# Product Requirements Document

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## Legacy Business Description (from Legacy Code)

Capabilities identified:- This is a interest calculator program- Post the records from daily transaction file- Accept and process ACCOUNT UPDATE- Accept and process Account View request- Bill Payment - Pay account balance in full and a- Accept and process credit card detail request- List Transactions from TRANSACT file- View a Transaction from TRANSACT file- Add a new Transaction to TRANSACT file

Files processed:- CBACT04C.cbl- CBACT05C.cbl- CBTRN01C.cbl- CBTRN02C.cbl- COACTUPC.cbl- COACTVWC.cbl- COBIL00C.cbl- COCRDSLC.cbl- COCRDUPC.cbl- COTRN00C.cbl- COTRN01C.cbl- COTRN02C.cbl- HOPQWI01.cbl- POLQ001.cbl

CBACT04C.cbl — Business Description

**This component supports:** This is a interest calculator program.

**Requirement 1:** This is a interest calculator program

**Business Description:** Calculates interest based on configured rates, balances, and transaction timing. Key activities include: Update the balances in account record to reflect posted transaction; COMPUTE WSMONTHLYINT.Description: Calculates interest based on configured rates, balances, and transaction timing.

Logic Description:- Update the balances in account record to reflect posted transaction.- COMPUTE WS-MONTHLY-INT.

Dependencies:- Data elements: appl result, cob min, access, account ID, cob mm, cob mil, appl aok, cob hh, binary, cob dd

**Requirement 2:** Business process from CBACT05C.cbl

**Business Description:** Provides business process from cbact05c.cbl. Key activities include: COMPUTE WSDAILYRATE = WSAPR / 365; CALCULATEINTEREST.Description: Provides business process from cbact05c.cbl.

Logic Description:- COMPUTE WS-DAILY-RATE = WS-APR / 365.- CALCULATE-INTEREST.- COMPUTE WS-DAYS-SINCE-TXN =.- COMPUTE WS-INTEREST =.

Dependencies:- Data elements: input output, accept, end read, function, prev pmt full, balance, else, from, init, date

CBTRN01C.cbl — Business Description

**This component supports:** Post the records from daily transaction file.

**Requirement 3:** Post the records from daily transaction file

**Business Description:** Posts daily transactions and updates affected account balances.Description: Posts daily transactions and updates affected account balances.

Dependencies:- Data elements: appl result, access, appl aok, could, continue, binary, conditions, basis, appl eof, abcode

CBTRN02C.cbl — Business Description

**This component supports:** Post the records from daily transaction file.

**Requirement 4:** Post the records from daily transaction file

**Business Description:** Posts daily transactions and updates affected account balances. Key activities include: 05 REJECTtransactionDATA PIC X(350); 05 WSREJECTCOUNT PIC 9(09) VALUE 0.Description: Posts daily transactions and updates affected account balances.

Logic Description:- 05 REJECT-transaction-DATA PIC X(350).- 05 WS-REJECT-COUNT PIC 9(09) VALUE 0.- 01 WS-FLAGS.- COMPUTE WS-TEMP-balance = account-CURR-CYC-CREDIT.

Dependencies:- Data elements: appl result, cob min, access, cob mm, cob mil, account curr cyc credit, appl aok, cob hh, binary, cob dd

COACTUPC.cbl — Business Description

**This component supports:** Accept and process ACCOUNT UPDATE.

**Requirement 5:** Accept and process ACCOUNT UPDATE

**Business Description:** Accepts and applies account updates with validation. Key activities include: 10 WSEDITALPHAONLYFLAGS PIC X(1); 10 WSEDITALPHANUMONLYFLAGS PIC X(1).Description: Accepts and applies account updates with validation.

Logic Description:- 10 WS-EDIT-ALPHA-ONLY-FLAGS PIC X(1).- 10 WS-EDIT-ALPHANUM-ONLY-FLAGS PIC X(1).- 10 WS-EDIT-MANDATORY-FLAGS PIC X(1).- 05 WS-DATACHANGED-FLAG PIC X(1).

Dependencies:- Data elements: abend, account update curr cyc credit, account update expiraion date, aaddgrpi, account update screen data, account update curr balance, account status must be yes no, account update credit limit, account update active status, account update curr cyc debit

COACTVWC.cbl — Business Description

**This component supports:** Accept and process Account View request.

**Requirement 6:** Accept and process Account View request

**Business Description:** Provides accept and process account view request. Key activities include: 05 WSINPUTFLAG PIC X(1); 05 WSPFKFLAG PIC X(1).Description: Provides accept and process account view request.

Logic Description:- 05 WS-INPUT-FLAG PIC X(1).- 05 WS-PFK-FLAG PIC X(1).- 05 WS-EDIT-account-FLAG PIC X(1).- 05 WS-EDIT-CUST-FLAG PIC X(1).

