DATA PREDICTION AND PLOTTING USING PYTHON

Presented By -

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CONTENT

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INTRODUCTION

PROBLEM STATEMENT

- Project focuses on the problems faced by the small scale businessmen.
- Aim of the project is to predict and plot the data as per the datasets provided.
- Also helps to monitor and analyse sales on different scale.

ABOUT OUR PROJECT

- This project is made on Python 3.6.
- It has GUI-based interface made using Tkinter.
- Prediction is done on the basis of previous data using Annual Growth Rate Method.
- Application developed in this project can also be used for plotting data.
- Plotting of graph is done on Pie-charts and Bar-graphs.
- External Libraries used are : numpy and matplotlib

PREDICTION METHOD

- The prediction is being done on Annual Growth Rate Method
- Predicted values are being generated for:
    1. Year wise Value
    2. Month wise Value

TYPES OF PLOTS

BAR GRAPH

Plotting of Bar-graph is done on the basis of following criteria :

- A particular car sold in a particular month of all years.
- All cars sold in all months of a particular year.
- All cars sold in particular month in particular year.

PIE CHART

Plotting of Pie-graph is done on the basis of following criteria :

- All cars sold in a particular year.
- A particular car sold in all months of a particular year.

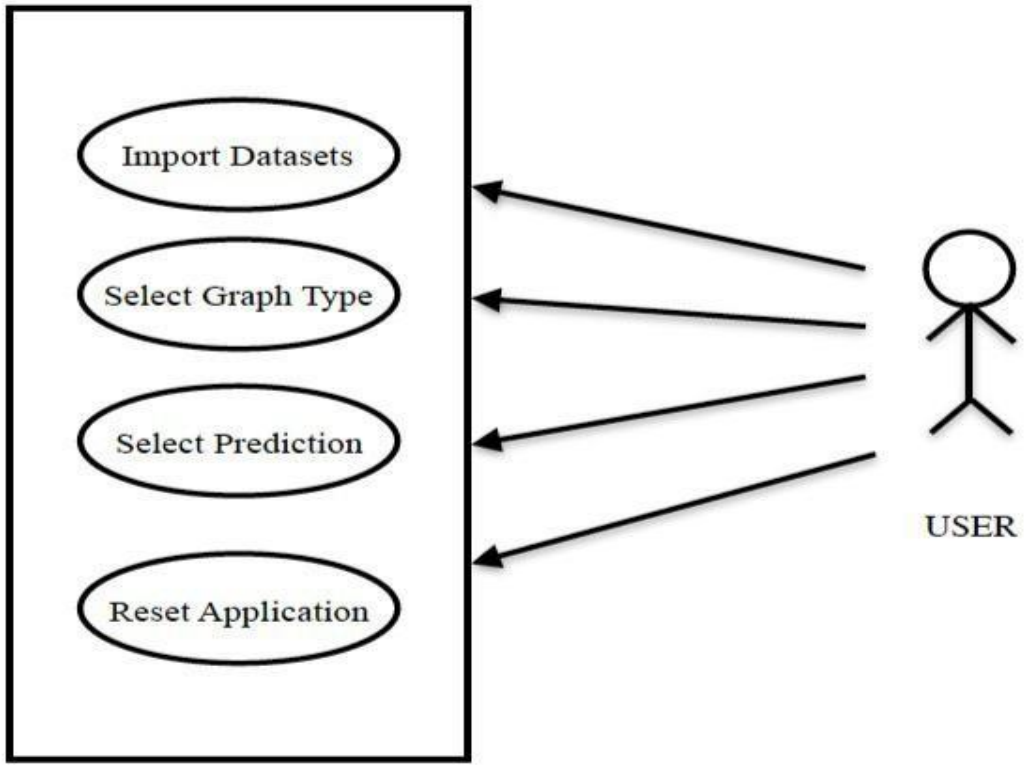
TECHNICAL SPECIFICATIONS

- Hardware Requirements
  - System with minimum 2GB RAM

- Software Requirements
  - Python 3.x
  - External libraries : numpy, matplotlib and tkinter.
  - Any Spreadsheet Software for CSV files.

