PROJECT 2

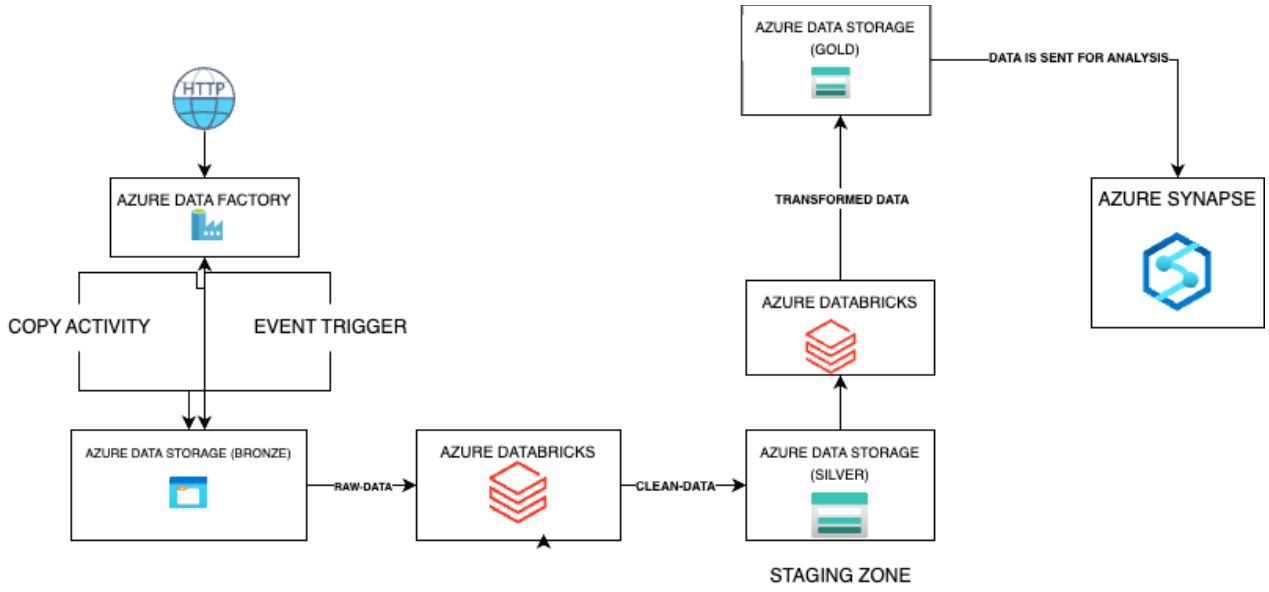
Customer Shopping Trends

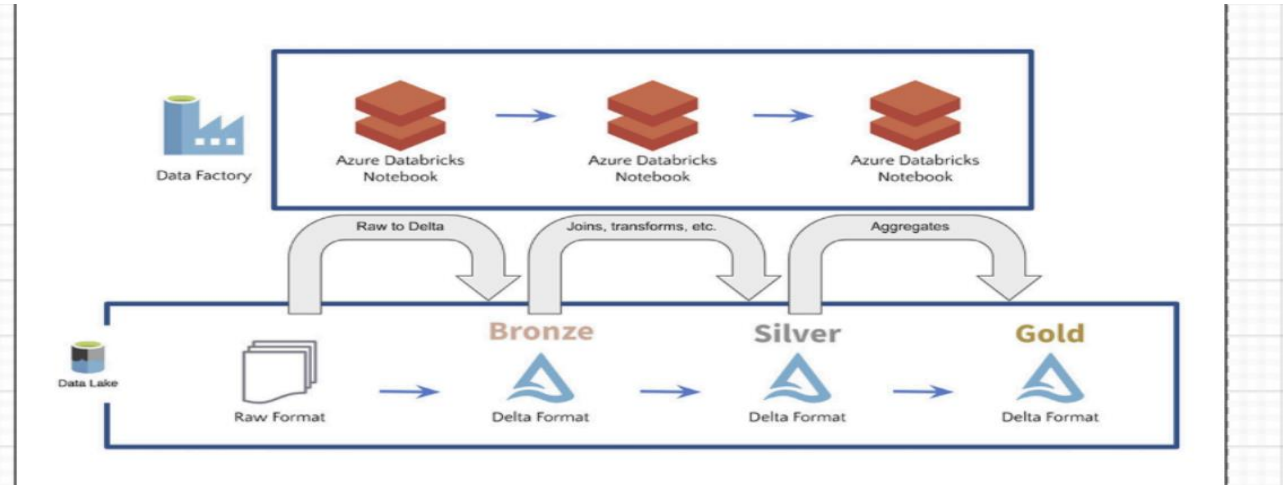
The Customer Shopping Preferences Dataset offers valuable insights into consumer behavior and purchasing patterns. Understanding customer preferences and trends is critical for businesses to tailor their products, marketing strategies, and overall customer experience. This dataset captures a wide range of customer attributes including age, gender, purchase history, preferred payment methods, frequency of purchases, and more.