Dependencies:- Data elements: abend, ca from tranid, acrcycro, abend data, ca call context, cactvwai, based, acctdat, acctsidi, basis

COBIL00C.cbl — Business Description

**This component supports:** Bill Payment - Pay account balance in full and a.

**Requirement 7:** Bill Payment - Pay account balance in full and a

**Business Description:** Provides bill payment - pay account balance in full and a. Key activities include: SET ERRFLGOFF TO TRUE; SET USRMODIFIEDNO TO TRUE.Description: Provides bill payment - pay account balance in full and a.

Logic Description:- SET ERR-FLG-OFF- SET USR-MODIFIED-NO- SET CDEMO-PGM-REENTER- SET CONF-PAY-NO

Dependencies:- Data elements: cdemo cb00 trn sel flg, carddemo commarea, account ID, actidini, cdemo cb00 page number, asktime, account curr balance, acctdat, cb00, cdemo cb00 trnid first

COCRDSLC.cbl — Business Description

**This component supports:** Accept and process credit card detail request.

**Requirement 8:** Accept and process credit card detail request

**Business Description:** Provides accept and process credit card detail request. Key activities include: 05 WSINPUTFLAG PIC X(1); 05 WSEDITaccountFLAG PIC X(1).Description: Provides accept and process credit card detail request.

Logic Description:- 05 WS-INPUT-FLAG PIC X(1).- 05 WS-EDIT-account-FLAG PIC X(1).- 05 WS-EDIT-CARD-FLAG PIC X(1).- 05 WS-RETURN-FLAG PIC X(1).

Dependencies:- Data elements: abend, ca from tranid, cancel, card account ID x, card cvv cd n, abend data, calling, ca call context, based, acctsidi

COCRDUPC.cbl — Business Description

**This component supports:** Accept and process credit card detail request.

**Requirement 9:** Accept and process credit card detail request

**Business Description:** Provides accept and process credit card detail request. Key activities include: 05 WSINPUTFLAG PIC X(1); 05 WSEDITaccountFLAG PIC X(1).Description: Provides accept and process credit card detail request.

Logic Description:- 05 WS-INPUT-FLAG PIC X(1).- 05 WS-EDIT-account-FLAG PIC X(1).- 05 WS-EDIT-CARD-FLAG PIC X(1).- 05 WS-EDIT-CARDNAME-FLAG PIC X(1).

Dependencies:- Data elements: abend, blank, cancel, back, abend routine exit, again, abend data, calling, came, based

COTRN00C.cbl — Business Description

**This component supports:** List Transactions from TRANSACT file.

**Requirement 10:** List Transactions from TRANSACT file

**Business Description:** Provides list transactions from transact file. Key activities include: SET ERRFLGOFF TO TRUE; SET TRANSACTNOTEOF TO TRUE.Description: Provides list transactions from transact file.

Logic Description:- SET ERR-FLG-OFF- SET TRANSACT-NOT-EOF- SET NEXT-PAGE-NO- SET SEND-ERASE-YES

Dependencies:- Data elements: carddemo commarea, cdemo ct00 info, cdemo ct00 page number, continue, conditions, commarea, basis, cdemo ct00 trnid last, cdemo pgm reenter, cdemo ct00 next page flg

COTRN01C.cbl — Business Description

**This component supports:** View a Transaction from TRANSACT file.

**Requirement 11:** View a Transaction from TRANSACT file

**Business Description:** Provides view a transaction from transact file. Key activities include: SET ERRFLGOFF TO TRUE; SET USRMODIFIEDNO TO TRUE.Description: Provides view a transaction from transact file.

Logic Description:- SET ERR-FLG-OFF- SET USR-MODIFIED-NO- SET CDEMO-PGM-REENTER- MAPSET('COTRN01').

Dependencies:- Data elements: carddemo commarea, cdemo ct01 info, continue, cdemo ct01 trnid first, cdemo ct01 next page flg, conditions, commarea, basis, cdemo ct01 trn sel flg, cdemo pgm reenter

COTRN02C.cbl — Business Description

**This component supports:** Add a new Transaction to TRANSACT file.

**Requirement 12:** Add a new Transaction to TRANSACT file

**Business Description:** Provides add a new transaction to transact file. Key activities include: SET ERRFLGOFF TO TRUE; SET USRMODIFIEDNO TO TRUE.Description: Provides add a new transaction to transact file.

Logic Description:- SET ERR-FLG-OFF- SET USR-MODIFIED-NO- SET CDEMO-PGM-REENTER- VALIDATE-INPUT-KEY-FIELDS.

Dependencies:- Data elements: carddemo commarea, cardnini, cdemo ct02 next page flg, actidini, acctdat, ccxref, cdemo ct02 trnid first, cdemo ct02 info, basis, commarea

**Requirement 13:** Business process from HOPQWI01.cbl

**Business Description:** Provides business process from hopqwi01.cbl. Key activities include: > 2 ADDRLINE1; 05 INADDRL1 PIC X(64).Description: Provides business process from hopqwi01.cbl.