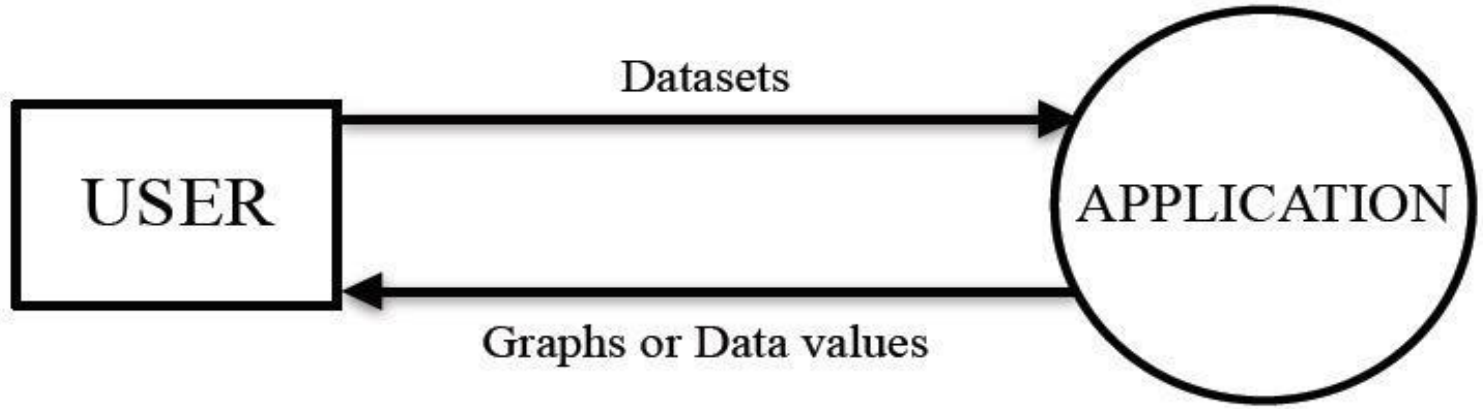
SOFTWARE DESIGN

- USE CASE DIAGRAM

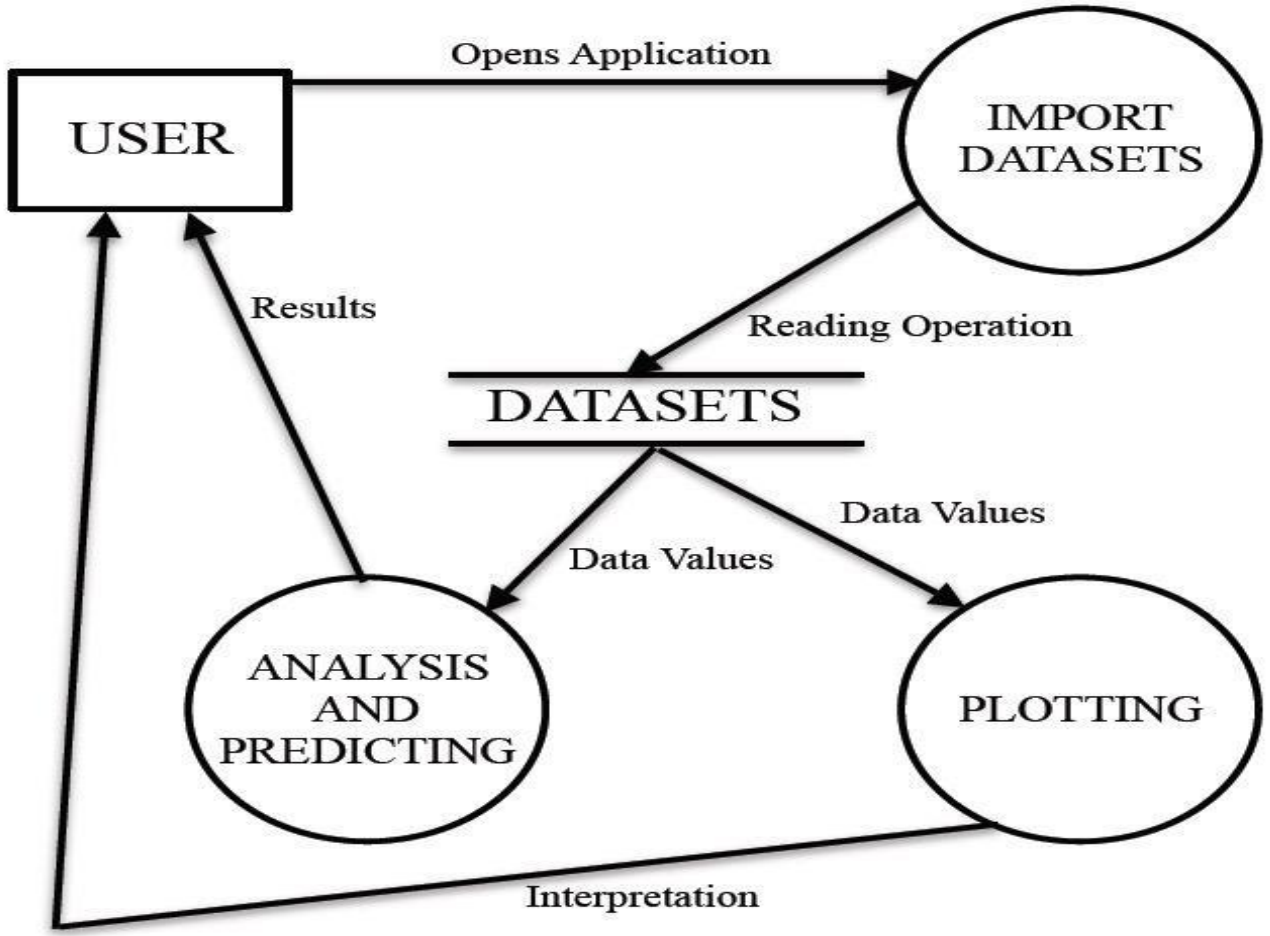


DATA FLOW DIAGRAMS

