

Interest Calculator Business Requirements

Business need

K.Q. Norton Dart Bank (KQND) is rebuilding the interest calculation system acquired during the merger of K.Q. Norton and Dart Bank of Brooklyn. The new system must meet the following requirements:

Requirements

- Calculate simple interest over:
 - Interval from 1 month to 50 years
- Calculate complex interest over:
 - Intervals from 1 month to 50 years
 - Interest compounding period from daily to annual (d,m,y and in between)
- Balance calculation methods (if ledger present):
 - Time of credit
 - Ex-date
 - Average over interest bearing period
 - Maximum, minimum
 - Time threshold (max/min for >x days during interest bearing period)
- Recurring scheduled credits/debits
- Required Minimum Balance - Accounts under a minimum balance: (pick one)
 - Receive no interest
 - Receive interest at a penalized rate
 - Suffer a flat rate deduction to interest (overflow may/not be applied to balance)
- Overdrawn accounts: (pick one)
 - Receive no interest
 - Suffer a monthly penalty for overdraw.

Use Cases and User Features

This feature will be used by internal teams to calculate interest on savings, money market, checking, and other interest-bearing accounts. Some loans may be treated in the same manner as interest-bearing accounts.

Existing workflow requirements

Risks or Restrictions

- Incorrect calculations will cost the bank money and could expose it to litigation if customer funds are mishandled
- There are no KYC (Know Your Customer) requirements on this tool. KYC is handled by the Customer Onboarding Department
- Because customers do not directly interface with this tool, and no transactions can be originated through this tool, AML and OFAC controls are not required for this project.a