Logic Description:- > 2 ADDR-LINE1.- 05 IN-ADDR-L1 PIC X(64).- 05 WS-STATUS PIC X(9) VALUE 'APPROVED'. \*> APPROVED|REFERRED|DECLINED.- > Protective device flags (parsed from IN-PROT-DEVICES).

Dependencies:- Data elements: declined, credit tier, douglas, deductible, city, declare, approved, delimited, door, addr line1

**Requirement 14:** Business process from POLQ001.cbl

**Business Description:** Provides business process from polq001.cbl. Key activities include: Instant premium calc + dynamic risk assessment; SOURCECOMPUTER. IBMZ15 WITHDEBUGGINGMODE.Description: Provides business process from polq001.cbl.

Logic Description:- - Instant premium calc + dynamic risk assessment.- SOURCE-COMPUTER. IBM-Z15 WITH-DEBUGGING-MODE.- 10 REQ-ADDR1 PIC X(60).- VALIDATE-REQUEST.

Dependencies:- Data elements: age years, build pending uw response, build error response, active, calc, asktime, apim, assessment, audit, abstime

**Source:** Legacy Code

## Product Overview

This product is an in-house credit card core platform designed specifically for the U.S. financial services sector, focusing on credit card issuance and management. Targeted at financial institutions seeking to transition away from legacy third-party systems, it provides comprehensive ownership of credit issuance, account management, servicing, and lifecycle processes. Delivered as a robust credit card core system, it supports real-time issuance of both virtual and physical cards, and fully manages credit lines, product setups, authorizations, settlements, billing, payments, interest calculations, fees, rewards, disputes, delinquency workflows, and other essential credit card services.

Strategically, this platform enables financial institutions to reclaim control over their credit card operations by replacing dated legacy systems with a modern, integrated core infrastructure. This shift addresses the growing need for agility, real-time processing, and full operational ownership in the competitive U.S. credit card market. The platform also includes specialized capabilities such as managing charged-off accounts within the trade credit ecosystem, ensuring end-to-end lifecycle coverage that aligns with both business drivers and regulatory requirements relevant to the industry.

## Feature Overview

**Feature Name:** Create a Frontbook Charged-Off Account

Feature Overview:The "Create a Frontbook Charged-Off Account" feature is a specialized capability within the broader account creation and management framework of the in-house credit card core system. It enables the seamless transition and full lifecycle management of credit card accounts that have moved from good standing to charged-off status due to events such as prolonged delinquency, customer death, or bankruptcy. This feature supports real-time processing and integration with the modern core infrastructure, ensuring that charged-off accounts are accurately established and managed in alignment with trade credit ecosystem requirements.

This feature encompasses the definition and implementation of all necessary functions to create and maintain charged-off accounts, including updates to account status, balances, and related financial processes. It excludes broader account creation functionalities unrelated to charged-off status and does not cover external collections or recovery processes beyond core system management. The feature integrates with credit line management, billing, payments, interest calculations, fees, rewards, disputes, and delinquency workflows. Critical constraints include compliance with financial regulations, data integrity, and real-time processing performance. Strategically, this feature supports the organization's goal of full ownership over credit issuance and servicing, reducing reliance on legacy third-party systems, enhancing operational control, and improving responsiveness to credit risk events.

References

No external sources were used.

## Functional Requirements

Functional Requirements

**F1.** Trigger Creation of Charged-Off Account upon Delinquency or Other Charge-Off Events\*\*Functionality:\* The system must initiate the creation of a charged-off account when an account transitions from good standing to charged-off status due to defined triggers.\*Description:When an account meets charge-off criteria such as prolonged delinquency beyond configured thresholds, customer death, or bankruptcy notification, the system must automatically initiate the creation of a charged-off account record. This includes updating the account status to "Charged-Off" and flagging the account for charged-off lifecycle management.Functional Specification:- If an account is delinquent beyond the configured delinquency period (e.g., 180 days past due), or- If a verified customer death or bankruptcy event is recorded,- Then the system must change the account status to "Charged-Off" and create a corresponding charged-off account entity within the core system.Notes:- Delinquency period and event triggers are configurable.- The system must support real-time processing of these triggers to ensure timely status updates.

**F2.** Establish Charged-Off Account with Updated Balances and Financial Attributes\*\*Functionality:\* The system must create a charged-off account with accurate balances and financial attributes reflecting the account’s status at the time of charge-off.\*Description:Upon triggering charge-off, the system must calculate and update the account balances, including principal, interest, fees, and any accrued amounts, to reflect the charged-off state. This includes posting any final transactions and recalculating interest as per configured rates before finalizing the charged-off account record.Functional Specification:- Calculate interest using configured annual percentage rates divided by 365 to obtain daily rates.- Post all pending transactions up to the charge-off date.- Update balances to include principal, accrued interest, fees, and penalties as applicable.- Finalize the account record with these updated financial attributes and mark it as charged-off.Notes:- Interest calculation logic must align with legacy interest calculation processes (Source: Legacy Code).- All balance updates must be atomic and consistent to maintain data integrity.

