

Description:

The **Student Grade Management System** is an application designed to grade management for educational institutions. Inspired by SQL database structures, it models entities like students, courses, and grades using object-oriented programming to ensure data efficient operations. Teachers can manage student information, courses, and grades while generating summaries and visualizations. Students can view their grades and enrolled courses via a secure login system. The system supports CRUD operations, secure data storage, and CSV import for data integration.

Functions:

1. **Student Management:** Add, delete, update, and retrieve student details and grades.
2. **Course Management:** Add, delete, and query course details and enrolled students.
3. **Grade Management:** Record, update, and query student grades by course or student ID.
4. **Statistics and Visualization:** Generate statistics and visualizations.
5. **Security:** Encrypt user credentials and validate logins.
6. **Data Handling:** Import data from CSV files.