GEO 115 PROJECT 1

Project Overview

This project is a simple Python-based Student Management System designed for the GEO115: Programming in Geographic Information Systems (GIS) course. It demonstrates the use of basic Python constructs, including functions, dictionaries, loops, and conditional statements.

The program allows users to:

* Add student names and their scores
* View the score of a specific student
* Calculate and display the class average, maximum score, and minimum score
* Exit the program

Features

1. Add Student: Users can input a student's name and their corresponding score.
2. View Student: Users can retrieve and display the score of a particular student by name.
3. Calculate Class Average: The program calculates the average score of all students, as well as the highest and lowest scores in the class.
4. Exit: The program continues running until the user opts to exit.

How to Run the Program

Prerequisites

1. Python 3: Ensure that Python is installed on your machine
2. IDE: You can run the script in any IDE or text editor (e.g., Visual Studio Code, PyCharm, etc.).
3. Git: To clone the repository, Git should be installed.

Steps to Run

1. Input the code into the IDE
2. Run the Python Script
3. Interact with the Program:

A screen shot of a computer

Description automatically generated

Program Menu

Upon running, the program will display the following options:

1. Add student
2. View student
3. Calculate class average
4. Exit

* Option 1: Enter a student's name and score.
* Option 2: Retrieve a student's score by name.
* Option 3: Calculate the class average, highest score, and lowest score.
* Option 4: Exit the program.

Error Handling

- The program handles invalid inputs, such as entering non-numeric values for scores or selecting menu options outside the available range.

- If no students are added, the program will notify the user when attempting to calculate averages.

Repository Link

You can find the repository here:

https://github.com/Enoch124/GEO-115/blob/main/GEO115\_Project1.ipy