Student Grade Management System

ASSET, ALMAS, OLZHAS

Why This Topic Was Chosen

- Student academic performance is a key factor in education systems.
- Many universities lack simple digital tools to manage student grades efficiently.
- This project provides a lightweight, easy-to-use solution for tracking student grades.
- Helps students and teachers quickly access and manage records without complex software.

Similar Projects in Kazakhstan

- Universities use online student portals (e.g., Platonus, Moodle).
- These platforms focus on grading but are complex and require internet access.
- Unique Factor: This project is a small, offline, simple-to-use system designed for quick student management.

WHAT IS THIS PROJECT AND HOW DOES IT WORK?

- A console-based system to manage student grades.
- Allows users to add, view, search, and delete student records.
- Uses C++ vectors to store student data dynamically.

- Displays a menu system for user interaction.
- User enters choices to perform different operations.
- Data is stored temporarily (lost when the program exits).

Project Auditory

Who can use this system?
- University and college students to track their own grades.
- Teachers and professors to manage small class records.
- Schools without internet-based grading systems.
- Beginners learning C++ programming who need a real-world project.

Project Features

- User-friendly Console Interface → Simple menu-based navigation.
- Efficient Storage → Uses vector<Student> for fast operations.
- Essential Functions:
- ✅ Add student records.
- ✅ View all students.
- ✅ Search for a student by ID.
- ✅ Delete student records.
- Future Enhancements:
  - Add file storage for permanent records.
  - Include a grade analysis tool (average, top performers).
  - Implement a graphical user interface (GUI) for easier use.