A Requirement file

On

Student management system(SMS)

1) Functional Requirements

1. **Login System:** The system shall have a secure login system for **administrators, teachers**, and **students**.

2. **Student Information Management:** The system shall allow administrators and teachers to view, update, and delete student information.

3. **Academic Records Management:** The system shall allow administrators and teachers to view and update student academic records.

4. **Data Export:** The system shall allow administrators to export student data in various formats **(e.g., CSV, Excel).**

2) Non-Functional Requirements

1. **Security**: The system shall ensure the confidentiality, integrity, and availability of student data.

2. **Usability:** The system shall provide an intuitive and user-friendly interface for administrators, teachers, and students.

3. **Performance:** The system shall respond quickly to user inputs and queries.

4. **Scalability:** The system shall be able to handle an increasing number of students and users without compromising performance.

3) Interface Requirements

1. **Graphical User Interface (GUI):** The system shall have a GUI that is easy to navigate and use.
2. **Login Interface:** The system shall have a secure login interface that authenticates users.
3. **Student Information Interface:** The system shall have an interface for administrators and teachers to view, update, and delete student information.

4) Hardware and Software Requirements

1. **Hardware**: The system shall be compatible with standard computer hardware, including desktops, laptops, and tablets.
2. **Software:** The system shall be built using **Python, Tkinter**, and **MySQL.**

5) Testing Requirements

1. **Unit Testing:** The system shall undergo unit testing to ensure that individual components function correctly.
2. **Integration Testing:** The system shall undergo integration testing to ensure that components work together seamlessly.
3. **System Testing:** The system shall undergo system testing to ensure that the entire system functions correctly.