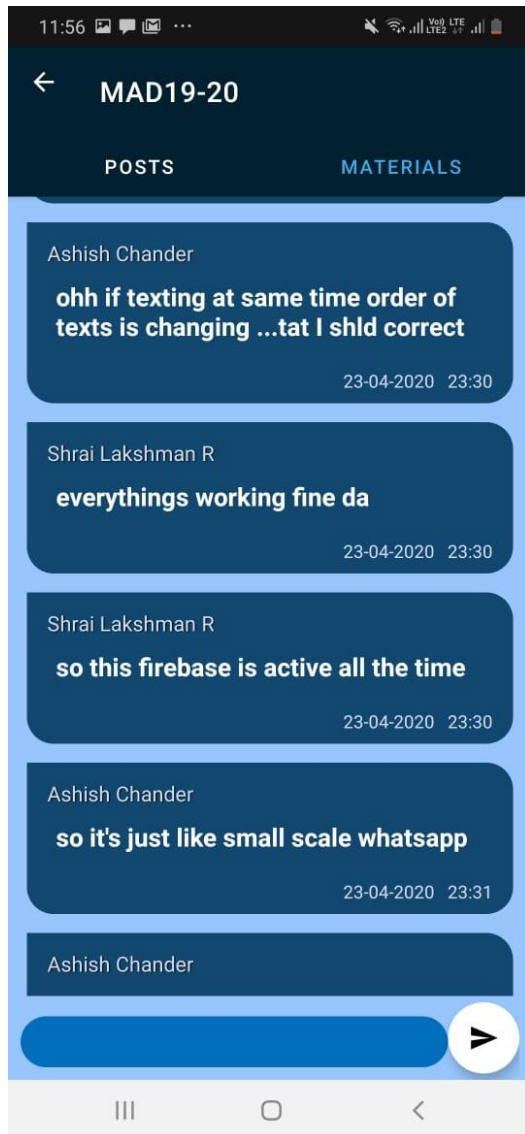


The classes button in the teacher's homepage directs the user to the page as shown in the image on the left. This page lists out all the classes

the teacher has created. The user can create a new class by clicking on the “+” button at the bottom right of the screen.



When the class code and name are entered in the specified fields, the create button on being clicked creates a new class which the students can enroll into as shown in the above two images.

