HCI 584X

Overview

A running log application (app) is being created where it stores the user's running data and calculates the daily average for road and trail run miles per month. The user inputs the date, the type of run (road or trail run), hours, minutes, seconds, and miles. Base on these inputs, the app also calculates the pace of the run. The user can add, edit, or delete data from the app. The app would utilize an excel spreadsheet to store and display data.

Demonstration

The user first inputs if they want to add, edit, or delete a row of data. If they decide to add a new row, they would need to input the date, run type (road or trail run), hours, minutes, seconds, and miles of the run. If they decide to edit data, the user needs to input the index of the row and the column name. Then the user inputs the new data. If the user wants to delete a row of data, they need to input the index of that row. The user can also execute calculating their daily average road and trail miles per month.

Would you like to add data, edit data, delete data, or exit app? a/e/d/exit (Press 'Enter' to confirm or 'Escape' to cancel)

Screenshot 1: Asking user to input what task to accomplish.

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Enter number of miles: (Press 'Enter' to confirm or 'Escape' to cancel)

Screenshot 2: Adding new data. Asking the user to input number of miles.

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		Date	Run Type	Hours	Minutes	Seconds	Miles	Pace
	0	2024-01-01 00:00:00	road	1	1	1	1.0	61.016667
	1	2024-01-02 00:00:00	trail	1	2	2	2.0	31.016667
	2	2024-01-03 00:00:00	road	3	2	3	12.0	15.170833
	3	2024-01-04 00:00:00	trail	4	4	4	4.0	61.016667
	4	2024-01-05 00:00:00	road	3	3	3	10.0	18.305000
	5	2024-01-06	trail	6	6	6	12.0	30.508333

Screenshot 3: Result of adding a new row.

```
Enter new data: (Press 'Enter' to confirm or 'Escape' to cancel)
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Screenshot 4: Asking user to input the new data/value.

[2]	~	30.95						
		Date	Run Type	Hours	Minutes	Seconds	Miles	Pace
	0	2024-01-01	road	1	1	1	1	61.016667
	1	2024-01-02	trail	1	2	2	2	31.016667
	2	2024-01-03	road	3	2	3	12	15.170833
	3	2024-01-04	trail	4	4	4	4	61.016667
	4	2024-01-05	road	3	3	3	10	18.305000
	5	2024-01-06	trail	4	6	6	12	20.508333

Screenshot 5: Result of changing 1/6/2024 Hours from 6 to 4.

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Enter index to delete: (Press 'Enter' to confirm or 'Escape' to cancel)
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Screenshot 6: Asking the user what row they want to delete based on the index.

	Date	Run Type	Hours	Minutes	Seconds	Miles	Pace
0	2024-01-01	road	1	1	1	1	61.016667
1	2024-01-02	trail	1	2	2	2	31.016667
2	2024-01-03	road	3	2	3	12	15.170833
3	2024-01-04	trail	4	4	4	4	61.016667
4	2024-01-05	road	3	3	3	10	18.305000

Screenshot 7: Result of deleting the last row of data.

```
Daily average road miles for Month 1: 2.621875 miles

Daily average trail miles for Month 1: 3.526666666666666 miles

Daily average road miles for Month 2: 12.0 miles

Daily average trail miles for Month 2: 11.0 miles
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Screenshot 8: Results of calculation based on user's run data.

Issues Encountered

Some issues I encountered were trying to send data to the excel spreadsheet and pull data based on a specific index and column. These two issues I was able to research online to find a solution. Another issue I encountered was when a user inputs new data or edits data, the app

would input a new index column each time. Another issue I had was trying to calculate the averages per month based on the running data. These issues were solved by reaching out to the professor and helping me.

Milestones

1. Creating GUI

- a. Start creating the GUI and format the layout
 - i. Display screen, buttons, input boxes, etc.
- 2. Manipulate data functionality of GUI
 - a. Implement functionality to add, edit, and delete data from Version 1 to GUI
 - Insert button adds new row, delete button call delete function to delete row, etc.

3. Calculations

- a. Implement calculations from Version 1 to GUI.
- b. Display calculation results.

Self Reflection

I am somewhat satisfied with my progress so far. I think there is a good chance I can finish the project within the next weeks but it will depend on the problems I encounter when coding Version 2. I did not expect to be stuck iterating through the rows by months and having some trouble with solving the extra index column. Also, I did not expect to struggle with the daily average calculations. It was easier than I thought to send data directly to excel, locate specific data, edit data based on the index and column, and delete a row.