ABC_Xsell_Decisioning_Python_Model(1.0)
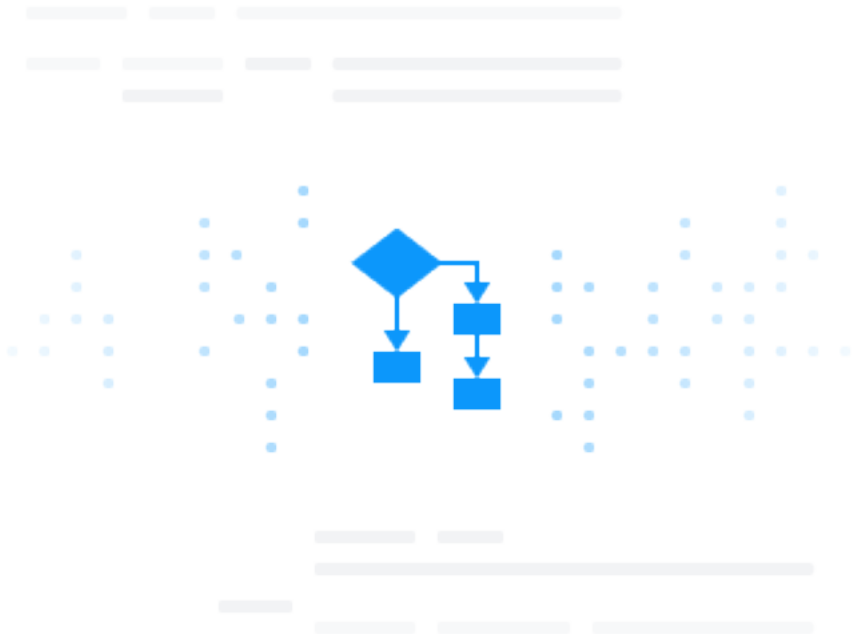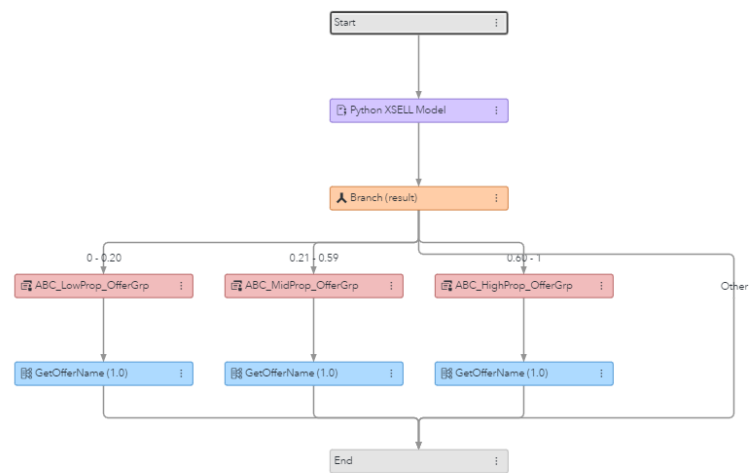
Table of Contents

Properties

Name:	ABC_Xsell_Decisioning_Python_Model
Version:	1.0
Description:	
Location:	/Public/ABC/RuleSets
Date created:	Dec 31, 2019 05:40 PM
Created by:	sasdemo
Date modified:	Jan 2, 2020 02:49 PM
Modified by:	sasdemo
Object URI:	/decisions/flows/7016b4b1-8e39-47a8-b210-1f8482e6ae01/revisions/e37e809e-13a4-432c-9350-331fe006ecf3
Subject ID:	
Subject level:	

Decision Flow

Start

Python XSELL Model

Branch (result)

0 - 0.20

0.21 - 0.59

0.60 - 1

Other

ABC_LowProp_OfferGrp

ABC_MidProp_OfferGrp

ABC_HighProp_OfferGrp

GetOfferName (1.0)

GetOfferName (1.0)

GetOfferName (1.0)

