# Data Dictionary

Database Name: quinnincDB

|  |
| --- |
| 1. Customer |
| 1. CustomerEmailAddress |
| 1. CustomerPhoneNumber |
| 1. SystemAdministrator |
| 1. SystemAdministratorPhoneNumber |
| 1. SystemLoginPosition |
| 1. SystemLogin |
| 1. SystemLoginDateTime |
| 1. Teller |
| 1. TellerShiftStartDateTime |
| 1. TellerShiftEndDateTime |
| 1. TellerPhoneNumber |
| 1. AccountStatus |
| 1. AccountNormalSavings |
| 1. AccountBonusSavings |
| 1. AccountPremierSavings |
| 1. CustomerTransactionDeposit |
| 1. CustomerTransactionWithdrawal |
| 1. Manager |
| 1. ManagerPhoneNumber |

List of Tables:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| PassportNumber | char(9) | 9 characters | Primary key,  Not Null,  Check | 456434653 |
| FirstName | varchar(20) | 20 characters | Not Null | George |
| MiddleName | varchar(25) | 25 characters | - | Noah |
| LastName | varchar(30) | 30 characters | Not Null | Adam |
| LaneAddress | varchar(40) | 40 characters | Not Null | Beach Lane |
| City | varchar(20) | 20 characters | Not Null | Liverpool |

## Customer Table:

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_C\_PassportNumber\_Length | Customer | PassportNumber | (LEN(PassportNumber) = 9) |

## CustomerEmailAddress Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| cPassportNumber | char(9) | 9 characters | Foreign Key,  Composite Key,  Not Null,  Check | 524698753 |
| EmailAddress | varchar(50) | 50 characters | Composite Key,  Not Null,  Check | sample@sample.com |

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_CEM\_PassportNumber | CustomerEmailAddress | cPassportNumber | Customer | PassportNumber |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_CEM\_PassportNumber\_Length | CustomerEmailAddress | cPassportNumber | (LEN(PassportNumber) = 9) |
| CHK\_CEM\_EmailAddress\_@ | CustomerEmailAddress | EmailAddress | (EmailAddress LIKE '%@%') |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| cPassportNumber | char(9) | 9 characters | Foreign Key,  Composite Key,  Not Null,  Check | 524689875 |
| PhoneNumber | char(11) | 11 characters | Composite Key,  Not Null,  Check | 7215-587145 |

## CustomerPhoneNumber Table:

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_CPN\_PassportNumber | CustomerPhoneNumber | cPassportNumber | Customer | PassportNumber |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_CPN\_PassportNumber\_Length | CustomerPhoneNumber | cPassportNumber | (LEN(cPassportNumber) = 9) |
| CHK\_CPN\_PhoneNumber\_Length | CustomerPhoneNumber | PhoneNumber | (LEN(PhoneNumber) = 11) |

## SystemAdministrator Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| SARecordID | int | - | - | Yes-  1 | 5 |
| AdminID | char(8) | 8 characters | Primary Key | Yes –  SA000001 | SA000005 |
| Branch | varchar(30) | 30 characters | Not Null | - | Liverpool |
| FirstName | varchar(20) | 20 characters | Not Null | - | George |
| MiddleName | varchar(25) | 25 characters | - | - | Noah |
| LastName | varchar(30) | 30 characters | Not Null | - | Adam |
| LaneAddress | varchar(40) | 40 characters | Not Null | - | Beach Lane |
| City | varchar(20) | 20 characters | Not Null | - | Liverpool |
| EmailAddress | varchar(50) | 50 characters | Check | - | sample@sample.com |
| RegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| slSystemLoginID | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | SL000005 |
| saAdminID\_RegisteredBy | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | SA000008 |

### Foreign Key Constraint Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_SA\_AdminID | SystemAdministrator | saAdminID\_RegisteredBy | SystemAdministrator | AdminID |
| FK\_SL\_SystemLoginID | SystemAdministrator | slSystemLoginID | SystemLogin | SystemLoginID |

### Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_SA\_RegistrationDateTime | SystemAdministrator | RegistrationDateTime | Current date and time |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_SA\_EmailAddress\_@ | SystemAdministrator | EmailAddress | (EmailAddress LIKE '%@%') |
| CHK\_SA\_AdminIDRegisteredBy\_Length | SystemAdministrator | saAdminID\_RegisteredBy | (LEN(saAdminID\_RegisteredBy) = 8) |
| CHK\_SL\_SystemLoginID\_Length | SystemAdministrator | salSystemLoginID | (LEN(slSystemLoginID) = 8) |

