Polling In Wi-Fi Using Android

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ABSTRACT: Strengthening the interactivity and enhancing the teaching – learning methodology is an important aspect of our system. Our system is an android application as well as client and server based system. This system is based on polling (voting), done by both students, about the lectures. The system is mainly designed for better interaction between students and teachers. The polling is done by student's android mobile using Wi-Fi technology. This system can lead in enhance progress of students learning experiences and teachers improved way of delivering their subject knowledge.

KEYWORDS: Polling System; Wi -Fi; Mac Address; Clicker Device; Android Mobile Device

I. INTRODUCTION

Usually, for almost all the student. It is difficult to ask question in the lecture. Means which topic student understand or not. And usually normal polling is conducted on the month that is only based on the feedback about teachers not for the lectures. That is problem, student does not understand the lectures. So that our system is a polling android application and web-based system. It is about the polling which is done by students regarding the every lectures held in the class. In this system the students have to give their feedback using android app and the system is about the lectures being conducted or the topics being covered in the class, whether they have understood the particular topic or not.

  Here, student can give their feedback about particular lecture and teachers can see the result how many students understood the lecture. If more number of student does not understand the lecture for particular topic then teacher will repeat the lecture for that particular topic.

II. RELATED WORK

In [3] authors used concept of polling system. The process is performed by student about understanding the lecture and generate a graph according to the polls. The students as well as teachers can access this application using any internet enabled device. The student will be logged in with their own registered login id and password.

On successful login he/she can perform following tasks:

a) Student will registered in App using he/she own mobile.

b) It will create an account of all the students by keeping note of their academic details and allow

students to access their accounts by providing with their login details. Student can perform the following function. Once the students get their login id and password from the academic detail, they will be logging into the system and generate a password.

On successful login they can perform the following operations:

c) Students select one options. Understand and Not Understand.

d) Not understand student see the topic which is covered in the lecture.

e) Select those topic which is not understood.

Teacher can perform the following function. Once the students get their login details from the academicdetail, they will be logged in into the system with respect to their login id and generated password.

On successful login they can perform the following operations:

f) Teachers will login in App.

g) Upload the Topic Learning Outcome(TLO)

h) See the poll, how many student understand and how many student not understand.

i) On the basis of graph, teacher decide the which topic will be repeated.

III.PSEUDO CODE

Step 1: Fetch mac address from the student mobile.
Step 2: Select the options.
Step 3: Generate poll graph.
Step 4: Calculate understand students (U) or not understand students (NU).
If (NU>70%)
    Repeat the lecture
Else
    Not repeat the lecture.
Step 5: Student select the option which is not understand
Step 6: Again generate the poll graph
Step 7: If student not understand go to step 4.
Step 8: End

IV.SIMULATION RESULTS

Student feedback polling system is an android app and is also a web-based system. It has a many modules according to the flow of the feedback process. There are two main users – Student and Faculty. Student give their lecture feedback through polling. Faculty receives the feedback in the form graph. Faculty gets two form feedback, one is through polling that how many students understood and understood the lecture. And secondly, through analyzing the condition after the poll rating whether lecture is need to be repeated or not.
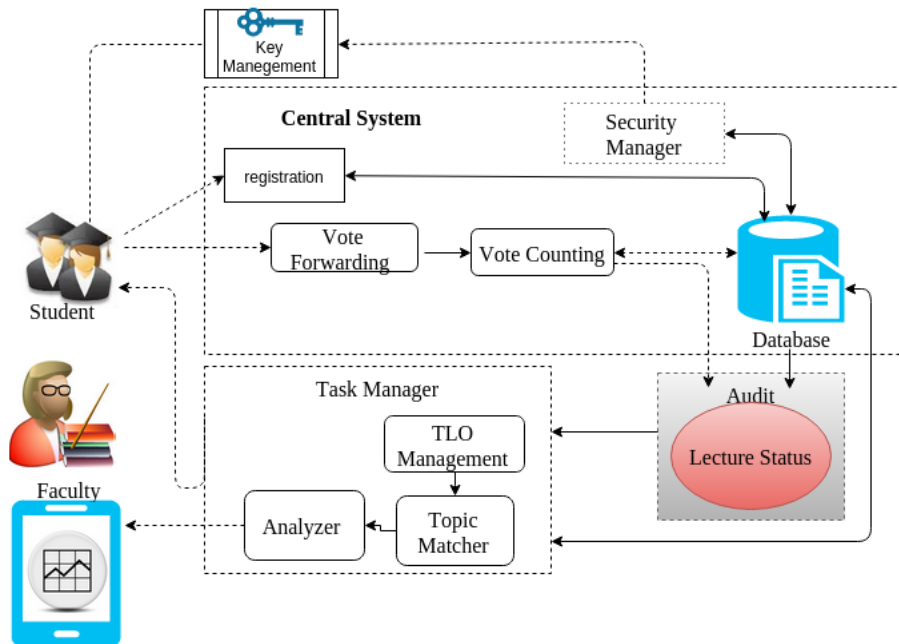