End

Node Details

Code file: Python XSELL Model

Object URI	/decisions/codeFiles/5f39ee2e-362f-423e-8fb2-b27ad3dca430
Description	
Code file type	Python
Date created	Jan 2, 2020 10:45 AM
Date modified	Jan 2, 2020 03:36 PM
Created by	sasdemo
Error message	
Input mapping:	
Claim_Amt	Claim_Amt(Decision)
Current_Premium	Current_Premium(Decision)
Car_Price	Car_Price(Decision)
Car_Age	Car_Age(Decision)
Rating_Category	Rating_Category(Decision)
Output mapping:	
result	result(Decision)

Branch: result

Branching type	Ranges
Error message	
Branches	
0 - 0.20	result >= 0 AND result <= 0.20
0.21 - 0.59	result >= 0.21 AND result <= 0.59
0.60 - 1	result >= 0.60 AND result <= 1
Other	

Treatment group: ABC_LowProp_OfferGrp

Object URI	/treatmentDefinitions/definitionGroups/ca070160-98a5-48f4-b9ad-f9c0e9911552/revisions/cc339ee8-48e6-4ac6-ba84-a35ad403be6a
Description	
Date created	Dec 31, 2019 05:34 PM

Date modified	Dec 31, 2019 05:34 PM
Created by	sasdemo
Error message	
Data grid mapping	ABC_LowProp_OfferGrp_out
Input mapping:	
Output mapping:	
OfferName	OfferName(Data grid)
OfferCode	OfferCode(Data grid)
Offer	Offer (Data grid)
treatment_definition_name	treatment_definition_name(Data grid)
treatment_definition_revision_id	treatment_definition_revision_id(Data grid)
treatment_definition_id	treatment_definition_id(Data grid)
treatment_definition_group_revision_id	treatment_definition_group_revision_id(Data grid)
treatment_definition_group_id	treatment_definition_group_id(Data grid)

Rule set: GetOfferName(1.0)	
Object URI	/businessRules/ruleSets/ a37f2007-70fe-4a74-99d4-28475bba8e61/ revisions/5395e574-bd0f-41a1- ad74-514f1db19bc3
Description	
Type	Assignment
Date created	Dec 31, 2019 06:16 PM
Date modified	Dec 31, 2019 06:28 PM
Created by	sasdemo
Error message	
Data grid mapping	No
Input mapping:	
ABC_HighProp_OfferGrp_out	ABC_LowProp_OfferGrp_out(Decision)
Output mapping:	
OfferName	OfferName(Decision)

Treatment group: ABC_MidProp_OfferGrp	
Object URI	/treatmentDefinitions/ definitionGroups/5d25d545-3c36-4fe3-94e7-1b 3627ed6322/revisions/9248eaa8- ab20-426d-9269-e5a7b3d12eea

Description	
Date created	Dec 31, 2019 05:35 PM
Date modified	Dec 31, 2019 05:35 PM
Created by	sasdemo
Error message	
Data grid mapping	ABC_MidProp_OfferGrp_out
Input mapping:	
Output mapping:	
OfferName	OfferName(Data grid)
OfferCode	OfferCode(Data grid)
Offer	Offer (Data grid)
treatment_definition_name	treatment_definition_name(Data grid)
treatment_definition_revision_id	treatment_definition_revision_id(Data grid)
treatment_definition_id	treatment_definition_id(Data grid)
treatment_definition_group_revision_id	treatment_definition_group_revision_id(Data grid)
treatment_definition_group_id	treatment_definition_group_id(Data grid)

Rule set: GetOfferName(1.0)	
Object URI	/businessRules/ruleSets/ a37f2007-70fe-4a74-99d4-28475bba8e61/ revisions/5395e574-bd0f-41a1- ad74-514f1db19bc3
Description	
Type	Assignment
Date created	Dec 31, 2019 06:16 PM
Date modified	Dec 31, 2019 06:28 PM
Created by	sasdemo
Error message	
Data grid mapping	No
Input mapping:	
ABC_HighProp_OfferGrp_out	ABC_MidProp_OfferGrp_out(Decision)
Output mapping:	
OfferName	OfferName(Decision)