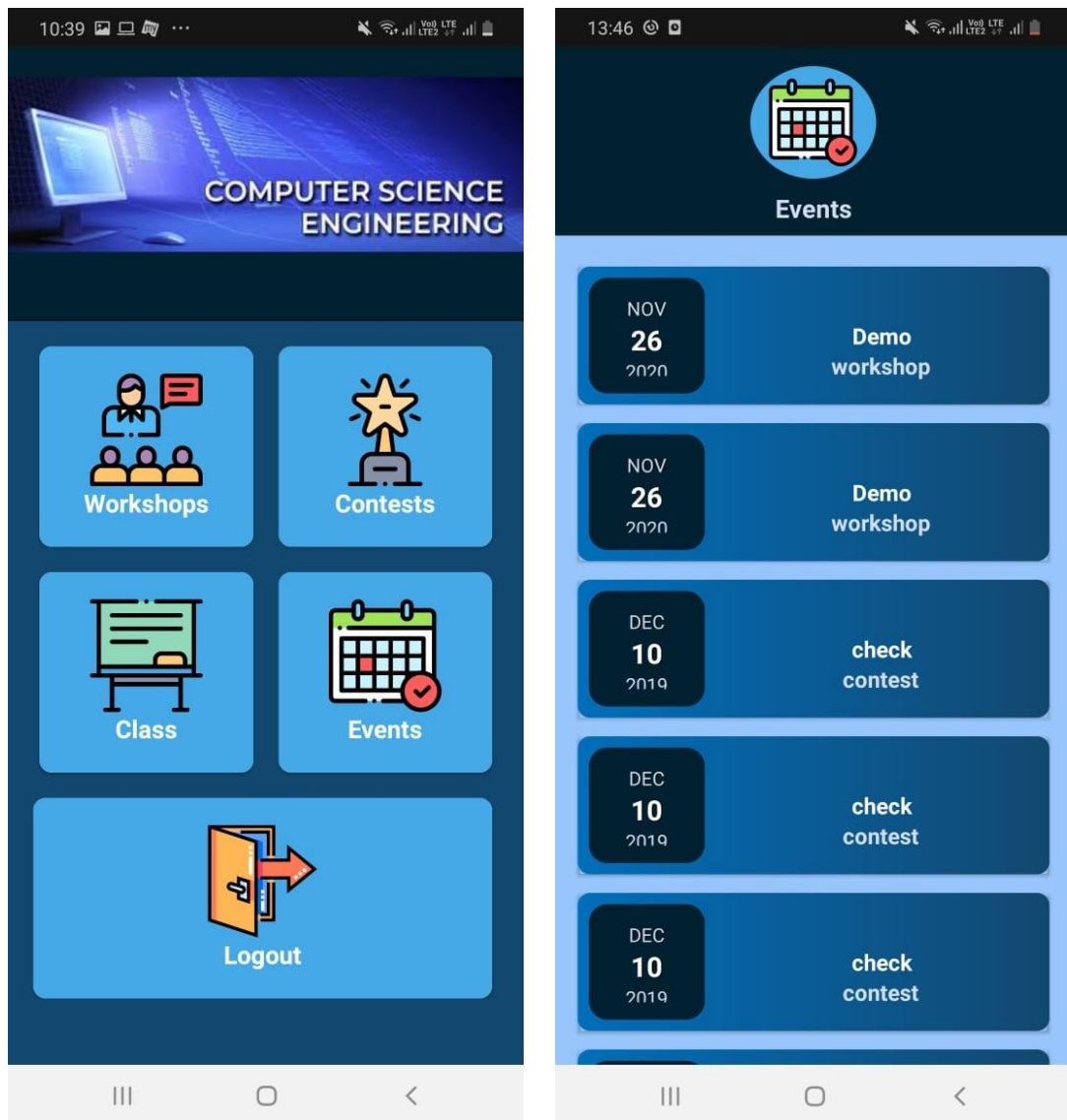


Each class contains 2 sections: Posts and Materials.

In the posts section, the students get to converse with the teacher regarding the schedules, tests, study materials etc.

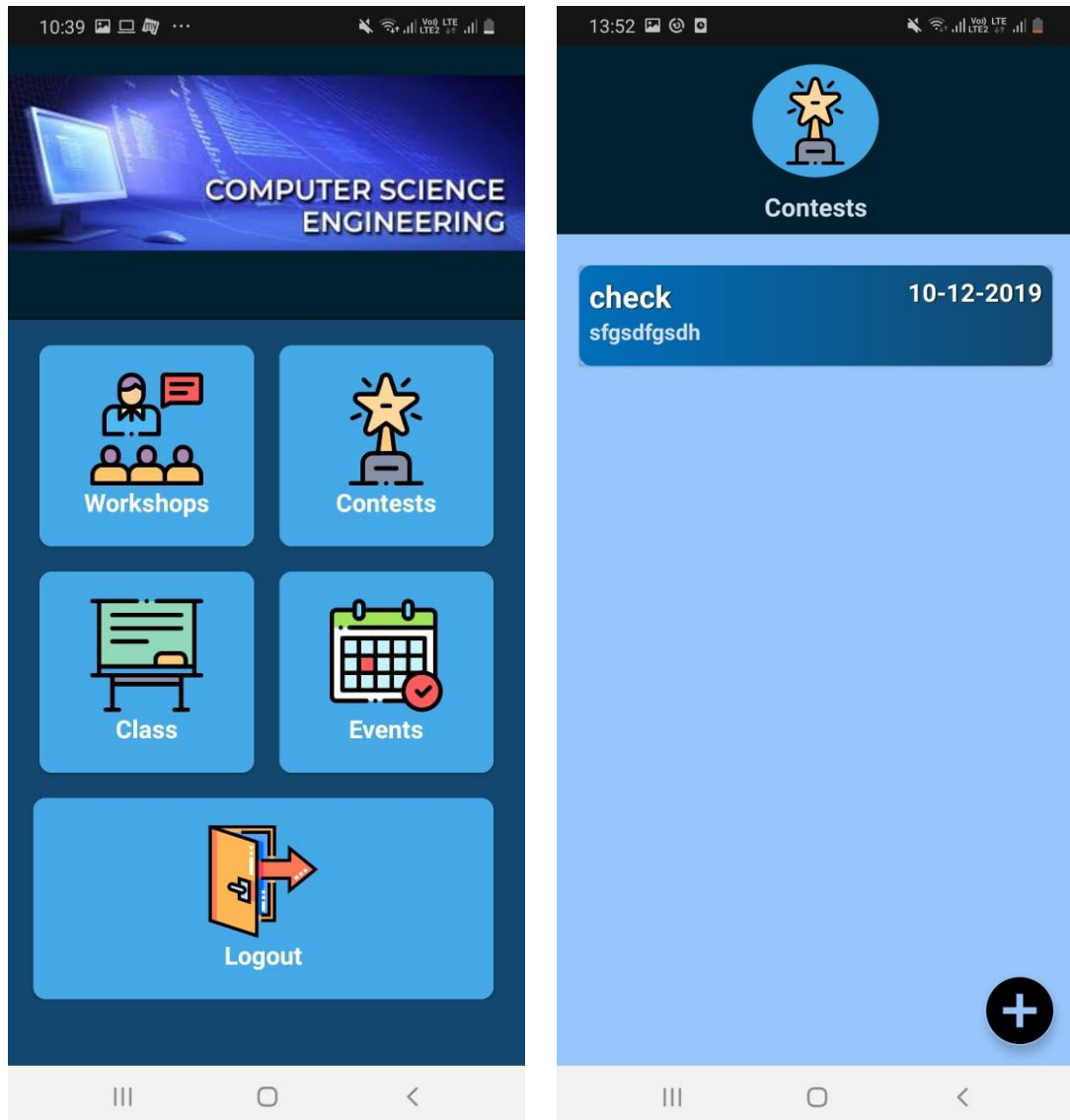
In the materials section, uploads are made, only by the teacher who created the class .The uploads include study materials, question papers for practice etc.

