



Student Automation System

Ms. Snehal R. Sarode; Ms. Priyanka K. Pachpohar & Prof. Vaishali Sarangpure

Abstract: *Student Automation System provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a student's academic career is critically important in the university as well as colleges. Student Automation system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose, progress in the course, completed semesters, years, coming semester year curriculum details, exam details, project, final exam result and all these will be available through a secure, online interface embedded in the college's website. It will have, batch execution details, students' details in all aspects, the various academic notifications to the staff and students updated by the college administration. Different reports and Queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters, and certification and even for the entire college. Here student can interact direct with the admin by using message form through which his or her query will respond directly and easily.*

Student Management System (SMS) tracks all the details of a student from the day one to the end of his course which can be used for all reporting purpose, tracking enrolment, progress in the course, completed semesters years, final exam results and all these will be available for future references too. Our project will have the databases of courses offered by the college under all levels of graduation or main streams related to Dental Course, students' details in all aspects. Different reports and Queries can be generated based of vast options related to students, batch, course, quota, semesters and category and even for the entire college.

Keywords: Student Automation System; Database; HTML; SQL

INTRODUCTION

Student Automation System deals with all kinds of student details of the college, curriculum batch details and other resources. Collage Staff are able to directly access all aspects of a student's academic records through a secure, online interface embedded in the college's website. The system utilizes user authentication, displaying only information necessary for an individual's duties. all data is stored securely on SQL servers managed by the college admin and ensures highest possible level of security. This system provides a simple interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily.

Viewing student data, managing admission and reshuffling, managing seats, quota, board, semester, faculty, category and for examination, block allocation, subject management, scheduling exam, result and related issues are made simple and easy. There are custom search capabilities to aid in finding student information and working on student records. Our project will have the databases of courses offered by the college under all levels of graduation or main streams related to student details, fees details, students' contact details in all aspects. Different reports and Queries can be generated based of vast options related to students, batch, course, quota, semesters and category and even for the entire college. A Student Automation System



(SAS) is designed to help collages for management of student details. Extensive information is available at your fingertips through this System. Viewing student data, managing admission and, managing details, quota, board, semester, faculty, category and for examination, block allocation, subject management , scheduling exam, result and related issues are made simple and easy. There are custom search capabilities to aid in finding student information and working on student records.

PURPOSE

This system should improve efficiency of college record management. Student Minimums time required to access and deliver student records. To make the system more secure. This avoids paper-work, for maintaining the student records manually and all the data can be handling easily. Student Automaton System providing the interface for students and increasing the efficiency of college record management. The student information could be retrieved using secure and user friendly environment in minimum time.

OBJECTIVES

- Providing the web base interface for students , faculty etc.
- Increasing the efficiency of college record management.
- Decrease time required to access and deliver student records.
- To make he system more secure.
- Decrease time spent on non value added tasks.

System design

In system design data flow diagram, detailed flow graph, requirement analysis, and the design process of the front and back end design of the front and back end design of the student automation system.

DATA FLOW DIAGRAM

A Data Flow Diagram(DFD) is a graphical representation of the “flow” of Student Automation System. This DFD can be visualization of Data processing.DFD identify interaction between the system and outside entities. A DFD flow data through a system represent. It can be used problem analysis. It views a system as function that transforms the given input into required output. This context-level DFD is then ”exploded” to show more detail of the system being modelled.

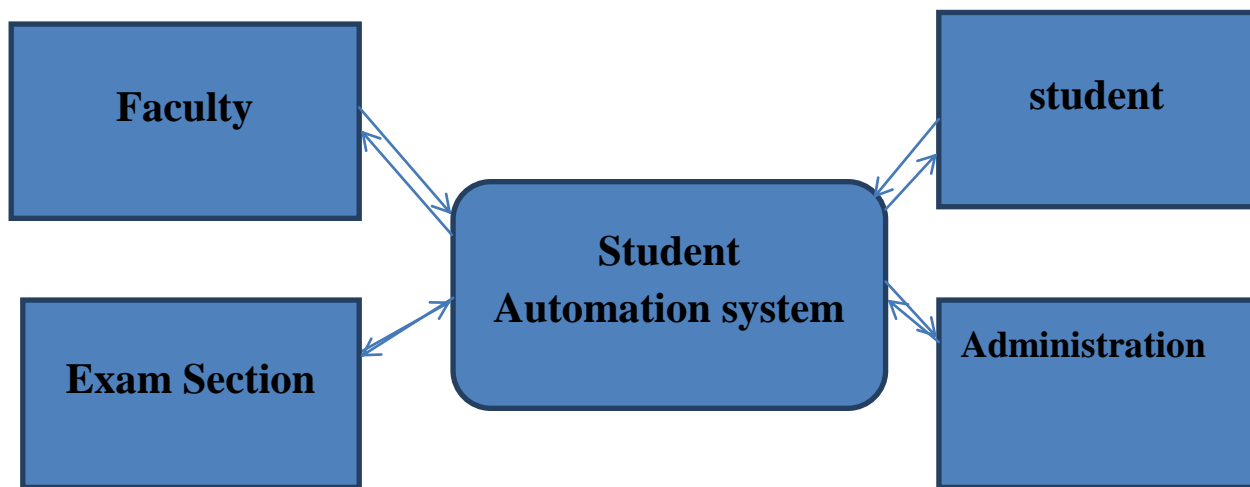


Fig.1 Data Flow Diagram

B.DETAILED FLOW GRAPH

The flow graph shown in fig.2.The design of the student automation system include the design of



the home page which provides the way for all the student, staff and other user to access this system . This system required unique id no and password provided by the web master of the college. This home page mainly contains a login from through which a new user can register, or an existing user can login to the system by entering the

