

User Manual : MONOPRIX FORECASTER

How to install:

- 1) Prerequisites: python3 (preferably 3.6)
- 2) Extract "forecaster_final.zip"
- 3) Update pip :
 - a) Windows: `python -m pip install --upgrade pip`
 - b) Ubuntu linux: `pip install --upgrade pip`
- 4) From the project's directory install all dependencies by launching this command : `pip install -r requirements.txt`
- 5) From the project's directory launch the python endpoint script "app.py"
 - a) Windows : `py -3.6 app.py`
 - b) ubuntu : `python app.py`
- 6) Type "localhost:5000" in your browser of choice
- 7) Use the application

How to use:

- 1) To forecast fill the form with the correct data and hit submit to view the graph
- 2) After forecasting you can download the results by clicking the Download button
- 3) To add new or additional data to the model click browse to choose a file and then "add" to save the results and wait until the page reloads. Two types of data can be added
 - a) Holidays dates (make sure the file name is "holidays.csv") and this is its format :

	A	B	C	D	
1	year	month	day_of_month	holiday	
2	2020	1	1	New Year	
3	2020	1	14	Revolution and Youth Day	
4	2020	3	20	Independence Day	
5	2020	4	9	Martyrs' Day	
6	2020	5	1	Labour Day	
7	2020	6	15	Eid al-Fitr	
8	2020	6	16	Eid al-Fitr	
9	2020	6	17	Eid al-Fitr	
10	2020	7	25	Republic Day	
11	2020	8	22	Eid al-Adha	
12	2020	8	23	Eid al-Adha	
13	2020	8	21	Eid al-Adha	
14	2020	9	12	Muharram	
15	2020	10	15	Evacuation Day	
16	2020	11	21	The Prophet's Birthday	
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b) New or additional sales data (.xlsx extension) and this is its format:

	A	B	C	D	E	F	G	
1	Date	shop id	item id	item category	id struct	Price	item cnt	day
2	1/1/2014	2	425300160	1442	1442607080203	3.25	1	
3	1/1/2014	2	431000630	1443	1443656130301	1.52	2	
4	1/1/2014	2	437000050	1443	1443638020702	0.69	7	
5	1/1/2014	2	437000130	1443	1443641010301	1.99	1	
6	1/1/2014	2	554280020	1428	1428659090401	1.8	1	
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4) Press the Reset button to delete all new data after the first use (the application switches back the first version of the model, removes historical prediction and removes additional sales data except the base data (2014-2018):
THIS BUTTON SHOULD BE USED WHEN AFTER ADDING DATA THAT CONTAINS WRONG INFORMATIONS OR IN CASE OF UNEXPECTED ISSUE.