iv) Events:



Events display the list of all workshops and contests which take place throughout the year. Each event is arranged based on the date it is conducted.

v) Contests:

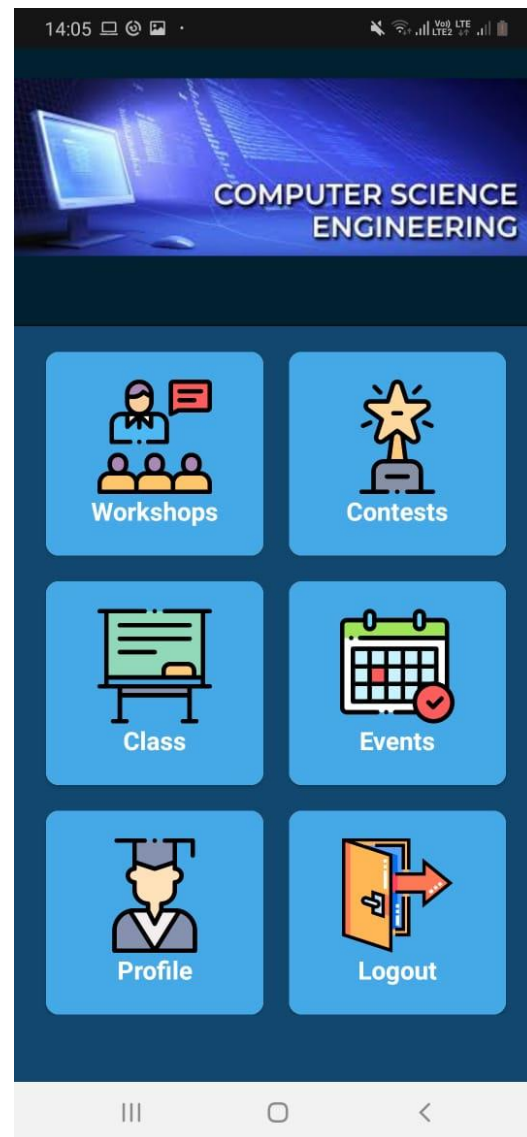
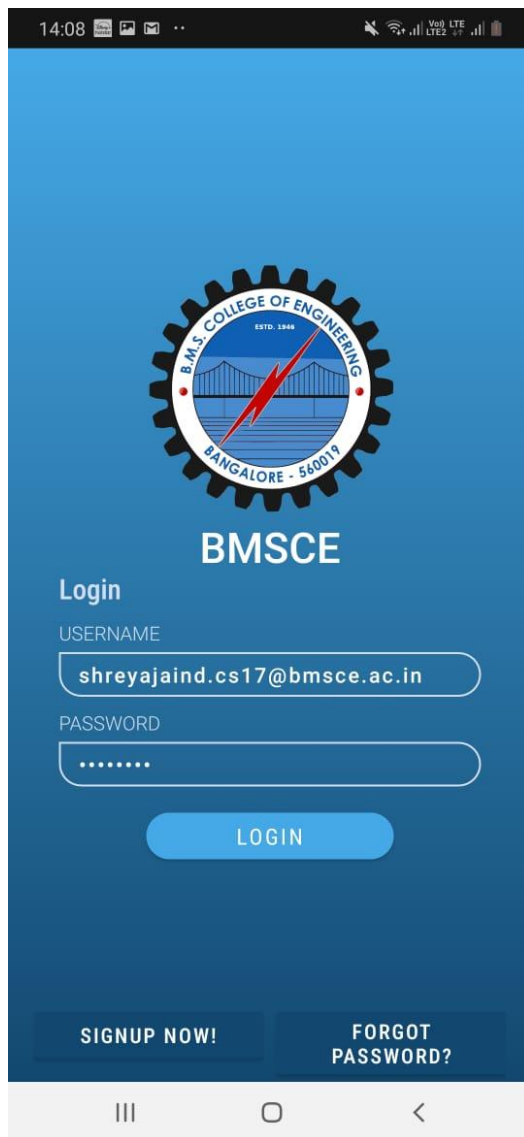


The contests button, directs the user to the contests page where the contests scheduled are displayed according to the date scheduled. Similar to workshops, the teacher can create a contest by clicking on the “+” button and enter the details.

Files can be uploaded in the details section of the contests to clarify the details.

