***STUDENT MANAGEMENT SYSTEM***

***Introduction*** *:*

The student management system can handle all the details about a student. the details include student personal details , college details , course details , academic details etc. Student management system is an automated version of manual student management system. It is a server-client based system and we will be designing and implementing the system to make it a fully automated system.

***Purpose :***

The document we need to create first will contain all the details about the software requirements regarding the student management system and describes the design decision , architectural design and the detailed design needed to implement the system. It provides the visibility in the design and provides information needed for software support. New reliable and fast school-management/college-management software with the great customers support. This automation of student management system will help us with efficiently provided student information to teacher and school/college administration . This increase in efficiency of result making , provide result to parents , give feedback to student , finally publication of students’ results. It also provides a mechanism to edit the student information form which makes the system flexible.

***User Characteristics :***

 The users of the system are students, teachers and the administrators who maintain the system.The users are assumed to have basic knowledge of the computers. Theadministrators of the system to have more knowledge of the internals of the system and is able torectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system. The proper user interface, users manual, online help and the guide to install and maintain the system must be sufficient to educate the users on how to use thesystem without any problems.

***General Constraints :***

The information of all the users must be stored in a database that is accessible by the Student Information Management System.The university information security system must be compatible with the applications. The Student Information Management System is connected to the school/college/university computer and is running all 24 hours a day. The authorized users must have their correct usernames and passwords to enter into the Student Information Management System.

So we are dividing the project into the following broad categories which are :

1. Student module
2. Fee module
3. Attendance module
4. Marks module
5. Student module : Admin -> add new student, see student details , edit / update student details , delete student

Student -> See his details and update his profile

1. Fee module : Admin -> edit or update fees structure and edit , update student fee ( paid or pending )
2. Attendance module : Admin -> mark attendance and calculate aggregate, see attendance list and default list.
3. Marks module : Admin -> edit and update marks

Required Methods / function requirements for the Student Management system :

* + - 1. Admin function :
         1. Login , edit profile
         2. Manage Student : Add , edit , view list
         3. Manage fee : Add , view , list and filter fees according to student.
         4. Manage Attendance : Add , view , list and filter attendance according to student.
         5. Manage Marks : Calculate marks for each student
         6. Record : Record of all students , fee , attendance, certificate.
      2. Student functions :
         1. Registration
         2. View Payment history
         3. View Attendance history
         4. View Results

***SYSTEM ANALYSIS :***

System analysis can be categorized into five parts.

* System planning and initial investigation
* Information Gathering
* Applying analysis tools for structured analysis
* Feasibility study
* Cost/ Benefit analysis.

In the current system we need to keep a number of records related to the student and want to enter the details of the student and the marks manually. In this system only the teacher or the school authority views the mark of the student and they want to enter the details of the student. This is time consuming and has much cost.

***PROPOSED SYSTEM :***

In our proposed system we have the provision for adding the details of the students by themselves. So the overhead of the school authorities and the teachers is become less. Another advantage of the system is that it is very easy to edit the details of the student and delete a student when it found unnecessary. The marks of the student are added in the database and so students can also view the marks whenever they want.

Our proposed system has several advantages

* User friendly interface
* Fast access to database
* Less error
* More Storage Capacity
* Search facility
* Look and Feel Environment
* Quick transaction

All the manual difficulties in managing the student details in a school or college have been rectified by implementing computerization.

***User Interfaces :***

We will be designing and creating the user interface of the system based on Java language .The student management system will have following user-friendly and menu-driven interfaces like :

1. Login : to allow the entry of only authorized users through valid login id and password.
2. Student Personal detail : to maintain the information of a student and to register him/her to the system.
3. School/college Details : to maintain school/college details
4. ProgrammeDetails : to maintain scheme details of a programme.
5. Paper details : to maintain paper details of a scheme for a particular programme
6. Faculty details : to maintain the faculty details.