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| **Project Code** | Module 2 : Mandatory |
| **Project Name** | Upload EOD Transactions files into System |

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| --- | --- | --- |
| **Prepared/Modified by** | **Role** | **Date of Preparation** |
| Charudatta Joshi | AWS Trainer | 04-05-2023 |
| **Reviewed by** | **Role** | **Date of Review** |
|  |  |  |
| **Approved by** | **Role** | **Date of Approval** |
|  |  |  |
| **Circulation List** |  | **Version Number of the template:** |
| **Version Number** | 1.0 | 1.0 |

**Problem Statement:**

End of Day transaction files will come at end of every day. Create a system to upload these files into the system. Maximum automation is preferred

**Infrastructure Setup:**

S3, Lambda, DynamoDB, Glue

**Requirements**

**Table 1: Account Master**

|  |  |
| --- | --- |
| Table : | Acct\_master |
| Column | Datatype |
| acc\_no | Text, Unique, only alphanumeric |
| acc\_name | Text. Display name for the account |
| acc\_desc | Store description f accounts |
| acc\_type | Only 4 possible values I=Income, E=Expanse, A=Asset, L=Liablity |

**Table 2: Transaction table**

|  |  |
| --- | --- |
| Table | ledger\_txn |
| Column | Datatype | Purpose |
| txn\_id | Integer| sequencial auto generated |
| voucher\_code | char(10) | Uncque| Capatured from syatem |
| txn\_type | char(1) | D=Debit C=Credit |
| txn\_date | date| yyyy-mm-dd |
| acc\_no | Fk from Account master |
| txn\_amt | Numeric(11.2) | transaction amount |
| source\_system\_id | Integer|Id of system from which it is posted| 1=Inventory Management System, 2=Self generated Transaction |
| source\_system\_txn\_id | varchar(50) Transaction Id of source system |

**Table 3: Source System Master**

|  |  |
| --- | --- |
| Table | Src\_sys\_mst |
| Column | Datatype | Purpose |
| System\_id | Integer| sequencial auto generated |
| System\_name | Varchar(30) store description of various data source syatems |

1. **Requirement**: At end of day a parquet file will be received from a satellite system in s3 bucket. Upload the file, process data and post it as a ledger transaction

**File Structure:**

|  |  |
| --- | --- |
| Field | Details |
| trnrefid | source syetem txn id |
| code | voucher\_code |
| tdate | txn\_date |
| trn\_amount | amount for posting |
| vat | amount for posting |
| excise\_duty | amount for posting |

**File Format: Parquet**

**File Name : ecommerce\_sales.parquet**

**Acceptance Criteria:**

1. 3 separate transaction entries should be posted for every transaction
2. Amounts should be credited to following accounts
   1. “Product Sale”
   2. “Value Added Tax”
   3. “Excise Duty”
3. If a transaction fails for any reason a separate file of failed records should be created for reload purpose
4. **Requirement**: At end of day a Avro file will be received from a satellite system in s3 bucket. Upload the file process data and post it as a ledger transaction

**File Structure:**

|  |  |
| --- | --- |
| Field | Details |
| Tran\_ref\_id | source syetem txn id |
| Transaction\_dt | txn\_date |
| amt | amount for posting |
| gst | amount for posting |
| custom\_duty | amount for posting |

**File Format: Avro**

**File Name : supermarket\_sales.avro**

**Acceptance Criteria:**

1. 3 separate transactions should be posted for every transaction
2. Amounts should be credited to following accounts
   1. “Product Sale”
   2. “Goods and Service Tax”
   3. “Custom Duty”
3. If a transaction fails for any reason a separate file of failed records should be created for reload purpose
4. Generate voucher code from txn\_ref\_id
5. Transactions of future dates should not be posted should be failed