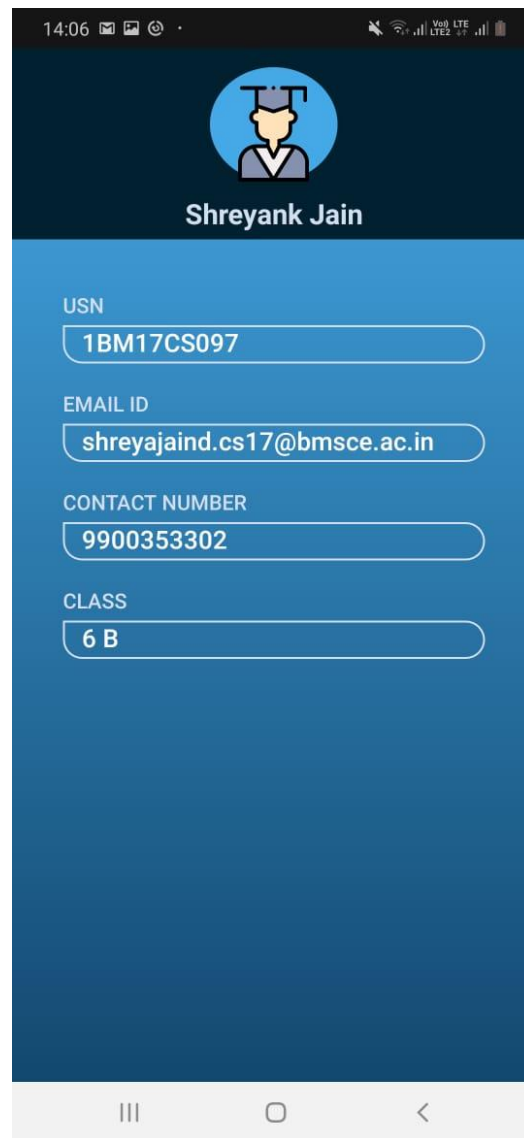
4. Login as a Student:

i) Home page after login:



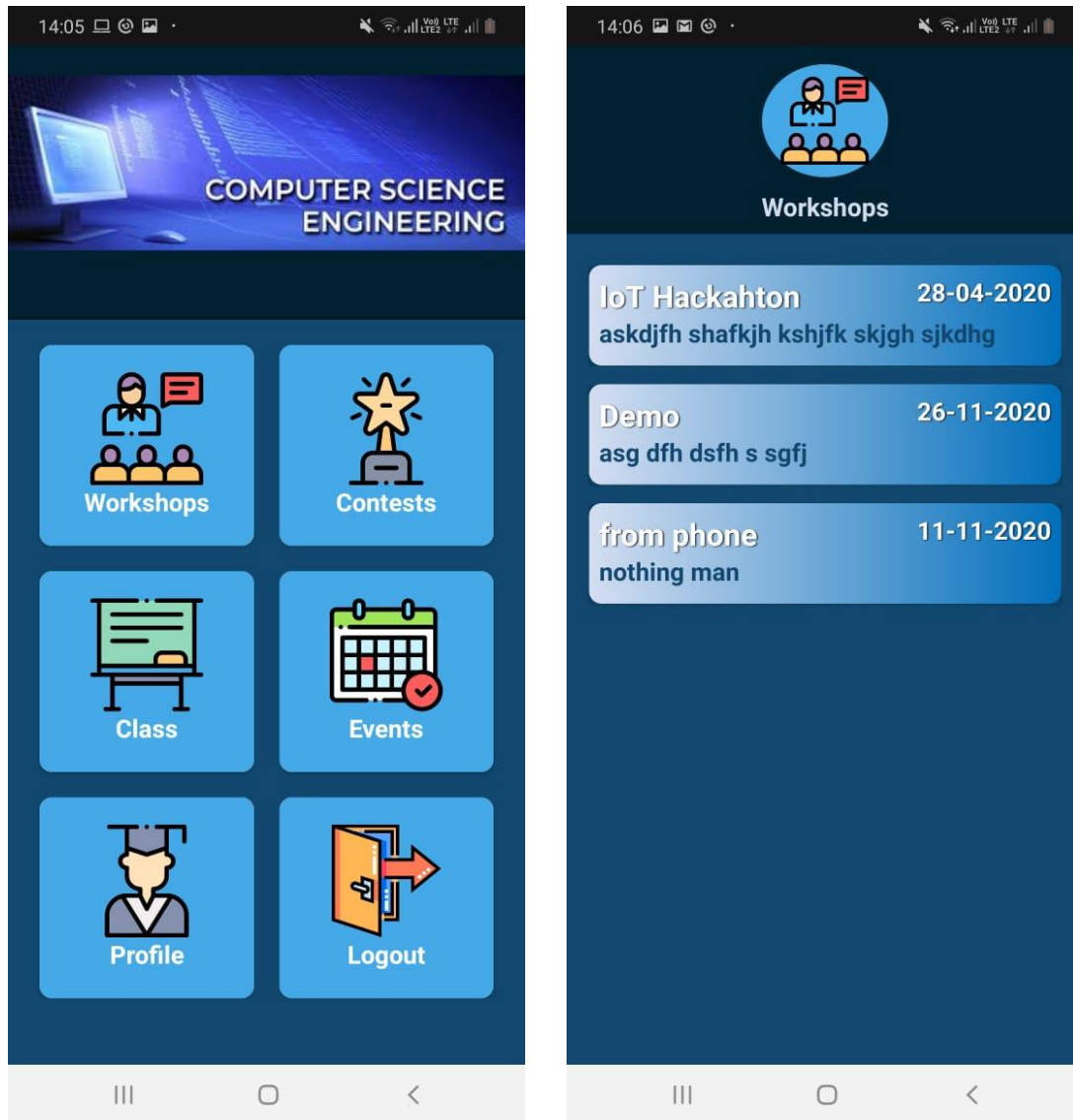
The student login homepage is as shown in the right image above.
It has 6 buttons.