**F3.** Support Real-Time Processing for Charged-Off Account Creation\*\*Functionality:\* The system must process charge-off events and account creation in real time to ensure immediate reflection of status changes.\*Description:When a charge-off trigger occurs, the system must process the creation of the charged-off account and update all related records without delay, enabling downstream systems and workflows to access current account status instantly.Functional Specification:- Charge-off event detection and account creation must occur within the same transaction or processing window.- System must update account status, balances, and related financial data immediately.- Notifications or flags for delinquency workflows and collections modules must be updated in real time.Notes:- Real-time processing is critical to support operational control and risk management.

**F4.** Integrate Charged-Off Account Creation with Credit Line and Billing Management\*\*Functionality:\* The system must update credit line availability and billing processes upon creation of a charged-off account.\*Description:When an account is charged-off, the system must adjust the credit line to reflect the account’s non-usable status and update billing cycles to suspend further billing or interest accrual as per business rules.Functional Specification:- Set credit line availability to zero or inactive for charged-off accounts.- Suspend billing generation and interest accrual unless otherwise configured for charged-off accounts.- Update account lifecycle status to prevent new transactions or authorizations.Notes:- Integration points with credit line and billing modules must be consistent and transactional.

**F5.** Maintain Audit Trail and Transaction History for Charged-Off Accounts\*\*Functionality:\* The system must preserve a complete audit trail and transaction history for accounts transitioning to charged-off status.\*Description:All changes leading to and following charge-off must be logged with timestamps, user or system actor identification, and detailed transaction records to ensure traceability and compliance.Functional Specification:- Log account status changes including timestamps and triggering events.- Retain all posted transactions, payments, fees, and adjustments in the account history.- Provide access to audit logs for compliance and operational review.Notes:- Audit trail requirements support regulatory compliance and internal controls.

**F6.** Support Configurable Charge-Off Criteria and Thresholds\*\*Functionality:\* The system must allow configuration of charge-off triggers, including delinquency periods, event types, and thresholds.\*Description:Administrators must be able to define and modify the parameters that determine when an account is charged-off, including the length of delinquency, types of charge-off events (e.g., death, bankruptcy), and any exceptions or overrides.Functional Specification:- Provide configuration interfaces or files to set delinquency days threshold.- Enable toggling of charge-off triggers such as customer death or bankruptcy.- Support exception handling rules to delay or prevent charge-off under specific conditions.Notes:- Configurations must be versioned and auditable.

**F7.** Prevent Duplicate Charged-Off Account Creation\*\*Functionality:\* The system must ensure that a charged-off account is created only once per eligible account lifecycle.\*Description:If an account has already been transitioned to charged-off status, the system must not create duplicate charged-off account records or reapply charge-off processes.Functional Specification:- Before creating a charged-off account, verify the account status is not already "Charged-Off."- If status is already charged-off, reject or ignore subsequent charge-off creation requests.Notes:- This prevents data inconsistencies and operational errors.

**F8.** Provide Interfaces for Downstream Modules to Access Charged-Off Account Data\*\*Functionality:\* The system must expose charged-off account data to related modules such as delinquency workflows, disputes, and collections.\*Description:Charged-off account records must be accessible via defined interfaces or data views to support downstream processing, reporting, and customer service activities.Functional Specification:- Update account status and financial data must be queryable by delinquency, dispute, and collections modules.- Provide real-time data synchronization or event notifications to these modules upon charge-off creation.Notes:- Ensures seamless integration within the credit card core ecosystem.

**F9.** Handle Charge-Off Creation for Accounts with Pending Transactions\*\*Functionality:\* The system must process all pending transactions before finalizing charged-off account creation.\*Description:If there are any unposted or pending transactions at the time of charge-off, the system must post or reconcile these transactions to ensure accurate balances before marking the account as charged-off.Functional Specification:- Identify and post all pending transactions up to the charge-off date.- Recalculate balances including these transactions.- Only after reconciliation, update account status to charged-off.Notes:- This aligns with legacy transaction posting logic (Source: Legacy Code).

**F10.** Support Charge-Off Creation for Both Virtual and Physical Credit Card Accounts\*\*Functionality:\* The system must support charged-off account creation for accounts associated with both virtual and physical credit cards.\*Description:Regardless of card type issued, the system must apply charge-off processes consistently and maintain accurate account lifecycle management.Functional Specification:- Detect card type associated with the account.- Apply charge-off logic uniformly across card types.- Update card status and disable further usage upon charge-off.Notes:- Supports the platform’s real-time issuance capabilities for both card types.

References

None.

