VIRTUAL LAB IMPLEMENTATION BY USING ANDROID

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Abstract: Android based lab control is a framework which enables you to get to work area of remote PCs go about as "server" through the android telephone go about as "Customer" utilizing wifi arrange. This framework depends on VNC engineering where client can see and access the work area of remote PC of any stage like linux, mac and windows etc. for that, a VNC server must be introduced on a PC associated utilizing Wifi-network.The picture of the work area is packed before it is transmitted to the phone. so to deal with this, we should utilize a VNC convention to get to the graphical UI of remote computer. The client can play out the activity like catching the screen, mouse clicking, zooming panning, opening archives and document exchange and so on.

I. INTRODUCTION

Mobile learning has been receiving increased attention from diverse conferences and publications. it constitutes an efficient complementary tool to the traditional learning methods. Now a days most of the students were optioning the distance education for that students we created one lab Following this idea, we present Portable Lab, a mobile learning system that integrates an application developed for mobile devices with Google Android operating system. Android is chosen because of its increasing popularity, as it is open sourced.

II. SCOPE

In this application different facilities are provided to the students and college management.

- Here the administrator task is to prepare and monitor the subjects,register professor,add video sessions w.r.t subjects.
- The professor task is to prepare test papers and view exam results,provide exercises to students.
- The student views the list of objects
  Contents can listen to videos,giving comments and rating about particular session and even can view the comments and rating by other students.
- Giving test and viewing their performance comparing with other students can access axercises given by professor.

III. RESEARCH METHODOLOGY

EXISITING SYSTEM
Now a days there are many different methods of learning throughout the world, many of students especially employee-students are opting for distance education. While in the classroom, the student is required to meet Schedules and is restricted to the physical space which is not a good process for the students who are opting the distance education, which consumes more time and requires lots of efforts.

PROPOSED SYSTEM
In the proposed system we are eliminating the drawbacks present in the existing system by creating a mobile application using which the college management and students get benefited.

MODULES
In this we contain four types of modules:

Module-1: First is the authentication module, where the admin,professor and students are going to be authenticated.
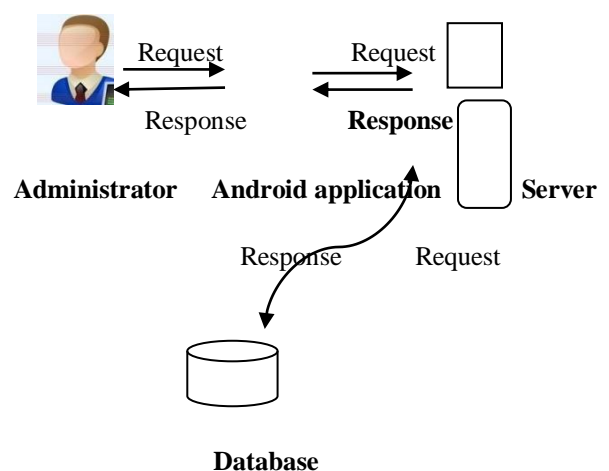**Module-2:** Second is the admin module, where admin creates subjects,add videos to it and creates professor according to the subject.
Module-3: Third is the professor module,where, professor creates/deletes questions paper,add exercises and views exam results of his subject.
Module-4: Fourth is the student module,where the student can get register, listens to the videos,can give and view the reviews on videos, view the exercises and attend exam,see exam results.

3-Tier Architecture
  1. Client (Mobile)
  2. Server (Apache Tomcat)
  3. Back end Database (MySql).

- So it explain like Requests will be taken from the Client and it will be process in Apache Tomcat server then the server will contact the database and process the request.
- The request will be get back to the service method and in turn, it will send to the client nothing but mobile. So it explain like Requests will be taken from the Client and it will be process in Apache Tomcat server then the server will contact the database and process the request.