ii) Viewing profile details:



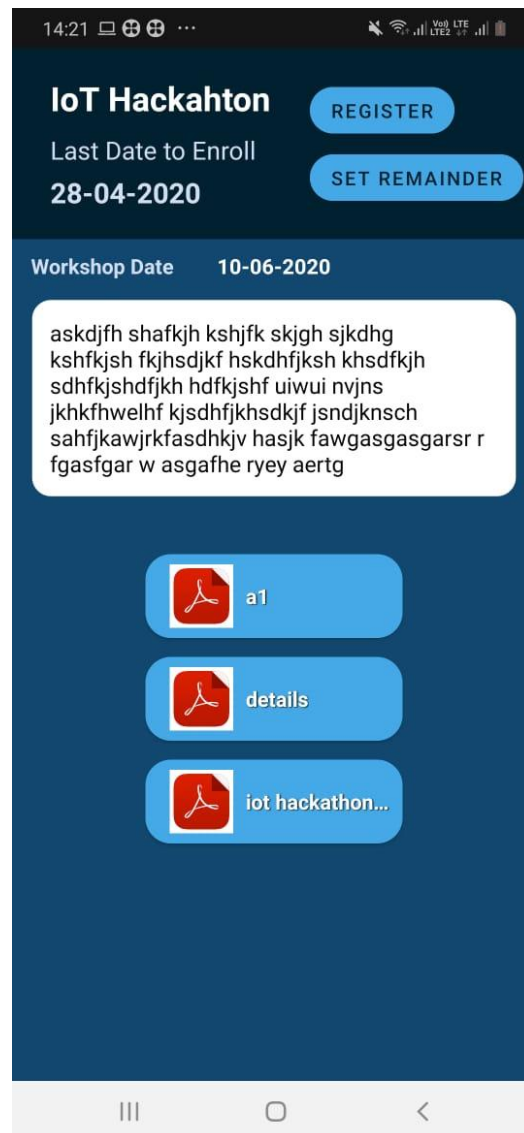
Clicking on the profile button in the homepage displays the details that the student entered during registration into the platform.

iii) Registering for workshops:



Clicking on the workshops button in the home page directs the user to a page containing all workshops that were uploaded by the teacher.

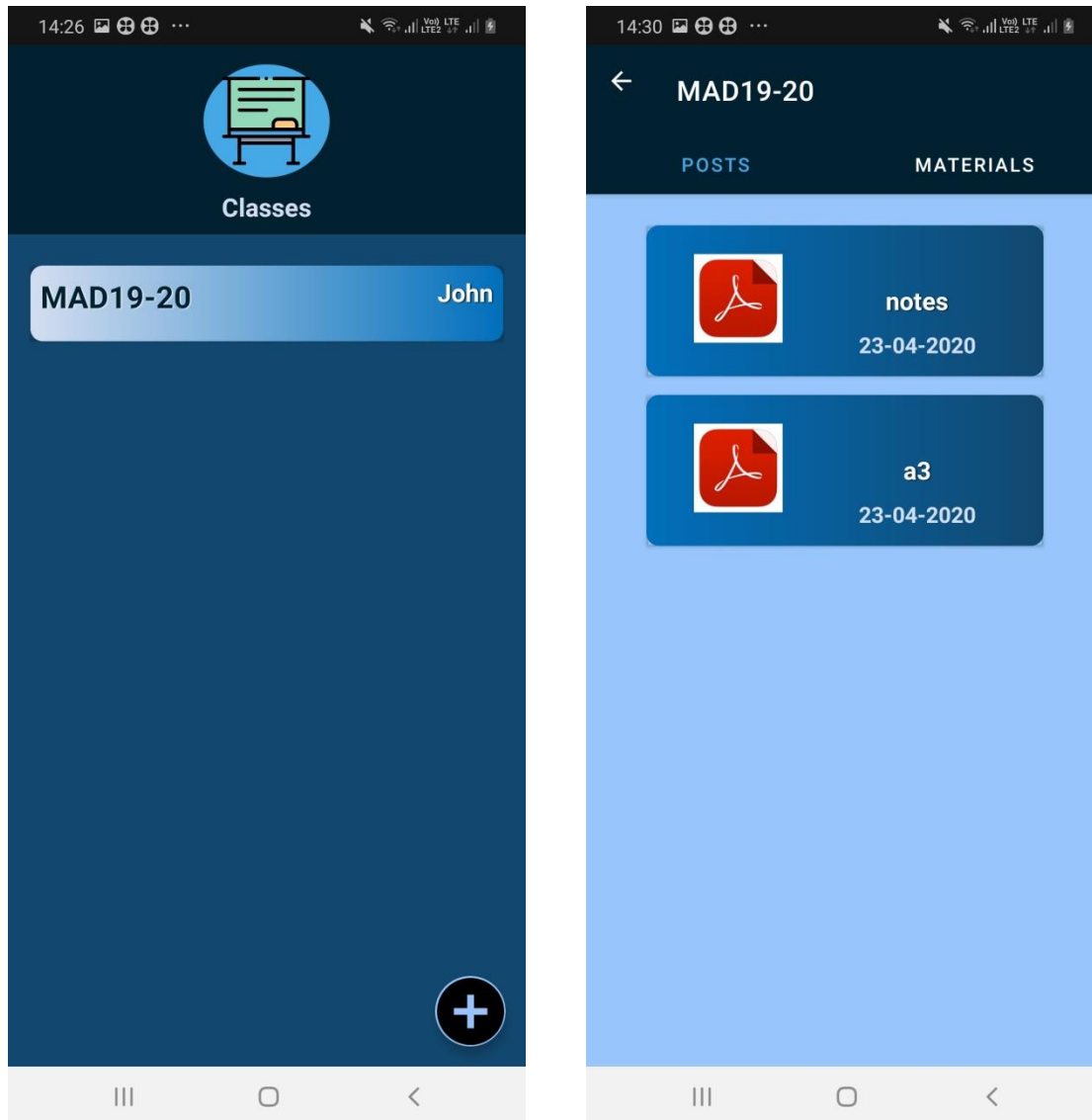
The details of each workshop are viewed by clicking on the uploaded button.



