Student Data Retrieval Program - GitHub Repository Documentation

1. Introduction

In this project we created a text file student_data.txt which stores data of students such as student id, name and grade and called that data into our program to manipulate the data. We not only retrieved student data from a text file but also implemented sorting by name using the Bubble Sort algorithm. The program was developed as a Visual Studio Project using C#. The student data will be stored in a simple text file, and the project's source code will be tracked on GitHub.

2. Project Setup

A Visual Studio project called "ConAppRetrieveStudentDataAndSearchAndSort" was created with console type as .NET(C#) and saved.

3. Data Format

The text file, "student_data.txt," will be used to store student data. The data format will be as follows:

StudentID, Name, Grade

1, Ram Rajan, 12

2, Mary Janet, 10

3, Michael Jackson, 11

4. Coding the Program

The Program.cs file in the project was opened, and the C# code was written to retrieve and display student data from the text file. We also implemented sorting of student data based on their names using the Bubble Sort algorithm.

To sort the students by name, we used the Bubble Sort algorithm, which compares adjacent names and swaps them if they are in the wrong order. This process is repeated until the list is fully sorted.

5. Sorting Student Data

We implemented the Bubble Sort algorithm to sort the students by their names. The students were sorted in ascending order based on their names.

6. Testing the Program

The project was built and run within Visual Studio. It was ensured that the "student_data.txt" file is present in the project directory or full path to the file was provided in the code.

7. Creating a GitHub Repository

Create a new GitHub repository with an appropriate name CreateDeployFilesToGitHubProject.

Initialize a Git repository in the local project folder using the following command in the terminal or Git Bash:

git init

git add .

git commit -m "GitHubProject commit"

git remote add origin https://github.com/PrashastVats1/CreateDeployFilesToGitHubProject.git

git push -u origin master

8. Conclusion

In this project, we created a program to retrieve student data from a text file, display it, and implemented sorting of the student data based on their names using the Bubble Sort algorithm. The source code was tracked in a GitHub repository. This simple system allows Rainbow Schools to manage student data efficiently.

GitHub Repository Link:
https://github.com/PrashastVats1/CreateDeployFilesToGitHubProject