Advanced Databases CA

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# Scope of the document

# Technical Design to include

## ER Diagram

## Physical Model in Third Normal Form (3NF)

## Data Dictionary

Accounts

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| AccountTypeId | int |  | x | x | ReferenceData(Id) |  |
| Balance | decimal(18,2) |  |  |  |  |  |
| CustomerId | int |  | x | x | Customers(Id) |  |
| DateOpened | date |  |  | x |  |  |
| Id | int | x |  | x |  |  |

Addresses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| AddressLine1 | varchar(50) |  |  | x |  |  |
| AddressLine2 | varchar(50) |  |  |  |  |  |
| AddressLine3 | varchar(50) |  |  |  |  |  |
| City | varchar(20) |  |  | x |  |  |
| Country | varchar(20) |  |  | x |  |  |
| Id | int | x |  | x |  |  |

Associations

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| Customer1Id | int | x | x | x | Customers(id) |  |
| Customer2Id | int | x | x | x | Customers(id) |  |
| ReferenceDataId | int | x | x | x | ReferenceData(Id) |  |

Customers

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| AddressId | int |  | x | x | Addresses(Id) |  |
| CustomerTypeId | int |  |  | x |  |  |
| FirstName | varchar(20) |  |  | x |  |  |
| Id | int | x |  | x |  |  |
| LastName | varchar(20) |  |  | x |  |  |
| PhoneNo | varchar(10) |  |  |  |  |  |

ReferenceData

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| Description | varchar(50) |  |  | x |  |  |
| Id | int | x |  | x |  |  |
| IsDeleted | bit |  |  |  |  |  |

Securities

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Data type | Primary Key | Foreign Key | Not null | Reference to | Constraint |
| AccountId | int |  | x | x | Accounts(id) |  |
| Id | int | x |  | x |  |  |
| Name | varchar(20) |  |  | x |  |  |
| SecurityTypeId | int |  | x | x | ReferenceData(Id) |  |
| Value | decimal(18,2) |  |  | x |  |  |

## Technology used

## Embedded SQL File containing all DDL and DML statements.

# Testing

# Data Governance & Security

# Reflection on Learnings

# References