[Siyu] Advanced Designer



| Version | Author | Date |
|---------|-----------|---------------------|
| 1.0 | siyu.chen | 2024-04-29 11:09:25 |

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I. Project general description

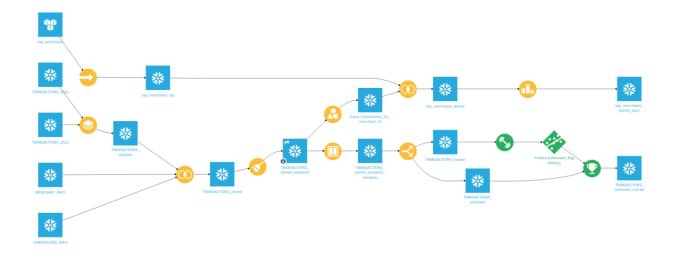
Project references for the created flow:

- Project name: [Siyu] Advanced Designer
- Project key: **SIYUADVANCEDDESIGNER**
- Project short description:

The project *Sylvain's full walkthrough* was created by sylvain.franco on Dec 08th 2022
The project *STARTERADVANCEDDESIGNER* was copied from
SYLVAINSFULLWALKTHROUGH by sylvain.franco on Dec 20th 2022
The project *SIYUADVANCEDDESIGNER* was copied from
STARTERADVANCEDDESIGNER by siyu.chen on Apr 25th 2024

- Status:
- Current git branch: master
- Tags: duplicated, imported
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:08:27
- Last Modification by api:XJHUEYK71G9Z8M5F (deleted) on the 2024-04-26 11:10:42

II. Graphical Representation of the Flow



III. Datasets

List all the datasets in the flow.

1. TRANSACTIONS_2021

Summarized information about your dataset TRANSACTIONS_2021:

• Tags: origin:sql_import, managed-snowflake

a) Status of the dataset TRANSACTIONS_2021

Characteristics of the dataset TRANSACTIONS 2021:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

Record Count: Not computed

- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:10:17
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 17:11:16

b) Related Recipes

The dataset TRANSACTIONS 2021 relates to the following recipes.

Successor Recipes

List of recipes with TRANSACTIONS 2021 as an input:

• compute TRANSACTIONS stacked (Stack)

c) Schema

| Column Name | Column Type | Description |
|-----------------|-------------|-------------|
| transaction_id | string | |
| authorized_flag | string | |

| purchase_date | string | |
|----------------------|--------|--|
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | string | |
| item_category | string | |
| purchase_amount | string | |
| signature_provided | string | |

2. TRANSACTIONS_2022

Summarized information about your dataset TRANSACTIONS_2022:

Tags: origin:sql_import, managed-snowflake

a) Status of the dataset TRANSACTIONS_2022

Characteristics of the dataset TRANSACTIONS_2022:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: Not computed

- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:10:17
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 17:11:26

b) Related Recipes

The dataset TRANSACTIONS_2022 relates to the following recipes.

Successor Recipes

List of recipes with TRANSACTIONS 2022 as an input:

compute_TRANSACTIONS_stacked (Stack)

c) Schema

| Column Name | Column Type | Description |
|----------------------|-------------|-------------|
| transaction_id | string | |
| authorized_flag | string | |
| purchase_date | string | |
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | string | |
| item_category | string | |
| purchase_amount | string | |
| signature_provided | string | |

3. TRANSACTIONS_stacked

Summarized information about your dataset TRANSACTIONS stacked:

a) Status of the dataset TRANSACTIONS_stacked

Characteristics of the dataset TRANSACTIONS_stacked:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: Not computed

- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:11:29
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:11:29

b) Related Recipes

The dataset TRANSACTIONS_stacked relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS_stacked as an output:

compute_TRANSACTIONS_stacked (Stack)

List of recipes with TRANSACTIONS_stacked as an input:

• compute_TRANSACTIONS_stacked_joined (Join)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|----------------------|-------------|-------------|
| transaction_id | string | |
| authorized_flag | string | |
| purchase_date | string | |
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | string | |
| item_category | string | |
| purchase_amount | string | |
| signature_provided | string | |

4. MERCHANT_INFO

Summarized information about your dataset MERCHANT INFO:

• Tags: origin:sql_import, managed-snowflake

a) Status of the dataset MERCHANT_INFO

Characteristics of the dataset MERCHANT_INFO:

• Type: Snowflake

• Connection: managed-snowflake

Total Size: Not computed

• Record Count: Not computed

• Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:10:17

• Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:12:54

The dataset MERCHANT_INFO relates to the following recipes.