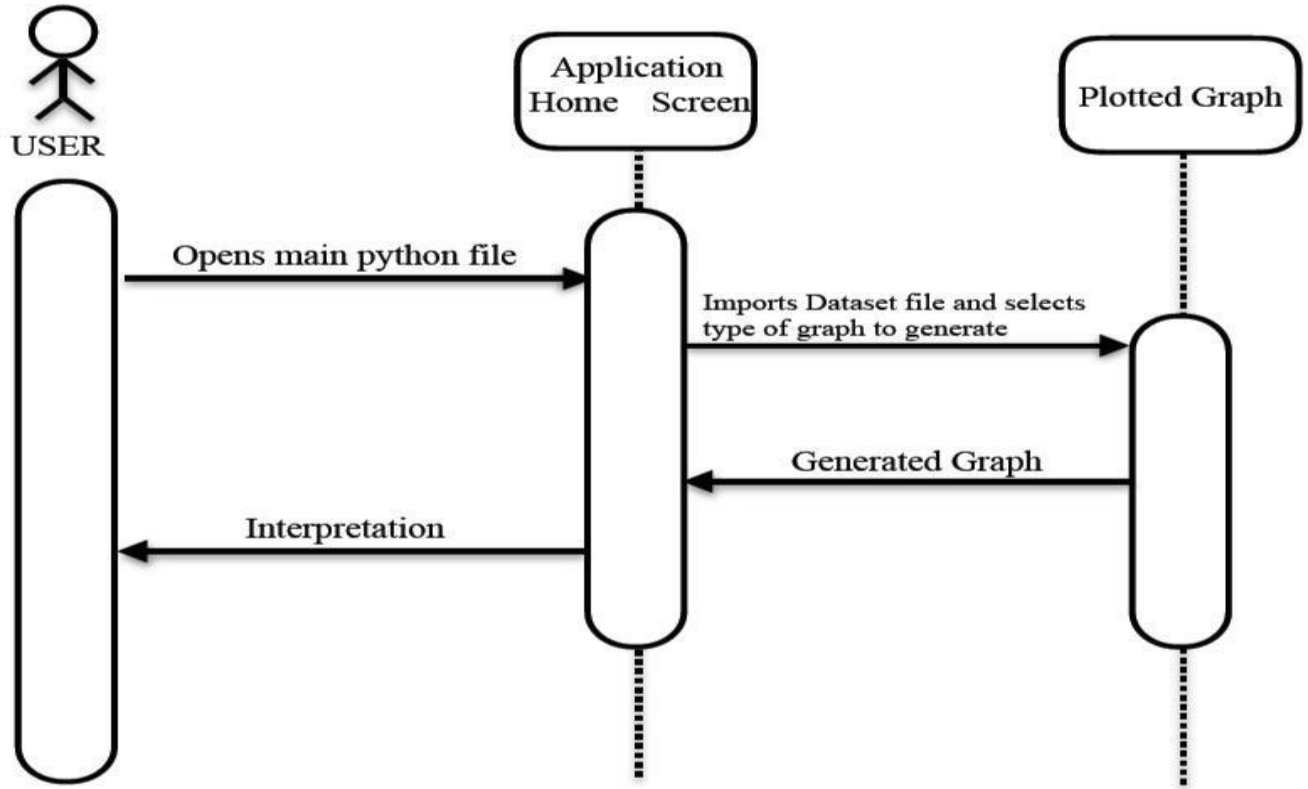
- DFD LEVEL 0



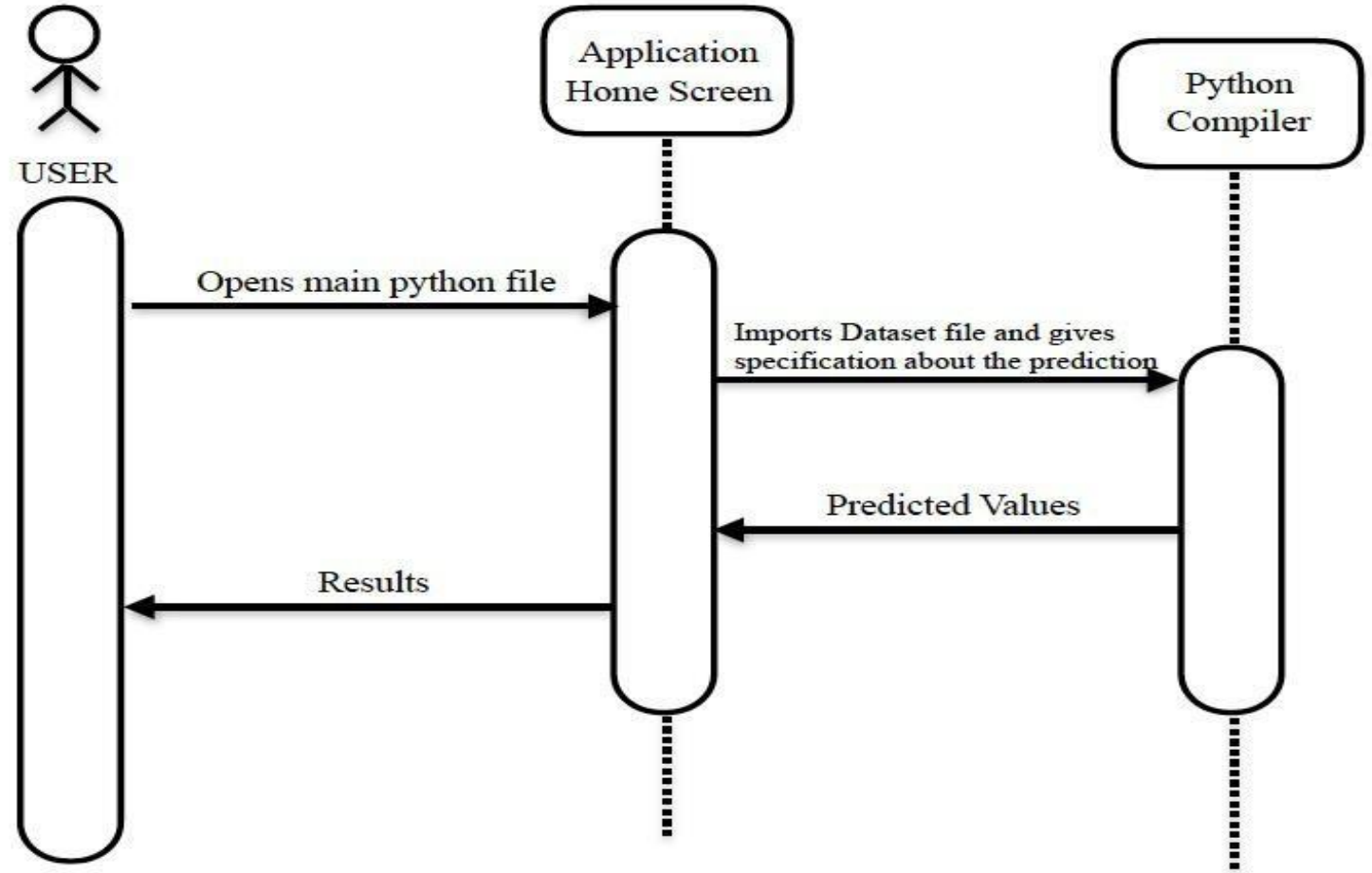
- DFD LEVEL 1


USER
Opens Application
IMPORT DATASETS
Results
Reading Operation
DATASETS
Data Values
Data Values
ANALYSIS AND PREDICTING
PLOTTING
Interpretation

