Document 8- Tools-Visio and Axure

Write a paragraph on your experience using Visio and Axure for the project.

During the project, I used both Visio and Axure to create visual representations and interactive prototypes for various business processes and user interfaces. In Visio, I created flowcharts, process diagrams, and system architecture layouts to help visualize complex workflows and ensure clarity in communication with stakeholders. This tool was invaluable for mapping out processes and identifying potential areas of improvement. On the other hand, Axure was used to develop wireframes and high-fidelity interactive prototypes, which enabled stakeholders to better understand the user experience and provide early feedback on design concepts. The combination of these tools allowed for both a clear visualization of the functional aspects of the system and an engaging way to test user interactions before development began.

Document 9- BA experience My experience as BA in following phases:

During the requirement gathering phase, I employed the MOSCOW technique to prioritize the requirements, ensuring that we focused on the most critical aspects of the project. Given that the client was unavailable for a period, I took the initiative to identify and liaise with alternative points of contact on the client's side to obtain the necessary information as quickly as possible. To ensure the completeness and quality of the gathered requirements, I validated them using the FURPS technique, which helped assess functionality, usability, reliability, performance, and supportability. Throughout this phase, I also identified and removed duplicate or repeated requirements, streamlining the process and reducing confusion. To refine and clarify certain requirements, I utilized prototyping, allowing the stakeholders to visualize and interact with the requirements, leading to more precise and actionable insights. This approach ensured that we were aligned with the client's needs and expectations while minimizing ambiguities.

2. Requirement Analysis:

During the Requirement Analysis phase, my role as a Business Analyst involved thoroughly reviewing the gathered requirements to ensure they were clear, complete, and aligned with the project goals. I worked closely with stakeholders to break down and prioritize the requirements, ensuring that we addressed both business needs and technical constraints. To facilitate effective communication and decision-making, I used techniques such as process modeling and data flow diagrams to represent complex information visually. This helped identify any gaps, inconsistencies, or ambiguities in the requirements early on. I also worked on defining acceptance criteria for each requirement, ensuring that there was a clear understanding of the deliverables and expectations. Additionally, I collaborated with the technical team to ensure that the requirements were feasible within the given constraints, and I facilitated discussions to address any potential risks or challenges that could arise during the project. By actively engaging with both business and technical stakeholders, I ensured that the analysis phase led to a comprehensive set of well-defined requirements that set a solid foundation for the next stages of the project.

3. Design:

During the Design phase, my role as a Business Analyst was to bridge the gap between business requirements and technical implementation by collaborating closely with both stakeholders and the development team. I ensured that the design process was aligned with the validated requirements and client expectations. I was involved in reviewing and refining design documents, such as wireframes, user interface mockups, and system architecture diagrams, to ensure they met the business needs and were technically feasible.

Additionally, I facilitated discussions between the design and development teams to address any potential challenges or ambiguities in the design. In some cases, I used prototyping tools like Axure to create interactive prototypes, which helped stakeholders visualize the system and provide feedback before development began. I also worked with the team to ensure that non-functional requirements, such as performance and security, were adequately addressed in the design. Throughout this phase, my focus was on ensuring that the design was intuitive, user-friendly, and aligned with the overall goals of the project, while also ensuring that all technical constraints were considered. By maintaining clear communication between all teams, I helped ensure a smooth transition from design to development.

4. Development:
During the Development phase, my role as a Business Analyst was to ensure that the development team had a clear understanding of the requirements and design specifications, and to act as a liaison between the business stakeholders and the development team. I worked closely with developers to ensure that the solution being built aligned with the business goals, user needs, and technical constraints outlined in the earlier phases.

I reviewed the developed features and functionality regularly to ensure they met the acceptance criteria defined in the Requirement Analysis phase. Whenever discrepancies or issues arose, I communicated with both the stakeholders and the development team to clarify requirements and ensure that necessary adjustments were made. In some cases, I facilitated sprint reviews or demos, helping stakeholders understand the progress and provide feedback, which was crucial in maintaining alignment throughout the development process.

Additionally, I assisted in user acceptance testing (UAT), working with the business side to prepare test cases based on the requirements and ensuring that the system met all expectations before it was released. This phase required constant communication, attention to detail, and flexibility to adapt to any changes or issues that arose. By maintaining close collaboration with the development team and stakeholders, I played a key role in ensuring the successful delivery of the solution.