Successor Recipes

List of recipes with MERCHANT_INFO as an input:

compute_TRANSACTIONS_stacked_joined (Join)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|-----------------------|-------------|-------------|
| merchant_id | string | |
| merchant_category_id | string | |
| subsector_description | string | |
| latitude | string | |
| longitude | string | |

5. CARDHOLDER_INFO

Summarized information about your dataset CARDHOLDER_INFO:

Tags: origin:sql_import, managed-snowflake

a) Status of the dataset CARDHOLDER_INFO

Characteristics of the dataset CARDHOLDER_INFO:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: Not computed

• Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:10:17

• Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 17:11:39

The dataset CARDHOLDER_INFO relates to the following recipes.

Successor Recipes

List of recipes with CARDHOLDER_INFO as an input:

compute_TRANSACTIONS_stacked_joined (Join)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|-----------------------|-------------|-------------|
| internal_card_mapping | string | |
| first_active_month | string | |
| reward_program | string | |
| latitude | string | |
| longitude | string | |
| fico_score | string | |
| age | string | |

6. TRANSACTIONS_joined

Summarized information about your dataset TRANSACTIONS joined:

a) Status of the dataset TRANSACTIONS_joined

Characteristics of the dataset TRANSACTIONS_joined:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: Not computed

• Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 16:39:20

• Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 16:39:22

The dataset TRANSACTIONS_joined relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS_joined as an output:

• compute_TRANSACTIONS_stacked_joined (Join)

Successor Recipes

List of recipes with TRANSACTIONS_joined as an input:

• compute_TRANSACTIONS_joined_prepared (*Prepare*)

c) Schema

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| transaction_id | string | |
| authorized_flag | string | |
| purchase_date | string | |
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | string | |
| item_category | string | |
| purchase_amount | string | |
| signature_provided | string | |
| merchant_subsector_description | string | |
| merchant_latitude | string | |
| merchant_longitude | string | |
| card_first_active_month | string | |
| card_reward_program | string | |
| card_latitude | string | |

| card_longitude | string | |
|-----------------|--------|--|
| card_fico_score | string | |
| card_age | string | |

7. TRANSACTIONS_joined_prepared

Summarized information about your dataset TRANSACTIONS joined prepared:

- Short description: This dataset contains enriched features on credit card transactions.
- Tags: credit-card-fraud

a) Status of the dataset TRANSACTIONS_joined_prepared

Characteristics of the dataset TRANSACTIONS joined prepared:

- Type: Snowflake
- Connection: managed-snowflake
- Total Size: Not computed
- Record Count: Not computed
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 16:39:43
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:57:40

b) Related Recipes

The dataset TRANSACTIONS_joined_prepared relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS_joined_prepared as an output:

compute_TRANSACTIONS_joined_prepared (Prepare)

Successor Recipes

List of recipes with TRANSACTIONS joined prepared as an input:

- compute TRANSACTIONS joined prepared windows (Window)
- compute_Tfraud_transactions_by_merchant_id (Group)

c) Schema

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| transaction_id | bigint | |
| authorized_flag | bigint | |
| authorized_flag_description | string | |
| purchase_date | string | |
| purchase_date_parsed | date | |
| purchase_date_parsed_month | bigint | |
| purchase_date_parsed_day | bigint | |
| purchase_date_dow | bigint | |
| purchase_weekend | bigint | |
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | bigint | |
| item_category | string | |
| purchase_amount | double | |
| signature_provided | string | |
| risk | string | |
| merchant_subsector_description | string | |
| spending_type | string | |
| merchant_latitude | double | |
| merchant_longitude | double | |
| card_first_active_month | string | |
| card_first_active_month_parsed | date | |
| days_active | bigint | |
| card_reward_program | string | |

| card_latitude | double | |
|------------------------|--------|--|
| card_longitude | double | |
| card_fico_score | bigint | |
| card_age | bigint | |
| merchant_location | string | |
| merchant_state | string | |
| merchant_state_enName | string | |
| card_location | string | |
| distance_card_merchant | double | |
| card_state | string | |
| card_state_enName | string | |

8. fraud_transactions_by_merchant_id

Summarized information about your dataset fraud_transactions_by_merchant_id:

a) Status of the dataset fraud_transactions_by_merchant_id

Characteristics of the dataset fraud transactions by merchant id:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: **Not computed**

• Record Count: 0

• Created by **siyu.chen** on the 2024-04-26 08:54:13

• Last Modification by **siyu.chen** on the 2024-04-26 09:32:09

b) Related Recipes

The dataset fraud_transactions_by_merchant_id relates to the following recipes.

