

# Feeder06 app

Aniket Shirke, Arijit Pramanik, Samarjeet Sahoo

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# **1 Introduction**

This is the report (probably user manual too) about the Feeder06 app. This app used Django for the backend development and Android for the frontend part. The app has two main functions. Firstly, to remind students about the pending assignments and deadlines. Secondly, to enable the student to provide feedback about the courses and to allow the instructor to view the results about the same.

## **2 FEEDER06 - Django backend**

### **2.1 Database**

The Django database contains all information about the different models used in the app. It has the list of :

- Registered courses and course related data.
- Registeres students and related data like roll no, password etc.
- Registered instructors, a special Admin and their login details.
- Running and finished deadlines
- Default and instructor made Feedback forms for different courses

This database is the key for Django authentication of Android requests.

### **2.2 Users**

This website is intended to be used by only :

- The Special Admin
- The Instructors

#### **2.2.1 Special Admin**

The Special Admin is enabled to :

- Register Courses
- Import the registered list of students



Figure 1: Home Page

### 2.2.2 Instructors

The Instructors are enabled to :

- Register if not registered yet.
- View all the running courses.
- View finished and running deadlines of all courses.
- Add new deadlines for new assignments.
- Add new feedback forms.
- View the feedback given by the students.

The Special Admin, being special, can't be replaced and is unique. However, one can register as an instructor and enjoy the privileges of using the app.

### 2.3 Screenshots

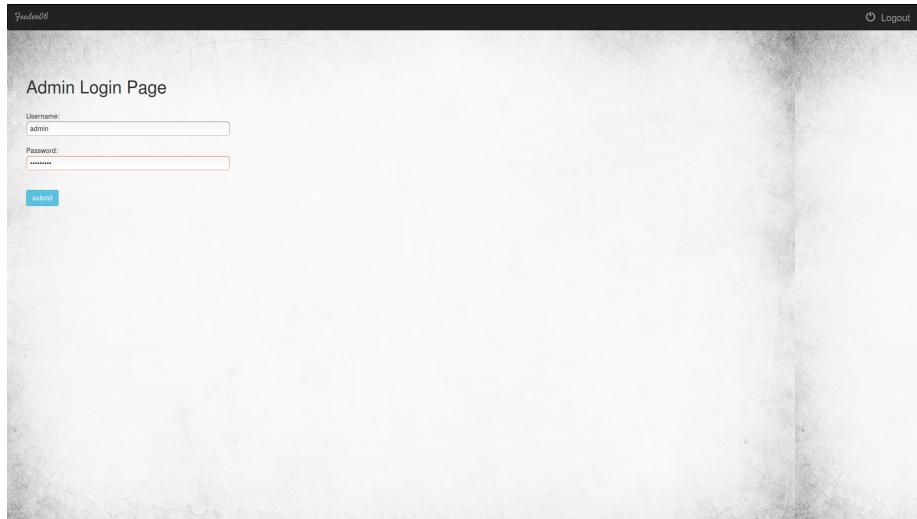


Figure 2: Admin login

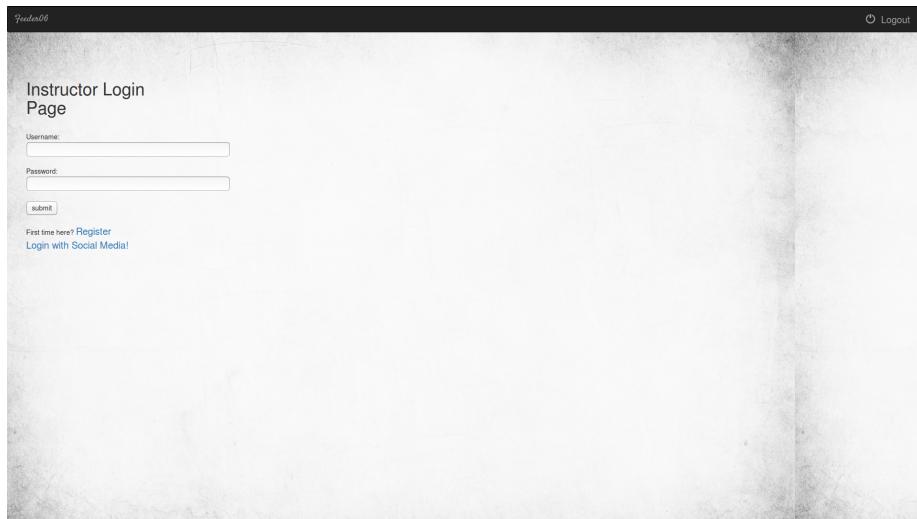


Figure 3: Instructor



Figure 4: Admin home



Figure 5: Add Feedback

The screenshot shows a feedback form titled "Feedback Form". At the top left is a link "Click to add a question". Below it is a text input field with the placeholder "Quest: Do you need Extra problems?". A "Submit" button is located at the bottom right of the input field. At the very bottom of the page, there is a link "Submit and Return to the homepage". The top right corner features a "Logout" link.

Figure 6: Add question

The screenshot shows a page titled "Add deadline". It includes a dropdown menu for "Course" set to "CS\_213-Data Structures and Algorithms". Below it are two input fields: "Name" containing "Sahri problems" and "Deadline" containing "2016-10-09". A "Register" button is positioned at the bottom of the form area. The top right corner features a "Logout" link.