SEQUENCE DIAGRAM FOR PLOTTING

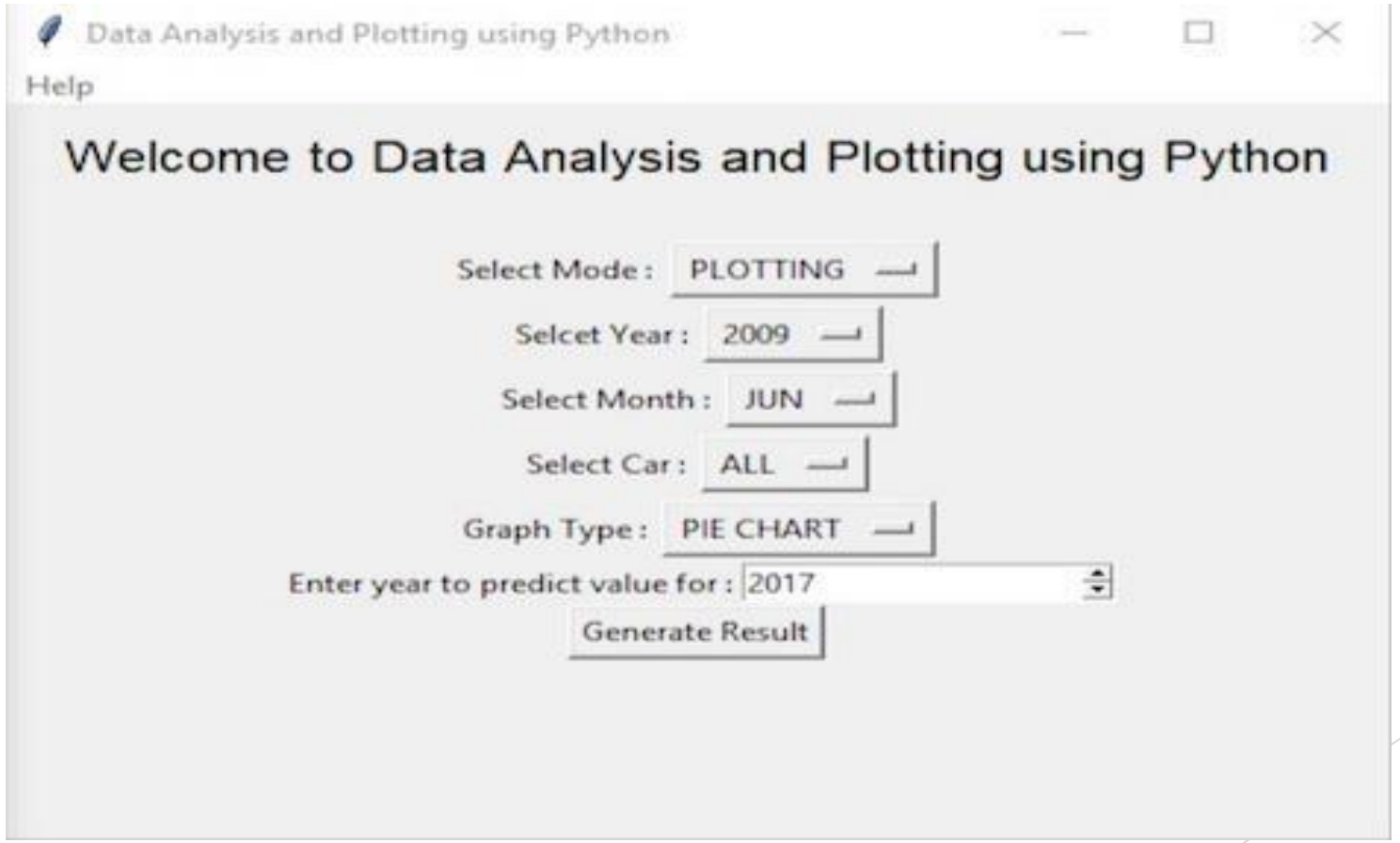


SEQUENCE DIAGRAM FOR ANALYSIS