***STUDENT.CS***

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Section\_8

{

public class Student

{

public string Name { get; set; }

public string Class { get; set; }

}

}

***PROGRAM.CS***

using System;

using System.Collections.Generic;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Section\_8

{

public class Program

{

static List<Student> ReadStudentData(string fileName)

{

List<Student> students = new List<Student>();

try

{

string[] lines = File.ReadAllLines(fileName);

foreach (string line in lines)

using System;

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namespace Section\_8

{

public class Program

{

static List<Student> ReadStudentData(string fileName)

{

List<Student> students = new List<Student>();

try

{

string[] lines = File.ReadAllLines(fileName);

foreach (string line in lines)

{

string[] parts = line.Split(',');

if (parts.Length == 2)

{

students.Add(new Student { Name = parts[0], Class = parts[1] });

}

}

}

catch (FileNotFoundException)

{

Console.WriteLine($"File '{fileName}' not found.");

}

return students;

}

static void SortData(List<Student> students)

{

students.Sort((s1, s2) => s1.Name.CompareTo(s2.Name));

}

static List<Student> SearchData(List<Student> students, string name)

{

return students.FindAll(s => s.Name.ToLower() == name.ToLower());

}

static void DisplayData(List<Student> students)

{

if (students.Count == 0)

{

Console.WriteLine("No student data available.");

}

else

{

Console.WriteLine("Student Data:");

foreach (Student student in students)

{

Console.WriteLine($"Name: {student.Name}, Class: {student.Class}");

}

}

}

static void Main(string[] args)

{

string fname = "C:\\Users\\Keerthana\\OneDrive\\Desktop\\job\\simpli\\Projects\\Section\_8\\Section\_8\\StudentData.txt";

// Reading student data from the file

List<Student> studata = ReadStudentData(fname);

char ch;

do

{

Console.WriteLine("Select\n1.Display data\n2.SortData\n3.Search for student using name");

int choice=int.Parse(Console.ReadLine());

switch (choice)

{

case 1:

Console.WriteLine("Display Data");

DisplayData(studata);

break;

case 2:

Console.WriteLine("Sort Data");

SortData(studata);

DisplayData(studata);

break;

case 3:

Console.WriteLine("Search for student using name\n");

Console.Write("Enter the name of the student to search for: ");

string searchName = Console.ReadLine();

List<Student> searchResult = SearchData(studata, searchName);

if (searchResult.Count > 0)

{

Console.WriteLine("Search Results:");

DisplayData(searchResult);

}

else

{

Console.WriteLine($"No student found with the name '{searchName}'.");

}

break;

}

Console.WriteLine("If you want to continue press y");

ch = char.Parse(Console.ReadLine().ToLower());

} while (ch == 'y');

Console.ReadKey();

}

}

}