Project

Data Pipeline for Customer Account Analysis

**Step-1:** **Data Ingestion (Backend Storage to Raw (Bronze) Container)**

1. Copy Activity: Configure an Azure Data Factory (ADF)

1(a). Backend Storage Account (Source)

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1(b). ADF-Pipeline: Copying data from backend to raw

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1(c). Sink (Bronze container)

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**Step 2: Databricks Activity (Incremental/Delta Processing)**

2(a). Initiate Spark session and display files in Bronze container.

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2(b). Reading all files from Bronze container

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2(c). Transformation (Part-1): Drop Duplicates, if any

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2(d). Define schemas for delta format

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2(e). Read all files into new schemas

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2(f). Transformation (Part-2): Adding new column “Timestamp”

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2(g). Writing or Processing all the CSV files in Bronze to Delta Format in Silver container.

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**Step 3: Databricks Activity (ETL Processing)**

3(a). Initiate Spark Session and define paths and read files in Silver containerA screenshot of a computer

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3(b). Also define path for file in Gold container, perform aggregate function and store transformed or refined data in Gold.

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**Step 4: Azure Synapse Analytics**

4(a).External Table Creation for Accounts table

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4(b). External Table Creation for Customers table

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4(c). External Table Creation for Loan\_Payments table

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4(d). External Table Creation for Loans table

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4(e). External Table Creation for Transactions table

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4(f). External Table Creation for Refined\_Customers table

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