SCHEMA:

- **Customer ID - Unique identifier for each customer**
- **Age - Age of the customer**
- **Gender - Gender of the customer (Male/Female)**
- **Item Purchased - The item purchased by the customer**
- **Category - Category of the item purchased**
- **Purchase Amount (USD) - The amount of the purchase in USD**
- **Location - Location where the purchase was made**
- **Size - Size of the purchased item**
- **Color - Color of the purchased item**
- **Season - Season during which the purchase was made**
- **Review Rating - Rating given by the customer for the purchased item**
- **Subscription Status - Indicates if the customer has a subscription (Yes/No)**
- **Shipping Type - Type of shipping chosen by the customer**
- **Discount Applied - Indicates if a discount was applied to the purchase (Yes/No)**
- **Promo Code Used - Indicates if a promo code was used for the purchase (Yes/No)**
- **Previous Purchases - The total count of transactions concluded by the customer at the store, excluding the ongoing transaction**
- **Payment Method - Customer's most preferred payment method**
- **Frequency of Purchases - Frequency at which the customer makes purchases (e.g., Weekly, Fortnightly, Monthly)**

Architecture Diagram:





RAW-DATA

```
Customer ID,Age,Gender,Item Purchased,Category,Purchase Amount (USD),Location,Size,Color,Season,Review Rating,Subscription Status,Shipping Type,Discount Applied,Promo Code Used,Previous Purchases,Payment Method,Frequency of Purchases
1,55,Male,Blouse,Clothing,53,Kentucky,L,Gray,Winter,3.1,Yes,Express,Yes,Yes,14,Venmo,Fortnightly
2,19,Male,Sweater,Clothing,64,Maine,L,Maroon,Winter,3.1,Yes,Express,Yes,Yes,2,Cash,Fortnightly
3,50,Male,Jeans,Clothing,73,Massachusetts,S,Maroon,Spring,3.1,Yes,Free Shipping,Yes,Yes,23,Credit Card,Weekly
4,21,Male,Sandals,Footwear,90,Rhode Island,M,Maroon,Spring,3.5,Yes,Next Day Air,Yes,Yes,49,PayPal,Weekly
5,45,Male,Blouse,Clothing,49,Oregon,M,Turquoise,Spring,2.7,Yes,Free Shipping,Yes,Yes,31,PayPal,Annually
6,46,Male,Sneakers,Footwear,20,Wyoming,M,White,Summer,2.9,Yes,Standard,Yes,Yes,14,Venmo,Weekly