Treatment group: ABC_HighProp_OfferGrp	
Object URI	/treatmentDefinitions/

	definitionGroups/376b88ad-827d-4ea1-a8ae-f9143622f176/revisions/ddaa11fc-d375-43fe-90cb-16690997e443
Description	
Date created	Dec 31, 2019 05:36 PM
Date modified	Dec 31, 2019 05:36 PM
Created by	sasdemo
Error message	
Data grid mapping	ABC_HighProp_OfferGrp_out
Input mapping:	
Output mapping:	
OfferName	OfferName(Data grid)
OfferCode	OfferCode(Data grid)
Offer	Offer (Data grid)
treatment_definition_name	treatment_definition_name(Data grid)
treatment_definition_revision_id	treatment_definition_revision_id(Data grid)
treatment_definition_id	treatment_definition_id(Data grid)
treatment_definition_group_revision_id	treatment_definition_group_revision_id(Data grid)
treatment_definition_group_id	treatment_definition_group_id(Data grid)

Rule set: GetOfferName(1.0)	
Object URI	/businessRules/ruleSets/a37f2007-70fe-4a74-99d4-28475bba8e61/revisions/5395e574-bd0f-41a1-ad74-514f1db19bc3
Description	
Type	Assignment
Date created	Dec 31, 2019 06:16 PM
Date modified	Dec 31, 2019 06:28 PM
Created by	sasdemo
Error message	
Data grid mapping	No
Input mapping:	
ABC_HighProp_OfferGrp_out	ABC_HighProp_OfferGrp_out(Decision)
Output mapping:	
OfferName	OfferName(Decision)

Variables

Variables	Data Type	Input	Output	Initial Value	Description	Length
ABC_HighProp_OfferGrp_out	Data grid	False	False			
ABC_LowProp_OfferGrp_out	Data grid	False	False			
ABC_MidProp_OfferGrp_out	Data grid	False	False			
Car_Age	Integer	True	False			
Car_Price	Decimal	True	False			8
Claim_Amt	Decimal	True	False			8
Current_Premium	Decimal	True	False			8
OfferName	Character	False	True	Extend the add-on to your iPad!		
Rating_Category	Decimal	True	False			8
result	Decimal	False	True			

Data Grids

Data grid: ABC_HighProp_OfferGrp_out

Columns	Data Type	Length
treatment_definition_group_id	Character	36
treatment_definition_group_revision_id	Character	36
treatment_definition_id	Character	36
treatment_definition_revision_id	Character	36
treatment_definition_name	Character	250
Offer	Character	32767
OfferCode	Decimal	
OfferName	Character	32767

Data grid: ABC_LowProp_OfferGrp_out

Columns	Data Type	Length
treatment_definition_group_id	Character	36
treatment_definition_group_revision_id	Character	36
treatment_definition_id	Character	36
treatment_definition_revision_id	Character	36
treatment_definition_name	Character	250
Offer	Character	32767
OfferCode	Decimal	
OfferName	Character	32767

Data grid: ABC_MidProp_OfferGrp_out

Columns	Data Type	Length
treatment_definition_group_id	Character	36
treatment_definition_group_revision_id	Character	36
treatment_definition_id	Character	36
treatment_definition_revision_id	Character	36
treatment_definition_name	Character	250
Offer	Character	32767
OfferCode	Decimal	
OfferName	Character	32767

Code Files

Python XSELL Model

- URI - /decisions/codeFiles/5f39ee2e-362f-423e-8fb2-b27ad3dca430
- Type - Python

''' List all output parameters as comma-separated values in the "Output:" docString. Do not specify "None" if there is no output parameter. '''

```python
import pandas as pd
import pickle

colmmn_list = ['Claim_Amt','Current_Premium','Car_Price','Car_Age','Rating_Category']

pickle_location = '/home/sasdemo/RForest_XSELLreg_obj.pkl'

loaded_model = pickle.load(open(pickle_location, 'rb'))


def execute (Claim_Amt, Current_Premium, Car_Price, Car_Age, Rating_Category):
'Output: result'
df = pd.DataFrame([[Claim_Amt, Current_Premium, Car_Price, Car_Age, Rating_Category]],
columns=colmmn_list)
result1 = loaded_model.predict(df)
result = float(round(result1[0],4))
#result = 5
return result
```