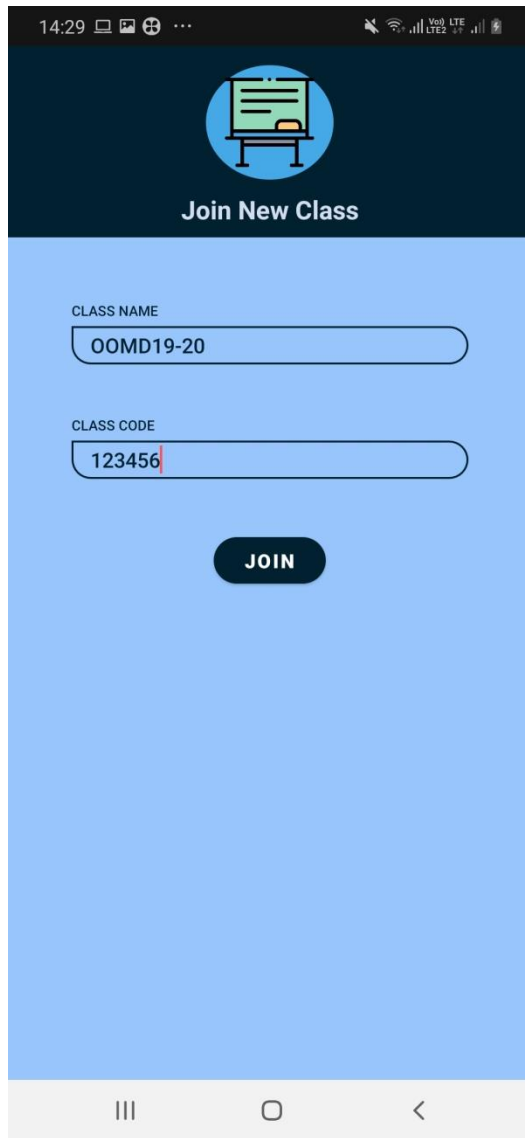
The workshop details can be viewed as shown in the picture above. All file attachments uploaded by the teacher are accessible. The student can set a reminder to register for the workshop. The register button is

linked to a form which is meant for the student to fill in order to register for the workshop.

iv) Joining Classes:



The class button in the homepage shows the list of classes the student has joined and each class gives the student access to all the posts and materials uploaded by the teacher of that class.