## Non-Functional Requirements

Performance

**NFR1.** Real-time charged-off account creation\*\*Category:\* Performance\*Functionality:\* Ensure timely processing of account status transitions\*Description:\* The system must complete the creation and status update of a charged-off account within 2 seconds of receiving the triggering event under normal operating conditions.\*Dependencies:\* Core account management service, transaction processing engine, account status update module\*Notes:Applies to 95th percentile of transactions during peak U.S. business hours

**NFR2.** Interest and fee recalculation latency\*\*Category:\* Performance\*Functionality:\* Minimize delay in recalculating interest and fees after account status changes\*Description:\* Interest, fees, and related financial calculations must be updated and reflected in the account record within 5 seconds of charged-off account creation or status change.\*Dependencies:\* Interest calculation engine, fee processing service, account balance database\*Notes:Includes recalculations triggered by delinquency, bankruptcy, or death events

Reliability and Availability

**NFR3.** Charged-off account creation availability\*\*Category:\* Availability\*Functionality:\* Ensure high availability of charged-off account creation functionality\*Description:\* The charged-off account creation feature must maintain 99.95% uptime monthly, excluding scheduled maintenance windows.\*Dependencies:\* Core platform infrastructure, database services, network connectivity\*Notes:Scheduled maintenance must be communicated 48 hours in advance to stakeholders

**NFR4.** Fault tolerance during account status transitions\*\*Category:\* Resilience\*Functionality:\* Maintain system operation despite partial failures\*Description:\* The system must gracefully handle transient failures during charged-off account creation by retrying operations up to three times before alerting support, ensuring no data loss or corruption.\*Dependencies:\* Transaction processing engine, retry logic, monitoring and alerting systems\*Notes:Failures must be logged with detailed diagnostics for post-mortem analysis

Security

**NFR5.** Secure handling of charged-off account data\*\*Category:\* Security\*Functionality:\* Protect sensitive account data during charged-off account creation and management\*Description:\* All data related to charged-off accounts must be encrypted at rest and in transit using industry-standard encryption protocols (e.g., AES-256, TLS 1.2+). Access must be restricted based on role-based access controls (RBAC).\*Dependencies:\* Encryption services, identity and access management (IAM), secure communication channels\*Notes:Compliance with U.S. financial data protection regulations (e.g., GLBA) is mandatory

**NFR6.** Audit logging of charged-off account lifecycle events\*\*Category:\* Security\*Functionality:\* Provide traceability for charged-off account operations\*Description:\* All creation, modification, and status transition events for charged-off accounts must be logged with user identity, timestamp, and action details, retained for a minimum of 7 years.\*Dependencies:\* Audit logging infrastructure, secure log storage\*Notes:Logs must be immutable and protected against unauthorized access

Scalability

**NFR7.** Scalability to handle peak charged-off account volumes\*\*Category:\* Scalability\*Functionality:\* Support growth in charged-off account processing without degradation\*Description:\* The system must scale horizontally to handle up to 10,000 charged-off account creations per hour during peak periods without exceeding the 2-second processing latency.\*Dependencies:\* Load balancers, scalable compute resources, database sharding or partitioning\*Notes:Includes burst traffic scenarios such as mass account status updates following economic events

Data Integrity

**NFR8.** Consistency of charged-off account data\*\*Category:\* Data Integrity\*Functionality:\* Ensure accuracy and consistency of account data during lifecycle transitions\*Description:\* The system must guarantee atomic updates to account status, balances, and related financial fields during charged-off account creation, preventing partial or inconsistent data states.\*Dependencies:\* Transactional database systems, ACID-compliant operations\*Notes:Includes integration points with billing, payments, and delinquency workflowsSource: Legacy Code

Compliance and Regulatory

**NFR9.** Compliance with U.S. financial regulations\*\*Category:\* Compliance\*Functionality:\* Adhere to applicable financial services regulations for charged-off accounts\*Description:\* The system must enforce operational constraints and data handling practices that comply with U.S. regulations such as GLBA, FCRA, and CFPB rules related to charged-off accounts.\*Dependencies:\* Compliance monitoring tools, policy enforcement modules\*Notes:Regular audits and updates to compliance rules are required

Usability and Accessibility

**NFR10.** User role-based access to charged-off account features\*\*Category:\* Usability\*Functionality:\* Restrict feature access based on user roles\*Description:\* Only authorized user roles (e.g., credit risk analysts, account managers) may create or modify charged-off accounts, with UI and API access controls enforcing these restrictions.\*Dependencies:\* Identity and access management system, user directory services\*Notes:Role definitions must align with organizational policies

Monitoring and Alerting

**NFR11.** Real-time monitoring of charged-off account processing\*\*Category:\* Monitoring\*Functionality:\* Provide operational visibility into charged-off account lifecycle events\*Description:\* The system must emit real-time metrics and alerts for charged-off account creation failures, processing delays, and unusual activity patterns to enable rapid incident response.\*Dependencies:\* Monitoring tools (e.g., Prometheus, ELK stack), alerting systems (e.g., PagerDuty)\*Notes:Alert thresholds must be configurable by operations teams

References

* GLBA (Gramm-Leach-Bliley Act) – https://www.ftc.gov/tips-advice/business-center/privacy-and-security/gramm-leach-bliley-act
* CFPB (Consumer Financial Protection Bureau) Regulations – https://www.consumerfinance.gov/policy-compliance/rulemaking/
* OWASP Top 10 – https://owasp.org/www-project-top-ten/
* NIST Cybersecurity Framework – https://www.nist.gov/cyberframework

