**Technical Design Document Template**

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**Program Description:** This program uses the csv module to write each record into the grades.csv file and have a header of First Name, Last Name, Exam 1, Exam 2 and Exam3. A separate program reads the grades.csv file and displays the data in tabular format. Implements the with keyword

**Functions used in the Program:**

1. **Function Name:** cvs\_examstudentinfo

**Description:** This program is getting student data and writing into CSV

**Parameters:** N/A

**Variables:**

1. File- object: it is placeholder for the CSV file that is being written into
2. Writer- csv writer: used to write the info and rows to the CSV file
3. Numofstudents- int: the teachers input representing the number of students
4. First\_name- str: stores the first name of student
5. Last\_name- str: stores the last name of student
6. Exam1- str: stores the grade for exam 1
7. Exam2- str: stores the grade for exam 2
8. Exam3- str: stores the grade for exam 3

**Logical Steps:**

1. Opens and created CSV file ready to be written on
2. Write the header name for rows and columns
3. Get user input
4. The loop reiterates asking for each students they first and last name and exam scores
5. The data gathered is written into the CSV file
6. Tell the user the data is saved
7. The read\_gradecsv() function is called to display the data

**Returns:** N/A

2. **Function Name:** read\_gradescsv

**Description**: reads the grade file and displays the data in tabular form

**Parameters:** N/A

**Variables:**

1. File- object: it is placeholder for the CSV file that is being written into
2. Reader- csv.reader: reads the contents of the CSV file
3. Header- list: stores the header and column names
4. Row- list: stores each row of student data read from the CSV file

**Logical Steps:**

1. CSV file opens in read module
2. CSV header is created to read the contents
3. Print the data into a formatted table

**Returns:** N/A

**Logical Steps:**

1. cvs\_examstudentinfo() is called.

The program begins by executing the cvs\_examstudentinfo() function.

1. Open the CSV file for writing. Opens the grades.csv file in write mode ('w')
2. Write the header to the CSV file.
3. Prompt user for the number of students.
4. Loop to gather data for each student.
5. Tells the user that data has been saved.
6. Call the read\_gradescsv() function.
7. Open the CSV file for reading.
8. Create a CSV reader to read the file.

10.Read and print the header row.

11. Loop through each student row and print the data.

A screenshot of a computer

AI-generated content may be incorrect.

**Link to your repository:** https://github.com/lrubioro