

A PAPER ON STUDENTS' RESULTS SORTING SYSTEM

Prachi¹, Sowmya Ramanathan², A.Yogendra Reddy³, R V S N Vamsi Krishna⁴

¹B.TECH-3rd YEAR, CSE Dept., SRM UNIVERSITY RAMAPURAM CAMPUS, choti.anurag@gmail.com

²B.TECH-3rd YEAR, CSE Dept., SRM UNIVERSITY RAMAPURAM CAMPUS, ramanathan.sowmya97@gmail.com

³B.TECH-3rd YEAR, CSE Dept., SRM UNIVERSITY RAMAPURAM CAMPUS, yogendra.arumalla@gmail.com

⁴ B.TECH-3rd YEAR, CSE Dept., SRM UNIVERSITY RAMAPURAM CAMPUS,
vamsikrishna.ramayanam@gmail.com

Abstract: This project is used to create an android application for sorting the students' results of a university .This project is used for sorting the grades of individual students of the university. The sorted results' will mainly be categorized into three: viewing the results of the entire class, viewing the results of a particular subject or viewing results of a particular student. After sorting, the results can be easily viewed in each one of the above stated manners. By viewing the results in such various manners the faculty can easily list out or group the slow learners and help them out by giving extra attention. This will in turn benefit the students. This project can be further improvised as it can also be created as a hybrid application which in future can be used as desktop application, web application or a mobile application. This project can be used in future by any university for analyzing the results of the entire university and can even further examine the subjects where many students have arrears and accordingly prepare for giving more assistance in those subjects to all the students. In this manner the university can work towards improving the quality of the education they provide and can support their students in a better manner.

Keywords: android studio, result's sorting, manual, static database.

1. INTRODUCTION

In the current system, this sorting of results is done manually by the faculty which is a very tedious job. It may even have some inaccurate final grouping. It is indeed a very time consuming task. This new system or application can benefit the university by saving a lot of time and also increase the accurateness of the work done. This app can be easily accessed by the faculty anytime in that period of the semester. It can be further be put to actual implementation by actually linking it with the college database by requesting the authorization. This project can be further improvised as it can also be developed as a hybrid application which in future can be used as desktop application, web application or a mobile application on various platforms. In this project the main role is played by the database containing the results of the university and sorting that database. Currently a small manual database base is created for the results obtained by the students and is linked to our android application. One another database is also manually created which will contain the credentials of the faculty only through which they can access the sorted results' list. Depending upon the option selected by the faculty the results will be projected

2. RELATED WORKS

2.1 Purpose

The idea is to design an android application which contains a small static data of the college. the static data shall be manually created and will not match with the college database for now.

2.2 Objective

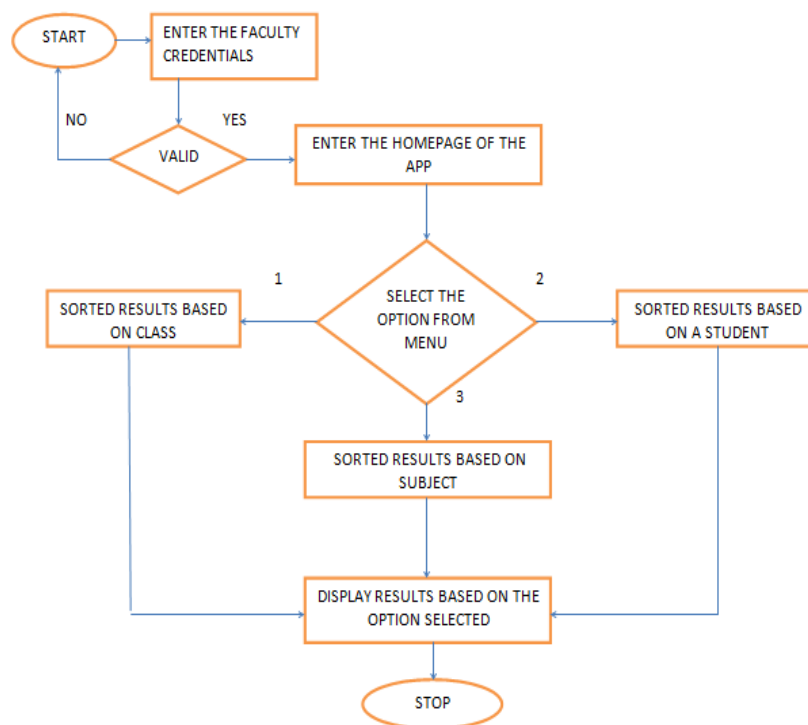
- to create an android application.
- to ease faculty's manual calculations.
- to save time.
- to automate the work done.
- to analyze the results and assist the students in need.

