**Course End Project 2**

**Create a Text-file Based System For Storing and Updating Teacher Records**

**GitHub Link:** [**https://github.com/saraswathy15/PE2Textfile**](file:///D:\SimplilearnProjects\PhaseEndProject2)

**Overview:**

**The PE2Textfile program is a simple console application designed for managing teacher records. It allows users to perform various operations such as adding new teachers, displaying all teachers, updating teacher information, and exiting the program. The program uses a FileOperation class to handle file-related operations for storing teacher records.**

**Usage:**

1. **Add Teacher:**
   * **Users can add a new teacher to the records by providing the Teacher ID, Name, Class, and Section.**
2. **Display All Teachers:**
   * **Users can view a list of all teachers currently stored in the records.**
3. **Update Teacher:**
   * **Users can update the information of an existing teacher by providing the Teacher ID and entering the updated Name, Class, and Section.**
4. **Exit:**
   * **Users can choose to exit the program.**

**Code Structure:**

**The program consists of two main classes: Program and FileOperation.**

**1. Program Class**

* **Main Method:**
  + **Manages the main execution flow of the program.**
  + **Creates an instance of the FileOperation class.**
  + **Displays a menu for user interaction, allowing them to choose different operations.**
* **Menu Options:**
  + **Add Teacher:**
    - **Accepts user input for Teacher ID, Name, Class, and Section.**
    - **Creates a new Teacher object and adds it to the teacher records using the AddTeacher method of the FileOperation class.**
  + **Display All Teachers:**
    - **Retrieves all teachers using the GetAllTeachers method of the FileOperation class.**
    - **Displays the details of each teacher.**
  + **Update Teacher:**
    - **Accepts user input for the Teacher ID to update.**
    - **Allows users to enter updated information for Name, Class, and Section.**
    - **Creates a new Teacher object and updates the teacher information using the UpdateTeacher method of the FileOperation class.**
  + **Exit:**
    - **Sets the exit flag to true, terminating the program.**

**2. FileOperation Class**

* **Methods:**
  + **AddTeacher(Teacher teacher): Adds a new teacher to the records.**
  + **GetAllTeachers(): Retrieves a list of all teachers.**
  + **UpdateTeacher(int teacherId, Teacher updatedTeacher): Updates the information of an existing teacher.**

**Conclusion:**

The ‘**PE2Textfile’** program provides a basic framework for managing teacher records. Users can interact with the program to add, display, and update teacher information. The program can be extended and customized based on specific requirements.