ECLASSROOM - An application for Sharing data and information between staff and student

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Abstract

Our application is basically a mobile app that helps the students in getting the required details regarding the college activities, events etc. This system allows the faculty to share the required data and some important notifications regarding the college events. It has a login page where only the particular department students can view the details provided by the department staffs. Here the document uploading can be done easily. The faculty can share the timetable, upcoming seminars, workshops, events, notes etc. only to the particular department students and rest others will not be able to view it. The document will be built on an online server where the faculty can upload the data in an easier way and the students can search for the required data. Only the particular semester details are displayed and the rest are hidden. By this project, the whole college can use this app and need not depend on other platforms for the sharing of data.

Keywords: Mobile Application, Firebase, Online Classroom.

1. Introduction

The Flowchart for "ECLASSROOM" app has a splash screen followed by a login page where only the specified users to that department/college can access the app.
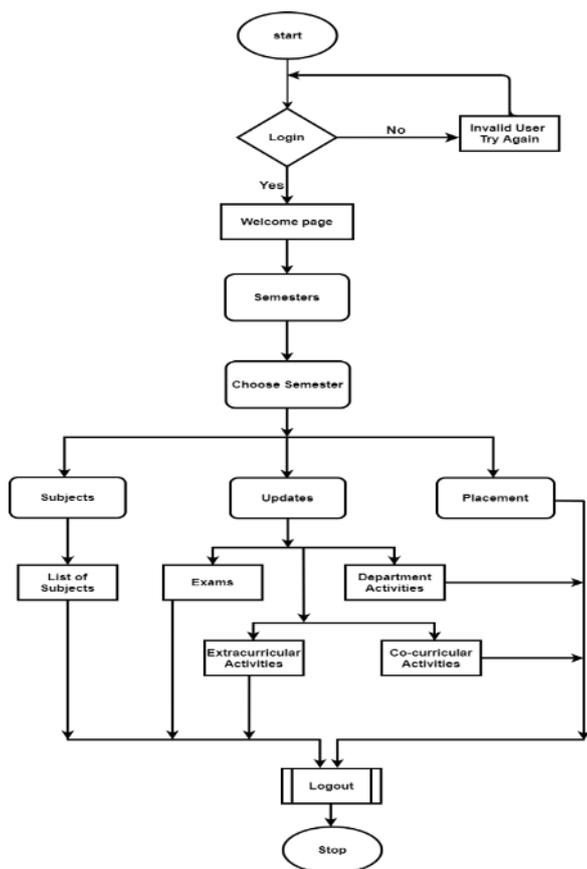
2. Working

Once the user enters the login details the name and password are checked and it is moved to the next page called as the welcome page. If the login details are incorrect it will ask the user to login again. In the welcome page we tell about the semesters and the facebook option of that department. By clicking on the facebook image button it will direct it to the department facebook page where the user can get the required details of the department activities posted via a social media application. By clicking on the semesters it will direct it to the next

page where it will list the semesters in order. By clicking on the particular semester (say semester 6) it will go to the next page. In the semester 6 page it will list the image buttons namely subjects, updates and placement. By clicking on the placement image button it will download a pdf file from the firebase.

The staffs in the placement team will upload the required pdf files in the firebase and once the image button is clicked in the app it will download the file from the firebase. The file will list activities regarding the placement exams, interviews, seminars,
webinars etc. By clicking on the updates button it will direct to the next activity where the image buttons are listed as the Exams, Department activities, extracurricular activities, Co-curricular activities. By clicking on Exams it

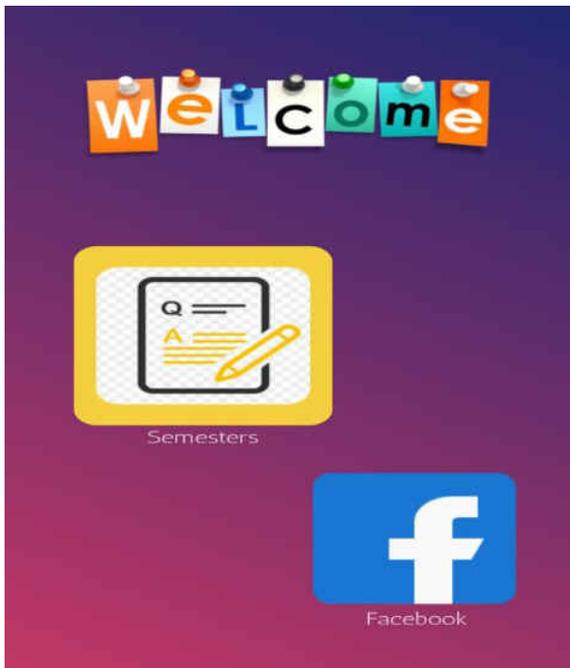will display the upcoming exams of that semester in a pdf file format.