Figure 7: Add Deadline



Figure 8: Student Import



Figure 9: Register

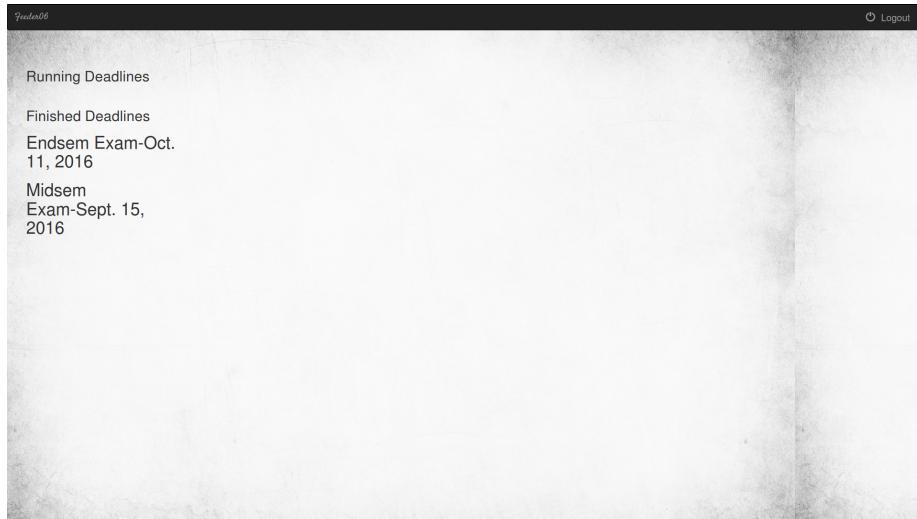


Figure 10: View Deadline



Figure 11: Logout

### **3 FEEDER06- Android**

#### **3.1 Android App**

##### **3.1.1 Login Page**

So we have implemented the login page which takes the credentials of username and password from the user and is supposed to verify it against the django database using the volley request a.k.a POST method. Then it is supposed to return success. Based on that the user (here it is the student) will gain access to the calendar page.

We tried using OkHttp3, but were in vain to get response from django. Hence currently for exploring the features beyond Login Page, please refer to the app LoginAPP. The elements used here are:

- textView
- EditText
- Button

##### **3.1.2 The Calendar**

So here comes up the main Calendar. The calendar is supposed to receive data from the django backend for the various assignments, deadlines and submissions. But, despite our frantic efforts, we were unable to sync it up with the django admin. So, we made dummy submission, assignment deadlines and miscellaneous. The color codes are:

- Date with red border: current date
- Date with background blue, text white: For feedback deadlines
- Date with background green, text white: For assignment deadlines
- Date with pinkish background: For multiple deadlines on a day

The features:

- On clicking the submissin deadlines page you would get a dialog box showing up the assignment description
- On clicking the feedback deadlines, you are supposed to get the feedback form which we are going to implement as a new activity
- for multiple deadline dates, it will just open up a dialog box showing the item which had been selected

#### **3.2 Screenshots**

Some screenshots of the Android app:

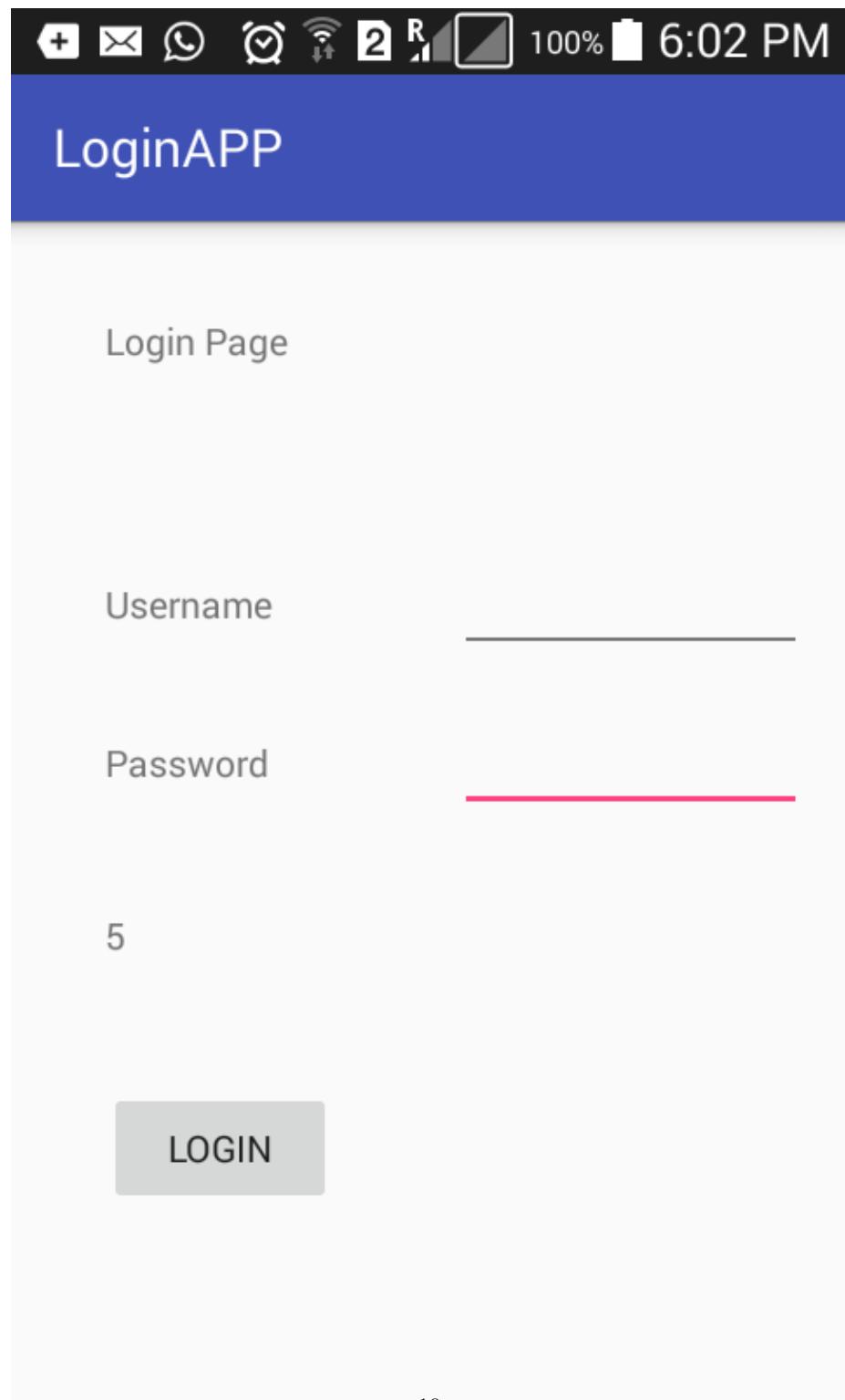


Figure 12: A1