Parent Recipe

List of recipes with fraud_transactions_by_merchant_id as an output:

• compute_Tfraud_transactions_by_merchant_id (Group)

Successor Recipes

List of recipes with fraud transactions by merchant id as an input:

• compute_top_merchants_joined (Join)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| merchant_id | string | |
| merchant_category | bigint | |
| sum_fraud_transcations | double | |
| merchant_subsector_description | string | |
| merchant_geopoint | string | |
| merchant_state | string | |

9. top_merchants

Summarized information about your dataset top_merchants:

a) Status of the dataset top_merchants

Characteristics of the dataset top_merchants:

• Type: Amazon S3

Connection: sample-dataTotal Size: Not computed

• Record Count: 100

• Created by siyu.chen on the 2024-04-26 09:14:11

• Last Modification by **siyu.chen** on the 2024-04-26 09:14:11

b) Related Recipes

The dataset top_merchants relates to the following recipes.

List of recipes with top_merchants as an input:

compute_top_merchants_sql (Sync)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|----------------------|-------------|-------------|
| merchant_id | string | |
| merchant_name | string | |
| merchant_category_id | bigint | |
| merchant_turnover | double | |

10. top_merchants_sql

Summarized information about your dataset top merchants sql:

a) Status of the dataset top_merchants_sql

Characteristics of the dataset top merchants sql:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: Not computed

• Created by **siyu.chen** on the 2024-04-26 09:37:38

• Last Modification by **siyu.chen** on the 2024-04-26 09:37:38

b) Related Recipes

The dataset top merchants sql relates to the following recipes.

Parent Recipe

List of recipes with top_merchants_sql as an output:

compute_top_merchants_sql (Sync)

List of recipes with top_merchants_sql as an input:

• compute_top_merchants_joined (Join)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|----------------------|-------------|-------------|
| merchant_id | string | |
| merchant_name | string | |
| merchant_category_id | bigint | |
| merchant_turnover | double | |

11. top_merchants_joined

Summarized information about your dataset top_merchants_joined:

a) Status of the dataset top_merchants_joined

Characteristics of the dataset top merchants joined:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: 100

• Created by siyu.chen on the 2024-04-26 09:21:34

• Last Modification by siyu.chen on the 2024-04-26 09:33:35

b) Related Recipes

The dataset top merchants joined relates to the following recipes.

Parent Recipe

List of recipes with top_merchants_joined as an output:

compute_top_merchants_joined (Join)

List of recipes with top_merchants_joined as an input:

• compute_top_merchants_joined_topn (Top N)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| merchant_id | string | |
| merchant_name | string | |
| merchant_category_id | bigint | |
| merchant_turnover | double | |
| merchant_category | bigint | |
| sum_fraud_transcations | double | |
| merchant_subsector_description | string | |
| merchant_geopoint | string | |
| merchant_state | string | |
| percent_fraud | double | |

12. top_merchants_joined_topn

Summarized information about your dataset top_merchants_joined_topn:

a) Status of the dataset top_merchants_joined_topn

Characteristics of the dataset top_merchants_joined_topn:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: 10

• Created by **siyu.chen** on the 2024-04-26 09:35:37

• Last Modification by **siyu.chen** on the 2024-04-26 09:36:12

The dataset top_merchants_joined_topn relates to the following recipes.

Parent Recipe

List of recipes with top merchants joined topn as an output:

compute_top_merchants_joined_topn (Top N)

c) Schema

Schema details of the dataset.

