

NAME- MAYANK KAUSHAL

EMP ID- 2579352

GIT HUB REPOSITORY LINK- <https://github.com/mayank5654/practice-project-1.32>

Retrieve Student Data from a Text File with the Option of Sorting and Searching

Description:-This console application is designed to facilitate the retrieval, sorting, and searching of student data for Rainbow Schools. It provides a simple and user-friendly interface for managing student information stored in a text file.

Note:- I Ensures that the text file is properly formatted, and the application is run in a suitable environment. This application provides Rainbow Schools with a practical prototype for managing student data efficiently. Users can easily sort, search, and view student information through a straightforward console interface.

Features:-Retrieve Student Data:-This program reads student data from a text file named student_data.txt. Each line in the file should follow the format: Name, Class.

Sort by Name:-Users can choose the option to sort the student data alphabetically by name. The sorting is case-insensitive, ensuring a consistent display.

Search by Name:-Users can search for a specific student by entering their name. The search is not case-sensitive, providing flexibility in input.

Display Student Data:-The application allows users to view the entire student dataset or the results of sorting/searching.

Menu-Driven Interface:- I interacted with the application through a menu-driven interface. The menu provides options for sorting, searching, displaying data, and exiting the application.

Implementation:-This application uses a Student class to represent each student, with properties for name and class. Student data is read from the text file, parsed, and stored in a list of Student objects. The menu provides a seamless experience for users to navigate through different functionalities. Sorting is achieved using LINQ to order the list of students by name. Searching is performed by filtering the list based on the entered name.

How I Used:

Prepared Data:-Created a text file named student_data.txt. Populate it with student data, each line in the format: Name, Class.

Run the Application:-Executed the application in a Visual Studio Windows Console Project.

Interact with the Menu:-Chooed options from the menu to sort, search, or display student data.

Exit the Application:-Use dthe exit option in the menu to gracefully terminate the application.