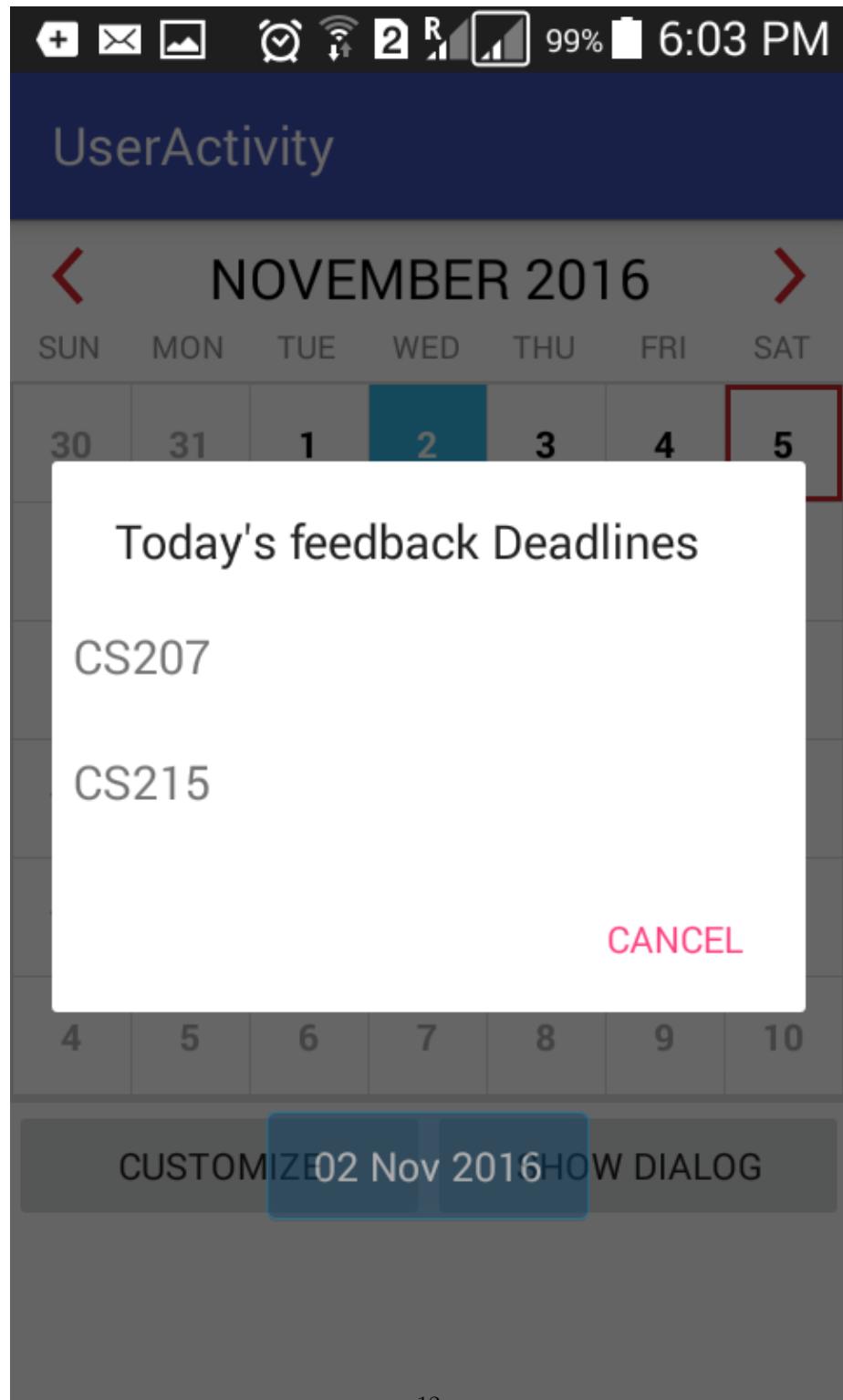


Figure 14: A3