3. SYSTEM DESIGN

This deals with data flow diagram, detailed flow graph, requirement analysis, and the design process of the front and back end design of the student information management organization.

3.1 Data Flow Diagram (DFD)

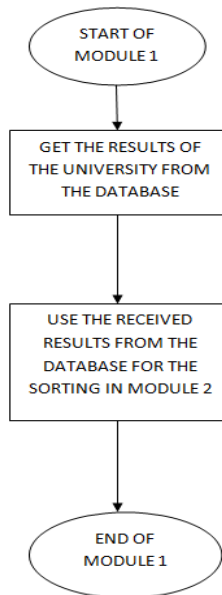
Modelling is one of the parameter which play an important role in designing some project or application. DFD is a one of the graphical modeling tool. DFD represents the entire flow graph of the project from starting point of project to end of project. A Data Flow Diagram (DFD) is a graphical representation of the “flow” of Student Information System. A data flow diagram can also be used for the dream of Data Processing [3]. DFD shows the communication between the system and external entities. This context-level DFD is then “exploded” to show more detail of the system being modeled. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem examination. It views a system as function that transforms the given input into required output. Movement of data through the different transformations or processes in the system are shown in Data Flow Diagram of Fig. 1. This seminar mainly focuses on the control the information of the students, faculty, placement cell information, exam section, related information of the college which is maintain by the college management through various levels of controlling. The function of the individual entities will be explained in detail in the flow graph.



3.2. Detailed Flow Graph

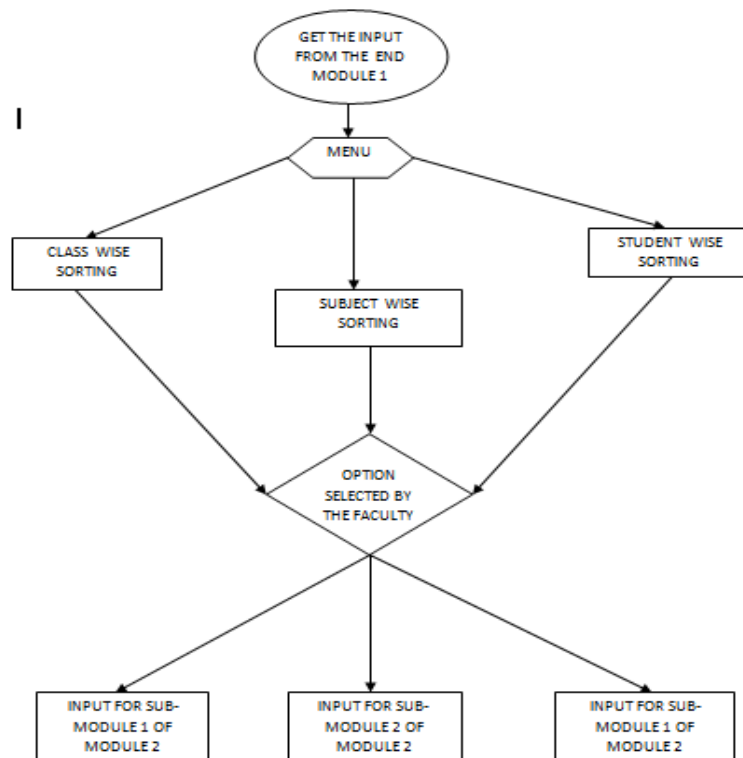
In this hierarchical representation is given regarding the student information system. The detailed flow graph is shown in Fig. 2. The design of the student information management system includes the invent of the home page which give the

technique for all the students, organization and other client to access the SIMS. All customer of the SIMS has a single username and password provided by the web master of the institution. The home page mainly contains a login form through which a new user can register, or an active user can login to the system by incoming the username and password provided by the web master.