IV. RESULT

A basic role for testing is to recognize programming disappointments so imperfections might be revealed and remedied. This is a non-questions and answers. Testing can't build up that an item capacities appropriately under all conditions yet can just set up that it doesn't work legitimately under particular conditions. The extent of programming testing regularly incorporates examination of code and additionally execution of that code in different situations and conditions and also analyzing the parts of code: does it do what it should do and do what it needs to do. In the present culture of programming advancement, a testing association might be separate from the improvement group. There are different parts for testing colleagues. Data got from programming testing might be utilized to revise the procedure by which programming is created.

Test Case-1: (Running the application)
- If Android is not integrated with eclipse and if the user tries to run the application then an error alert will be displayed by Eclipse.

Test Case-2: (User Registration)
- Without entering all the fields if user clicks on submit button then client side validation will be done i.e., an alert will be displayed saying "Enter all the fields".
- Here username is the unique identity, if username already exists then an alert is displayed to user saying "Username already exists, try another!!!!!!'.

Test Case-3: (Login Validation)
- Without giving user credentials if user clicks login button then an alert is displayed.
- If the user credentials are not matching with the details present in database then alert is displayed saying "Invalid username or password".
- If the user credentials are valid then login success and moves to particular user home page i.e., if admin login then admin home page and if students logins in then student home page is displayed.

Test Case-4: (Creating subject)
- If the admin tries to create same subject with respect to same branch then an alert will be displayed saying "Already subject exists".

Test Case-5: (uploading videos)
- While uploading videos if Wamp server is not started then videos cannot be uploaded.

Test Case-6: (Listening Videos)
- While Listening Videos if Wamp server is not started then videos cannot be played.

Test Case-7: (Viewing Reviews)
- If the there are no reviews or comments with respect to selected session then an alert will be displayed saying "There are no reviews as of now be the first to give review !!!!!".

Test Case-8: (Creating Question Papers)
- Professor can create only 5 Questions per subject, if tries to add more questions than an alert will be displayed saying "**Question Paper Exists**".

Test Case-9: (Deleting Question Paper)
- If question paper does not exists and if the admin tries to delete the question paper then an alert will displayed saying "**Cannot delete as there is no question paper**".

Test Case-10: (Viewing Subjects)
- After Successful login, student will view subjects according to their branch and year. If there are no subjects according to their branch and year then an alert will be displayed in login screen saying "**There are no subjects as of now**".

Test Case-11: (Attend Exam)
- If the student tries to attend the same exam once again then an alert will be displayed saying "**Already Exam has been given to this subject**".

V. CONCLUSION

The use of m-learning tools, if correctly conceptualized and built, constitutes an efficient complementary tool to the traditional teaching methods. Distance education, particularly e-learning and m-learning, has been receiving increased ``Attention from diverse institutions, conferences and publications. Additionally, sophisticated smart phones are increasing their sales in comparison to the basic cell phones and engineering students are massively using them. Regarding the target platform, the increasingly sales numbers of Android based mobile devices and the fact that Google software is booming show that the decision made is good. All these points, among others presented throughout the paper, mean that this project is interesting, innovative, beneficial, and has potential to be profitable.As future work, it is intended to study how to overcome some disadvantages found in m-learning, such as its high costs,the possibility for mobile devices to be misplaced or stolen and the difficulty to use mobile devices in noisy environments .Another point for future work is to study the best solution to apply mobile courses like this one to classes where the majority of their

students do not have the chosen platform-based devices. In addition to that, we are beginning the development a version for Apple's iPhone.None the less, we will continue with the strengthening of the application, focusing on new features, such as competitive Quizzes, mobile mini-forums and self-assessment.

VI. REFERENCE

[1]. http://en.wikipedia.org/wiki/Main_page

[2]. http://www.adobe.com/devnet/flex/?sdid=DKPOV

[3]. http://flextutorial.org/

[4]. http://www.dreamincode.net/forums/topic/42301-beginners-guide-to-creating-simple-mysql-tables/

[5]. http://www.w3schools.com/webservices/default.asp

[6]. Developer.android.com