

Student Management System (Console-Based)

A simple Java console-based application to manage student records. Supports CRUD (Create, Read, Update, Delete) operations with persistent storage using file I/O and an ArrayList.

Features

- I. Add new student records
- II. List all students (ID, Name, Age, Course)
- III. Update student information by ID
- IV. Delete students by ID
- V. Data Persistence: Student data is saved to and loaded from a local students.txt file

How It Works

- Interacts with the user through a text-based menu in the console
- Uses an ArrayList to store students in memory
- Reads from and writes to students.txt for persistent storage
- Handles invalid user input gracefully

File Structure

1. Main.java // Runs the program & handles user interaction
2. Student.java // Defines the Student class
3. StudentManager.java // Manages student records and file I/O
4. students.txt // (Created automatically) Stores saved student data

Compile the Application

- `javac Student.java StudentManager.java Main.java`

Run the Program

- `java Main`

Technologies Used

- Java SE (Standard Edition)
- File I/O (BufferedReader, BufferedWriter)
- ArrayList