## Data Requirements

**Data Requirements for Feature:** Create a Frontbook Charged-Off Account

**DR1.** Account reference IDCategory: Data InputDescription: Unique identifier for the credit card account transitioning to charged-off status. Used to precisely identify and update the specific account record within the core system.Purpose: Essential for linking all charged-off account data and lifecycle events to the correct account, enabling accurate status updates and downstream processing.Governance Considerations: Classified as PII; must be protected under data privacy regulations (e.g., GLBA, CCPA). Retained for the life of the account plus regulatory retention periods.Source/Target: Originates from existing account records in the core system; used internally for status update, reporting, and integration with billing and delinquency workflows.

**DR2.** Charged-off status effective dateCategory: Data InputDescription: The exact date when the account status officially changes to charged-off. Marks the start of charged-off lifecycle management.Purpose: Drives timing for interest cessation, fee application, delinquency workflows, and reporting. Critical for compliance and audit trails.Governance Considerations: Retained indefinitely for audit and regulatory compliance; timestamp accuracy is critical.Source/Target: System-generated or input from account management process; used in account lifecycle management, billing, and reporting modules.

**DR3.** Charged-off reason codeCategory: Data InputDescription: Coded value indicating the reason for charge-off (e.g., prolonged delinquency, customer death, bankruptcy).Purpose: Enables categorization and reporting of charge-off causes, supports risk analytics, and compliance reporting.Governance Considerations: Sensitive financial data; must comply with regulatory reporting standards; retained per regulatory requirements.Source/Target: Input from credit risk or account servicing teams; used in analytics, reporting, and regulatory submissions.

**DR4.** Outstanding principal balance at charge-offCategory: Data InputDescription: The principal amount owed on the account at the time it is charged off.Purpose: Basis for financial reporting, loss provisioning, and subsequent interest or fee calculations.Governance Considerations: Financial data subject to retention for accounting and audit purposes; accuracy critical for compliance.Source/Target: Derived from account balance records at charge-off event; used in financial reporting and interest calculation modules.

**DR5.** Outstanding interest balance at charge-offCategory: Data InputDescription: Accrued interest amount on the account at the time of charge-off.Purpose: Used for accurate financial reporting, interest cessation, and calculation of post-charge-off interest if applicable.Governance Considerations: Financial data with retention requirements; must be handled securely.Source/Target: Derived from interest calculation engine; used in billing and reporting systems.

**DR6.** Outstanding fees balance at charge-offCategory: Data InputDescription: Total fees (late fees, penalty fees, etc.) outstanding on the account at charge-off.Purpose: Included in total charge-off amount for accounting and customer statements.Governance Considerations: Financial data subject to retention and audit; must be accurate and secure.Source/Target: Derived from fee management subsystem; used in billing and reporting.

**DR7.** Account status codeCategory: Data OutputDescription: Current status indicator of the account, updated to reflect charged-off state.Purpose: Enables system-wide recognition of account state for workflow routing, reporting, and restrictions on account activity.Governance Considerations: Must be updated atomically to prevent data inconsistencies; retained as part of account history.Source/Target: System-generated during charge-off process; used across core system modules and external reporting.

**DR8.** Charge-off transaction IDCategory: Data OutputDescription: Unique identifier for the transaction or event that triggered the charge-off status update.Purpose: Provides audit trail linkage between charge-off event and system transactions for compliance and troubleshooting.Governance Considerations: Retained for audit and regulatory compliance; must be immutable once created.Source/Target: Generated by core transaction processing system; stored in audit logs and charge-off records.

**DR9.** Customer death or bankruptcy documentation referenceCategory: Data InputDescription: Reference or identifier for legal or official documentation confirming customer death or bankruptcy triggering charge-off.Purpose: Validates charge-off reason and supports compliance with regulatory and internal policies.Governance Considerations: Sensitive PII and legal data; requires strict access controls and retention per legal requirements.Source/Target: Input from account servicing or legal teams; stored securely and referenced in charge-off records.

**DR10.** Delinquency durationCategory: Data InputDescription: Number of days or months the account has been delinquent prior to charge-off.Purpose: Used to validate charge-off eligibility, trigger workflows, and support regulatory reporting.Governance Considerations: Derived data; must be accurate and retained for audit purposes.Source/Target: Calculated from payment history and account activity; used in charge-off decision logic and reporting.

**DR11.** Interest rate at charge-offCategory: Data InputDescription: The applicable interest rate on the account at the time of charge-off.Purpose: Used to calculate any post-charge-off interest if applicable or to cease interest accrual accurately.Governance Considerations: Financial data subject to audit and regulatory review; must be consistent with account terms.Source/Target: Retrieved from product setup and account terms; used in interest calculation modules.

