Programming Exercise CSV

Technical Document

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Program Description:

* This manages students grades by writing them to and reading from a CSV file. Allowing users to input student information and then display the data. This program consists of three functions: write\_grades\_to\_csv, read\_grades\_from\_csv, and main.

Function: write\_grades\_to\_csv()

* Description:
* Collects student data and writes it to a CSV file.
* Variables:
* Num\_students (int): The number of students
* First\_name (str): Student’s first name
* Last\_name (str): Student’s last name
* Exam1 (int): Exam 1 grade
* Eaxm2 (int): Exam 2 grade
* Exam3 (int): Exam 3 grade
* Csvfile: The CSV file object
* Writer: The CSV writer object
* Logical Steps:

1. Prompts user for number of students
2. Opens grades.csv in write mode
3. Creates a CSV writer object
4. Writes the header row
5. Iterates through the students, prompting for their data
6. Writes each student’s data as a row in the csv file
7. Prints a confirmation message

Function: read\_grades\_from\_csv()

* Description:
* Reads students grades from the CSV file and displays them
* Variables:
* Csvfile: The CSV file object
* Reader: The CSV reader object
* Row (list): A row of data from the CSV file
* Logical Steps:

1. Opens grades.csv in read mode
2. Creates a CSV reader object
3. Iterates through each row
4. Prints each row in a formatted table
5. Handles FileNotFoundError

Function main()

* Description:
* Provides a menu for user interaction
* Variables:
* Choice (str): User’s menu selection
* Logical Steps:

1. Displays the menu
2. Prompts the user for their choice
3. Calls the appropriate function
4. Handles the appropriate function
5. Exits the program

Github: <https://github.com/FamiliarotherW/COP2373-CSV>

