# Al Observability report

#### Context

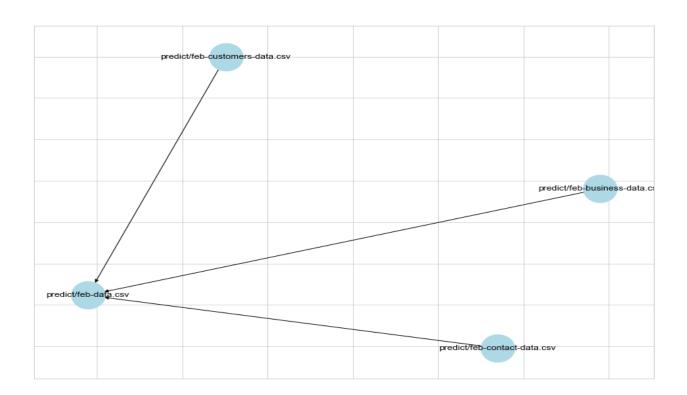
Project : O-Reilly

Application: Creation data feb Environment: Production

Run on: 2021-04-21T14:56:14.461157

With version https://gitlab.example.com,2021-04-21T14:56:14.460024

## Lineage



### **Data Sources**

### Data Source Name: predict/feb-customers-data.csv

#### Data Source ID:

predict/feb-customers-data.csv	CSV	file:/Users/kensu/Customers/Kensu/oreilly/data/predict/feb-customers-data.csv

#### Data Source Schema:

age	used
job	used
marital	used
education	used
default	used
housing	used
loan	used
id	used

#### Data Source Stats:

age							
count	mean	std	min	25%	50%	75%	max
8534.0	39.93	10.48	18.0	32.0	38.0	47.0	98.0
count	mean	std	min	25%	50%	75%	max
8534.0	20661.56	11877.36	1.0	10395.75	20734.0	31062.5	41183.0

### Data Source Name: predict/feb-contact-data.csv

#### Data Source ID:

Name		Location
predict/feb-contact-data.cs		
V	CSV	file:/Users/kensu/Customers/Kensu/oreilly/data/predict/feb-contact-data.csv

#### Data Source Schema:

Field	
contact	used

month	used
day_of_week	used
campaign	used
pdays	used
previous	used
poutcome	used
id	used

#### Data Source Stats:

campaign							
count	mean	std	min	25%	50%	75%	max
8534.0	2.57	2.74	1.0	1.0	2.0	3.0	42.0
pdays							
count	mean	std	min	25%	50%	75%	max
8534.0	962.11	187.83	0.0	999.0	999.0	999.0	999.0
previous							
count	mean	std	min	25%	50%	75%	max
8534.0	0.17	0.48	0.0	0.0	0.0	0.0	5.0
id							
count	mean	std	min	25%	50%	75%	max
8534.0	20661.56	11877.36	1.0	10395.75	20734.0	31062.5	41183.0

## Data Source Name: predict/feb-business-data.csv

#### Data Source ID:

predict/feb-business-data.csv	CSV	file:/Users/kensu/Customers/Kensu/oreilly/data/predict/feb-business-data.csv

#### Data Source Schema:

emp_var_rate	used
cons_price_idx	used
cons_conf_idx	used
euribor3m	used
nr_employed	used
id	unused