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| merchant_id | string | |
| merchant_name | string | |
| merchant_category_id | bigint | |
| merchant_turnover | double | |
| merchant_category | bigint | |
| sum_fraud_transcations | double | |
| merchant_subsector_description | string | |
| merchant_geopoint | string | |
| merchant_state | string | |
| percent_fraud | double | |

13. TRANSACTIONS_joined_prepared_windows

Summarized information about your dataset TRANSACTIONS_joined_prepared_windows:

a) Status of the dataset TRANSACTIONS_joined_prepared_windows

Characteristics of the dataset TRANSACTIONS_joined_prepared_windows:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

- Record Count: 294,135
- Created by siyu.chen on the 2024-04-26 08:28:18
- Last Modification by siyu.chen on the 2024-04-26 08:30:41

The dataset TRANSACTIONS_joined_prepared_windows relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS joined prepared windows as an output:

• compute_TRANSACTIONS_joined_prepared_windows (Window)

Successor Recipes

List of recipes with TRANSACTIONS_joined_prepared_windows as an input:

split_TRANSACTIONS_joined_prepared (Split)

c) Schema

| Column Name | Column Type | Description |
|-----------------------------|-------------|-------------|
| transaction_id | bigint | |
| authorized_flag | bigint | |
| authorized_flag_description | string | |
| purchase_date | string | |
| purchase_date_parsed | date | |
| purchase_date_parsed_month | bigint | |
| purchase_date_parsed_day | bigint | |
| purchase_date_dow | bigint | |
| purchase_weekend | bigint | |
| card_id | string | |
| merchant_id | string | |

| merchant_category_id | bigint |
|--------------------------------|--------|
| item_category | string |
| purchase_amount | double |
| signature_provided | string |
| risk | string |
| merchant_subsector_description | string |
| spending_type | string |
| merchant_latitude | double |
| merchant_longitude | double |
| card_first_active_month | string |
| card_first_active_month_parsed | date |
| days_active | bigint |
| card_reward_program | string |
| card_latitude | double |
| card_longitude | double |
| card_fico_score | bigint |
| card_age | bigint |
| merchant_location | string |
| merchant_state | string |
| merchant_state_enName | string |
| card_location | string |
| distance_card_merchant | double |
| card_state | string |
| card_state_enName | string |
| purchase_amount_min | double |
| purchase_amount_max | double |
| purchase_amount_avg | double |

| purchase_amount_sum | double | |
|------------------------|--------|--|
| w2_purchase_amount_min | double | |
| w2_purchase_amount_max | double | |
| w2_purchase_amount_avg | double | |
| w2_purchase_amount_sum | double | |

14. TRANSACTIONS_known

Summarized information about your dataset TRANSACTIONS known:

a) Status of the dataset TRANSACTIONS_known

Characteristics of the dataset TRANSACTIONS_known:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: 0

• Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:12:18

• Last Modification by **siyu.chen** on the 2024-04-26 08:33:12

b) Related Recipes

The dataset TRANSACTIONS_known relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS known as an output:

• split_TRANSACTIONS_joined_prepared (Split)

Successor Recipes

List of recipes with TRANSACTIONS_known as an input:

• train_Predict_authorized_flag__binary_ (Prediction Training)

c) Schema

| Column Name | Column Type | Description |
|--------------------------------|-------------|-------------|
| transaction_id | bigint | |
| authorized_flag | bigint | |
| authorized_flag_description | string | |
| purchase_date | string | |
| purchase_date_parsed | date | |
| purchase_date_parsed_month | bigint | |
| purchase_date_parsed_day | bigint | |
| purchase_date_dow | bigint | |
| purchase_weekend | bigint | |
| card_id | string | |
| merchant_id | string | |
| merchant_category_id | bigint | |
| item_category | string | |
| purchase_amount | double | |
| signature_provided | string | |
| risk | string | |
| merchant_subsector_description | string | |
| spending_type | string | |
| merchant_latitude | double | |
| merchant_longitude | double | |
| card_first_active_month | string | |
| card_first_active_month_parsed | date | |
| days_active | bigint | |
| card_reward_program | string | |

| card_latitude | double | |
|------------------------|--------|--|
| card_longitude | double | |
| card_fico_score | bigint | |
| card_age | bigint | |
| merchant_location | string | |
| merchant_state | string | |
| merchant_state_enName | string | |
| card_location | string | |
| distance_card_merchant | double | |
| card_state | string | |
| card_state_enName | string | |
| purchase_amount_min | double | |
| purchase_amount_max | double | |
| purchase_amount_avg | double | |
| purchase_amount_sum | double | |
| w2_purchase_amount_min | double | |
| w2_purchase_amount_max | double | |
| w2_purchase_amount_avg | double | |
| w2_purchase_amount_sum | double | |

TRANSACTIONS_unknown **15.**

Summarized information about your dataset TRANSACTIONS_unknown:

a) Status of the dataset TRANSACTIONS_unknown

Characteristics of the dataset TRANSACTIONS_unknown:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