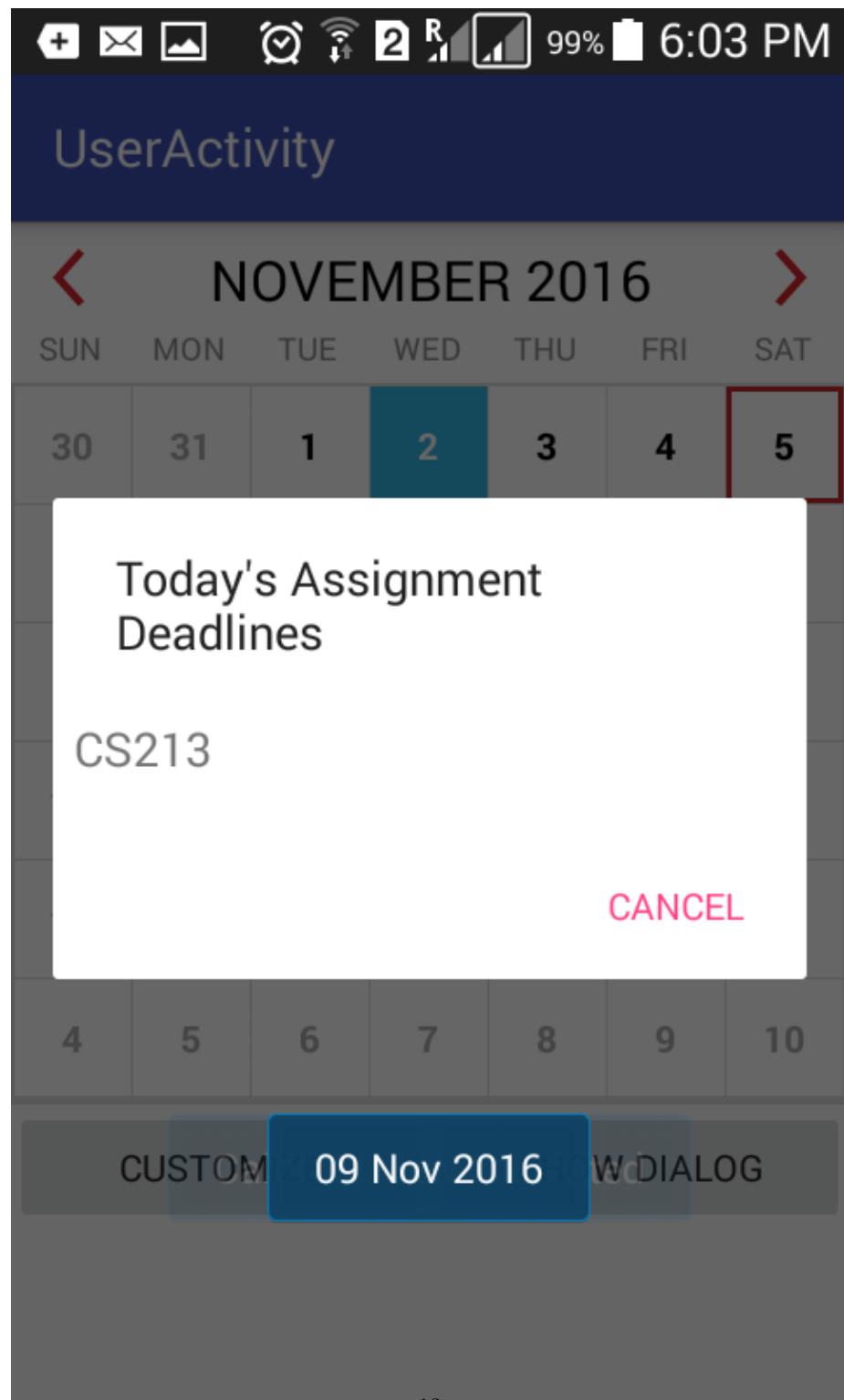
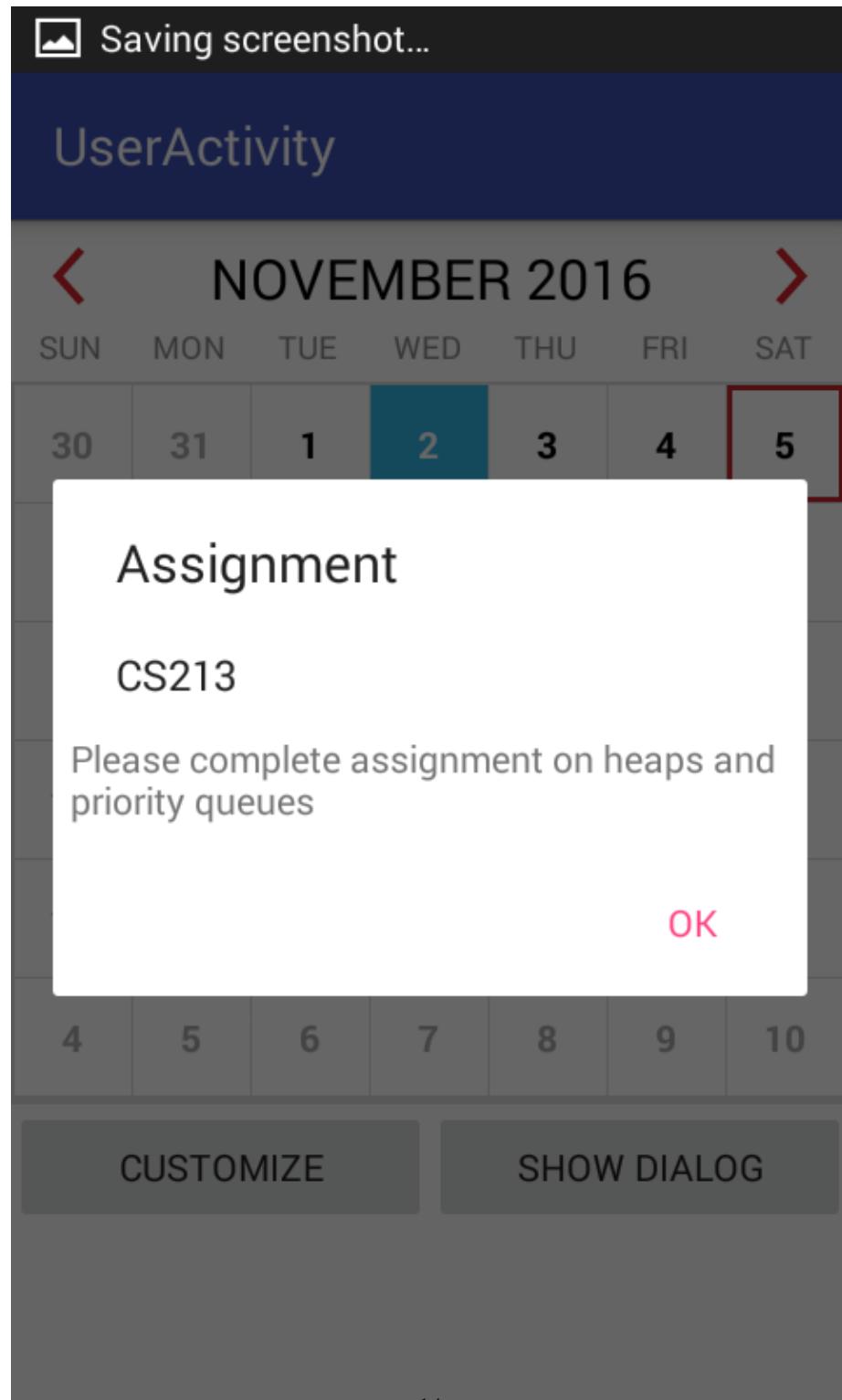