Fig .1 Proposed System Architecture

The central system is the most efficient and importance aspect in the methodology and through architecture point of view. It is linked with all the other modules of process flow. Central system has sub modules – Database module, Security Manager Module, Key Management module, Vote sorter and Vote forwarder.

Database module -
Database module in central system stores all the records of data. It may also be called as central database of whole system. It stores student's information, student's login id, data of lectures, etc. It has sub database sections. Namely, Students attendance database, student's registration database, lecture database, login database, history database.

Security Manager Module -
As the name suggest, this module deals with the security measures. If any student who did not attendant the lecture, then he/she won't be allowed to give the feedback.

Key management module -
In this module, it manages the student login aspects. During login process, it will check and do the comparison between the mac address and students details from the database, and then with help of login id it will allow to login for the feedback purpose.

Voter Sorter and Vote Forwarder -
When students poll for feedback, it goes into the vote forwarder. The vote forwarder, forwards the votes to the vote sorter. The vote sorter then sort the votes according to the polls, understood and not understood. Following with the mac address other information of the student, it is stored into the database.

Registration System –
Registration module is the initial method of the feedback process. As shown in fig.2 every student have to register with their academic data like, name roll number, class, year, and the most important their phones mac address. The mac address would be the unique key of login for each student. This registration is only for the first time to keep the record of students. When enrolling of the students is done, every student will get its login id. With this login id they can poll for the feedback. Student's is store data in the registration database of the central system.
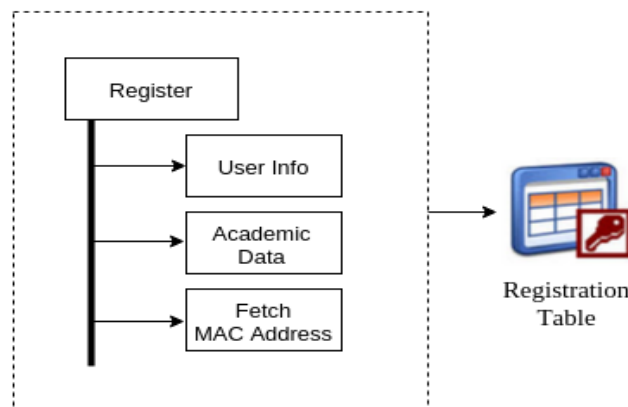

Fig .2. Registration System

Login System
The feedback is to be given in every week regarding lectures. The feedback is needed bypolling procedure. In fig.3 first the student have to poll with their login id with respect to the lectures- understood or understood. The feedback is done using wi-fi network. It can be possible that the student who have not attended the lectures would also try to give their feedback. To avoid these kind of false responses the login system would check and compare with the daily attendance