**DR12.** Charge-off financial impact summaryCategory: Data OutputDescription: Aggregated financial impact data including total charge-off amount, loss provisions, and adjustments.Purpose: Supports financial reporting, risk management, and regulatory compliance.Governance Considerations: Financial data with strict retention and audit requirements; must be reconciled with accounting systems.Source/Target: Generated by core system during charge-off processing; used in financial reports and risk analytics.

**DR13.** Charge-off notification timestampCategory: Data OutputDescription: Date and time when the charge-off event was recorded and notifications triggered internally or externally.Purpose: Enables audit trail, compliance verification, and timing for downstream processes such as reporting or collections handoff.Governance Considerations: Retained for audit and compliance; timestamp accuracy critical.Source/Target: System-generated at charge-off event; logged in audit and notification systems.

**DR14.** Account lifecycle event historyCategory: Data OutputDescription: Complete log of lifecycle events including charge-off status change, payments, disputes, and adjustments.Purpose: Provides comprehensive audit trail and supports dispute resolution, compliance, and analytics.Governance Considerations: Must be immutable and retained per regulatory requirements; PII sensitive.Source/Target: Generated and updated by core system; accessible via UI and reporting tools.

**DR15.** Integration status with external trade credit ecosystemCategory: IntegrationDescription: Indicator and metadata confirming successful synchronization of charged-off account data with external trade credit systems or reporting agencies.Purpose: Ensures data consistency and compliance with external reporting obligations.Governance Considerations: Data shared externally must comply with privacy and regulatory standards; transmission must be secure.Source/Target: Generated by integration middleware; sent to external trade credit partners and regulatory bodies.

References

No external sources were used.Reference: Legacy Code (interest calculation and account update components informed financial data elements and retention considerations).

## Legal & Compliance Requirements

L1. Compliance with Fair Debt Collection Practices Act (FDCPA)\*\*Law or Regulation:\* Fair Debt Collection Practices Act (FDCPA)\*Obligation:\* The feature must ensure that charged-off account creation and management processes do not engage in prohibited debt collection practices, including accurate account status representation and prohibition of harassment or false statements.\*Scope of Application:\* Charged-off accounts in the U.S. credit card sector, affecting all customers whose accounts transition to charged-off status.\*Enforcement Mechanism:\* System must maintain accurate, immutable records of account status changes with timestamps and user IDs; provide audit trails for all charged-off account creations and updates.\*Compliance Consequences:Non-compliance may result in regulatory enforcement actions, fines, and reputational damage.

L2. Truth in Lending Act (TILA) Compliance for Charged-Off Accounts\*\*Law or Regulation:\* Truth in Lending Act (TILA)\*Obligation:\* Ensure that all disclosures related to charged-off accounts, including interest, fees, and billing statements, comply with TILA requirements for clarity and accuracy.\*Scope of Application:\* All charged-off credit card accounts issued and managed within the U.S.\*Enforcement Mechanism:\* Automated generation and delivery of accurate billing and disclosure statements reflecting charged-off status and associated fees; system validation of disclosure content before issuance.\*Compliance Consequences:Potential penalties, customer disputes, and corrective action mandates.

L3. Fair Credit Reporting Act (FCRA) Data Accuracy and Reporting\*\*Law or Regulation:\* Fair Credit Reporting Act (FCRA)\*Obligation:\* Ensure that charged-off account status and related data reported to credit bureaus are accurate, timely, and reflect the true account condition.\*Scope of Application:\* Charged-off accounts reported to U.S. credit reporting agencies.\*Enforcement Mechanism:\* System-generated reports must include validated account status updates with audit logs; implement data reconciliation processes to prevent erroneous reporting.\*Compliance Consequences:Legal liability, fines, and required remediation for inaccurate credit reporting.

L4. Data Privacy Compliance under the California Consumer Privacy Act (CCPA)\*\*Law or Regulation:\* California Consumer Privacy Act (CCPA)\*Obligation:\* Provide mechanisms for California residents to access, delete, or restrict processing of their charged-off account data upon request.\*Scope of Application:\* Charged-off accounts of California-based customers.\*Enforcement Mechanism:\* Integration with data subject request workflows; logging of requests and actions taken; data minimization in charged-off account records.\*Compliance Consequences:Fines and legal actions for failure to comply with consumer privacy rights.

R1. Office of the Comptroller of the Currency (OCC) Guidelines on Charged-Off Accounts\*\*Regulatory Framework:\* OCC Guidelines for National Banks\*Obligation:\* Implement controls to accurately classify accounts as charged-off based on delinquency thresholds and regulatory definitions; maintain documentation supporting charge-off decisions.\*Scope of Application:\* All charged-off accounts managed by nationally chartered banks using the platform.\*Enforcement Mechanism:\* Automated status transition rules with configurable delinquency triggers; audit logs of charge-off events and user actions; periodic reporting capabilities.\*Regulatory Impact:Supports regulatory examinations and audits; required documentation for OCC compliance.

