**PE09: Programming Exercise**

**Instruction**

**Model Sales Through DeepAR**

Closely follow the textbook chapter 11 and Lecture 09.pptx to implement Model Sales through DeepAR:

* PE09-1 Data
  + Understand the Data
    - Go through textbook from page 354 to 360
  + Preprocess the data
* PE09-2 Train DeepAR
  + - Go through textbook from page 363 to 365
* PE09-3 Predict and evaluate sales

**Your task for PE09 is to:**

1. Complete above task

**HINT**:

* Feel free to follow [this step-by-step video](https://cityuseattle.sharepoint.com/teams/AI620ONEmergicTopicsinArtificialIntelligence-Fall2024/_layouts/15/stream.aspx?id=%2Fteams%2FAI620ONEmergicTopicsinArtificialIntelligence%2DFall2024%2FShared%20Documents%2FModule%2009%2FRecordings%2FMeeting%20in%20%5FModule%2009%5F%2D20241124%5F223434%2DMeeting%20Recording%2Emp4&referrer=StreamWebApp%2EWeb&referrerScenario=AddressBarCopied%2Eview%2E1bc92033%2D3c46%2D43fe%2D9434%2Dd629d41f78f3) to complete this PE

**Please make sure you remove all the running resources (including the inference you deployed) after finishing the task.**

**Submit the items below to the PE submission page:**

1. Please provide screenshots after completing task1 PE09-1, PE09-2, PE09-3 along with the prediction and evaluation results
2. Around 100 words of overall feelings completing this PE.
   * Make sure the PE module number and your name are written on the file name, e.g., "*PE09\_Name.docx").*