5. Testing:

During the Testing phase, my role as a Business Analyst was to ensure that the solution met the business requirements and quality standards by facilitating effective communication between stakeholders, the development team, and the testing team. I worked closely with the QA team to ensure that the test cases were aligned with the requirements and acceptance criteria defined earlier in the project. I assisted in reviewing and validating test plans, test scripts, and test scenarios to ensure comprehensive coverage of all business functionality.

In addition to supporting the QA team, I played a crucial role in user acceptance testing (UAT) by collaborating with business stakeholders to define real-world test scenarios and ensuring the application was tested in a manner that reflected actual usage. I helped coordinate UAT sessions, addressed any issues or defects identified during testing, and ensured they were tracked and resolved promptly.

Throughout this phase, I maintained strong communication with both the technical and business teams, ensuring that any discrepancies or gaps were quickly identified and addressed. I also assisted in prioritizing defect fixes based on business impact and criticality. My focus was on ensuring that the final product met the business goals, was free from critical issues, and was ready for deployment.

6. Deployment:

During the Deployment phase, my role as a Business Analyst was to ensure a smooth transition from development and testing to the live production environment. I worked closely with both the technical team and the stakeholders to ensure all requirements were met and the solution was properly configured for deployment. My main responsibilities included coordinating with the deployment team, reviewing deployment plans, and ensuring that the necessary documentation was in place to support the deployment process.

I also supported the business stakeholders by providing clear communication regarding the deployment schedule, potential impacts, and any necessary training or user support that was required post-deployment. This involved conducting user training sessions or preparing user manuals to ensure that the end-users were equipped to navigate the new system effectively.

Throughout the deployment process, I closely monitored the system’s performance and worked with the technical team to resolve any issues that arose. I helped to track any post-deployment issues or bugs and ensured they were addressed promptly. Additionally, I facilitated the transition to the operational team, ensuring they had all the required documentation and support to maintain the system going forward. My primary focus during the Deployment phase was ensuring the system was successfully rolled out, users were ready, and any issues were quickly identified and resolved, ensuring the project's success.

**Document 6- Please prepare a use case diagram, activity diagram and a use case specification document.

use case specification**

Use case -1

|  |  |
| --- | --- |
| USE Case ID | DC 001 |
| Use case name | Apply for Personal Loan |
| Created By | suman | Last update Date | 11-11-2024 |
| Date created | 1-11-2024 | Last Revision Date | 11-10-2024 |
| Actor | Customer, System, Credit Bureau, Loan Officer  |
| Description | This use case describes the process a **Customer** follows to submit an online personal loan application.  |
| Pre-Condition | * The Customer has an active account with the bank (SMFG).
* The Customer is logged into the loan application portal.
* The Customer has filled out and submitted the loan application form with accurate and complete information.
 |
| Post Condition |  The Customer receives the loan decision (approval or rejection).If the loan is approved, the system proceeds to the loan disbursement process.  |
| Normal flow of event | * **Customer** logs into the loan application portal.
* **ustomer** enters personal information, financial details ,specifies loan details (e.g., amount requested, desired repayment period).
* **System** evaluates the eligibility based on the credit score, income, and loan amount. If eligible, **System** generates a loan approval recommendation and notifies the **Loan Officer**.
* If the **Loan Officer** approves the loan, **System** generates the loan agreement and initiates the disbursement process.
* **Customer** receives a notification of loan approval, including the loan terms.
 |
| Alternate Flow | Flow 1: Incomplete or Invalid Information:* If the System detects missing or invalid data (e.g., missing income details, invalid address), it prompts the Customer to correct the information.
* Once corrected, the System continues the normal flow.

Flow 2: Low Credit Score:* If the Customer’s credit score is below the required threshold, the System automatically rejects the application.
* The Customer is notified with the reason for rejection.
 |
| Expectation | * The Customer expects a seamless, easy-to-use online application process.
* The Customer expects to receive a timely response (approval or rejection) after submission.
 |
| Frequency of use | * High
 |
| Assumption | * The Customer provides accurate and complete data during the application process.
* The system can handle a high volume of applications without performance issues.
 |
| Constraints  | * The system must ensure compliance with legal and regulatory requirements for handling sensitive personal and financial data.
* The loan approval process must be completed within a specific time frame (e.g., 1–2 business days).
* Loan amount limits, credit score thresholds, and income requirements must be strictly enforced according to business rules
 |
| **Dependencies** | The Credit Bureau ,The Bank Backend Systems integration ,Internet access |
| Inputs and Outputs | **Input**: Customer Information, Financial Information, Loan Details, Credit Score **Outputs**: Loan Decision: Approval or rejection.* Loan Terms: Amount approved, interest rate, repayment schedule.
* Customer Notification: Approval/rejection status and terms.
 |
| **Business Rules** | * The Customer must meet certain eligibility criteria to be approved for a loan .The System must calculate the loan’s interest rate based on the Customer’s credit score.
* The Loan Amount cannot exceed the customer’s credit limit based on their credit score and income.
 |
| Miscellaneous Information | * The System must comply with relevant privacy and data protection laws
* The Customer’s loan application data must be securely stored and accessible only to authorized personnel.
* The loan agreement must be electronically signed by the Customer before disbursement can take place.
 |