- Record Count: Not computed
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:12:29
- Last Modification by **siyu.chen** on the 2024-04-26 08:33:12

The dataset TRANSACTIONS_unknown relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS unknown as an output:

• split_TRANSACTIONS_joined_prepared (Split)

Successor Recipes

List of recipes with TRANSACTIONS_unknown as an input:

score_TRANSACTIONS_unknown (Prediction Scoring)

c) Schema

| Column Name | Column Type | Description |
|-----------------------------|-------------|-------------|
| transaction_id | bigint | |
| authorized_flag | bigint | |
| authorized_flag_description | string | |
| purchase_date | string | |
| purchase_date_parsed | date | |
| purchase_date_parsed_month | bigint | |
| purchase_date_parsed_day | bigint | |
| purchase_date_dow | bigint | |
| purchase_weekend | bigint | |
| card_id | string | |
| merchant_id | string | |

| merchant_category_id | bigint |
|--------------------------------|--------|
| item_category | string |
| purchase_amount | double |
| signature_provided | string |
| risk | string |
| merchant_subsector_description | string |
| spending_type | string |
| merchant_latitude | double |
| merchant_longitude | double |
| card_first_active_month | string |
| card_first_active_month_parsed | date |
| days_active | bigint |
| card_reward_program | string |
| card_latitude | double |
| card_longitude | double |
| card_fico_score | bigint |
| card_age | bigint |
| merchant_location | string |
| merchant_state | string |
| merchant_state_enName | string |
| card_location | string |
| distance_card_merchant | double |
| card_state | string |
| card_state_enName | string |
| purchase_amount_min | double |
| purchase_amount_max | double |
| purchase_amount_avg | double |

| purchase_amount_sum | double | |
|------------------------|--------|--|
| w2_purchase_amount_min | double | |
| w2_purchase_amount_max | double | |
| w2_purchase_amount_avg | double | |
| w2_purchase_amount_sum | double | |

16. TRANSACTIONS_unknown_scored

Summarized information about your dataset TRANSACTIONS unknown scored:

a) Status of the dataset TRANSACTIONS_unknown_scored

Characteristics of the dataset TRANSACTIONS_unknown_scored:

• Type: Snowflake

• Connection: managed-snowflake

• Total Size: Not computed

• Record Count: **65,389**

• Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:29:06

Last Modification by siyu.chen on the 2024-04-26 08:40:48

b) **Related Recipes**

The dataset TRANSACTIONS_unknown_scored relates to the following recipes.

Parent Recipe

List of recipes with TRANSACTIONS unknown scored as an output:

• score_TRANSACTIONS_unknown (Prediction Scoring)

c) Schema

| Column Name | Column Type | Description |
|-----------------|-------------|-------------|
| transaction_id | bigint | |
| authorized_flag | bigint | |

| authorized_flag_description | string |
|--------------------------------|--------|
| purchase_date | string |
| purchase_date_parsed | date |
| purchase_date_parsed_month | bigint |
| purchase_date_parsed_day | bigint |
| purchase_date_dow | bigint |
| purchase_weekend | bigint |
| card_id | string |
| merchant_id | string |
| merchant_category_id | bigint |
| item_category | string |
| purchase_amount | double |
| signature_provided | bigint |
| risk | string |
| merchant_subsector_description | string |
| spending_type | string |
| merchant_latitude | double |
| merchant_longitude | double |
| card_first_active_month | string |
| card_first_active_month_parsed | date |
| days_active | bigint |
| card_reward_program | string |
| card_latitude | double |
| card_longitude | double |
| card_fico_score | bigint |
| card_age | bigint |
| merchant_location | string |

| merchant_state | string | |
|------------------------|--------|--|
| merchant_state_enName | string | |
| card_location | string | |
| distance_card_merchant | double | |
| card_state | string | |
| card_state_enName | string | |
| purchase_amount_min | double | |
| purchase_amount_max | double | |
| purchase_amount_avg | double | |
| purchase_amount_sum | double | |
| w2_purchase_amount_min | double | |
| w2_purchase_amount_max | double | |
| w2_purchase_amount_avg | double | |
| w2_purchase_amount_sum | double | |
| proba_0 | double | |
| proba_1 | double | |
| prediction | string | |

IV. Recipes

List all the recipes in the flow.