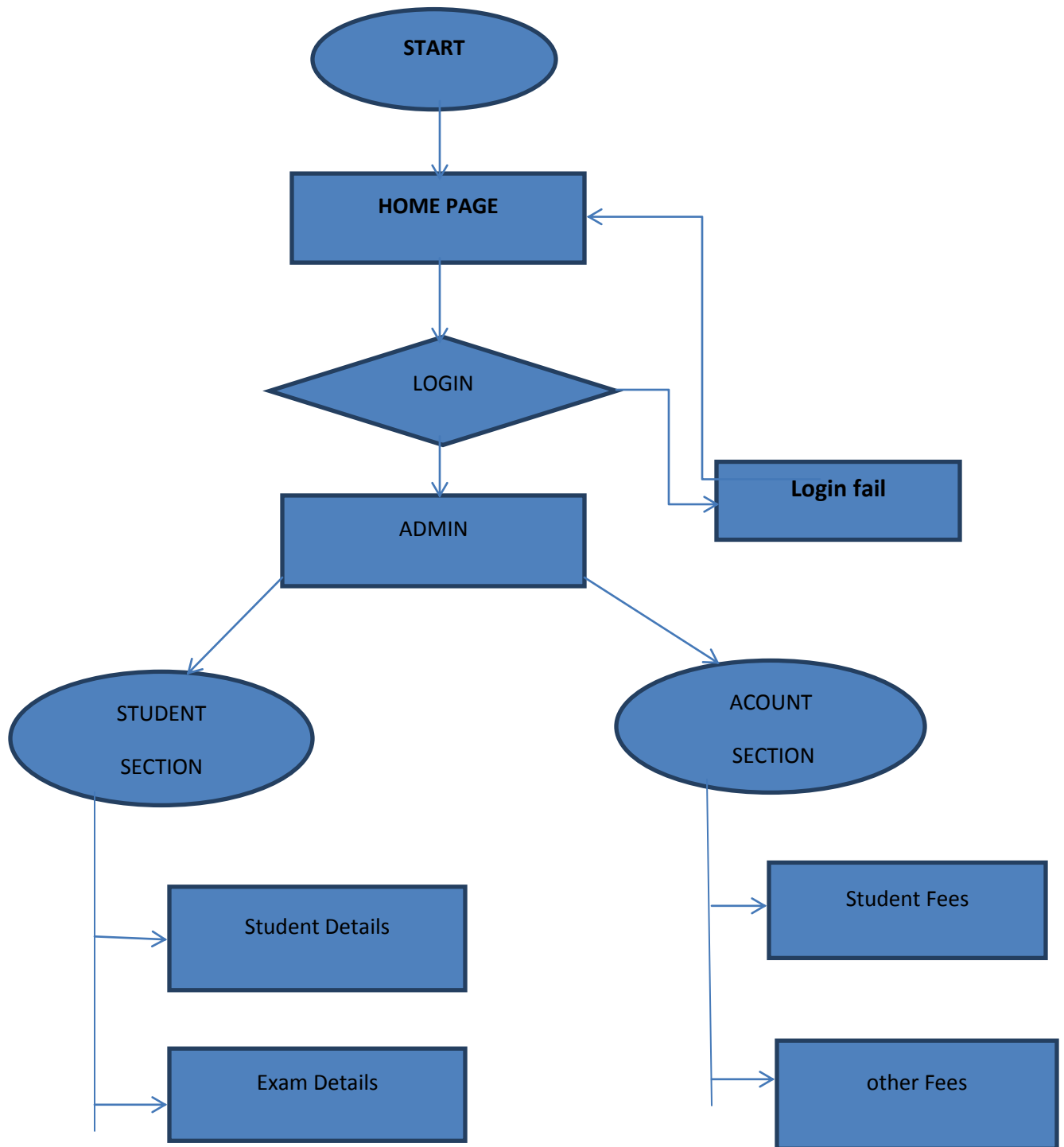
EXAM SECTION: The examination section is responsible for updating internal and external examination time table. They are also responsible for the updating the supervision list for the faculty and class room allocation for the students in the examination. And they are responsible for the checking and approving the internal marks details updated by the staff.

FACULTY:The faculty can change the information regarding the student internal marks, student attendance and any information regarding there subjects they handle. They can also get the notification from the placement cell and exam section. They can also view the student details for better understanding the student performance and improving the efficiency of the student.

