

Design and Development of Application for Pedagogue Utility Using Android

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ABSTRACT: In most of the Universities, the existing methods for circulating information within the department/college and getting change of classes for staffs are Conventional. If a teaching staff has to take leave, he or she has to go in person to each staff to get alter with is tedious and time consuming. To make the work simple eliminating the human effort, we herewith came out with an effective concept of creating an Android Application for pedagogue utility with the help of Android studio, PHP and My SQL. This Application helps us to create a Circular within its bounds which includes predefined styles and templates. It searches for the staffs having leisure hour and gives a request to them which will be shown to them and the status of the request can be monitored.

KEYWORDS: Android, Circular, Pedagogue, Android Studio, PHP, My SQL.

I. INTRODUCTION

In the Present scenario, currently many Android applications are available separately to favour the students with respect to their studies as well for other study utilities. Particularly there is no specific Android application in the market which is completely designed for pedagogue utility. Other applications in the market helps them in taking lecture notes or videos, download the notes, calculator application which helps in doing complex engineering functions. In the educational institutions still a person has to carry the circular class by class. To make the work simple eliminating the human effort, we herewith came out with an effective concept of creating an Android application. This application helps us to create a circular which can be circulated within the department. This application also makes the job of getting change of classes for staffs easier by the search query which it includes. It searches for the staffs having leisure hour and gives a request to them. Here the time table of every staff in the department will be preloaded by the master user and he/she can monitor the process. This Android application makes the job of getting change of classes or alter for staffs and circulating information easier with one touch from the mobile phone.

II. PROPOSED METHOD

In this proposed method, we have come out with an effective idea of developing an Android application for the prescribed problem. This Android application enables the staffs or professors to get alter for class effectively by one touch from the mobile application thus saving time. This Android application also makes the job of circulating information within the department or college simple and efficient eliminating manual work. The designed Android application has an inbuilt search query with which the user or staff will be able to check the staffs with leisure hour and request them for alter through a message. This will be notified in the notification panel of the staff to whom the request has been sent. This will be monitored by the master control user who will be typically the department heads (HOD and Assistant HOD). The another feature of circulating information includes predefined styles and templates with which the circular can be developed. This application is designed solely for the purpose of pedagogue utility and helps the staffs to get alter for classes. Circulars are as well

circulated with in the college or department through this Android application eliminating human effort and saving time.

III.SOFTWARE REQUIREMENTS

ANDROID STUDIO

Android studio is the official integrated development environment (IDE) for Android application development, based on Intelli J IDEA. On top of Intelli J's powerful code editor and developer tools, Android studio offers even more features that enhances the productivity when building Android applications, such as a flexible griddle-based build system. A fast and feature-rich emulator. Unified environment where it is possible to develop for all Android devices. Instant run to push changes to the running applications without building a new APK. Code templates and Git-Hub integration to make it easy with building common application features and to import sample codes. Thus it is an essential IDE for developing Android application.

PHP

The PHP is an open source Scripting Language which plays a major role the development of an Android application.

PHP is Embedded with HTML PHP is a server side scripting language designed primarily for web development but it is also used as a general purpose programming language. PHP codes are embedded into HTML codes or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a common gateway interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data including images, with generated web page. PHP code may also be executed with a comment-line interface (CLI) and can be used to implement standalone graphical applications.

My SQL

My SQL is a popular choice of database for use in Android applications, it is an open source Relational Data Base Management System (RDBMS) based on Structured Query Language (SQL). My SQL runs on virtually all platforms, including Linux, Unix and Windows. Although it can be used in a wide range of applications, My SQL is most often associated with web based applications, online publishing and it is an important component of an open source enterprise stack called LAMP. LAMP is a web development platform that uses Linux as the operating system, Apache as web server, My SQL as the relational database management system and PHP object oriented scripting language.

IV.BLOCK DIAGRAM AND WORKING

BLOCK DIAGRAM

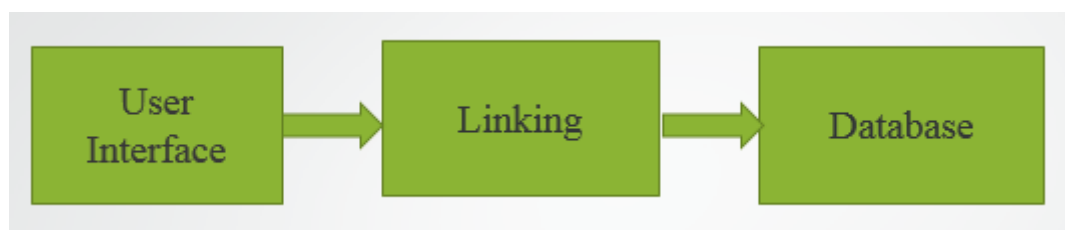


Fig 1: System Architecture

WORKING

The first block in the block diagram describes the User Interface (developed using java) which is designed in Android studio. The user interface refers to the concept of virtually what we will be able to see and utilize. The methods and data are encapsulated in this block. So in this process area the design of application is made in the way it should be visible to the end users of the application. The second block describes the linking between User Interface and the database. The block of codes written using PHP are executed here. It connects the block of codes executed using java script with the database. The third block describes the database. It gets and stores the given data and information. All the information regarding the application (usage based) are stored in the database. It is more secure and easily accessible.