Figure: Flowchart of ECLASSROOM

By clicking on, Department activities, extracurricular activities, Co-curricular activities will download a pdf file and the pdf file will list all the activities regarding the department activities like seminar, workshop, etc., extracurricular and co-curricular activities. Here the class coordinator will be the in-charge for all the activities in the updates section where the required files will be uploaded in the firebase and the users of that app can download the file and get the information in a quicker way.

On clicking the subjects image button will display the list of subjects for that semester and the user can select the required subject. In the next page, it will display the subject in a unit wise format. Also, it includes the question banks and question papers for that subject. This activity is completely different from the other activities as the subject staffs should upload the data in the firebase and the users can download it as a pdf file.

For all the above activities if the file is deleted by the corresponding staff from the firebase, the user cannot download the file. Once the file is uploaded, the corresponding staffs can give a message telling that the file is uploaded and then the users of that app can download the file.

This is the first page to the app also called the splashscreen. Here, I have added the specific font and animations to give the user an eagerness to enter into the app.

This is the login page and the users with the app are given the specific login details and the user needs to enter those details and login into the app.

This is the next page to the login page where the specific semester selection and the facebook link are given as an image button to give the users an immersive view in using the app and it is also easy for the users to get all the details in a single page.

This is the next page to the welcome page where the list of semesters are given and the users can select the particular semester which are given in the form of an image button and by clicking it they can go to the next page.

On clicking the particular semester say (semester 6) the details such as the subjects, updates regarding the department and the placement updates are listed. On clicking the placement button it will display the placement regarding details and it applies the same to the update button.
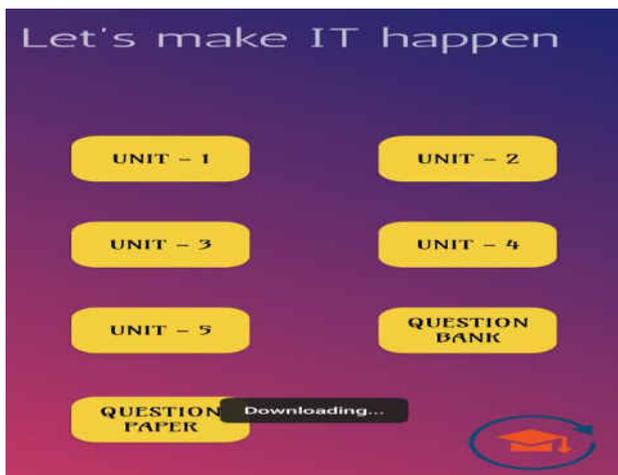

By clicking on it a pdf file will be downloaded stating the date and time of the events, exams, seminars etc.
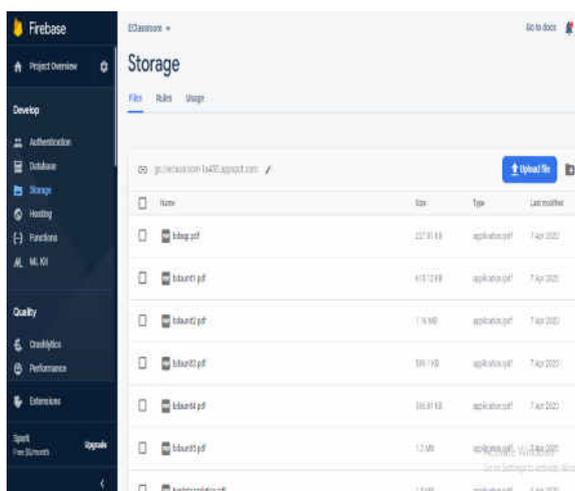

On clicking the subject's button in the previous page it will display the list of subjects and the user can select the specific subjects.

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On clicking the specific subject it will direct to the other page where it will tell about the number of units and question banks and question papers. By clicking it a pdf file will be downloaded. As mentioned the downloading of pdf files is based on the concept of firebase where the data will be uploaded and by the staffs and the required files can be downloaded by the specific users. It also has another option where a notification can be sent to the users who use the app using the firebase.

On clicking the image button the corresponding pdf file will be downloaded from the firebase. Here in the firebase it shows the files that are being uploaded by the staff. Once on uploading, the files will be presentin the firebase and when the user in the app clicks the image button the pdf file will be downloaded from the firebase. If the file is deleted from the firebase, the user cannot download the pdf file.

3. Conclusion

"ECLASSROOM" is the app which we have done primarily for shorter ways as it is only for a specific classroom and only the users in that classroom can have the access to the app. The users can have the usage to the way specified. In the upcoming days, the app is going to be transformed to a modified app where the entire college can use the app and each person will have the specific id registered to the app. It would be very useful for the entire college as the app can be used in many ways and need not depend on other platforms for this kind of usage.

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