ADMINISTRATOR: The admin is responsible for entering the new student, promoting the

student from one class to another, from one semester to another and from one year to another. Managing the student accounts like any changes regarding to the name, address etc. The admin also updates the college related information like information regarding any other events that occur in the college. The admin will check the all the updates i.e. student updates, exam updates etc. The admin has the highest level of power in the student information system.

STUDENT : The student is of centre focus, because in every college student plays the very important role . Student can access the information of the college, course details, subject details, faculty details, training and placement cell information and exam section information. The course details include information regarding branch he is studying, the academic curriculum of the college, year wise subject offered by the branch, the subject details include the syllabus of the subjects, information regarding the staff handling the subjects, the subjects he presently registered for the semester he is presently studying, attendance and internal marks of the subjects, he can also ask any queries to the staff regarding the subjects.





System Modules

The Project is divided into two Sections, Student Section and Account Section. These section having following modules.

Student details
Exam details
Student fees
Other fees

Student section:-

Student Section can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges.

Student details :-

Student information system deals with all kind of student details, personal details, official details, college details, course details, curriculum, batch details like name, address, etc.

Exam Details:-

Details from the day one to the end of the course which can be used for all reporting purpose, progress in the course, completed semesters, years, coming semester year curriculum details, exam details, project , final exam result and all these will be available through a secure.

Account Section:

Account Section can use by education or college to maintain the fees details of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges. Students can pay their fees installment or can pay one time. There are facility provided by the system for Students that pay their fees in five installment. They can pay their fees of demand draft or cheque. In account Section there are two sub-modules, first one is students fees and second one is other fees.

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Other fees:-

This modules maintain development fees, clearance fees of students and other fees related to students.

REQUIREMENT ANALYSIS

- The basic requirement for the design of the student automation system are
- Every user should have their own identity
- Login facility
- User can update his/her personal information and can view the notice, result, placement and exam section updates etc.
- Faculty and exam section can update any of the information.

DATABASE DESIGN PROCESS

It is fair to say that database play a critical role in almost all areas where computer are used ,including business, electronic commerce, engineering, medicine, law, education And library sponce. A database is collection of a related data.

A database has the following implicit properties:

- A database represents some aspect of the real world, sometimes called the mini-world or the Universe Of Discourse (UOD) change to the mini world are reflected in the database.
- A database is a logically coherent collecting of data with some inherent meaning. A random assortment of data cannot correctly be referred to as a database.
- A database is designed, built and populated with data for a specific purpose. It is an intended group of users and some preconceived application which these users are interested.

Database Management System (DBMS)is a collection of programs that enables users to create and maintain a database. DBMS is a



general-purpose software system that facilitates the process of defining, constructing, manipulating, and sharing database among various user and applications. Defining a database involves the specifying the data types, structures, and constraints of the data to be stored in the database. The database definition or descriptive information is also stored in the database in the form of dictionary; it is called Meta data constructing the database is the process of storing the data on the storage medium that is controlled by the DBMS.

Manipulating a database includes functions such as queering the database to retrieve specific data, updating the database to reflect in the mini-world, and generating reports from the data. Sharing a database allows a multiple users and programs to access the database simultaneously.

Application program accesses the database by sending queries or request for data to the DBMS. A query typically causes some data to be retrieved; a transaction may cause some data to be read and some data to be written into the database.

CONCLUSION

Student Automation System reduces the man power required and it provides accurate information always. Information of all year's student gathered can be saved and can be accessed at any time. Management can get the required information without delay. Helpful to perform paperless work and manage all data. Provides easy, accurate, unambiguous and faster data access.

REFERENCES

[1] Zhibing Liu, Huixia Wang, Hui Zan "Design and implementation of student information management system." **2010 International symposium** on intelligence information processing and trusted computing. 978-0-76954196-9/10 IEEE.

[2] 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.

[3] 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.

[4] 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.

[5] Rankin, j. (2013, march 28). How data System & report can either fight or propagate the data analysis error epidemic, and how educator leader can help.

[6] U.S. Department of Education Office of Planning, Evaluation and Policy Development (2009). Implementing data-informed decision making in schools: Teacher access, supports and use. United States Department of Education (ERIC Document Reproduction Service No. ED504191)

[7] Gary Langsdale, "What It Takes to Keep Student Information Safe in the Digital Age," The EvoLLLution, October 2, 2014. Accessed at <http://www.evollution.com/opinions/audio-takes-student-information-safe-digital-age/>

[8] Natalie Gagliardi, "US universities at greater risk for security breaches than retail and healthcare: BitSight," ZDNet, August 21, 2014. Accessed at <http://www.zdnet.com/us->



[universities-at-greater-risk-for-security-breaches-
than-retail-and-healthcare-bitsight-7000032843/](http://www.edupediapublications.org/journals/index.php/IJR/issue/archive)

[9] ["We Built, We Bought, We Shared: The
Costs of Administrative Service Systems vs. the](#)

[Academic Mission \(EDUCAUSE Review\) |
EDUCAUSE.edu".](#) *Www.educause.edu.*

Retrieved 2015-06-02.