

Digital SESWA Using Android Studio

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ABSTRACT

Sri Eshwar Social Welfare Association was started by the students and management of Sri Eshwar College of Engineering with the motivation of doing various social activities. This association is financially supported by SECEIANS. This is being processed manually which involves time and man power. In order to overcome this, we propose a project "DIGITAL SESWA". The basic idea behind this project is to collect the amount through ID cards having bar code. The application consists of front page where it has two modules namely SESWA module and FINE module. FINE module is an additional feature which is being added to collect amount from the student for indiscipline. There is an admin who is given username and password. He gets all the information about both the modules. In SESWA module, by scanning ID card the details of the user is displayed and the amount can be debited from the card only if there is sufficient amount whereas in FINE module the amount is debited from the card even if there is no sufficient amount and a popup message is displayed. In FINE module register number is entered instead of scanning and the same details as in SESWA module are displayed. Finally the overall report is being monitored by the admin.

Keywords: Bar Code Scanning, Bar Code Generation, Android Studio

I. INTRODUCTION

Money transaction has migrated from direct cash transfer to transfer the amount through devices. Technology has advanced further and mobile banking is the buzzword today. SESWA is Sri Eshwar Social Welfare Association which is processed by the SECIANS providing financial support to do various social activities. The amount is collected manually from the students and is take care by the student representative and overall governed by the faculty in charge and with the help of the management the social activity is done with the amount collected .The collection of amount from each individual needs more time and proper handling of amount .This is time consuming and requires a separate person. So as to overcome this, we propose a project based on android application. Digital SESWA application is helpful in transferring amount between specified users. The android application "Digital SESWA" is mainly used in institutions and organizations. The application has a main module as SESWA and additionally there is a module named FINE. Both the module focus on amount transfer. The transaction is made secure through the use of Bar code.

II. METHODS AND MATERIAL

2. EXISING SYSTEM

SESWA which is Sri Eshwar Social Welfare Association organized by the students, faculty members and the management of Sri Eshwar College of Engineering. SESWA is mainly organized to do various social activities and to support the needy .The people of Sri Eshwar provide financial support to the idea implemented. The amount is collected from the students by having a box at each class and it is monitored by a student representative of the particular class. The transaction of amount is through direct cash transfer .The technology is being updated and there should be security in money transaction too. The amount which is collected is from each class is handled by the class representative and there will a faculty y in charge to guide those representatives .Then the amount from each faculty . SESWA which is Sri Eshwar Social Welfare Association organized by the students, faculty members and the management of Sri Eshwar College of Engineering. SESWA is mainly organized to do

various social activities and to support the needy .The people of Sri Eshwar provide financial support to the idea implemented. The amount is collected from the students by having a box at each class and it is monitored by a student representative of the particular class. The transaction of amount is through direct cash transfer .The technology is being updated and there should be security in money transaction too. The amount which is collected is from each class is handled by the class representative and there will a faculty y in charge to guide those representatives .Then the amount from each faculty.

3. PROPOSED SYSTEM

The amount transaction is secure through electronic devices rather than direct cash transfer. The android application “DIGITAL SESWA” is highly useful in secured amount transaction within the institutions and the organizations. The application consists of main module named “SESWA module” and an additional module named “FINE module”.