14:29

Join New Class

CLASS NAME

OOMD19-20

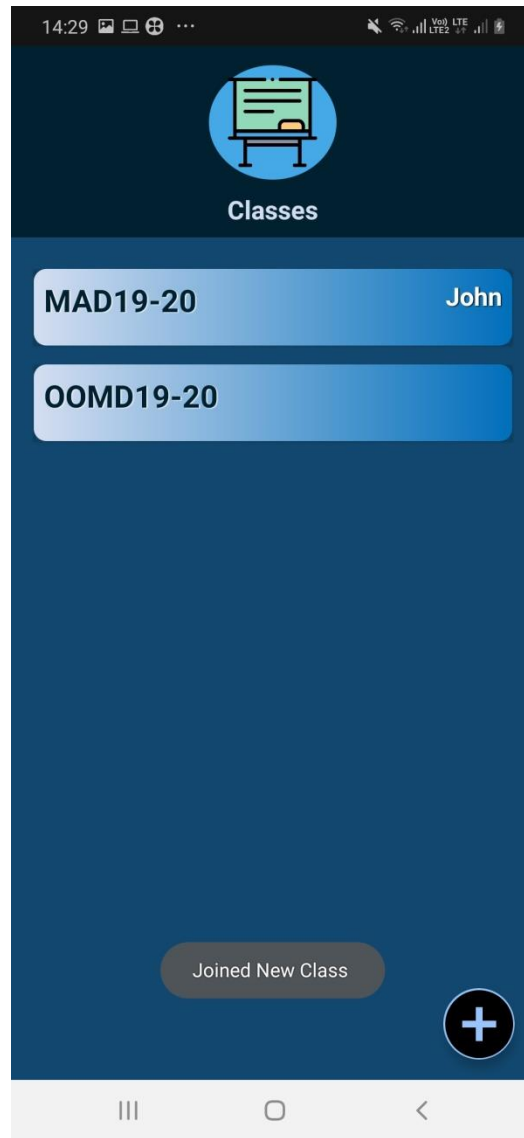
CLASS CODE

123456

JOIN

III ○ <

This screen is titled "Join New Class" and features a header icon of a classroom. It contains two input fields: "CLASS NAME" with the value "OOMD19-20" and "CLASS CODE" with the value "123456". A "JOIN" button is positioned below the inputs. The bottom navigation bar shows three icons: a list, a home circle, and a back arrow.



14:29

Classes

MAD19-20 John

OOMD19-20

Joined New Class

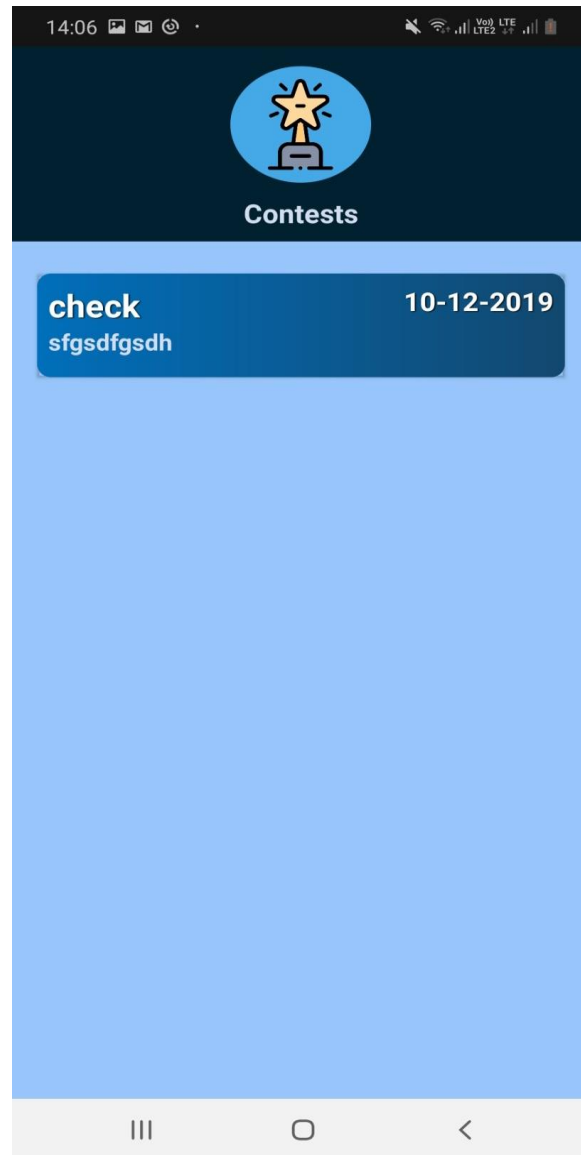
+

III ○ <

This screen is titled "Classes" and features the same header icon. It displays two class entries: "MAD19-20" associated with "John" and "OOMD19-20". A "Joined New Class" message is shown at the bottom, along with a circular "+" button in the bottom right corner. The bottom navigation bar is identical to the previous screen.

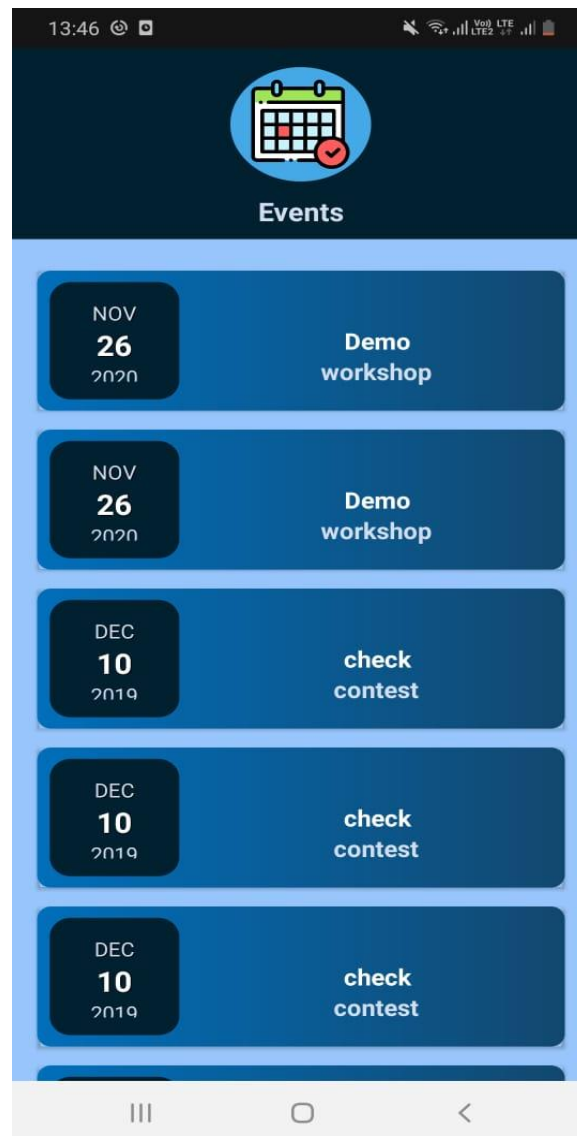
The student can join a new class by clicking on the “+” button on the bottom right of the class page. On entering the valid class name and class code, the student will be able to join another class.

