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| **Project Code** | Project 4 - Optional |
| **Project Name** | Enhancement Request: Create a Bookkeeping Serverless Application |

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

**Problem Statement:**

Create a Bookkeeping Serverless Application (API Gw + Lambda(Java/Python) + Dynamodb)

Modules: Voucher, Account Master , Reporting

**Infrastructure Setup:**

S3, Lambda, DynamoDB, Glue

**Use cases**

**Use case 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 |

1. Create master screen to SEARCH Ledger Accounts.

Allow user to search using Account No, Account Name and Account Type

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | Search Account Master | |  |
|  |  |  |  |
|  | Account No: | Text box |  |
|  |  |  |  |
|  | Account Name : | Text box |  |
|  |  |  |  |
|  |  |  |  |
|  | Acct Type | Dropdown |  |
|  |  |  |  |
|  |  | Search (button) |  |
|  |  |  |  |
|  |  |  |  |

On click of search button, records relevant to the search should be listed in a tale on same or next page.

1. Create master screen to ADD Ledger Accounts.
2. Create master screen to UPDATE Ledger Accounts.
3. Create master screen to DELETE Ledger Accounts.

Screen should appear as below

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | Account Master | |  |
|  |  |  |  |
|  | Account No: | Text box |  |
|  |  |  |  |
|  | Account Name : | Text box |  |
|  |  |  |  |
|  | Description : | Text box |  |
|  |  |  |  |
|  | Acct Type | Dropdown |  |
|  |  |  |  |
|  |  | SAVE (button) |  |
|  |  |  |  |
|  |  | CANCEL (button) |  |
|  |  |  |  |
|  |  |  |  |

Account No should be unique. Validate before saving

**Acceptance Criteria:**

Screen should properly update values in Database.

**Use case 2: Transaction Voucher**

|  |  |
| --- | --- |
| 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 |
| Txn\_desc | Description of transaction |

1. Create screen to post a voucher

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | VOUCHER | | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Voucher No: | | |  | Text box | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Narration : | | |  | Text box | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Date : | | |  | Input Date | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Debit Transactions | | | | | | | |  |  |
|  |  | No | Account No | | |  | Amount | | |  |  |
|  |  | 1 | Text box | | |  | Text box | | |  |  |
|  |  | 2 | Text box | | |  | Text box | | |  |  |
|  |  | 3 | Text box | | |  | Text box | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Credit Transactions | | | | | | | |  |  |
|  |  | No | Account No | | |  | Amount | | |  |  |
|  |  | 1 | Text box | | |  | Text box | | |  |  |
|  |  | 2 | Text box | | |  | Text box | | |  |  |
|  |  | 3 | Text box | | |  | Text box | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | CANCEL | |  |  | SAVE | |  |  |  |
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**Acceptance Criteria:**

1. Screen should properly update values in Database.
2. Total of amounts from Debit should be equal to total of amounts from Credit section
3. Total no of rows created should be equal to, number of transactions entered in debit plus number of transactions entered in credit section
4. Voucher No, Narration and Date fields should be common for every transaction

**Usecase 3 : Search Voucher**

1. Create master screen to search a voucher.

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|  |  |  |  |  |  |  |  |  | Search Voucher | | | | | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Voucher No: | | |  | Text box | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Narration : | | |  | Text box | | | |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | Date : | | |  | Date | | | |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | SEARCH | |  |  |  |  |  |  |  |  |  |  |  |
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|  |  | Txn Id | | Voucher No | | | Txn Date | | Txn Type | | Account No | | Txn Amount | | Source Syatem Id | | | Source Syatem Txn Id | | | | Description | | | |  |
|  |  |  | |  | | |  | |  | |  | |  | |  | | |  | | | |  | | | |  |
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**Acceptance Criteria:**

System should filter records based upon search criteria

**Usecase 5 : Ledger Balance Reports**

1. Ledger Balance Report.

Create a report displaying current balance in accounts

Input : Nothing

|  |  |  |
| --- | --- | --- |
| Date | Todays Date |  |
| No | Account Name | Balance (RS) |
| 1 | Receivables | 4586 |
| 2 | Cash | 55698 |
| 3 | Saundry Debitors | 5526 |

**Acceptance Criteria:**

Table in report should have current balances in front of all ledger accounts

**Usecase 6 : Daily Transaction Report**

1. Transaction Report

Create a report displaying daily transactions as below

Input FromDate and To Date

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Transaction Id | Voucher Code | Transaction Type | Account Name | Amount | Transaction Date |
| 22 | VC1152 | D | Receivables | 600 | 22-Mar-23 |
| 23 | VC1152 | D | Cash | 400 | 22-Mar-23 |
| 24 | VC1152 | C | Expense | 1000 | 22-Mar-23 |
| 25 | VC1153 | D | Cash | 2000 | 27-Mar-23 |
| 26 | VC1153 | C | Expense | 2000 | 27-Mar-23 |

**Acceptance Criteria:**

Table in Report should have all transactions done in the period