Software Requirement Specification for "School Management and Automation System"

1. Introduction:

This document aims at defining the overall software requirements for Student Result Management System. The final product will be having only features or functionality mentioned in this document.

2.1 Product Functionality:

A summary of the major functions that the software will perform:

1) A login facility for enabling only authorized access to the system.
2) User (Admin) will be able to add/modify/delete information about different students data.
3) User (Admin) will be able to add/modify/delete information about different subjects that are offered in particular semester.
4) User (Admin) will be able to add/modify/delete information about elective subjects opted by different students in different semester.
5) User (Admin) will be able to add/modify/delete information regarding marks obtained by different students in different semester.
6) User will also be able to print mark sheets of students
7) User will be able to reset the system leading to deletion of all existing information from the backend database.
8) User (Admin) will be able to create/modify/delete new/existing user accounts.

2.2 User Characteristics:

The different users of the system are Administrator, Students, Parents and Staff (Teachers).

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

Login Screen: various fields available on this screen will be

1) User id

2) Password

3) Role: Admin/Student/Staff/Parent

Subject Information Parameter Screen: This screen will be accessible only to the user with admin role. The various fields available on this screen will be

1) Subject Code

2) Subject Name

3) Category / Type

4) Credits

Student Information Screen: various fields available on this screen will be

1) Student ID Number

2) Student Name

3) Year

4) Profile

5) Rank

Marks Entry Screen: various fields available on this screen will be

1) Student ID Number

2) Student Name

3) Subject Name

4) Internal Marks

5) External Marks

6) Total Marks

Mark Sheet Screen: It will allow user to enter the enrollment number and the semester number of the student for whom the user want to view/print the mark sheet.

3.1.2 Hardware Interfaces:

1) Support for printer i.e. appropriate drivers are installed.

2) Screen resolution of at least 800*600 required for proper and complete viewing of screens.

3.1.3 Software Interfaces:

1) Any window based operating system.

2) Browser.

3.1.4 Communication Interfaces None:

1) Email (Gmail, Hotmail, etc.)

3.2 Functional Requirements:

1) Subject Information Management:

 The system will maintain information about various subjects being offered during different semesters of the course. The following information would be maintained for each subject. Subject code , Subject Name ,Semester and Credits.

2) Student Information Management:

System will maintain information about various students enrolled in the school course in different years. The following information would be maintained for each student: Student ID No., Student Name, Year of student. The system will allow creation/modification/deletion of new/existing students and also have the ability to list all the students enrolled in a particular year.

4) Marks Information Management:

The system will maintain information about marks obtained by various students of different enrollment years in different semesters. The following information would be maintained: Student enrollment no, semester, subject code, internal marks, external marks, total marks and credits. The system will also have creation/modification/deletion of marks information.

5) Mark sheet Generation:

The system will generate mark-sheet for every student in different semesters.

6) Report Generation:

1) Student List Reports For each year a report will be generated containing the list of students enrolled in that batch year.

2) Semester-wise mark lists.

3) Rank-wise List Report.

7) User Account Management:

The system will maintain information about various users who will be able to access the system. The following information would be maintained. User Name, User ID, Password and Role.

4. Non-Functional Requirements:

1) Security

2) Maintainability

3) Portability

5. Other Requirements

None.

6. Change Management Process

Customer has to visit personally in the organization if any changes needed in project

scope and requirements.