## SystemAdministratorPhoneNumber Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| saAdminID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | SA000002 |
| PhoneNumber | char(11) | 11 characters | Composite Key,  Not Null,  Check | 7215-587145 |

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_SA\_AdminID | SystemAdministratorPhoneNumber | saAdminID | SystemAdministrator | AdminID |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_SAPN\_AdminID\_Length | SystemAdministratorPhoneNumber | saAdminID | (LEN(saAdminID) = 8) |
| CHK\_SAPN\_PhoneNumber\_Length | SystemAdministratorPhoneNumber | PhoneNumber | (LEN(PhoneNumber) = 11) |

## SystemLoginPosition Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| SLPRecordID | int | - | - | Yes -  1 | 5 |
| PositionID | char(8) | 8 characters | Primary Key | Yes –  PT000001 | PT000005 |
| Position | varchar(30) | 30 characters | Not Null | - | Bank Teller |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| SLRecordID | int | - | - | Yes-  1 | 5 |
| SystemLoginID | char(8) | 8 characters | Primary Key,  Not Null | Yes –  SL000001 | SL000002 |
| Username | varchar(30) | 30 characters | UNIQUE,  Not Null | - | - |
| Password | varchar(50) | 50 characters | UNIQUE,  Not Null | - | - |
| slpPositionID | char(8) | 8 characters | Foreign Key,  Not Null.  Check | - | SLP00005 |
| saAdminID | char(8) | 8 characters | Foreign Key.  Not Null,  Check | - | SD000007 |

## SystemLogin Table:

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_SL\_PositionID | SystemLogin | slpPositionID | SystemLoginPosition | PositionID |
| FK\_SL\_AdminID | SystemLogin | saAdminID | SystemAdministrator | AdminID |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_SL\_PositionID\_Length | SystemLogin | slpPositionID | (LEN(slpPositionID) = 8) |
| CHK\_SL\_AdminID\_Length | SystemLogin | saAdminID | (LEN(saAdminID) = 8) |

## SystemLoginDateTime Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| slSystemLoginID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | SL000004 |
| LoginDateTime | datetime | - | Composite Key,  Not Null,  Default | 2019-11-15 08:13:58.707 |

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_SLDT\_SysteLoginID | SystemLoginDateTime | slSystemLoginID | SystemLogin | SystemLoginID |

### Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_SLDT\_LoginDateTime | SystemLoginDateTime | LoginDateTime | Current date and time |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_SLDT\_SystemLoginID\_Length | SystemLoginDateTime | slSystemLoginID | (LEN(slSystemLoginID) = 8) |

## Teller Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| TRecordID | int | - | - | Yes-  1 | 5 |
| TellerID | char(8) | 8 characters | Primary Key | Yes –  TE000001 | TE0000004 |
| Branch | varchar(30) | 30 characters | Not Null | - | London |
| FirstName | varchar(20) | 20 characters | Not Null | - | Peter |
| MiddleName | varchar(25) | 25 characters | - | - | Jack |
| LastName | varchar(30) | 30 characters | Not Null | - | White |
| LaneAddress | varchar(40) | 40 characters | Not Null | - | Beach Lane |
| City | varchar(20) | 20 characters | Not Null | - | London |
| EmailAddress | varchar(50) | 50 characters | Check |  | sample@sample.com |
| RegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| slSystemLoginID | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | SL000002 |

### Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_T\_SystemLoginID | SystemLogin | slSystemLoginID | SystemLogin | SystemLoginID |

### Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_T\_RegirstrationDateTime | Teller | RegistrationDateTime | Current date and time |

### Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_T\_EmailAddress\_@ | Teller | EmailAddress | (EmailAddress LIKE '%@%') |
| CHK\_T\_SystemLoginID\_Length | Teller | slSystemLoginID | (LEN(slSystemLoginID) = 8) |

## TellerShiftStartDateTime Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| tTellerID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | TE0000004 |
| ShiftStartDateTime | datetime | - | Composite Key,  Not Null,  Default | 2019-11-15 08:13:58.707 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_TSSDT\_TellerID | TellerShiftStartDateTime | tTellerID | Teller | TellerID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_TSSDT\_ShidtStartDateTime | TellerShiftStartDateTime | ShiftStartDateTime | Current date and time |