3.1. SESWA MODULE

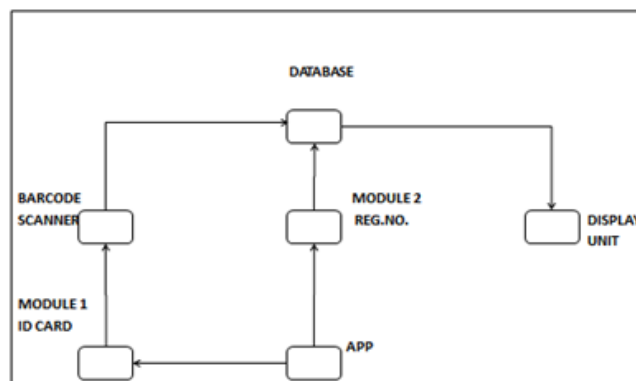
SESWA is Sri Eshwar Social Welfare Association which mainly focuses on helping the needy. The amount collected from the SECIANS is used for various social activities. The module helps in collecting the amount from individual through digitally rather than getting it on a hand cash. The module can be accessed by using barcode. The barcode is scanned and the predefined details of the scanned barcode are displayed .The details such as name, register number, year, department etc. are displayed. The module can be accessed mainly through barcode and rarely by the use of register number. Once the user enters the module, the user can pay the amount to SESWA through the ID card. The amount can be paid only if the user enters the amount available in the card .If the amount exceeds the card balance then there is pop up message displaying “Insufficient card balance”. Thus it helps in secured money transfer.

3.2. FINE MODULE

FINE module is an additional module particularly for our institution that can be accessed if necessary. It is for the low level members to debit their amount as fine for in disciplinary activity. This module can be

accessed first by the faculty and by the student by entering their register number .By entering the register number the predefined details such name, year, department etc. are displayed. The student can debit the amount for the in disciplinary activity. The in disciplinary activities include the person with no ID card, no clean shaving, shoes etc., .The student must debit the fine amount from the ID card even if there is no sufficient amount. If the student debits the amount available in the card then the amount is credited to management whereas if the amount is not sufficient in the card then there is a popup message displaying “Amount will be added to your fees “.This collection of amount as fine helps the works of the institution to follow a good discipline.

4. BLOCK DIAGRAM



5. ANDROID STUDIO

ANDROID is an OS (Operating System), which works on Linux Kernel. It is developed by AOSP (Android Open Source Project). AOSP leads by Google. Android Operating System can be divided into four layers to create new Android applications. The levels can be described as:

1. Applications - Contains the applications, like the Browser, Camera, Gallery, Music and Phone
2. Application framework - An API which allows high-level interactions with the Android system
3. Libraries and runtime - The libraries for many common framework functions, like graphic rendering, data storage, web browsing. Also contains the Android Runtime, as well as the core Java libraries for running Android applications.
4. Linux kernel - Communication layer for the underlying hardware.

5.1 DEFINING USER INTERFACE

The user interface of activities is defined with fragments, views and layout managers. These elements are defined by XML layout file. Views are a user interface widgets (buttons, text fields). Views are mainly used to configure appearance and behavior. LAYOUT Manager is the only way to arranging the other views. Fragments are component which run in the context of activity. It is the logic and layout information. It is easy to reuse them and to support devices of different sizes.

5.2. DEVELOPER TOOLS

Android application needs several Android specific Configuration files and the application is written using Java Programming language. The files are converted into an android application with the use of android development tooling. This tooling is used to compile, package, deploy and start applications that are developed. These Android configurations files are based on XML. There are some specialized editors which typically allow us to switch between XML file representation and a structured user interface.

5.3. USING LAYOUT MANAGER

A layout manager is responsible for all the layouts. The base class managers are the android. View and this class can be extended using view class. Android supports different default layout managers. The most used layout managers are linear layout, Frame layout, relative layout and grid layout. Frame layout is a layout manager which allows for creating visual effects .Linear layout puts all its elements into a single row or column depending upon the attribute. Attributes are of two types, Horizontal and vertical in which horizontal is a made default. It also helps in assigning weight through layout parameter. Relative Layout permits positioning the widget relative with one another. It is a complex Layout Manager and needs its use only in case of requirement of such Layout. Grid Layout helps in organizing the views either in a grid or in a table. It separates the area into rows, columns and cells.

6. CONCLUSION AND FUTURE SCOPE

This project is mainly designed for the development of our Institution and ease the administrative work. The

amount collected from the student is secured and this mode of payment is easy and user friendly for the users. The fine module helps to maintain the discipline of the students in and around the institution

III. REFERENCES

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