compute_TRANSACTIONS_stacked

Summarized information about the recipe compute_TRANSACTIONS_stacked.

a) Status

Characteristics of the recipe compute_TRANSACTIONS_stacked:

- Type: Stack
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:11:29
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:11:32

b) Inputs / Outputs

List of the inputs of the recipe:

- Dataset TRANSACTIONS 2021 (Snowflake)
- Dataset TRANSACTIONS 2022 (Snowflake)

List of the outputs of the recipe:

• Dataset TRANSACTIONS stacked (Snowflake)

Stacking mode: Union of input schemas

2. compute_TRANSACTIONS_stacked_joined

Summarized information about the recipe compute TRANSACTIONS stacked joined.

a) Status

Characteristics of the recipe compute_TRANSACTIONS_stacked_joined:

• Type: Join

- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 15:12:00
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 16:39:25

List of the inputs of the recipe:

- Dataset TRANSACTIONS stacked (Snowflake)
- Dataset MERCHANT INFO (Snowflake)
- Dataset CARDHOLDER_INFO (Snowflake)

List of the outputs of the recipe:

Dataset TRANSACTIONS_joined (Snowflake)

c) Join

Left TRANSACTIONS_stacked - MERCHANT_INFO And

| Left input | Condition | Right input |
|-------------|-----------|-------------|
| merchant_id | = | merchant_id |

| merchant_category_id | = | merchant_category_id |
|----------------------|---|----------------------|

Left TRANSACTIONS_stacked - CARDHOLDER_INFO And

| Left input | Condition | Right input |
|------------|-----------|-----------------------|
| card_id | = | internal_card_mapping |

3. compute_TRANSACTIONS_joined_prepared

Summarized information about the recipe compute TRANSACTIONS joined prepared.

a) Status

Characteristics of the recipe compute_TRANSACTIONS_joined_prepared:

- Type: Prepare
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-08 16:39:43
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:57:43

List of the inputs of the recipe:

• Dataset TRANSACTIONS_joined (Snowflake)

List of the outputs of the recipe:

• Dataset TRANSACTIONS_joined_prepared (Snowflake)

c) Prepare Steps

| Туре | Comment |
|--------------------------|---------|
| FilterOnBadType | |
| FindReplace | |
| GeoPointCreator | |
| GeoPointCreator | |
| CityLevelReverseGeocoder | |
| CityLevelReverseGeocoder | |
| GeoDistanceProcessor | |
| SwitchCase | |
| VisualIfRule | |
| DateParser | |
| DateComponentsExtractor | |
| CreateColumnWithGREL | |
| DateParser | |
| DateDifference | |

4. compute_Tfraud_transactions_by_merchant_id

Summarized information about the recipe compute_Tfraud_transactions_by_merchant_id.

a) Status

Characteristics of the recipe compute_Tfraud_transactions_by_merchant_id:

- Type: Group
- Created by **siyu.chen** on the 2024-04-26 08:54:13
- Last Modification by **siyu.chen** on the 2024-04-26 09:49:27

List of the inputs of the recipe:

Dataset TRANSACTIONS joined prepared (Snowflake)

List of the outputs of the recipe:

• Dataset fraud_transactions_by_merchant_id (Snowflake)

Group keys: merchant_id

5. compute_top_merchants_sql

Summarized information about the recipe compute top merchants sql.

a) Status

Characteristics of the recipe compute_top_merchants_sql:

- Type: Sync
- Created by siyu.chen on the 2024-04-26 09:37:38
- Last Modification by **siyu.chen** on the 2024-04-26 09:37:38

b) Inputs / Outputs

List of the inputs of the recipe:

• Dataset top_merchants (Amazon S3)

List of the outputs of the recipe:

• Dataset top_merchants_sql (Snowflake)

6. compute_top_merchants_joined

Summarized information about the recipe compute_top_merchants_joined.

a) Status

Characteristics of the recipe compute_top_merchants_joined:

- Type: Join
- Created by siyu.chen on the 2024-04-26 09:21:34
- Last Modification by siyu.chen on the 2024-04-26 09:38:59

b) Inputs / Outputs

List of the inputs of the recipe:

- Dataset fraud_transactions_by_merchant_id (Snowflake)
- Dataset top merchants sql (Snowflake)

List of the outputs of the recipe:

• Dataset top merchants joined (Snowflake)

c) Join

| | <u> </u> | |
|-------------|-----------|-------------|
| Left input | Condition | Right input |
| merchant id | = | merchant id |

