

E-Repository – An Android Application for College Students

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ABSTRACT- In this world of digitalization of education there has been the least privacy and efforts required in-terms of materials being shared and their availability, also the access to these materials at one spot is a prime problem faced by students. This android application E-Repository will surely act a savior with secured access given to materials they require and all at one place also the management of these notes is a go to easy feature that is added to this application

Key Words : Android Application, Java, Android Studio, MySQL, PHP.

1. INTRODUCTION

In the today's world of Mobile Applications where usage of them is spiking immensely, has allowed the development of mobile applications giving a rich and fast user experience. Developing an Android application where accessing notes and maintaining them is easy and is required as now a days accessing notes from online resources has become a tedious and difficult task for students. A solution to this problem is provided by our application called 'E- Repository' students can access the notes which are in the form of PDFs, PPTs and videos. We have provided the feasibility features to this application where students have to login to an application using their credentials and according to their semester they can choose the course which they want and can access the notes. Application also contains Q&A section where students can post their doubts.

1.1 Existing System

The existing system has proposed applications where the materials present in the application are to be downloaded and opened in different applications based on the type of the material and the access given is not authorized and secured. Also the piracy of contents cannot be controlled in the existing system as they are to be downloaded and viewed.

1.2 Proposed System

Proposed system has applications developed in Java to overcome the problems of requirement of multiple applications to open the contents of application, also makes it institute/university oriented as secured access and authorization of users is cross verified. Access to all the university materials all at one place is made available with neat organization and space requirement is reduced.

2. DESIGN AND DEVELOPMENT

2.1 Objectives

- To determine the goals and formulate the objectives in behavioural terms.
- To analyse the characteristics of learner(student)
- To organize the content in logical or psychological sequence.
- To mediate between content and resources of presentation.
- To provide the feedback among other components for the modification of learners.
- To evaluate the learners performance in terms of achieving educational objectives.

2.2 Tools and Technologies used

Front End: Java - The mobile edition of Java is called Java ME. Java ME is based on Java SE and is supported by most smartphones and tablets.

Back End: PHP and MySQL - PHP is the most popular scripting language for web development. It is free, open source and server-side (the code is executed on the server).

MySQL is a Relational Database Management System (RDBMS) that uses Structured Query Language (SQL).

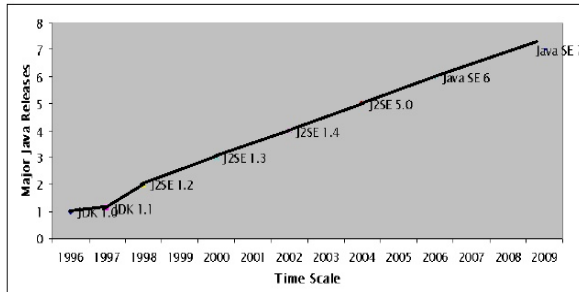


Chart -1: Graph representing different versions of Java Release

Tools:

1. Android Studio - Android Studio provides a unified environment where you can build Apps for Android phones, tablets, Android Wear, Android TV, and Android Auto.

2. WampServer: The WampServer program and environment allows you to create web applications with PHP Apache2 and MySQL database. The application is very intuitive even though it has a lot of functionalities. The service and software appears to be free all the way down the line.

2.3 Methodology

The methodology of E-repository application begins with a cross check given of whether the student using the application is registering for the application first time or wants to login, if he wants to register he is taken to that UI (User Interface) where University registered number is asked and the One time password is sent to the associated email id from the database.

Now the student can set the password for every time login. After logging in the student is displayed with the type of material (PDFs, video lectures, text files) he/she is given access to and wants to see. The student can access all the files as long as he/she is accessing the application and can logout which takes him to the login page. But cannot download and save these files in the local storage of the phone.

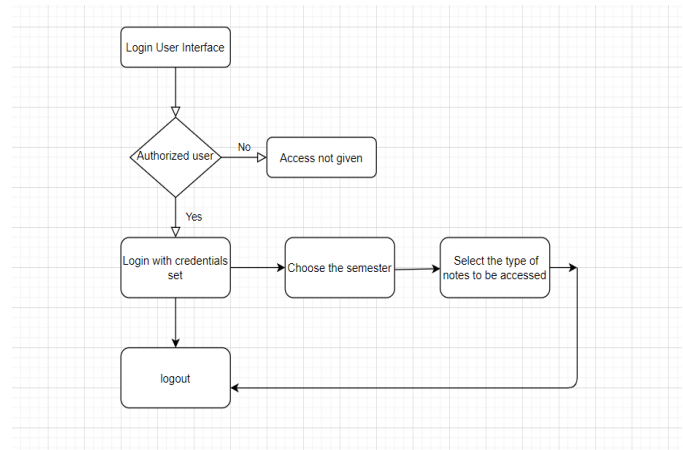


Fig -1: A system over view diagram

2.4 Contribution

E-Repository application helps the college students to find and access all their study resources at one place so that they can manage it easily and conveniently with the zero percent risk of losing the materials and missing online lectures. This application is also helpful for lecturers as they can post all resources directly in the application for a particular subject, year and semester section for students.

3. CONCLUSIONS

With advancements continuing in the field of mobile and technology, the impact its creating on digital education is of huge role. Also in the situations of pandemic like COVID-19 has taught us that such applications are the need of the hour which makes the life of students as well as teachers easier with secured access and organized content all at one place making access to materials an easy task.

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