**[Software Requirements Specification](https://exinfm.com/training/M2C3/srs_template.doc)**

A **Student Management System (SMS)** is a software application used by educational institutions to manage various aspects of student information, including enrollment, attendance, grades, and more. The specific software requirements for a Student Management System can vary depending on the institution's needs and the scale of the system. Here is a list of common requirements for our system:

**1. User Authentication and Authorization:**

* Secure user authentication for administrators, teachers and students.
* Role-based access control to ensure that users can only access the features and data appropriate to their role.

**2. Student Information Management:**

* Record and manage student information, including personal details, contact information, and academic history.
* Generate unique student identifiers or IDs.
* Manage enrollment and registration processes.

**3. Course and Curriculum Management:**

* Maintain a database of courses, including course names, descriptions, codes, and prerequisites.
* Define academic terms or semesters.
* Assign teachers to courses.

**4. Grading and Academic Records:**

* Enter and calculate student grades for assignments, exams, and coursework.
* Calculate and display GPA (Grade Point Average).
* Store and manage academic transcripts.

**5. Notice Creation:**

* Allow administrators to create and post notices.
* Present important updates as notices to students and faculty members.

**6. Security and Data Privacy:**

* Implement robust security measures to protect sensitive student data.
* Ensure compliance with data privacy regulations using cryptography.

**7. Scalability and Performance:**

* Design the system to handle a growing number of students and users.
* Optimize performance for efficient data retrieval and processing.

**8. Attendance Tracking (Future Addition):**

* Allow teachers to mark and record student attendance for each class or session.
* Support methods of attendance tracking as manual entry by students and reviewed by teachers in real-time.
* Include a user-friendly interface for taking attendance quickly.