7. compute_top_merchants_joined_topn

Summarized information about the recipe compute_top_merchants_joined_topn.

a) Status

Characteristics of the recipe compute_top_merchants_joined_topn:

- Type: Top N
- Created by **siyu.chen** on the 2024-04-26 09:35:37
- Last Modification by siyu.chen on the 2024-04-26 09:36:13

List of the inputs of the recipe:

• Dataset top_merchants_joined (Snowflake)

List of the outputs of the recipe:

Dataset top_merchants_joined_topn (Snowflake)

c) Top rows and sorting direction

Top rows: **10** Bottom rows: **0**

| Column name | Sorting direction |
|---------------|-------------------|
| percent_fraud | Descending |

8. compute_TRANSACTIONS_joined_prepared_windows

Summarized information about the recipe compute_TRANSACTIONS_joined_prepared_windows.

a) Status

Characteristics of the recipe compute_TRANSACTIONS_joined_prepared_windows:

- Type: Window
- Created by siyu.chen on the 2024-04-26 08:28:18
- Last Modification by siyu.chen on the 2024-04-26 08:30:52

b) Inputs / Outputs

List of the inputs of the recipe:

Dataset TRANSACTIONS joined prepared (Snowflake)

List of the outputs of the recipe:

Dataset TRANSACTIONS_joined_prepared_windows (Snowflake)

c) Windows

| Window name | Partitioning columns |
|-------------|----------------------|
| | card_id |
| | merchant_id |

9. split_TRANSACTIONS_joined_prepared

Summarized information about the recipe split_TRANSACTIONS_joined_prepared.

a) Status

Characteristics of the recipe split_TRANSACTIONS_joined_prepared:

- Type: **Split**
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:12:30
- Last Modification by siyu.chen on the 2024-04-26 08:33:17

b) Inputs / Outputs

List of the inputs of the recipe:

Dataset TRANSACTIONS_joined_prepared_windows (Snowflake)

List of the outputs of the recipe:

- Dataset TRANSACTIONS_known (Snowflake)
- Dataset TRANSACTIONS_unknown (Snowflake)

Split mode: Specific filter for each output dataset

10. train_Predict_authorized_flag__binary_

Summarized information about the recipe train Predict authorized flag binary .

a) Status

Characteristics of the recipe train Predict authorized flag binary:

- Type: **Prediction Training**
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:27:51

Last Modification by siyu.chen on the 2024-04-26 08:52:22

b) Inputs / Outputs

List of the inputs of the recipe:

Dataset TRANSACTIONS_known (Snowflake)

List of the outputs of the recipe:

Saved Model Predict authorized_flag (binary) (LightGBM (session 1 retrain) - v1)

11. score_TRANSACTIONS_unknown

Summarized information about the recipe score TRANSACTIONS unknown.

a) Status

Characteristics of the recipe score_TRANSACTIONS_unknown:

- Type: Prediction Scoring
- Created by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:29:06
- Last Modification by sylvain.franco@dataiku.com (deleted) on the 2022-12-20 09:29:12

b) Inputs / Outputs

List of the inputs of the recipe:

- Dataset TRANSACTIONS_unknown (Snowflake)
- Saved Model Predict authorized_flag (binary) (LightGBM (session 1 retrain) v1)

List of the outputs of the recipe:

• Dataset TRANSACTIONS unknown scored (Snowflake)

V. Saved Models

List all the saved models in the flow.

1. Predict authorized_flag (binary)

Summarized information about the saved model Predict authorized_flag (binary):.

a) Status

Model id: 3yL0JQWo

Active version: LightGBM (session 1 retrain) - v1

b) Related Recipes

List of the recipes related to the saved model.

Parent Recipe

Recipe with Predict authorized_flag (binary) as an output:

• train_Predict_authorized_flag_binary_(Prediction Training)

Successor Recipes

List of recipes with Predict authorized_flag (binary) as an input:

• score TRANSACTIONS unknown (Prediction Scoring)

VI. Deployment and Monitoring

A. Implementation Details

- The flow can be found here: https://dss-ffe10b81-f9822877-dku.ap-southeast-1.app.dataiku.io/projects/SIYUADVANCEDDESIGNER/
- The name of the generated file is: Dataiku Flow Documentation -SIYUADVANCEDDESIGNER.docx

B. Version Control

The flow was executed with the following version of DSS: 12.6.0