7,63,Male,Shirt,Clothing,85,Montana,M,Gray,Fall,3.2,Yes,Free Shipping,Yes,Yes,40,Cash,Quarterly
8,27,Male,Shorts,Clothing,34,Louisiana,L,Charcoal,Winter,3.2,Yes,Free Shipping,Yes,Yes,19,Credit Card,Weekly
9,26,Male,Coat,Outerwear,97,West Virginia,L,Silver,Summer,2.6,Yes,Express,Yes,Yes,8,Venmo,Annually
10,57,Male,Handbag,Accessories,31,Missouri,M,Pink,Spring,4.8,Yes,2-Day Shipping,Yes,Yes,4,Cash,Quarterly
11,53,Male,Shoes,Footwear,34,Arkansas,L,Purple,Fall,4.1,Yes,Store Pickup,Yes,Yes,26,Bank Transfer,Bi-Weekly
12,30,Male,Shorts,Clothing,68,Hawaii,S,Olive,Winter,4.9,Yes,Store Pickup,Yes,Yes,10,Bank Transfer,Fortnightly
13,61,Male,Coat,Outerwear,72,Delaware,M,Gold,Winter,4.5,Yes,Express,Yes,Yes,37,Venmo,Fortnightly
14,65,Male,Dress,Clothing,51,New Hampshire,M,Violet,Spring,4.7,Yes,Express,Yes,Yes,31,PayPal,Weekly
15,64,Male,Coat,Outerwear,53,New York,L,Teal,Winter,4.7,Yes,Free Shipping,Yes,Yes,34,Debit Card,Weekly
16,64,Male,Skirt,Clothing,81,Rhode Island,M,Teal,Winter,2.8,Yes,Store Pickup,Yes,Yes,8,PayPal,Monthly
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18,53,Male,Dress,Clothing,38,Mississippi,XL,Lavender,Winter,4.7,Yes,2-Day Shipping,Yes,Yes,36,Venmo,Quarterly
19,52,Male,Sweater,Clothing,48,Montana,S,Black,Summer,4.6,Yes,Free Shipping,Yes,Yes,17,Cash,Weekly
20,66,Male,Pants,Clothing,90,Rhode Island,M,Green,Summer,3.3,Yes,Standard,Yes,Yes,46,Debit Card,Bi-Weekly
21,21,Male,Pants,Clothing,51,Louisiana,M,Black,Winter,2.8,Yes,Express,Yes,Yes,50,Cash,Every 3 Months
22,31,Male,Pants,Clothing,62,North Carolina,M,Charcoal,Winter,4.1,Yes,Store Pickup,Yes,Yes,22,Debit Card,Quarterly
23,56,Male,Pants,Clothing,37,California,M,Peach,Summer,3.2,Yes,Store Pickup,Yes,Yes,32,Debit Card,Annually
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26,18,Male,Hoodie,Clothing,25,Texas,M,Silver,Summer,3.6,Yes,Express,Yes,Yes,14,PayPal,Annually
27,38,Male,Jewelry,Accessories,20,Nevada,M,Red,Spring,3.6,Yes,Next Day Air,Yes,Yes,13,Credit Card,Annually
28,56,Male,Shorts,Clothing,56,Kentucky,L,Cyan,Summer,5,Yes,Next Day Air,Yes,Yes,7,Bank Transfer,Every 3 Months