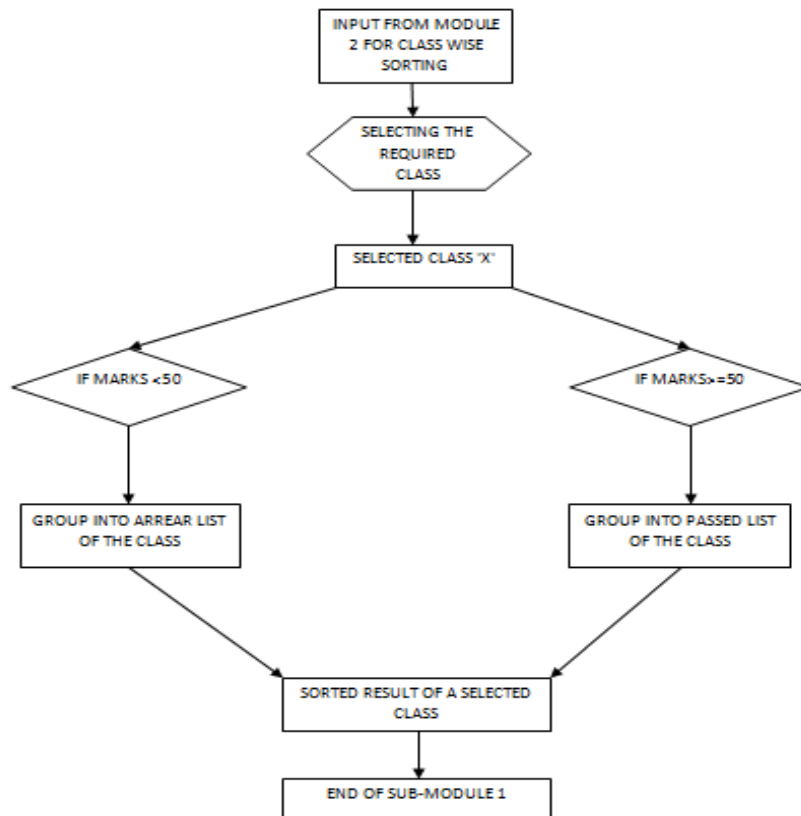
3.2.1 Input from the static database

Firstly, get the input from the static database that is stored as the data and sort the results from the database. Usually the data that is received from the database is sorted according to the category of the results



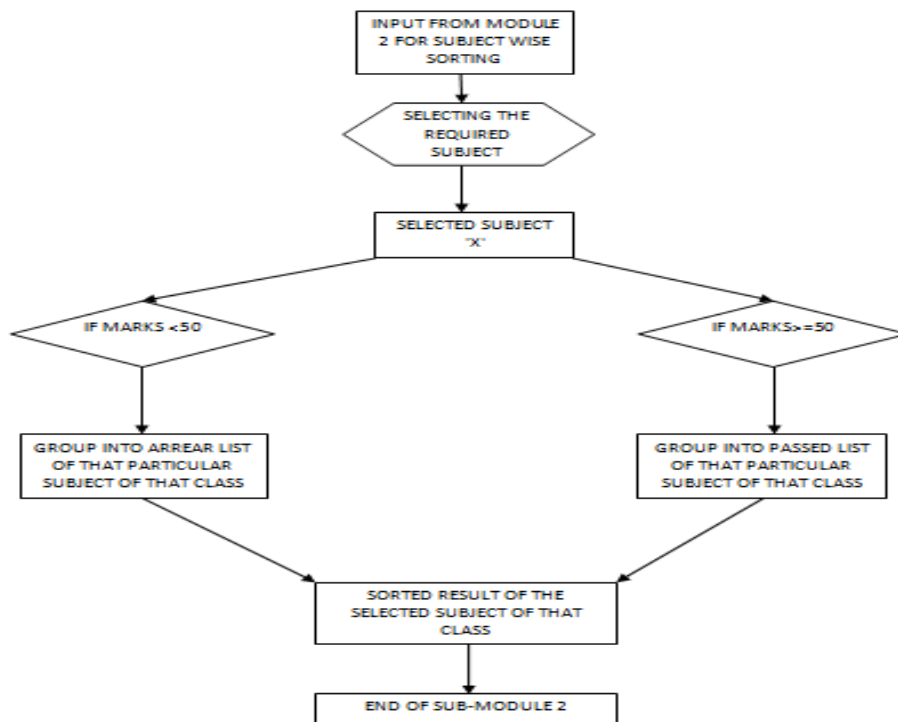
3.2.2 Menu

After getting the input from the module 1, the results are to be sorted in 3 ways which are been chosen by the faculty Firstly, the results are sorted according to class wise, secondly the results are sorted according to subject wise and finally the results are classified into student wise results and the results are displayed related to the option selected by the faculty



