Welcome To AI Session

AI Session Outline

Type	Material	Time Consuming
Theoretical	Introduction	5 Minutes
Theoretical	What is Artificial Intelligence ? (AI)	5 Minutes
Theoretical	What is Machine Learning ? (ML)	10 Minutes
Theoretical	Task 1 Search about some Algorithms and present wuth discussion	40 Minutes
Break		10 Minutes
Theoretical	What isDeep Learning ? (DL)	5 Minutes
Theoretical	Introducn to neural networks	5 Minutes
Theoretical	AI Applications	5 Minutes
Theoretical	AI Programming Languages	5 Minutes
Practical	Python libraries Pandas, Matplolib, numpy	5 Minutes
Practical	Task 2: read data using pandas and plot it using Matplolib	40 Minutes
Break		10 Minutes
Practical	AI Applications: Alexa, Face destection, Image Segmentation, Image classification, data regression, chatApp, Word Sentiment App, Speech Recognition, ChatGpt 3	20 Minutes

Theoretical	Discuss About This topic	10 Minutes
Practical	Task 3: Use one of these applications and emebd it in your Django app	40 Minutes
Break		10 Minutes
Theoretical	Questions About this session	15 Minutes

- Consuming Time of discussion: 90 Minutes.
- Consuming Time of Practical Training: 2 Hours.
- Breaks: 30 Minutes.
- overall time: 4 Hours.
- Expected Date: After JAVA Stack or Python Stack.

Before the session each group must:

1- Install Anaconda using(https://www.anaconda.com/download) then create virtual environment using Anaconda inside this virtual Environment install:

1- Matplotlib:
>>pip install matplotlib
2- numpy:
>>pip install numpy
3-pandas:
>>pip install pandas
4- CV2:
>>pip install opencv-python
5-Tensorflow:
>>pip install tensorflow
6-skimage:
>>pip install scikit-image
>>pip install skimage
7-sklearn:
>>pip install sklearn
8-nltk:
>>pip install nltk
9-textBlob:
>>pip install textblob
10- Speech Recognition
>>pip install SpeechRecognition
11- openAi:

>>pip install openai

2- create empty Django App with its Configurations.

3- Search and get some basic Knowledge about Artificial Intelligence, Machine Learning, Deep Learning, Neural Networks and Natural Language Processing terms. (just know what the terms means)

4- Each group must read about their topic:

- **Group 1: K- Nearest Neighbor KNN**
- **Group 2: Conventional Neural Networks**
- **Group 3: Regression and Gradient Descent**
- **Group 4:Support Vector Machine**
- **Group 5: Decision Tree**
- **Group 6: Naïve Bayes**
- **Group 7: Clustering**

Test if these liberals work on your computer, for any issues please contact Khalid.Khader@AXSOS.Academy , +972568807701 or via discord
you can also book appointment with me via **https://calendly.com/khalid-khader**

Notes:

- Every group must install at least 7 libraries.
- You cant proceed with AI Session without installing these libraries before 29th May.

Best Regards
Khalid Khader