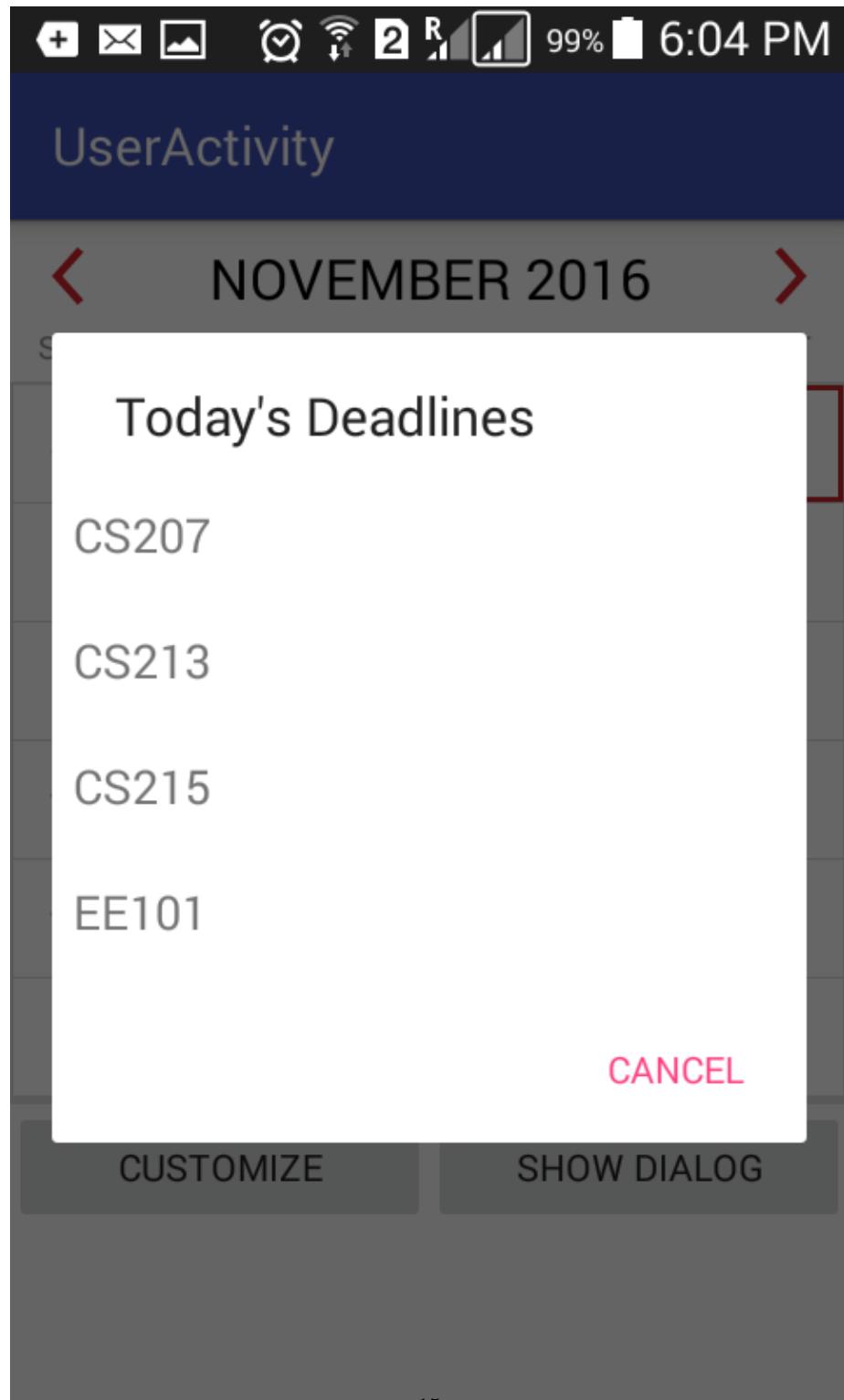
