

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	Introducun 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 embed 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 libraries 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