Knowledge Streams Assignment 01

PANDAS

Objective: To get the students ready for their **UPCOMING PANDAS MINI PROJECT**

A Note to Students: The PANDAS Mini Project is going to be of Advance category as it would/could be added in your portfolios as well. This assignment would help you to navigate the project more easily as it covers the basic concepts of Pandas. I strongly suggest that you use PANDAS documentation as a helping material for this. Any other AI or Google is your worst enemy in the long run! BEST OF LUCK.

Rehman Sadaqat

Assignment Title: PANDAS ASSIGNMENT 01
Due Date: October 28, 2024 - 23:59 (PST)

• Submission Method: GCR and LMS

• Weightage: 10% of your overall grade

• Instructions: Next Page for detailed Instructions

• Resources: Pandas Documentation

INSTRUCTIONS

Attempt Guidelines:

- 1. Make sure to write with clean and clear logic in each cell block.
- 2. Read the question very carefully. Even if your output is correct but it does not answer the question, points will be deducted.
- 3. The workbook is divided into 5 sections, each corresponding to an important concept of PANDAS. If you are weak in one part, make sure to go through your slides and/or Youtube videos to understand the concept before moving on to that section.
- 4. Points relative to each section are discussed on the next page.
- 5. You do not need any dataset files with this, there are links given in it.
- 6. The assignment holds significant weightage in your overall grade.
- 7. If you have any questions, feel free to connect with your peers. The instructors will only go through the file once in-class since instructors won't be allowed to help you build up logic in this assignment.
- 8. Pandas Documentation link is given ahead for you to review.

https://pandas.pydata.org/docs

Submission Guidelines:

- 1. Only 1 file is expected to be uploaded on assignment submissions.
- 2. Late submissions under no excuse will be entertained. Only the death of immediate family members (Mother, Father, Siblings, Spouse, Children) will be accommodated for extension.
- 3. If you are having any personal health issues, a prescription and medical proof of your medications will be needed for any sort of extension.
- 4. Any and all sorts of extensions should be requested only through email 1 day before the Submission deadline.

All questions are self-explanatory. The instructors will only help you with the question understanding, neither the logic nor the expected output.

GRADING SCHEME

Section 1: Get to know your data!

Steps	Points
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	3
13	1
14	1
15	1
16	1

Section 2: Filter and Sort your data!

Steps	Points
17	2
18	1
19	1
20	1
Bonus	5

Section 3: Grouping!

Steps	Points
1	1
2	4
3	1
4	1
5	3

Section 4: Apply!

Steps	Points
1	1
2	2
3	2
4	1
5	4

Section 5: Merge/Join!

Steps	Points
1	1
2	3
3	2
4	1
5	3
6	2

IN ORDER TO UNDERSTAND THE ASSIGNMENT, PLEASE GO THROUGH THE ATTACHED IPYNB FILE WITH THIS ASSIGNMENT.