#### Data Source Stats:

count         mean         std         min         25%         50%         75%         max           8534.0         0.06         1.57         -3.4         -1.8         1.1         1.4         1.4           count mean         std         min         25%         50%         75%         max           8534.0         93.57         0.58         92.2         93.08         93.75         93.99         94.77           cons_conf_idx           count mean         std         min         25%         50%         75%         max           8534.0         -40.55         4.62         -50.8         -42.7         -41.8         -36.4         -26.9           euribor3m           count mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed           count mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1 <th>Data Course</th> <th>Otato.</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Data Course	Otato.						
8534.0       0.06       1.57       -3.4       -1.8       1.1       1.4       1.4         count mean std min 25% 50% 75% max         8534.0       93.57       0.58       92.2       93.08       93.75       93.99       94.77         count_conf_idx         count mean std min 25% 50% 75% max         8534.0       -40.55       4.62       -50.8       -42.7       -41.8       -36.4       -26.9         euribor3m         count mean std min 25% 50% 75% max         8534.0       0.04       0.02       0.01       0.01       0.05       0.05       0.05         nr_employed         count mean std min 25% 50% 75% max         8534.0       5166.46       72.2       4963.6       5099.1       5191.0       5228.1       5228.1         id	emp_var_ra							
count mean std min 25% 50% 75% max           8534.0         93.57 0.58         92.2         93.08         93.75         93.99         94.77           cons_conf_idx           count mean std min 25% 50% 75% max           8534.0         -40.55         4.62         -50.8         -42.7         -41.8         -36.4         -26.9           euribor3m           count mean std min 25% 50% 75% max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed           count mean std min 25% 50% 75% max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	count	mean	std	min	25%	50%	75%	max
count         mean         std         min         25%         50%         75%         max           8534.0         93.57         0.58         92.2         93.08         93.75         93.99         94.77           cons_conf_idx           count         mean         std         min         25%         50%         75%         max           8534.0         -40.55         4.62         -50.8         -42.7         -41.8         -36.4         -26.9           euribor3m           count         mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed           count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	8534.0	0.06	1.57	-3.4	-1.8	1.1	1.4	1.4
8534.0 93.57 0.58 92.2 93.08 93.75 93.99 94.77  cons_conf_idx  count mean std min 25% 50% 75% max  8534.0 -40.55 4.62 -50.8 -42.7 -41.8 -36.4 -26.9  euribor3m  count mean std min 25% 50% 75% max  8534.0 0.04 0.02 0.01 0.01 0.05 0.05  nr_employed  count mean std min 25% 50% 75% max  8534.0 5166.46 72.2 4963.6 5099.1 5191.0 5228.1 5228.1  id	cons_price_							
cons_conf_idx           count         mean         std         min         25%         50%         75%         max           8534.0         -40.55         4.62         -50.8         -42.7         -41.8         -36.4         -26.9           euribor3m           count         mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed         count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	count	mean	std	min	25%	50%	75%	max
count         mean         std         min         25%         50%         75%         max           8534.0         -40.55         4.62         -50.8         -42.7         -41.8         -36.4         -26.9           euribor3m           count         mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed         count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	8534.0	93.57	0.58	92.2	93.08	93.75	93.99	94.77
8534.0       -40.55       4.62       -50.8       -42.7       -41.8       -36.4       -26.9         euribor3m         count       mean       std       min       25%       50%       75%       max         8534.0       0.04       0.02       0.01       0.01       0.05       0.05       0.05         nr_employed         count       mean       std       min       25%       50%       75%       max         8534.0       5166.46       72.2       4963.6       5099.1       5191.0       5228.1       5228.1         id								
euribor3m           count         mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed           count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	count	mean	std	min	25%	50%	75%	max
count         mean         std         min         25%         50%         75%         max           8534.0         0.04         0.02         0.01         0.01         0.05         0.05         0.05           nr_employed           count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	8534.0	-40.55	4.62	-50.8	-42.7	-41.8	-36.4	-26.9
8534.0 0.04 0.02 0.01 0.01 0.05 0.05 0.05  nr_employed  count mean std min 25% 50% 75% max  8534.0 5166.46 72.2 4963.6 5099.1 5191.0 5228.1 5228.1  id	euribor3m							
nr_employed  count mean std min 25% 50% 75% max  8534.0 5166.46 72.2 4963.6 5099.1 5191.0 5228.1 5228.1  id	count	mean	std	min	25%	50%	75%	max
count         mean         std         min         25%         50%         75%         max           8534.0         5166.46         72.2         4963.6         5099.1         5191.0         5228.1         5228.1           id	8534.0	0.04	0.02	0.01	0.01	0.05	0.05	0.05
8534.0 5166.46 72.2 4963.6 5099.1 5191.0 5228.1 5228.1 id	nr_employe							
id	count	mean	std	min	25%	50%	75%	max
	8534.0	5166.46	72.2	4963.6	5099.1	5191.0	5228.1	5228.1
count mean std min 25% 50% 75% max	id							
	count	mean	std	min	25%	50%	75%	max
8534.0 20661.56 11877.36 1.0 10395.75 20734.0 31062.5 41183.0	8534.0	20661.56	11877.36	1.0	10395.75	20734.0	31062.5	41183.0

## Data Source Name: predict/feb-data.csv

#### Data Source ID:

predict/feb-data.csv	CSV	file:/Users/kensu/Customers/Kensu/oreilly/data/predict/feb-data.csv

### Data Source Schema:

age	unused
job	unused
marital	unused
education	unused
default	unused
housing	unused
loan	unused

id	unused
contact	unused
month	unused
day_of_week	unused
campaign	unused
pdays	unused
previous	unused
poutcome	unused
emp_var_rate	unused
cons_price_idx	unused
cons_conf_idx	unused
euribor3m	unused
nr_employed	unused

#### Data Source Stats:

age							
count	mean	std	min	25%	50%	75%	max
8534.0	39.93	10.48	18.0	32.0	38.0	47.0	98.0
id							
count	mean	std	min	25%	50%	75%	max
8534.0	20661.56	11877.36	1.0	10395.75	20734.0	31062.5	41183.0
campaign							
count	mean	std	min	25%	50%	75%	max
8534.0	2.57	2.74	1.0	1.0	2.0	3.0	42.0
pdays							
count	mean	std	min	25%	50%	75%	max
8534.0	962.11	187.83	0.0	999.0	999.0	999.0	999.0
previous							
count	maan						
000	mean	std	min	25%	50%	75%	max
8534.0	0.17	std 0.48	min 0.0	25% 0.0	50% 0.0	75% 0.0	max 5.0
	0.17						
8534.0	0.17						
8534.0 emp_var_r	<b>0.17</b> ate	0.48	0.0	0.0	0.0	0.0	5.0
8534.0 emp_var_r.count	0.17 ate mean 0.06	0.48 std	0.0 min	0.0 25%	50%	75%	5.0 max

8534.0	93.57	0.58	92.2	93.08	93.75	93.99	94.77
cons_conf_idx							
count	mean	std	min	25%	50%	75%	max
8534.0	-40.55	4.62	-50.8	-42.7	-41.8	-36.4	-26.9
euribor3m	euribor3m						
count	mean	std	min	25%	50%	75%	max
8534.0	0.04	0.02	0.01	0.01	0.05	0.05	0.05
nr_employed							
count	mean	std	min	25%	50%	75%	max
8534.0	5166.46	72.2	4963.6	5099.1	5191.0	5228.1	5228.1

## **Service Level Agreement:**

### Profit must be greater than \$6000

## **Service Level Objectives:**

SLO	
Quality of contact-data table	{'schema': ["schema:predict/feb-contact-data.csv must be ['contact', 'month', 'day_of_week', 'campaign', 'pdays', 'previous', 'poutcome', 'id']"]}
Quality of business-data table	{'stats': ['euribor3m.mean must be in range [2, 4]']}

## Service Level Indicators, here are the associated alerts:

Message		Actual
euribor3m.mean is out of bounds	[2, 4]	0.036040691352238106