

• Problem statement:

Perform Natural Language Processing NLP in Arabic text-based Plants data and analyze the data to predict plant type by using Unsupervised learning models.

• Data Description:

We used some Web scraping tools to scrap 1000 plant from **Nabataty.com**. In this project we will perform NLP in Arabic text-based data and analyze the data to predict plant type by using Unsupervised learning models.

• Data type:

o **Plant name:** the plant name

o **Irrigation**: irrigation way

o **lighting**: if plant need light or not

o **temperature:** temperate atmosphere

o **Price:** plant price in SAR

o **Product code:** product code in the website

o **Tag:** plant tags in the website

o **Height**: the height of the plant with the pot in cm

o Width: pot width in cm

o **Description:** plant description

• Data size:

No. of rows: 1000
No. of columns: 10

• <u>Tools:</u>

o HTML

o Web Scraping: beautiful soup, selenium

o Programs: Python Jubyter Notebook

o Plots: bar plot, cat plot, pie chart

• MVP Goal:

The goal of this project is to perform NLP in Arabic text-based Plants data to predict plant type by using Unsupervised learning models.