AND PREDICTING

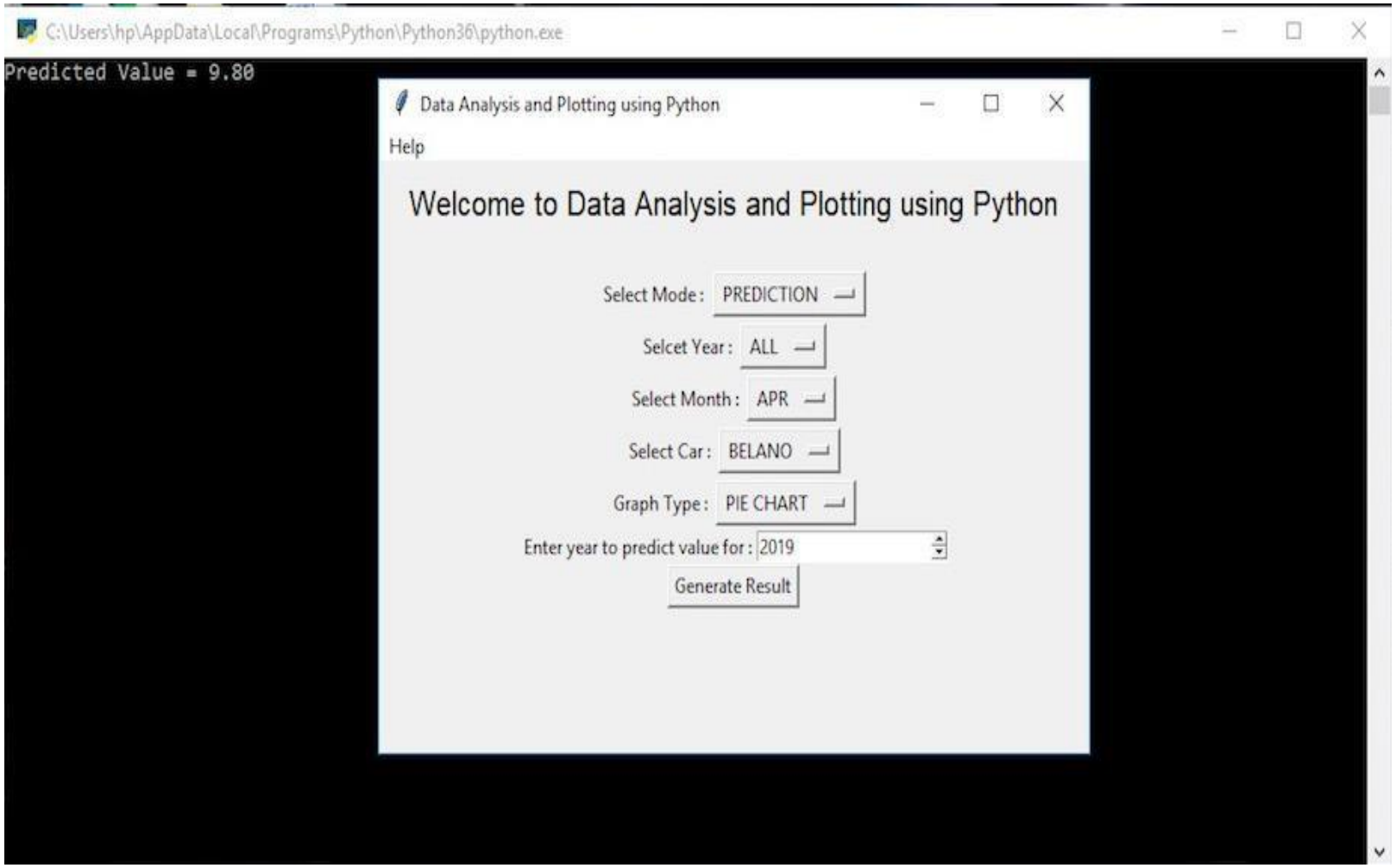


IMAGES OF INTERFACE

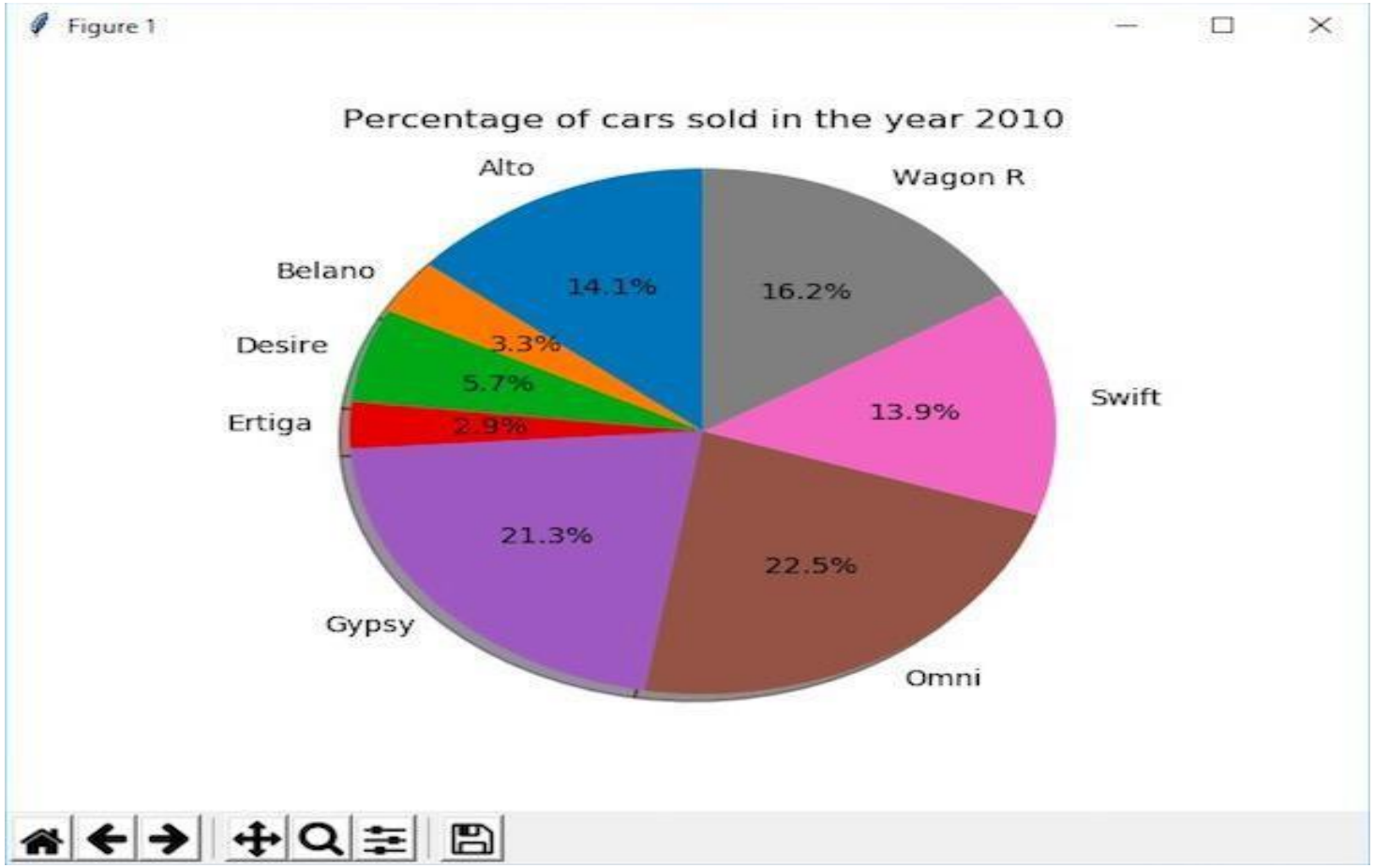