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_TSSDT\_TellerID\_Length | TellerShiftStartDateTime | tTellerID | (LEN(tTellerID) = 8) |

Check Constraint Details

## TellerShiftEndDateTime Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| tTellerID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | TE0000004 |
| ShiftEndDateTime | datetime | - | Composite Key,  Not Null,  Default | 2019-11-15 08:13:58.707 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_TSEDT\_TellerID | TellerShiftEndDateTime | tTellerID | Teller | TellerID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_TSEDT\_ShiftEndDateTime | TellerShiftEndDateTime | ShiftEndDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_TSEDT\_TellerID\_Length | TellerShiftEndDateTime | tTellerID | (LEN(tTellerID) = 8) |

## TellerPhoneNumber Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| tTellerID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | TE0000004 |
| PhoneNumber | char(11) | 11 characters | Composite Key,  Not Null,  Check | 7215-587145 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_TPN\_PhoneNumber | TellerPhoneNumber | tTellerID | Teller | TellerID |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_TPN\_TellerID\_Length | TellerPhoneNumber | tTellerID | (LEN(tTellerID) = 8) |
| CHK\_TPN\_PhoneNumber\_Length | TellerPhoneNumber | PhoneNumber | (LEN(PhoneNumber) = 11) |

## AccountStatus Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| ASRecordID | char(8) | 8 characters | - | Yes-  1 | 5 |
| AccountStatusID | char(8) | 8 characters | Primary Key | Yes-  AS000001 | AS000002 |
| AccountStatus | varchar(10) | 10 characters | Not Null | - | Active |

## AccountNormalSavings Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| ANSRecordID | int | - | - | Yes -  1 | 5 |
| NSAccountNumber | char(8) | 8 characters | Primary Key | Yes –  25000001 | 25000005 |
| NSAccountBalance | money | - | Not Null | - | 145.34 |
| NSRegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| cPassportNumber | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | 465336534 |
| tTellerID\_RegisteredBy | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | TE000003 |
| asAccountStatusID | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | AS000002 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_ANS\_PassportNumber | AccountNormalSavings | cPassportNumber | Customer | PassportNumber |
| FK\_ANS\_TellerID | AccountNormalSavings | tTellerID\_RegisteredBy | Teller | TellerID |
| FK\_ANS\_AccountStatusID | AccountNormalSavings | asAccountStatusID | AccountStatus | AccountStatusID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_ANS\_RegistrationDateTime | AccountNormalSavings | NSRegistrationDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_ANS\_PassportNumber\_Length | AccountNormalSavings | cPassportNumber | (LEN(cPassportNumber) = 9) |
| CHK\_ANS\_TellerID\_Length | AccountNormalSavings | tTellerID\_RegisteredBy | (LEN(tTellerID\_RegisteredBy) = 8) |
| CHK\_A\_AccountStatusID\_Length | AccountNormalSavings | asAccountStatusID | (LEN(asAccountStatusID) = 8) |

## AccountBonusSavings Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| ABSRecordID | int | - | - | Yes -  1 | 5 |
| BSAccountNumber | char(8) | 8 characters | Primary Key | Yes –  45000001 | 45000005 |
| BSAccountBalance | money | - | Not Null | - | 545.34 |
| BSRegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| cPassportNumber | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | 465336544 |
| tTellerID\_RegisteredBy | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | TE000003 |
| asAccountStatusID | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | AS000002 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_ABS\_PassportNumber | AccountBonusSavings | cPassportNumber | Customer | PassportNumber |
| FK\_ABS\_TellerID | AccountBonusSavings | tTellerID\_RegisteredBy | Teller | TellerID |
| FK\_ABS\_AccountStatusID | AccountBonusSavings | asAccountStatusID | AccountStatus | AccountStatusID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_ABS\_RegistrationDateTime | AccountBonusSavings | BSRegistrationDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_ABS\_PassportNumber\_Length | AccountBonusSavings | cPassportNumber | (LEN(cPassportNumber) = 9) |
| CHK\_ABS\_TellerID\_Length | AccountBonusSavings | tTellerID\_RegisteredBy | (LEN(tTellerID\_RegisteredBy) = 8) |
| CHK\_ABS\_AccountStatusID | AccountBonusSavings | asAccountStatusID | (LEN(asAccountStatusID) = 8) |