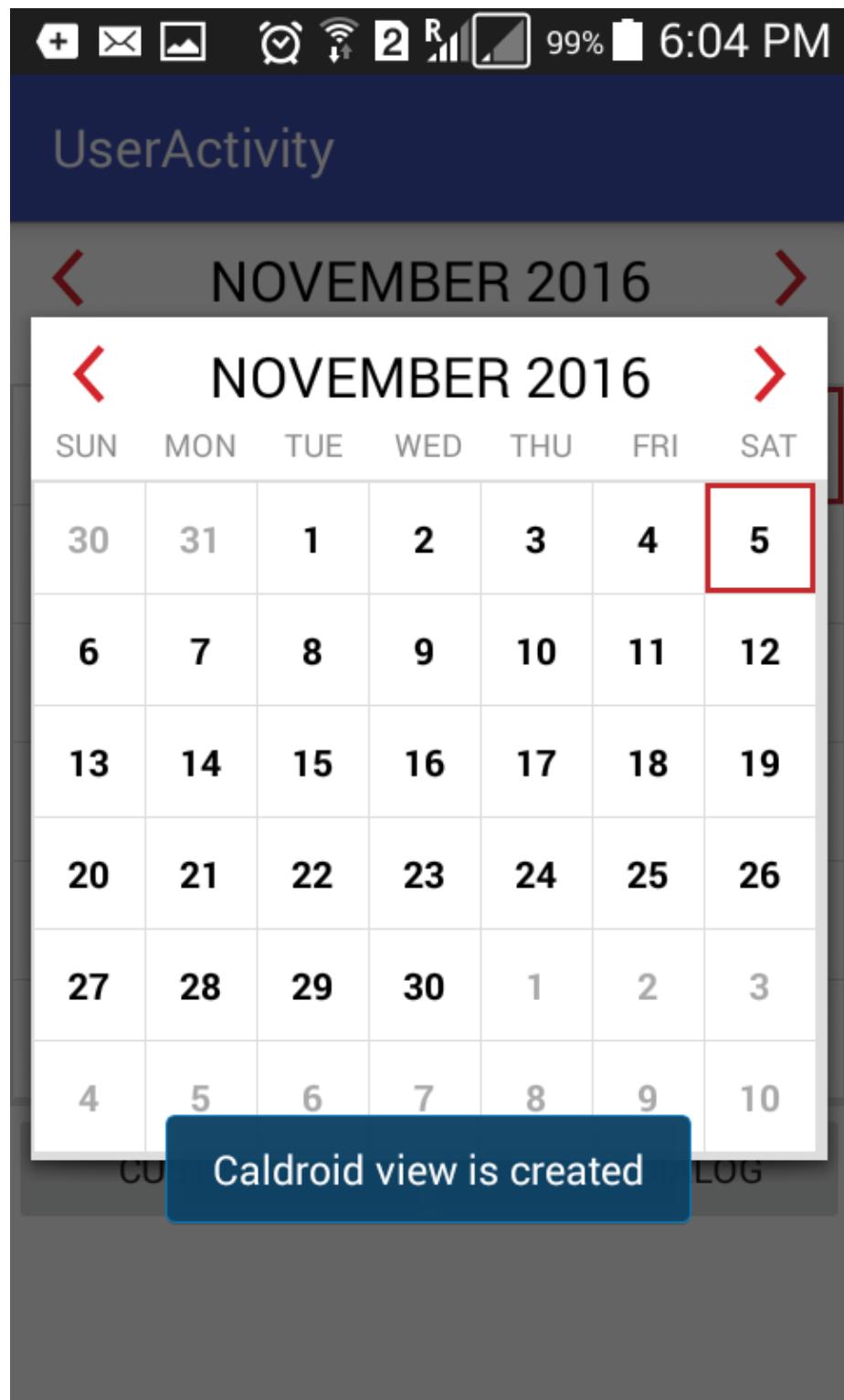
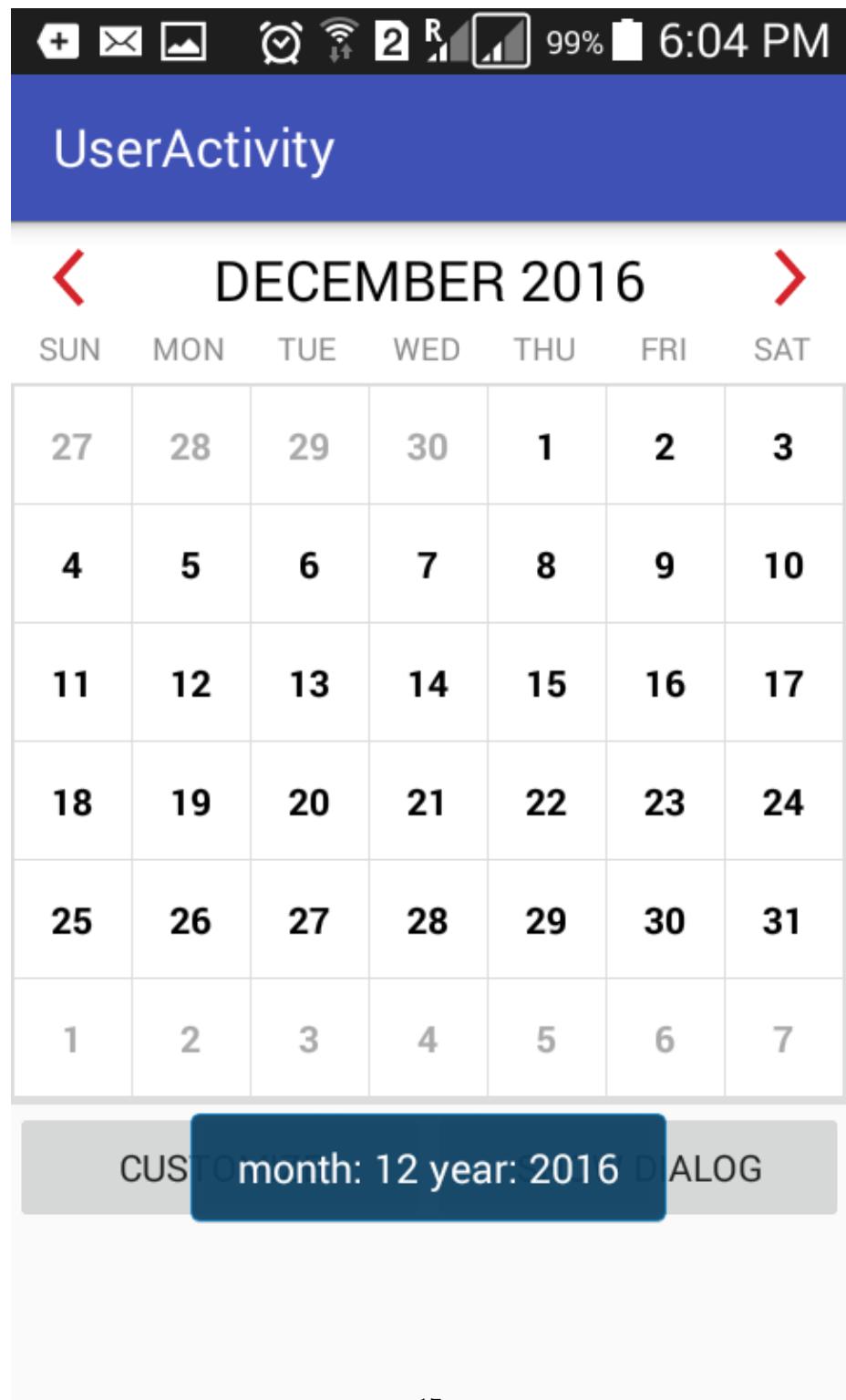


