Automated E-Form Systems

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Abstract:
Due to powerful and economical productive use of internet has brought an ease in accessing the information from all around the world. Today work is even done without presence of physical appearance of human. Mainly the aim is to taking advantage of growing need of internet and efficient android programming by developing an Android application that provides a tool to fill in the admission form for an Institution and also provide the train concession form filling facility. The project provides the Design and Development of an android application that would allow us to submit admission form of an institution and use web services to allow communication within the institution. Admission process is an initial process for every college and for every new academic session of a student. According to our eligibility we need confirm our seats by filling admission forms. Students feel it as lengthy and hectic process as it takes hours to stand in a queue and wait. Another problem what students face is Railway concession forms. Government provides college students with concession facility of train and bus passes. To get this service avail students have to wait in queue for hours. After analyzing the issues and regimen of the time, the need for developing an efficient application is strongly felt. E-Forms has programmed the human efforts effectively. The main objective is making the process adequate, quick and easy going.

Keywords: Android application, online admission process, train concession, online payment details multipurpose application.

I. INTRODUCTION

Android is an open source and Linux-based operating system designed for devices such as smart phones and tablets. Android was developed by open handset alliance led by Google. Android offer a unified approach to application development is freecommercial use. Androidstudio and EclipseIDE are the tools available which are used for Android development using Android Development Tools as a plug-in. An application to enhance the admission process and communication between members of an institute has been developed which is based on android platform. This application facilitates filling up of admission form using the android application which then gets stored in the database and is accepted or rejected by the admin authority. The admin logins to the app and then create groups or send messages or create events and manage events.

The staff using this system can thus individually address each student with task of process. The staff has also been given the facility to send Email to the desired student for purpose of communication. The students login to the application and can view their messages. This Application will reduce the amount of energy required as compared to manual process earlier. It makes the submission of admission form more reliable and comfortable communications. A server present in college premises will also have a cloud installed on it. Web services that we are going to provide will be hosted on this cloud. Students and staff will be connected to the cloud via android mobile application. All student details that are submitted will be stored in a MySQL database.

II. PROBLEM DEFINITION:

The manual process leads to problem to staff and students as well in many ways.
such as validation of student and some manual mistakes done by authority during filling student’s details which leads to errors and rejection of forms. Due to manual assessment students get stuck between allotted timings and their important lectures for submitting forms. Manual assessment is a time consuming flaws. With advancement in technology and current process of people where time is an important and precious resource it is necessary to develop a application mechanism to save the same and make the efficient use of technology.

III. SYSTEM DESCRIPTION

a) Existing system
Current process is in which student has to travel a long distance and stay in long queue just to fill a form. This leads to wastage of time and energy. Teachers nowadays use internet for posting assignments and notes so students would make use of it easily using web application. manual process leads to mistakes and time consuming. It also snags the process of taking admission. The manual process forms issuing makes student to visit the concerned staff and fill up details. The authority then manually checks and fills the details and it becomes a lengthy process. Particularly when large number of students come together to issue their forms.

b) Developed system:
An approach of developing an Android application is being used to facilitate the submission of an application form for an institute and promote intracollege communication. Due to Android application, process became easy and fast. All the data related to student is stored on the MySQL database which is at the admin side. The users of this system are staff/students. Students get this information instantly on their android app. So, with the help of this system students can get vital information regarding their academics as well as updates about it on time. The admin has the authority to add staff and provide them with a platform to carry out further tasks. The admin also validates the forms submitted by the student and also updates the form if the students requests for the same. The staff manages groups, broadcasts messages, send mail and manage event. The user i.e. the staff or the student has been given the facility to add notes. He can view the notes as and when required. The staff is given user-id by the admin and the password is sent to the staff via the email. The staff can then login using that id and password. The staff has the provision to add students and then send messages by creating groups. This will save a lot of time usually required to meet and address individual students. It makes the submission of admission form more reliable and communication process among the staff and the students more effective.

IV. USER DESCRIPTION

Users involved here are:

i) Students/users: Students will fill all their necessary information in the form. They will be provided with login id and password for authentication they may also make online payments of fees by filling their bank information and also can get an acknowledgement of submission and receipts printed.

ii) Admin: Admin is important user of this system. Admin will be responsible for validating the forms submitted by the students. She/he will be managing the operations like adding new staff member and updating details of existing staff.

iii) Staff: When the teacher runs the application for the first time, a login screen will be displayed
through which teacher will be entering the username and password required for authentication. The teacher will be provided with a unique login ID. After entering the correct login ID and password, the teacher will get authenticated and directed to the next screen. The next screen contains various options such as manage notifications, add notifications, add student, SMS broadcast, email broadcast etc. After selecting the particular operation, web service will get called by clicking a button provided on the screen. The web service thus invoked would send the notifications to the students in the group belonging to a particular semester and branch as per the input provided.

iv) Android App: Students will be the users of this app. They will have to install this application on their android phone. Each student will have a unique username and password, which will be provided to them by admin. Students can view notifications, create and manage personal problems, send SMS messages to other users.

V. SYSTEM IMPLEMENTATION

Fig 1 Architectural diagram

Fig 2: login page

Fig 3. Registration page
Fig 4. Main form

Fig 6: flow diagram of the process
VI. CONCLUSION

These E-Form automated system not only reduces the work load of students and the college authority but also enquire about any wrong information found about the students that the institution may not have. It is a good fortune for the students ‘and whose precious time and energy is saved, and also for the concerned authority whose workload is exceedingly reduced and exclusively also for the government at large, whose services are protected from exploitation.

VII. REFERENCES

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