A simplified accounting system requirements:

1. Provide a means to define an account.
2. Provide a means to add money to an account.
3. Provide a means to draw money from an account.
4. Provide a means for moving money between accounts.
5. Provide a statement for each account.
6. Multiple users should be able to access the same system concurrently.
7. Provide the ability to modify an account or modify a deposit or draw operation at any given time.
8. Provide a means for backup and restore.
9. Provide account statement.

List of tables in the database:

1. Accounts table:
   1. AccountID: a unique identifier that is generated automatically. The system should use this account id to load or update an existing account.
   2. AccountHolderName: this is a text field, and it is going to represent account name.
   3. AccountBalance: the actual balance of the account
   4. AccountNotes: holds some text information about the account holder.
   5. AccountVersion: used to keep track of the current record number

CREATE TABLE [dbo].[Accounts] (

[AccountID] INT NOT NULL,

[AccountHoldername] NVARCHAR (50) NOT NULL,

[AccountBalance] MONEY NOT NULL,

[AccountNotes] NVARCHAR (MAX) NULL,

[AccountVersion] INT NOT NULL,

PRIMARY KEY CLUSTERED ([AccountID] ASC)

);

1. Receipts:
   1. ReceiptID: a unique identifier that is used to load or edit the receipt.
   2. ReceiptNumber: represents the receipt number entered by the end user.
   3. ReceiptDate: the date of the receipt.
   4. SourceAccountID: the source account.
   5. DestinationAccountID: the destination account.
   6. ReceiptAmount: the amount of money being deposited, drawn, or transferred between accounts.

CREATE TABLE [dbo].[Receipts] (

[ReceiptID] INT NOT NULL,

[ReceiptNumber] VARCHAR (50) NULL,

[ReceiptDate] VARCHAR (50) NULL,

[SourceAccountID] INT NULL,

[DestinationAccountID] INT NULL,

[ReceiptAmount] MONEY NULL,

PRIMARY KEY CLUSTERED ([ReceiptID] ASC)

);

1. AccountsStatement table:
   1. ID
   2. AccountID
   3. ReceiptID
   4. ReceiptDate
   5. OldBalance
   6. BalanceChange
   7. NewBalance
   8. Notes

CREATE TABLE [dbo].[AccountsStatement] (

[id] INT NOT NULL,

[AccountID] INT NULL,

[ReceiptID] INT NULL,

[ReceiptDate] VARCHAR (50) NULL,

[OldBalance] MONEY NULL,

[BalanceChange] MONEY NULL,

[NewBalance] MONEY NULL,

[Notes] VARCHAR (MAX) NULL,

PRIMARY KEY CLUSTERED ([id] ASC)

);

1. Vars table:
   1. Variablename
   2. Variablevalue

CREATE TABLE [dbo].[Vars] (

[varname] VARCHAR (50) NOT NULL,

[varvalue] VARCHAR (MAX) NULL,

PRIMARY KEY CLUSTERED ([varname] ASC)

);

1. Users table:
   1. Userid
   2. Username
   3. UserPassword
   4. UserStatus

CREATE TABLE [dbo].[users] (

[userid] INT NOT NULL,

[username] VARCHAR (50) NULL,

[userpassword] VARCHAR (MAX) NULL,

[userstatus] VARCHAR (MAX) NULL,

PRIMARY KEY CLUSTERED ([userid] ASC)

);

**$$$**

Steps for recalculating receipts:

1. Identify the minimum date to start the changes from.
2. Remove the account statements records after that specific date.
3. Rollback the accounts to the last values available in the account statement table.
4. Reapply all the receipts from that specific day forward.