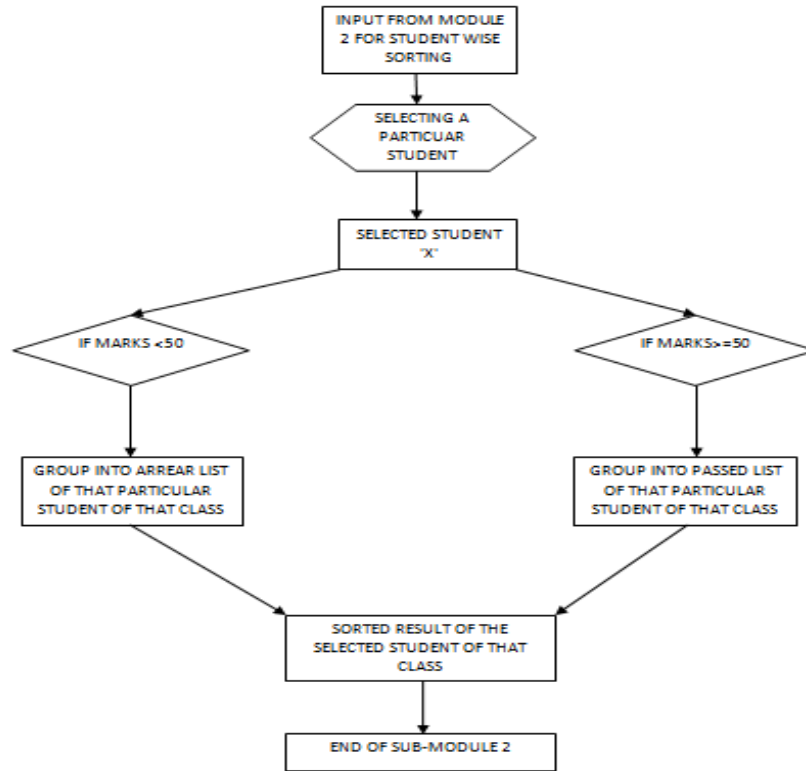
3.2.3 Class wise:

In the class wise results, the results will be displayed according to the respected classes that are selected by the faculty. After the login page the faculty will be redirected to the menu where the faculty can select the class wise results, results are displayed based on the fixed value. If the marks gained by the students are less than 50 then they are failed, if the marks gained are greater than or equal to 50 they are displayed in the past list.



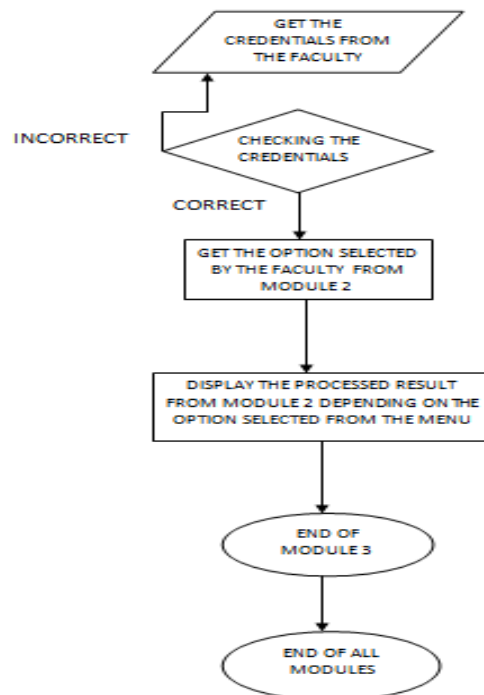
3.2.4 Subject wise:

After selecting the subject wise results then select the subject in which the results must be displayed, the passed list and failed list of the students of the subject selected will be displayed separately



3.2.5 Student wise:

Student wise results will be displayed for getting the results of each student. The faculty can get the results of each student by entering their details such as roll no, name etc.;



In the login page the faculty has to enter their login id and password, if the given details are incorrect they will again be redirected to the home page and if the details are correct then the menu will be displayed where they can select their choice of class wise, subject wise and student wise, the results will be displayed according to their choice.