HOME SCREEN



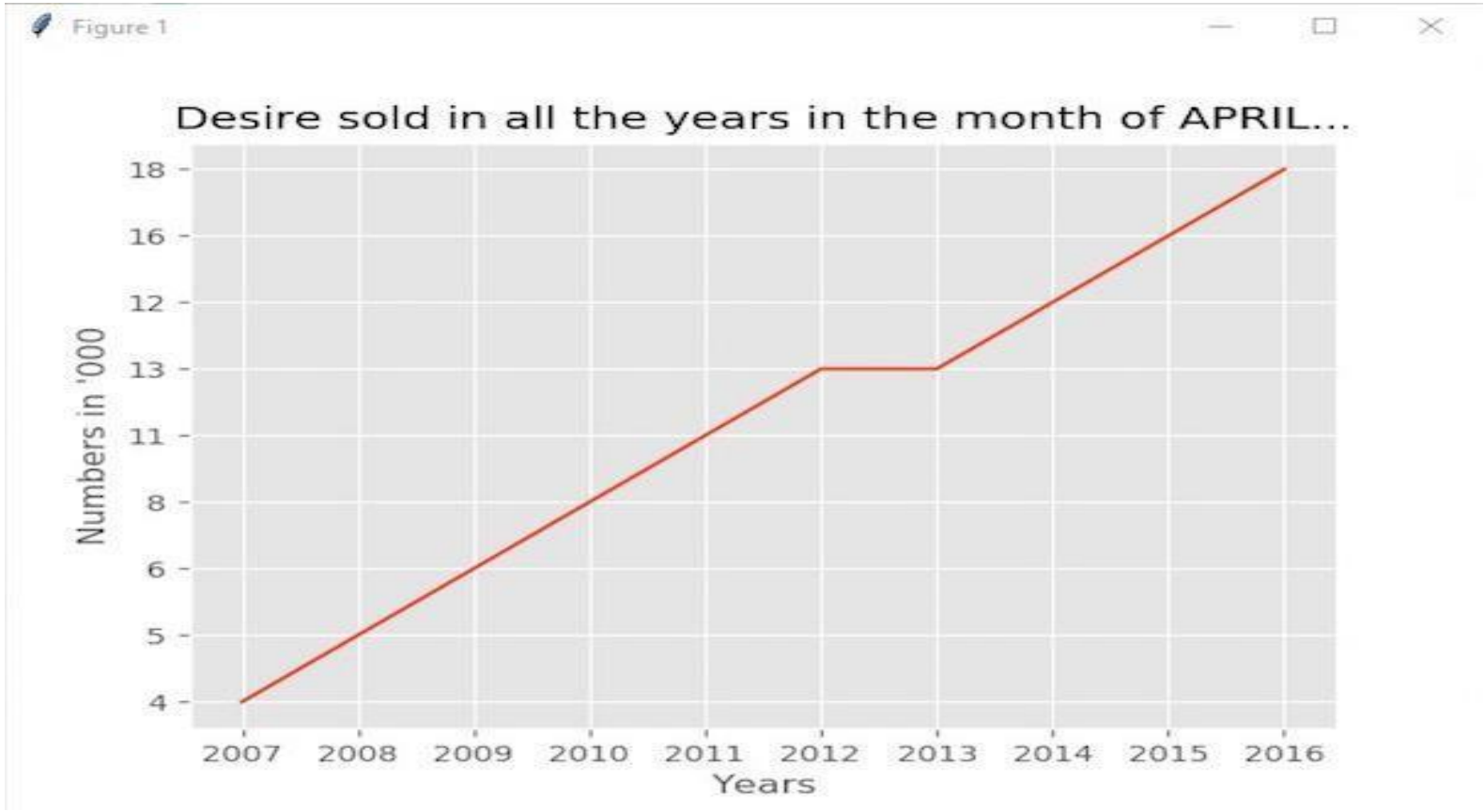
PREDICTION MODE SCREEN



PIE CHART PLOTTING OUTPUT SCREEN:



BAR GRAPH PLOTTING OUTPUT SCREEN:



THANK YOU

Questions Please!!!