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54,29,Male,Skirt,Clothing,24,Mississippi,S,Peach,Winter,3.9,Yes,Next Day Air,Yes,Yes,35,Credit Card,Weekly
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58,21,Male,Coat,Outerwear,64,West Virginia,M,White,Summer,4.4,Yes,Store Pickup,Yes,Yes,17,Debit Card,Fortnightly
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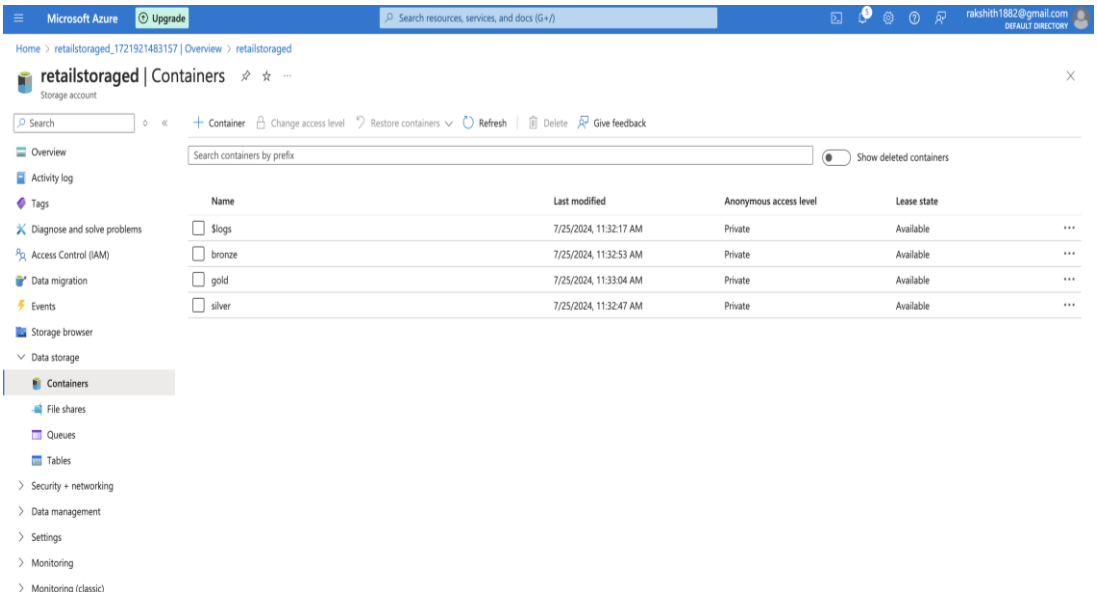

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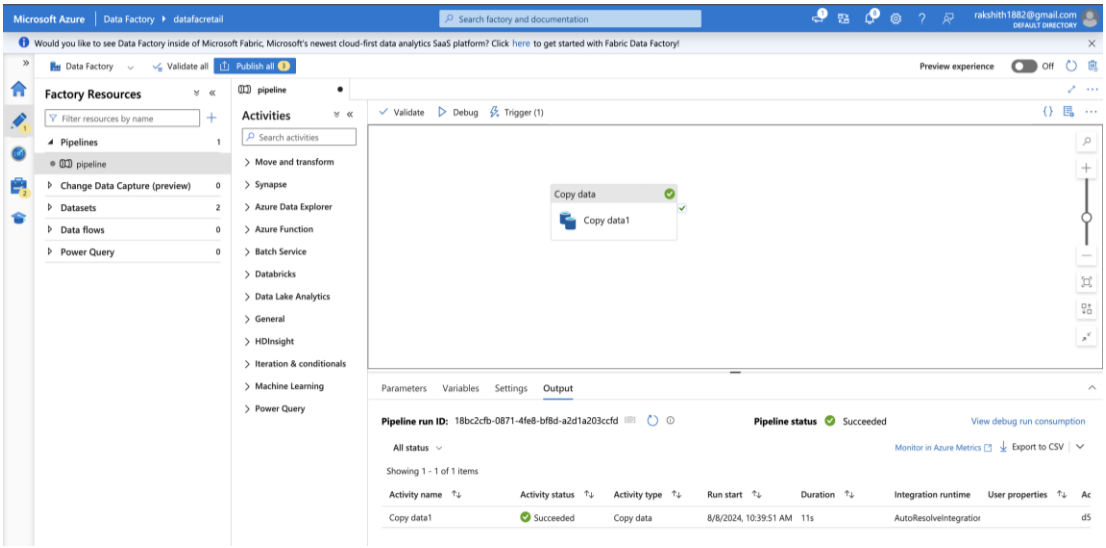
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Change Data Capture (preview) 0
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Data flows 0
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Activities
Search activities
Move and transform
Synapse
Azure Data Explorer
Azure Function
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Databricks
Data Lake Analytics
General
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Iteration & conditionals
Machine Learning
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Debug
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Parameters
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Settings
Output
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Pipeline status Succeeded
View debug run consumption
All status
Monitor in Azure Metrics
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Showing 1 - 1 of 1 items
Activity name
Activity status
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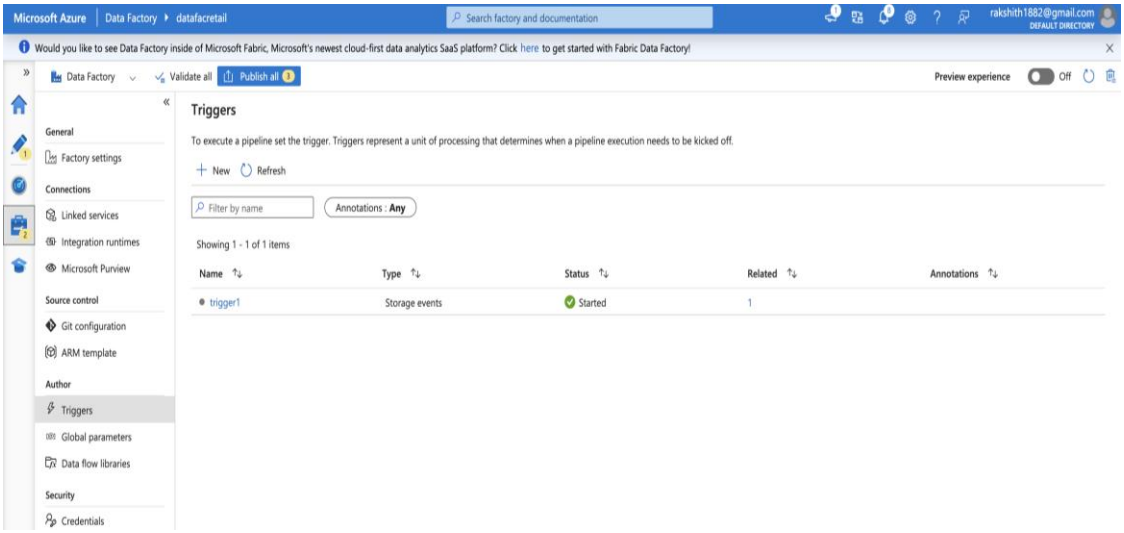
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Validate all
Publish all 3
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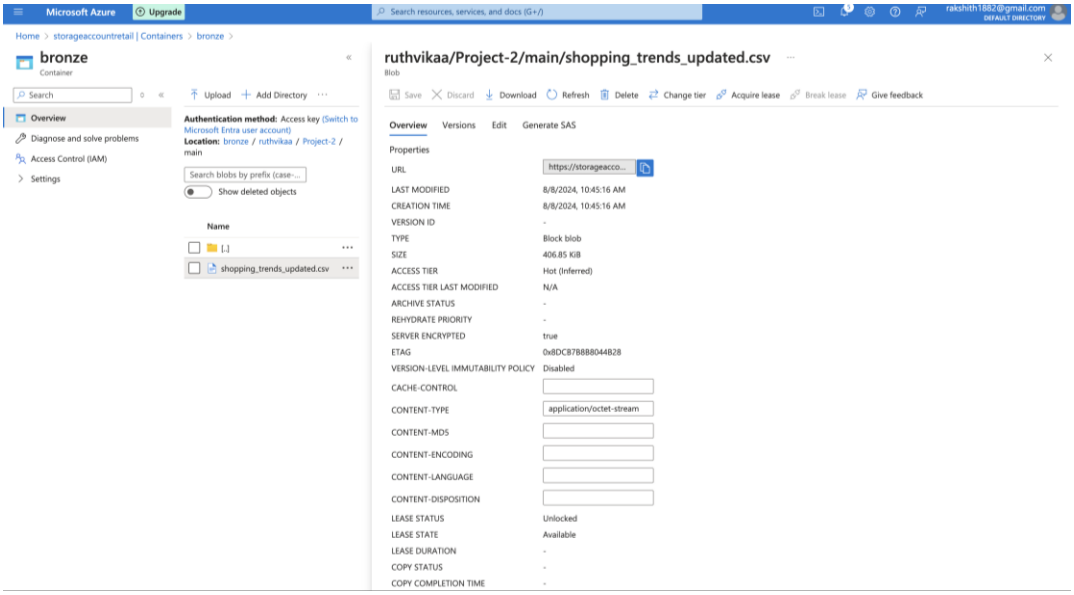
Off
General
Factory settings
Connections
Linked services
Integration runtimes
Microsoft Purview
Source control
Git configuration
ARM template
Author
Triggers
Global parameters
Data flow libraries
Security
Credentials
Triggers
To execute a pipeline set the trigger. Triggers represent a unit of processing that determines when a pipeline execution needs to be kicked off.