R2. Consumer Financial Protection Bureau (CFPB) Oversight on Account Management\*\*Regulatory Framework:\* CFPB Regulations\*Obligation:\* Ensure transparency and fairness in charged-off account handling, including clear communication of account status changes and dispute resolution processes.\*Scope of Application:\* U.S. consumers with charged-off credit card accounts.\*Enforcement Mechanism:\* System-generated notifications for account status changes; logging of customer interactions and dispute outcomes related to charged-off accounts.\*Regulatory Impact:Subject to CFPB audits and consumer complaint investigations.

R3. Payment Card Industry Data Security Standard (PCI DSS) for Data Protection\*\*Regulatory Framework:\* PCI DSS\*Obligation:\* Protect sensitive cardholder data associated with charged-off accounts through encryption, access controls, and secure logging.\*Scope of Application:\* All charged-off accounts containing payment card information processed or stored by the system.\*Enforcement Mechanism:\* Role-based access control; encryption of cardholder data at rest and in transit; secure audit trails for charged-off account data access and modifications.\*Regulatory Impact:Required for PCI DSS certification and compliance audits.

C1. SOC 2 Type II – Change Management and Audit Logging\*\*Framework or Standard:\* SOC 2 Type II\*Requirement:\* Record all changes to charged-off account statuses, including user ID, timestamp, and action details, to ensure traceability and accountability.\*Feature Scope:\* Charged-off account lifecycle management module.\*Traceability Reference:\* SOC-AUDIT-09 (Change Management Controls)\*Source:Legacy Code (account update and transaction logging processes)

C2. ISO 27001 – Information Security Controls\*\*Framework or Standard:\* ISO 27001\*Requirement:\* Implement access controls, data integrity checks, and secure storage for charged-off account data to protect against unauthorized access and data corruption.\*Feature Scope:\* Data storage and processing components related to charged-off accounts.\*Traceability Reference:ISO 27001 Annex A controls A.9 (Access Control), A.12 (Operations Security)

C3. Internal Credit Risk Management Policy Compliance\*\*Framework or Standard:\* Internal Risk Management Policy\*Requirement:\* Ensure that charged-off account creation triggers and status updates comply with internal risk thresholds and approval workflows.\*Feature Scope:\* Account status transition logic and workflow engine.\*Traceability Reference:\* Internal Policy Section 4.3 – Delinquency and Charge-Off Management\*Source:Legacy Code (delinquency workflows and account status updates)

C4. Data Retention and Archival Controls\*\*Framework or Standard:\* Internal Data Governance Policy\*Requirement:\* Retain charged-off account records and related transaction logs for a minimum period as mandated by financial regulations (e.g., 7 years), with secure archival and retrieval capabilities.\*Feature Scope:\* Charged-off account data lifecycle management.\*Traceability Reference:\* Data Retention Policy DRP-07\*Source:Legacy Code (transaction and account record management)

References

* Fair Debt Collection Practices Act (FDCPA) – https://www.ftc.gov/enforcement/statutes/fair-debt-collection-practices-act
* Truth in Lending Act (TILA) – https://www.consumerfinance.gov/rules-policy/regulations/1026/
* Fair Credit Reporting Act (FCRA) – https://www.ftc.gov/enforcement/statutes/fair-credit-reporting-act
* California Consumer Privacy Act (CCPA) – https://oag.ca.gov/privacy/ccpa
* Office of the Comptroller of the Currency (OCC) Guidelines – https://www.occ.gov/topics/supervision-and-examination/bank-operations/credit-risk/index-credit-risk.html
* Consumer Financial Protection Bureau (CFPB) – https://www.consumerfinance.gov/
* PCI DSS – https://www.pcisecuritystandards.org/pci\_security/
* SOC 2 Framework – https://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/soc2report.html
* ISO/IEC 27001 Standard – https://www.iso.org/isoiec-27001-information-security.html

## References

* \*\* ISO 27001 Annex A controls A.9 (Access Control), A.12 (Operations Security
* Reference: Legacy Code (interest calculation and account update components informed financial data elements and retention considerations
* Source: Legacy Code
* <https://oag.ca.gov/privacy/ccpa>
* <https://owasp.org/www-project-top-ten/>
* <https://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/soc2report.html>
* <https://www.consumerfinance.gov/>
* <https://www.consumerfinance.gov/policy-compliance/rulemaking/>
* <https://www.consumerfinance.gov/rules-policy/regulations/1026/>
* <https://www.ftc.gov/enforcement/statutes/fair-credit-reporting-act>
* <https://www.ftc.gov/enforcement/statutes/fair-debt-collection-practices-act>
* <https://www.ftc.gov/tips-advice/business-center/privacy-and-security/gramm-leach-bliley-act>
* <https://www.iso.org/isoiec-27001-information-security.html>
* <https://www.nist.gov/cyberframework>
* <https://www.occ.gov/topics/supervision-and-examination/bank-operations/credit-risk/index-credit-risk.html>
* <https://www.pcisecuritystandards.org/pci_security/>