V. USE CASE DIAGRAM AND DESCRIPTION

USE CASE DIAGRAM

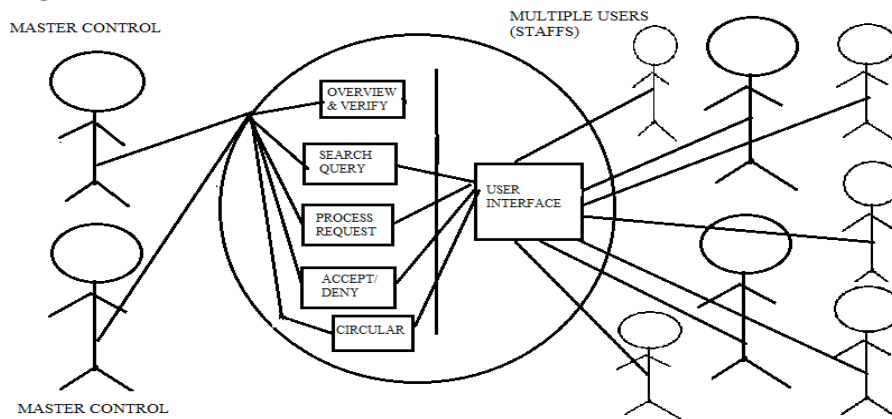


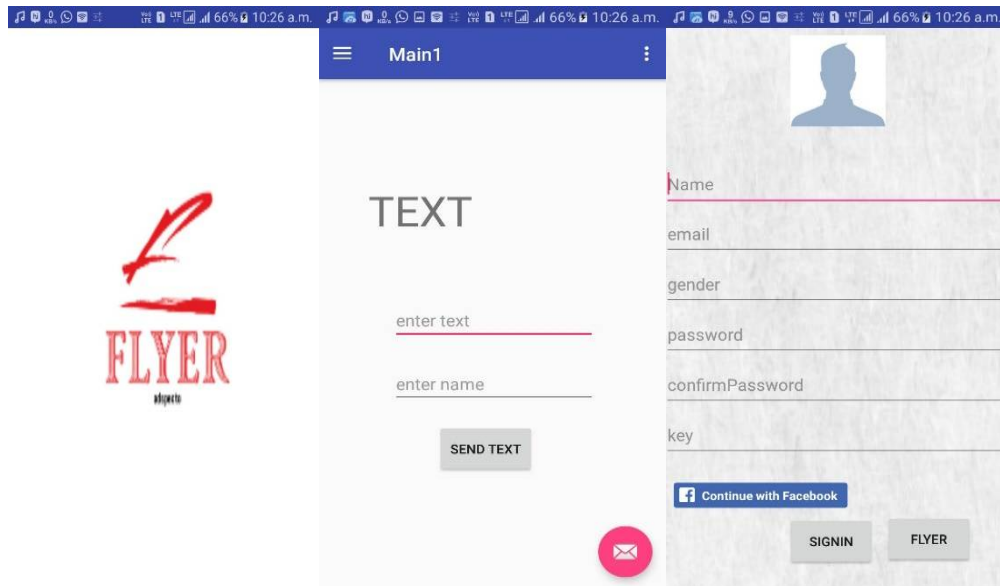
Fig 2: Use Case Diagram

DESCRIPTION OF USE CASE DIAGRAM

A use case diagram is a group of actors, a set of use cases enclosed by a system boundary communication, association between the actors and the use cases and also generalization among the actors and the use cases within the system. The above given use case diagram shows the actors involved in the Android application for pedagogy utility between the admin and the users. The admin monitors the records of the staffs and the master control is able to perform all the features. In the use case diagram, it is visible that several features are blocked for the end application users (staffs) which are like all the staffs will not able to view the requests which are not made by them. Only the Master control user can overview and verify the activities of all the other end users. The staff's functionality includes using search query for making a request, to view the process request that he/she has made, accept or deny the request which is given to them by the other staffs and reading the circulars which are made to them. The circulars can only be generated by the HoD or Assistant HOD as per the administration rights like right given by the master control user. It can be changed as per the necessity of the institution.

VI.RESULTS

The implementation of the Android application for pedagogy utility has been implemented with the help of Android studio, PHP and My SQL. Android studio has been used to implement the User interface of the Application, PHP has been used for linking purpose and My SQL for the purpose of database implementation.



VII. ADVANTAGES

This designed Android application is designed solely for the utility that helps the staffs to get alter for classes. Circulars are as well circulated with in the college or department through this android application eliminating human effort and thus saving time.

VIII. CONCLUSION AND FUTURE ENHANCEMENTS

Thus the Android Application for pedagogue utility has been designed which includes the specific features like getting alter for classes for staffs and circulating information with in the college/department. This Android application saves time and makes the job simpler for the staffs. As future enhancements, more features can be included in this Android application like attendance for staffs and other specific features in this application.

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