New
Refresh
Filter by name
Annotations : Any
Showing 1 - 1 of 1 items
Name
Type
Status
Related
Annotations
trigger1
Storage events
Started
1



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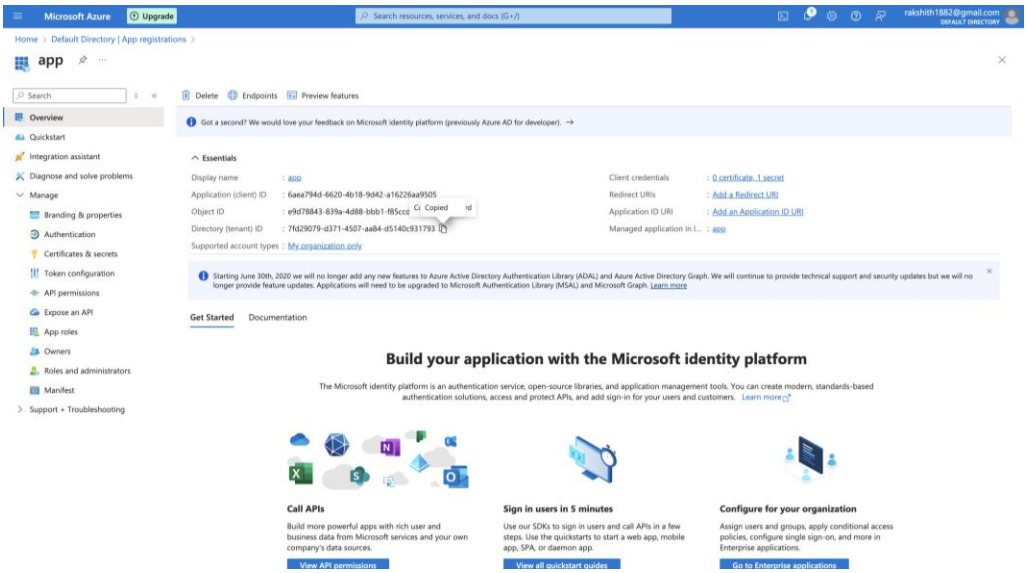

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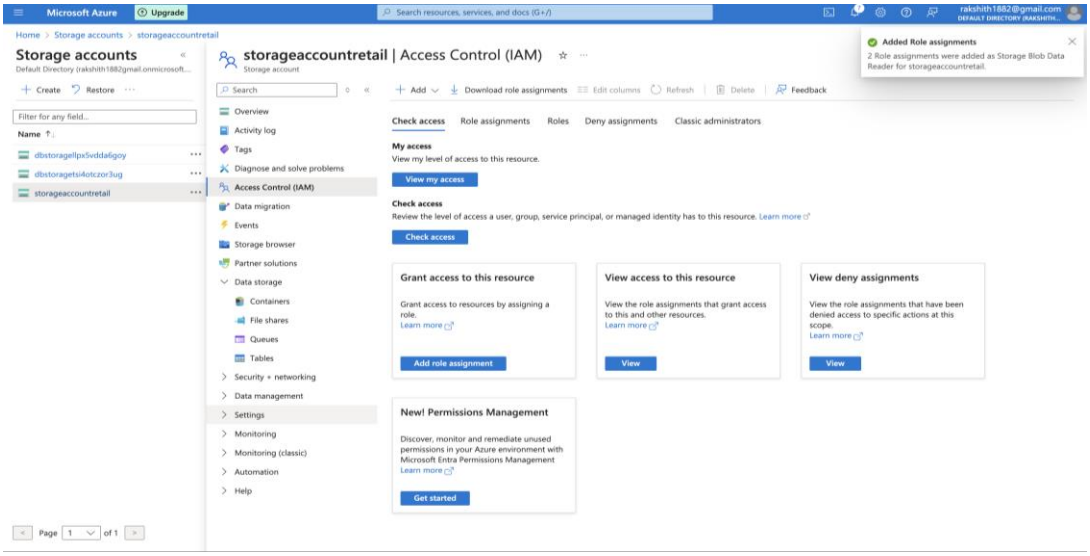
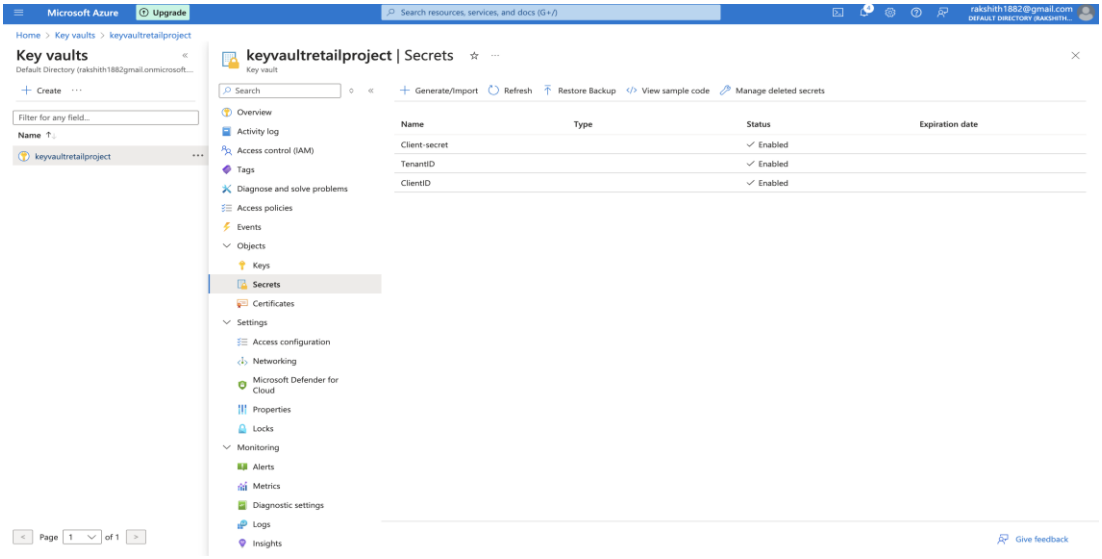
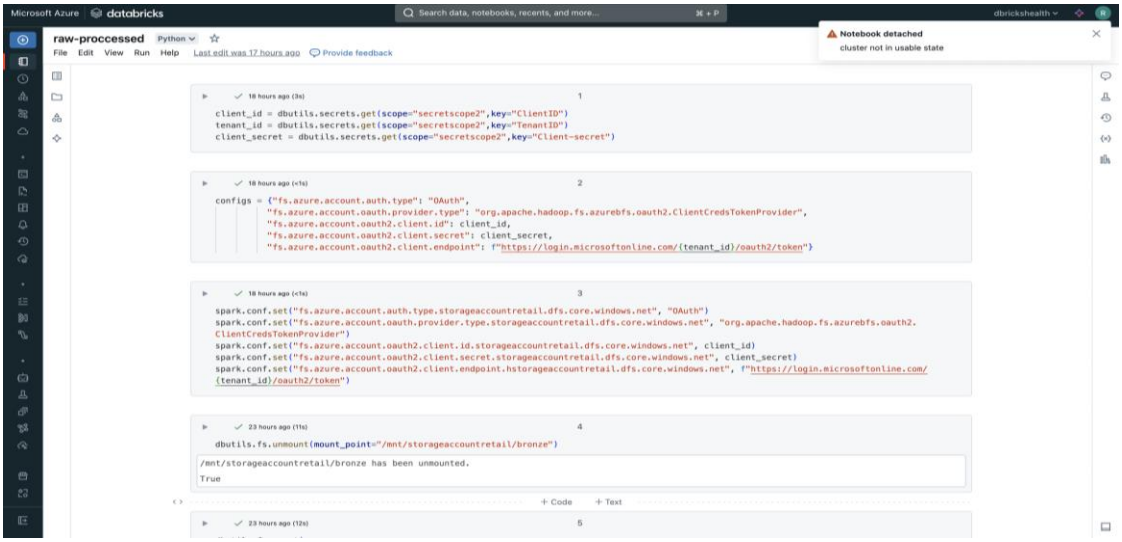


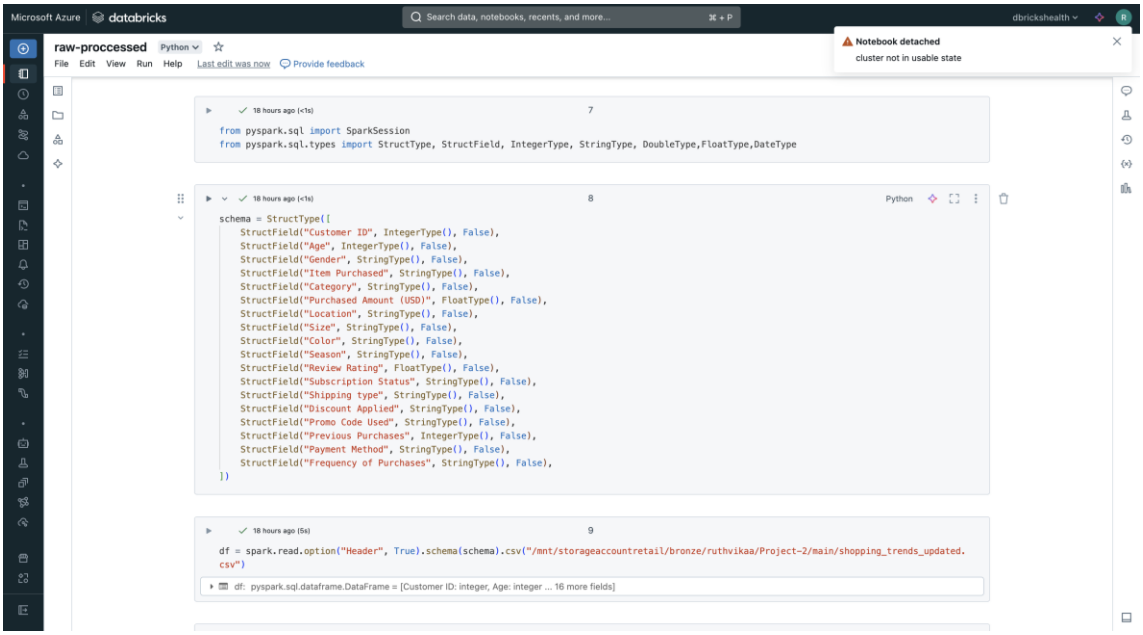
CREATED KEYVAULT AND GENERATED SECRETS:



CONFIGURATION SETUP IN DATABRICKS:



DEFINED SCHEMA



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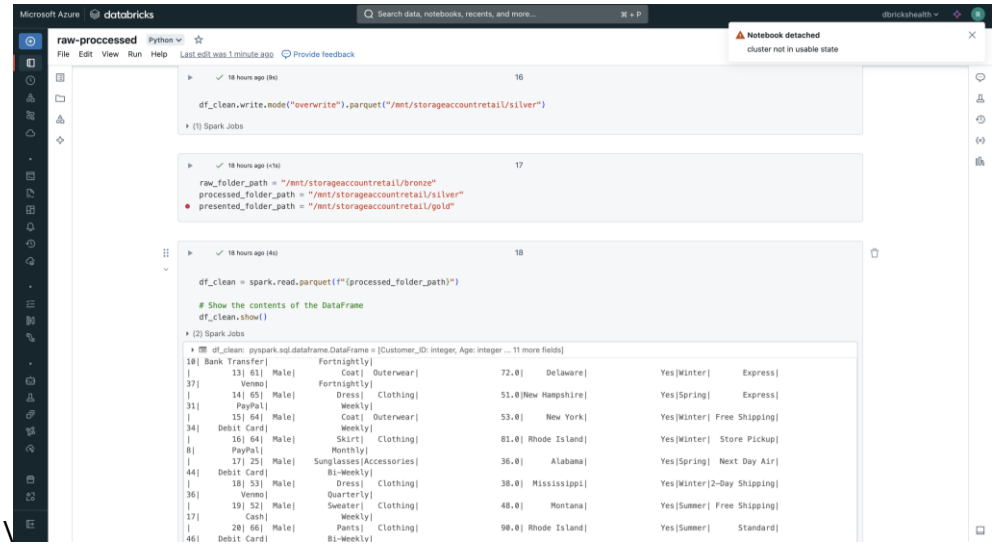
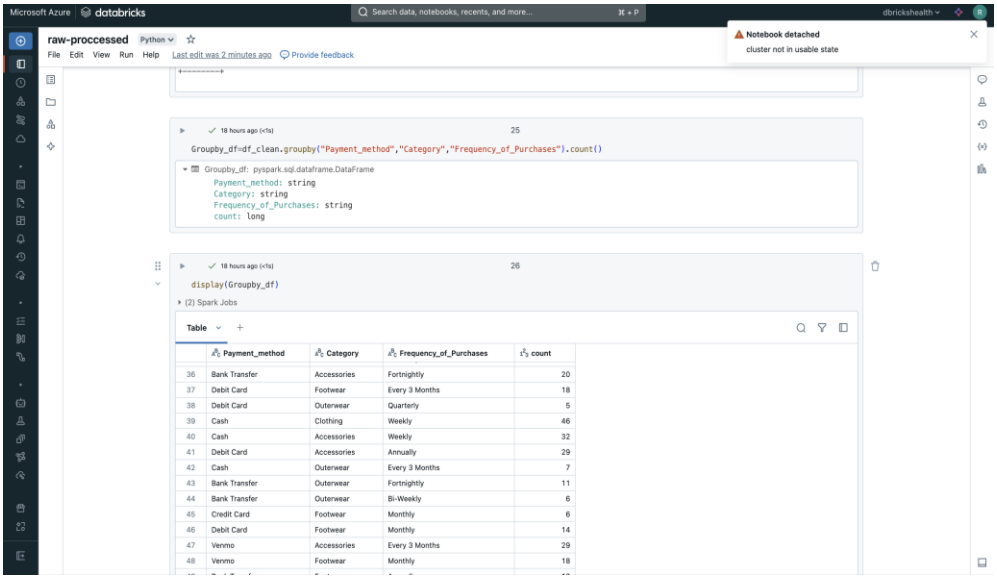
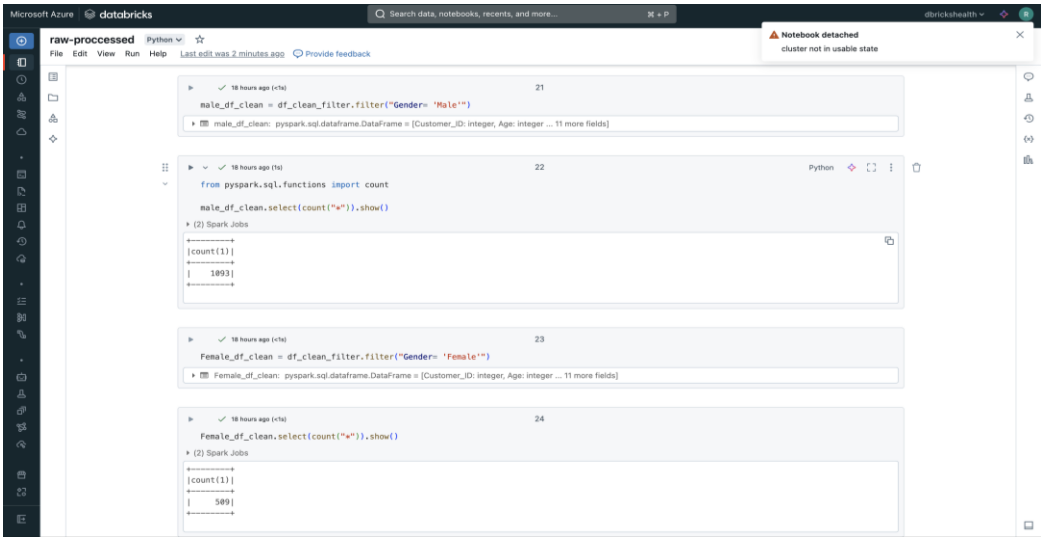