Figure 15: A4









## 4 FEEDER06 -User Manual

### 4.1 Django website

This part is intended only for the instructors and the special admin ! The students can skip to the Android part !

#### 4.1.1 System Requirements

- Django 1.10 installed on python
- Python 3.4 or above
- A web browser to run the website

#### 4.1.2 Entering the home page

To go to the homepage:

In terminal cd to the project root directory (the folder containing manage.py), and run :

```
python3 manage.py runserver
```

Once you have the server running, open your web browser and go to the address :

<http://127.0.0.1:8000/Feeder06/>

You should now have reached the home page of Feeder06 website !

Now , you will get a dropdown box ('Select') showing the following options:

Django Admin

Special Admin

Instructor

The Django Admin is to be used only by a superuser to modify the core database. It is not relevant for either the instructor or the special admin. Choose from either instructor or special admin to continue..

#### 4.1.3 Special Admin

If you chose 'Special Admin' in the home page , then you will be redirected to the Admin Login Page . Enter the appropriate credentials (as given in readme) and click on submit button.

On clicking the submit button, you will see the admin home page. You will see a list of registered courses. Also present will be options to 'Register Course' and to 'Logout'.

#### Registering new courses:

On clicking 'Register Course' you will be shown a form to register a new course. Enter the course code as XY\_123. X and Y are capital alphabets and 1,2 or 3 can be digits. Enter the course name, instructor name , Course year as a normal word (string). The midsem and endsem dates should be entered in the MM/DD/YYYY format.

Click on ‘Register’ to register the course ! If the course code was a new one and not existing already in the database, You will be shown:

Thank you for registering the course! [Return to the homepage](#).

Click on the link to return to the homepage.

#### **Importing student list:**

To import the student list, click on any of the courses displayed on the home page. You will be redirected to a page with the course name and the link to import student list. Click on the ‘Import Student list’ on this page. You will now be on the Import Page. Enter the course code (in the same format as used when registering) of the course for which you want to import the student list. Give the absolute path of the file with the file name at the end in the ‘Path to file:’ field. Click on Import ! The student list would have been imported if the path was given correctly .

Some important assumptions regarding the file:

- The file should be a csv file.
- The file should have 3 columns.
- Column 1 : Names of the students.
- Column 2 : Roll no of the students.
- Column 3 : Password of the students.
- There should neither be any heading for any column nor any blank rows or incomplete rows in the file. From the first row itself student data should be present.

#### **Logging out:**

To logout at any time, just click on the Logout button on the navbar of any webpage. Or you can click on the ‘Logout’ link in the home page. On logging out you will be shown a link through which you can login again.

#### **4.1.4 Instructor**

If you chose Instructor at the home page, you will be redirected to the Instructor Login Page. If you have already registered , just enter the credentials and click on the submit button to go further. If not registered yet, then either register or login with google.

#### **Registering:**

To register, click on the ‘Register’ link below the submit button. Then on the new page, enter a username and password and click on ‘Register’ button. If the username does not exist already, you will be registered! Else you would have

to choose new credentials. After registration you will get a page with a link to return to the homepage. Return to the homepage and now you can login!

#### **Logging in with Google:**

To login with Google, click on the ‘Login with Social Media’ link below the ‘Register’ link. The click on ‘Login with Google’, you will be redirected to the google login page. Login through google as you always do, and then you will be redirected to a page which now has a link to view courses. Click on this link to proceed.

#### **Instructor Home**

After you click on the submit button on login page or after logging in with google and then clicking the link to view courses, you will be redirected to the instructor home page. The home page has a list of existing courses and some links to enable adding and viewing of deadlines and feedback

#### **Adding and Viewing Deadlines:**

To add a deadline, simply click on ‘Add Deadlines’ link. You will be given a form to fill in the deadline details. Select the course from the dropdown menu. Give a name for the deadline specifying the assignment name. Enter the deadline in YYYY-MM-DD . Note that the name should not already exist. Then clicking the ‘Register’ button would add the deadline. There, you can return to the homepage. To view the deadline, just click on the corresponding link in the home page. This would show the running deadlines first, and then the finished deadlines after that. From there, to return to the Home page, click on the Feeder06 button.

#### **Adding Feedback:**

To add feedback, click on ‘Add Feedback’ link in the home page . You will be shown a form. Enter the course code in the form of ‘XY\_123’ (see Special Admin - Registering courses for details) . Enter the name as a normal string and enter the last date in the form of YYYY-MM-DD . The click on ‘Click to Start Adding Questions’. You will be redirected to a form with only one field ‘Quest:’. Add the question in the correspoding text box. Click on ‘Add Question’ button and the question would be added to the form ! After adding a question, you would be redirected to the same page . Now, you may add another question or you may submit and return to the homepage by clicking the link below the button.

#### **Viewing Feedback:**

Not activated yet.

#### **Logging out:**

To logout at any time, just click on the Logout button on the navbar of any webpage. Or you can click on the ‘Logout’ link in the home page. On logging out you will be shown a link through which you can login again.

## 4.2 Android App

### 4.2.1 Login Page

Now click on the icon of the app. We acknowledge that the app is supposed to be Feeder06 which also has a academia logo. But as the authentication is not working due to `volley.serverError`, please refrain from using this apart from the login page. Enter the username and password from the database and click login.

We tried using OkHttp3, but were in vain to get response from django. Hence currently for exploring the features beyond Login Page, please refer to the app LoginAPP.

Please use LoginAPP from this point as it aptly demonstrates the other features. To login, please supply any username and password and you shall be able to login if you have a valid internet connection. This is implemented using `HttpURLConnection` and just checks for a valid internet access. We have supplied the target URL as `gpo.iitb.ac.in`

### 4.2.2 The Calendar

So here comes up the main Calendar. Click on any one of the coloured dates to view what's on that day. Other white dates do not have deadlines on them. Now you click on the assignment or feedback for the particular course and hence you will be provided with the assignment description or the feedback form or some simple text if it's a misc. Once again:

- Date with red border: current date
- Date with background blue, text white: For feedback deadlines
- Date with background green, text white: For assignment deadlines
- Date with pinkish background: For multiple deadlines on a day

## 4.3 Other Features

We have given you a show dialog box which is Caldroid fragment which shows up a mini calendar. The customise functionality is kind of a dummy functionality checked for whether the select functions for dates and their interaction with buttons were working perfectly.

Also see to it that we have managed for **rotation handling** while using Caldroid and when you rotate it simply takes a new instance and accordingly displays.