## AccountPremierSavings Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| APSRecordID | int | - | - | Yes -  1 | 5 |
| PSAccountNumber | char(8) | 8 characters | Composite Key | Yes –  75000001 | 75000005 |
| PSAccountBalance | money | - | Not Null | - | 1045.34 |
| PSRegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| cPassportNumber | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | 465336534 |
| tTellerID\_RegisteredBy | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | TE000003 |
| asAccountStatusID | char(8) | 8 characters | Foreign Key,  Check,  Not Null | - | AS000002 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_APS\_PassportNumber | AccountPremierSavings | cPassportNumber | Customer | PassportNumber |
| FK\_APS\_TellerID | AccountPremierSavings | tTellerID\_RegisteredBy | Teller | TellerID |
| FK\_APS\_AccountStatusID | AccountPremierSavings | asAccountStatusID | AccountStatus | AccountStatusID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_APS\_RegistrationDateTime | AccountPremierSavings | BSRegistrationDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_APS\_PassportNumber\_Length | AccountPremierSavings | cPassportNumber | (LEN(cPassportNumber) = 9) |
| CHK\_APS\_TellerID\_Length | AccountPremierSavings | tTellerID\_RegisteredBy | (LEN(tTellerID\_RegisteredBy) = 8) |
| CHK\_APS\_AccountStatusID | AccountPremierSavings | asAccountStatusID | (LEN(asAccountStatusID) = 8) |

## CustomerTransactionDeposit Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| DTransactionNumber | int | - | Primary Key | Yes -  22000001 | 22000005 |
| TransactionAmount | money | - | Check | - | 250.25 |
| TransactionDateTime | datetime | - | Default | - | 2019-11-19 12:12:34.323 |
| ansNSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 25000003 |
| absBSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 45000002 |
| apsPSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 75000004 |
| tTellerID | char(8) | 8 characters | Foreign Key,  Not Null | - | TE000003 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_CTD\_NSAccountNumber | CustomerTransactionDeposit | ansNSAccountNumber | AccountNormalSavings | NSAccountNumber |
| FK\_CTD\_BSAccountNumber | CustomerTransactionDeposit | absNSAccountNumber | AccountNormalSavings | NSAccountNumber |
| FK\_CTD\_PSAccountNumber | CustomerTransactionDeposit | apsPSAccountNumber | AccountPremierSavings | PSAccountNumber |
| FK\_CTD\_TellerID | CustomerTransactionDeposit | tTellerID | Teller | TellerID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_CTD\_RegistrationDateTime | CustomerTransactionDeposit | TransactionDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_CTD\_TransactionAmount\_Amount | CustomerTransactionDeposit | TransactionAmount | (TransactionAmount > 0.00 ) |
| CHK\_CTD\_NSAccountNumber\_BSAccountNumber\_PSAccountNumber\_Length | CustomerTransactionDeposit | ansNSAccountNumber,  absBSAccountNumber,  apsPSAccountNumber | ( (LEN)(ansNSAccountNumber) = 8) OR (LEN(absBSAccountNumber) = 8) OR (LEN(apsPSAccountNumber) = 8) ) |
| CHK\_CTD\_NSAccountNumber\_BSAccountNumber\_PSAccountNumber\_NotNullVerification | CustomerTransactionDeposit | ansNSAccountNumber,  absBSAccountNumber,  apsPSAccountNumber | ((ansNSAccountNumber = ' ') OR (absBSAccountNumber = ' ') OR (apsPSAccountNumber = ' ')) |
| CHK\_CTD\_TellerID\_Length | CustomerTransactionDeposit | tTellerID | tTellerID |

Trigger Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Trigger Name** | **Table** | **Affecting Table** | **Affecting Column** | **Description** |
| TR\_UpdateAccountBalanceAfterDeposit | CustomerTransactionDeposit | AccountNormalSavings,  AccountBonusSavings,  AccountPremierSavings | NSAccountBalance,  BSAccountBalacne,  PSAccountBalance | After a deposit transaction record is inserted, the customer’s account balance will be increased. |