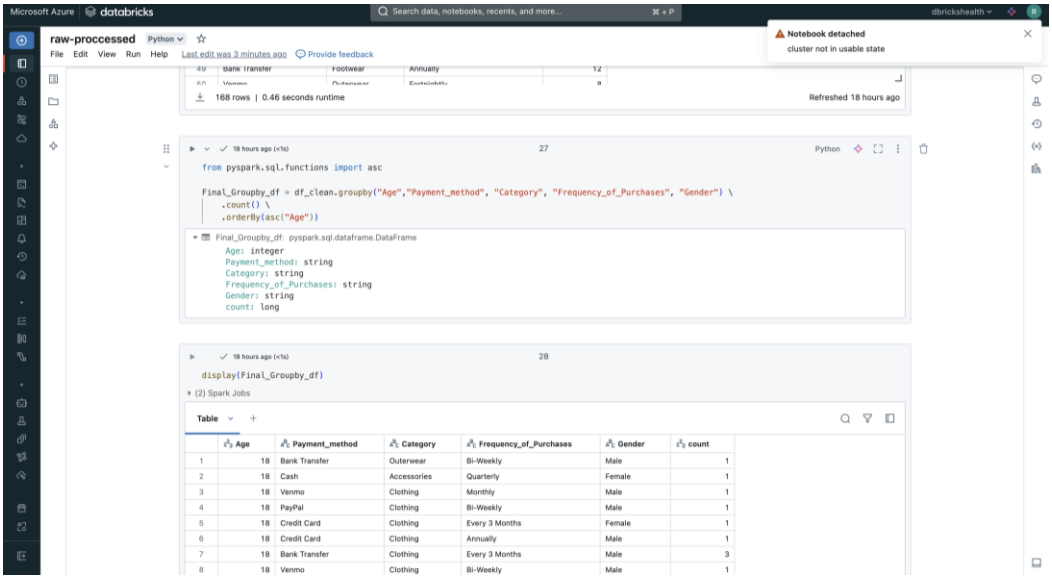


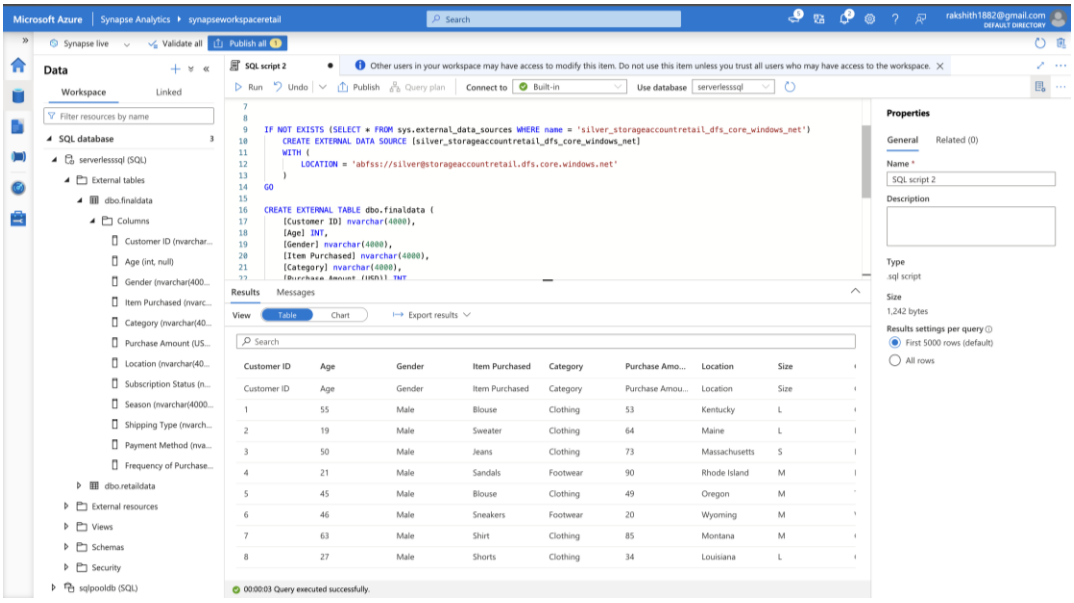


DATA AGGREGATIONS:





CREATED SYNAPSE SERVERLESS DB AND CREATED EXTERNAL TABLE:


Microsoft Azure
Synapse Analytics
synapseworkspaceretail
Search
rakshith1882@gmail.com
DEFAULT DIRECTORY
Synapse live
Validate all
Publish all 1
Data
Workspace
Linked
Filter resources by name
SQL database
serverlesssql (SQL)
External tables
dbo.finaldata
Columns
Customer ID (nvarchar...
Age (int, null)
Gender (nvarchar(400...
Item Purchased (nvarc...
Category (nvarchar(40...
Purchase Amount (US...
Location (nvarchar(40...
Subscription Status (n...
Season (nvarchar(4000...
Shipping Type (nvarch...
Payment Method (nva...