details from the student information database as well as daily attendance database. If the student would have not attended then, that student's mobile mac address would be rejected and won't be able to give the feedback for the respective lectures. There is one more concept of session start. When the student is allowed to give the feedback, he/she will log in, but after entering into the login scenario, the time limit session will start. That means he/she must consign their poll within that allotted session of time.
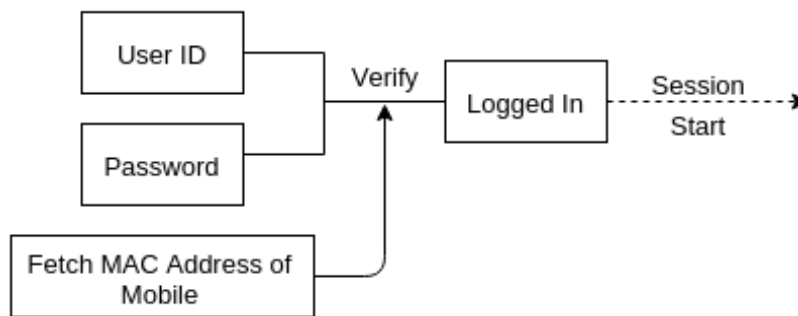

Fig. 3. Login System

Audit system

Audit system give the report about the lecture or we can say the status of the lectures. It all depends upon the votes or polls given by the student. When vote sorter sorts the votes, the graph is generated and it is checked by the audit module. The audit system concludes two parts- successful lectures and unsuccessful lectures. If the understood polling is more according to the Polling RequirementsGraph, the lecture is successful and repetition of lectures is not needed. But, if the graph shows that polling with not understood is more than there is a need of repetition of lecture. Audit system will fetch the TLO from the Task manager of task management system. It will match the topics covered in class and enlist those topics on the student's screen which they did not understand. These whole data would be forwarded to the central system. This will be kept in the form of history and thus would help teachers and student both in the future.
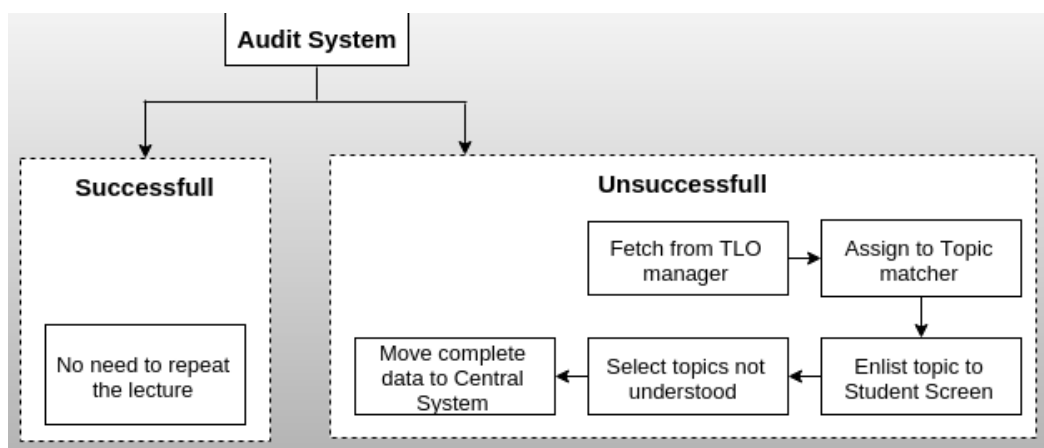

Fig. 4 Audit System

Task manager system
The TLOs of each subjects will be stored and analyzed by the task manager system. When audit system reports that the lecture is unsuccessful, the TLOs from the TLO management is match with the actual topics covered in class. Is this done by the topic matcher. Thereafter, it is analyzed by the analyzer that the lecture is need to be repeated.

V. CONCLUSION AND FUTURE WORK

With all the efforts invested in polling android application for interaction between the teacher and student, we believe that at the end of the project finds itself a much better place and moves a bit closer to the real world. We summarize the progress with respect to the main objectives of the project, namely, capability, convenience and accessibility. Polling in wi-fi android application will help all the college students overcome the communication barrier that is present currently among them. It helps for student and teacher both improve knowledge so if any student doubt in the lecture they can free ask about that particular topic, then it is easy to give their feedback and also help for teacher how to improve teaching. This application aims at bringing together all the college students so that they can help and be helped. It will be beneficial for all the students Thus, the proposed of fetch the mac address from student mobile because no one student can fake feedback about the lecture.

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