## CustomerTransactionWithdrawal Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| WTransactionNumber | int | - | Primary Key | Yes -  22000001 | 44000005 |
| TransactionAmount | money | - | Check | - | 250.25 |
| TransactionDateTime | datetime | - | Default | - | 2019-11-19 12:12:34.323 |
| ansNSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 25000003 |
| ansBSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 45000002 |
| apsPSAccountNumber | char(8) | 8 characters | Foreign Key,  Not Null | - | 75000004 |
| tTellerID | char(8) | 8 characters | Foreign Key,  Not Null | - | TE000003 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_CTD\_NSAccountNumber | CustomerTransactionWithdrawal | ansNSAccountNumber | AccountNormalSavings | NSAccountNumber |
| FK\_CTD\_BSAccountNumber | CustomerTransactionWithdrawal | absNSAccountNumber | AccountNormalSavings | NSAccountNumber |
| FK\_CTW\_PSAccountNumber | CustomerTransactionWithdrawal | apsPSAccountNumber | AccountPremierSavings | PSAccountNumber |
| FK\_CTW\_TellerID | CustomerTransactionWithdrawal | tTellerID | Teller | TellerID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_CTW\_RegistrationDateTime | CustomerTransactionWithdrawal | TransactionDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_CTW\_TransactionAmount\_Amount | CustomerTransactionWithdrawal | TransactionAmount | (TransactionAmount > 0.00 ) |
| CHK\_CTW\_NSAccountNumber\_BSAccountNumber\_PSAccountNumber\_Length | CustomerTransactionDeposit | ansNSAccountNumber,  absBSAccountNumber,  apsPSAccountNumber | ( (LEN)(ansNSAccountNumber) = 8) OR (LEN(absBSAccountNumber) = 8) OR (LEN(apsPSAccountNumber) = 8) ) |
| CHK\_CTW\_NSAccountNumber\_BSAccountNumber\_PSAccountNumber\_NotNullVerification | CustomerTransactionDeposit | ansNSAccountNumber,  absBSAccountNumber,  apsPSAccountNumber | ((ansNSAccountNumber = ' ') OR (absBSAccountNumber = ' ') OR (apsPSAccountNumber = ' ')) |

Trigger Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Trigger Name** | **Table** | **Affecting Table** | **Affecting Column** | **Description** |
| TR\_UpdateAccountBalanceAfterWithdrawal | CustomerTrasactionWithdrawal | AccountNormalSavings,  AccountBonusSavings,  AccountPremierSavings | NSAccountBalance,  BSAccountBalacne,  PSAccountBalance | After a withdrawal transaction is inserted, the customer’s account balance will be deducted. |

## Manager Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Auto-Increment**  **(Starting Value)** | **Value (Example)** |
| MRecordID | int | - | - | Yes-  1 | 5 |
| ManagerID | char(8) | 8 characters | Primary Key | Yes –  MA000001 | MA000002 |
| Branch | varchar(30) | 30 characters | Not Null | - | Liverpool |
| FirstName | varchar(20) | 20 characters | Not Null | - | George |
| MiddleName | varchar(25) | 25 characters | - | - | Noah |
| LastName | varchar(30) | 30 characters | Not Null | - | Adam |
| LaneAddress | varchar(40) | 40 characters | Not Null | - | Beach Lane |
| City | varchar(20) | 20 characters | Not Null | - | Liverpool |
| EmailAddress | varchar(50) | 50 characters | Check | - | sample@sample.com |
| RegistrationDateTime | datetime | - | Default | - | 2019-11-15 08:13:58.707 |
| slSystemLoginID | char(8) | 8 characters | Foreign Key,  Not Null,  Check | - | SL000004 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_M\_SystemLoginID | Manager | slSystemLoginID | SystemLogin | SystemLoginID |

Default Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Value** |
| DFT\_M\_RegistrationDateTime | Manager | RegistrationDateTime | Current date and time |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_M\_EmailAddress\_@ | Manager | EmailAddress | (EmailAddress LIKE '%@%') |
| CHK\_M\_SystemLoginID\_Length | Manager | slSystemLoginID | (LEN(slSystemLoginID) = 8) |

## ManagerPhoneNumber Table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Length** | **Constraints** | **Value (Example)** |
| mManagerID | char(8) | 8 characters | Foreign Key,  Composite Key,  Not Null,  Check | MA000003 |
| PhoneNumber | char(11) | 11 characters | Composite Key,  Not Null,  Check | 7215-584145 |

Foreign Key Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key Name** | **Table** | **Column** | **Reference Table** | **Reference Column** |
| FK\_M\_ManagerID | ManagerPhoneNumber | mManagerID | Manager | ManagerID |

Check Constraint Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Name** | **Table** | **Column** | **Condition** |
| CHK\_M\_ManagerID\_Length | ManagerPhoneNumber | managerManagerID | (LEN(managerManagerID) = 8) |
| CHK\_M\_PhoneNumber\_Length | ManagerPhoneNumber | PhoneNumber | (LEN(PhoneNumber) = 11) |