Frequency of Purchase...
dbo.retaildata
External resources
Views
Schemas
Security
sqlpooldb (SQL)
SQL script 2
Other users in your workspace may have access to modify this item. Do not use this item unless you trust all users who may have access to the workspace.
Run
Undo
Publish
Query plan
Connect to
Built-in
Use database
serverlesssql
IF NOT EXISTS (SELECT * FROM sys.external_data_sources WHERE name = 'silver_storageaccountretail_dfs_core_windows_net')
CREATE EXTERNAL DATA SOURCE [silver_storageaccountretail_dfs_core_windows_net]
WITH (
LOCATION = 'abfss://silver@storageaccountretail.dfs.core.windows.net'
)
GO
CREATE EXTERNAL TABLE dbo.finaldata (
[Customer ID] nvarchar(4000),
[Age] INT,
[Gender] nvarchar(4000),
[Item Purchased] nvarchar(4000),
[Category] nvarchar(4000),
Results
Messages
View
Table
Chart
Export results
Search
Customer ID
Age
Gender
Item Purchased
Category
Purchase Amo...
Location
Size
1 55 Male Blouse Clothing 53 Kentucky L
2 19 Male Sweater Clothing 64 Maine L
3 50 Male Jeans Clothing 73 Massachusetts S
4 21 Male Sandals Footwear 90 Rhode Island M
5 45 Male Blouse Clothing 49 Oregon M
6 46 Male Sneakers Footwear 20 Wyoming M
7 63 Male Shirt Clothing 85 Montana M
8 27 Male Shorts Clothing 34 Louisiana L
00:00:03 Query executed successfully.
Properties
General
Related (0)
Name *
SQL script 2
Description
Type
.sql script
Size
1,242 bytes
Results settings per query
First 5000 rows (default)
All rows