4. REQUIREMENT ANALYSIS

The basic needs for the plan of the Student information system are

- Every client should have their personal identity Login service.
- User can renew his/her private information and can view the notice, marks, appointment and exam section updates etc.
- Faculty, placement and exam sections can renew every of the information.

4.1 Functional Requirements

Student information management system aims to progress the good organization of college information management, and the major job is managing and maintaining information [4]. The administrator and students are two major useful needs in the system. The Administrator will be given new powers (enable/disable/ update) than other users. It will be ensured that the information entered is of the acceptable arrangement. For example, name cannot contain numbers. In case if incorrect form of information is added, the client will be asked to load the information another time. Students use the system to query and enter their information only.

4.2 Non-Functional Requirements

4.2.1 Performance Requirements:

The proposed organization that we are leaving to develop will be used as the chief performance system for helping the organization in management the whole database of the student studying in the organization. Therefore, it is accepted that the record would perform functionally all the requirements that are individual.

4.2.2 Safety Requirements:

The database may obtain crashed at any certain moment due to virus or operating system failure. Therefore, it is required to take the database backup [5].

4.2.3 Security Requirements:

We are leaving to develop a protected database. There are different categories of persons namely Administrator, Student who will be viewing either all or various information from the database. Depending upon the category of user the contact rights are decided. It means if the client is an administrator then he can be able to modify the information, append etc. All other users only have the rights to take back the information about record.

5. DESIGN PROCESS

5.1 Technologies Used

5.1.1 XML

XML is also useful language for making an android application .XML is Extensible markup language which is a backbone of our android application. We used this language to make our application more useful as well as competent.

5.1.2 Java

Android applications are developed using the Java language. As of now, that's really your only option for native applications. Java is a very popular programming language developed by Sun Microsystems (now owned by Oracle). Developed long after C and C++, Java incorporates many of the powerful features of those powerful languages while addressing some of their drawbacks. Still, programming languages are only as powerful as their libraries. These libraries exist to help developers build applications.

Some of the Java's important core features are:

- It's easy to learn and understand

- It's designed to be platform-independent and secure, using virtual machines
- It's object-oriented

Android relies heavily on these Java fundamentals. The Android SDK includes many standard Java libraries (data structure libraries, math libraries, graphics libraries, networking libraries and everything else you could want) as well as special Android libraries that will help you develop awesome Android applications.

5.1.3 SQL

SQL stands for Structured Query Language. SQL let us right to use and control databases. SQL is an ANSI (American National Standards Institute) standard. SQL can carry out queries touching a database, get back information from a database, place in records in a database, renew records in a database, remove records from a database, produce fresh databases, produce fresh tables in a database, produce stored events in a database, generate view in a database, place permissions on tables, procedures, and view.

6. CONCLUSION

This project can be used in future by any university for analyzing the results of the entire university and can even further examine the subjects where many students have arrears and accordingly prepare for giving more assistance in those subjects to all the students. In this manner the university can work towards improving the quality of the education they provide and can support their students in a better manner.

REFERENCES

- [1] S.R.Bharamagoudar "Web based Student Information Management System" IJARCCCE Vol.2, Issue 6, June 2013.
- [2] Zhibing Liu, Huixia Wang, Hui Zan "Design and implementation of student information management system."2010 International symposium on intelligence information processing and trusted computing. 978-0-7695- 4196-9/10 IEEE.
- [3] Zhi-gang YUE, You-wei JIN, "The development and design of the student management system based on the network environment", 2010 International Conference on Multimedia Communications, 978-0-7695-4136-5/10 2010 IEEE.
- [4] TANG Yu-fang,ZHANG Yong-sheng, "Design and implementation of college student information management system based on the web services". Natural Science Foundation of Shandong Province (Y2008G22), 978-1-4244-3930-0/09 2009 IEEE.
- [5] M.A. Norasiah and A. Norhayati. "Intelligent student information system". 4th International conference on telecommunication technology proceedings, Shah Alam, Malaysia, 0-7803-7773-7/03 2003 IEEE.
- [6] Jin Mei-shan¹ Qiu Chang-li² Li Jing³. "The Designment of student information management system based on B/S architecture". 978-1-4577-1415-3/12 2012 IEEE.