vi) Registering for contests:



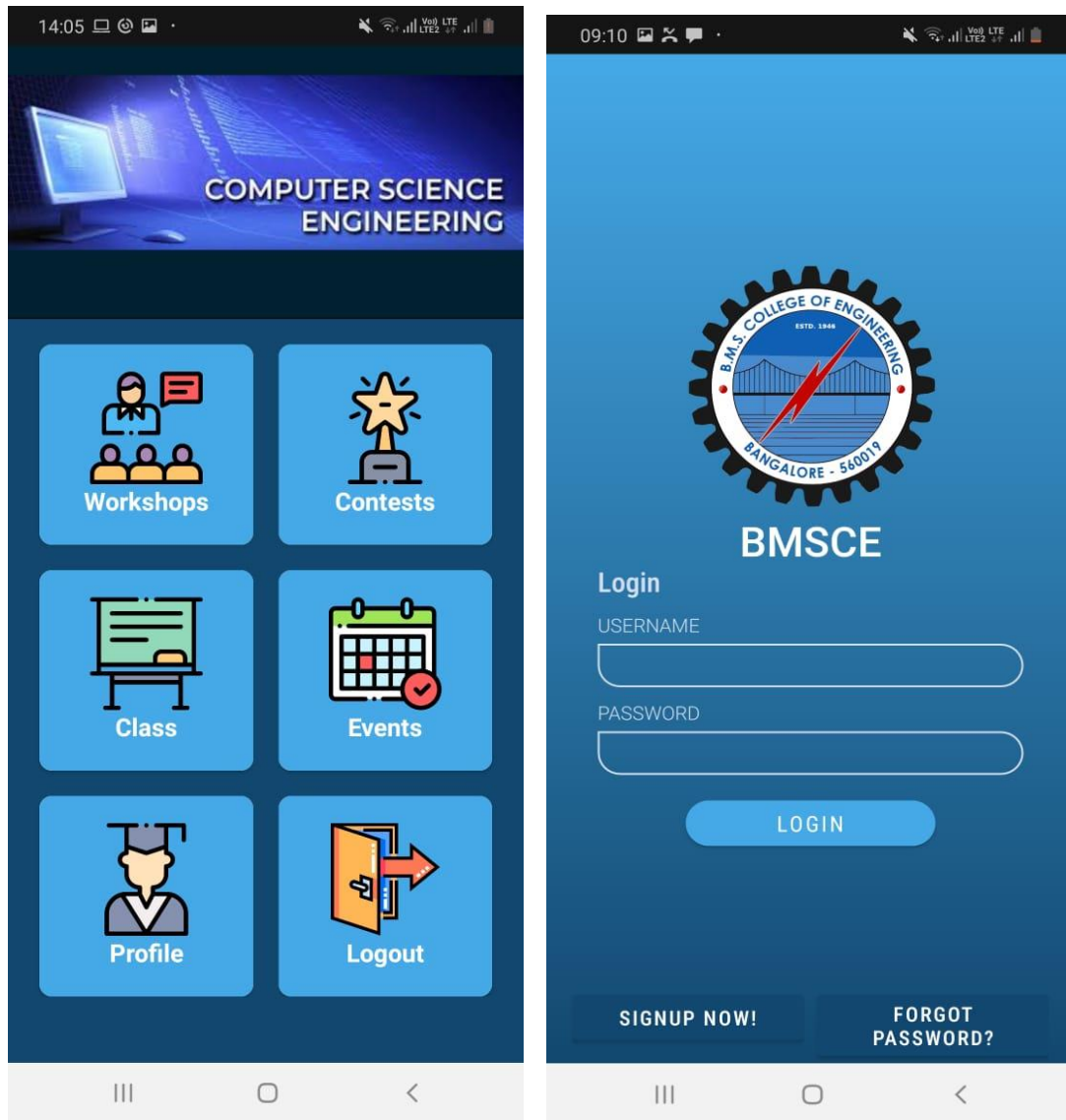
Similar to workshops, the student can view all the contests scheduled. Registration into the contest can be done by linking the “Register” button to a form. Remainders can be set on contests as well.

v) Viewing events:



The events page is linked to the events button in the students's homepage. All events in the college including the workshops and contests can be viewed here. The events are arranged according to the date at which they are scheduled.

vii) Logging out:



The logout button directs the user to the login page.