**Use case -2**

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| --- | --- |
| USE Case ID | DC 002 |
| Use case name | Check Loan Eligibility |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | Customer,System |
| Description | This use case describes the process in which the system checks the customer’s eligibility for a personal loan based on criteria such as credit score, income, existing debts, and requested loan amount.  |
| Pre-Condition | * The Customer must be logged into the loan application portal.
* The Customer must have already submitted their personal and financial details (e.g., income, loan amount requested) via the online loan application form.
* The system is integrated with the Credit Bureau to retrieve the customer’s credit score and credit history.
 |
| Post Condition | * The Customer will receive an eligibility status (approved or denied) based on the evaluation of their submitted data.
* The loan application status is updated in the system, and the eligibility outcome is stored for future reference or decision-making by the Loan Officer if necessary.
 |
| Normal flow of event | * The Customer submits their loan application through the online portal, providing personal information, financial details, and loan request specifics (e.g., amount, repayment period).
* The System receives the customer’s data and performs a data validation check to ensure completeness and accuracy (e.g., checks for missing or incorrect information).
* The System evaluates the customer’s eligibility based on the following factors: Credit score ,Income, Existing debts and liabilities
* The System automatically calculates whether the customer meets the eligibility criteria based on the above factors.
* If the customer is eligible, the System approves the loan application and notifies the Customer of their eligibility.
* If the customer is not eligible, the System rejects the application and provides the Customer with the reason for rejection (e.g., low credit score, insufficient income).
 |
| Alternate Flow | **Invalid or Missing Information:**If any required information is missing or invalid (e.g., missing income details or incorrect credit score), the System prompts the Customer to correct the data.The Customer updates and resubmits the information, and the process continues in the Normal Flow.**Credit Bureau Failure:**If the System cannot retrieve the customer’s credit score due to an issue with the Credit Bureau (e.g., network error), the loan application is placed on hold.The System notifies the Customer to try again later or provides an option to continue with limited validation until the issue is resolved.**Customer Below Minimum Credit Score Threshold:**If the customer’s credit score is below the required threshold for loan eligibility, the System automatically denies the application and informs the Customer of the reason (e.g., credit score too low). |
| Expectation | * The Customer expects a fast, automated process for determining loan eligibility based on their provided data
* The Customer expects clear feedback on why their loan application is approved or rejected, with transparency in the criteria used.
 |
| Frequency of use | High |
| Assumption | * The Customer has provided accurate and complete data in their loan application.
* The Credit Bureau provides accurate and up-to-date credit score and credit history.
 |
| Constraints | * loan eligibility check must be completed in real-time or within a defined timeframe to ensure a smooth user experience.
* Eligibility criteria, such as credit score thresholds and minimum income requirements, must be configurable and subject to updates based on regulatory or business rule changes.
* The system must comply with relevant data privacy and protection laws when retrieving and storing customer information.
 |
| Dependencies |  Credit Bureau integration , Bank Backend ,Internet access  |
| **Inputs and Output** | **Inputs:** Customer’s Personal Information, Customer’s Financial Information, Loan Request Details: Desired loan amount, repayment period.**Outputs:** Eligibility Decision, Eligibility Status, Eligibility Reason |
| Business Rule | * The Customer’s loan eligibility must meet predefined criteria such as: Minimum credit score threshold (e.g., 650 or higher). Minimum monthly income requirement (e.g., $2,500 per month).
* The System must calculate eligibility automatically without manual intervention.
* The Loan Amount cannot exceed the customer’s credit eligibility based on their financial profile.
 |
| **Miscellaneous Information** | * The System must ensure the security and confidentiality of Customer’s personal and financial information throughout the loan application and eligibility check process.
* The eligibility check is only one part of the overall loan approval process, which also includes manual review by a Loan Officer if needed
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**Use case-3**

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| USE Case ID | DC 003 |
| Use case name | Verify Customer’s Credit Score |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | System, Credit Bureau, Customer |
| Description | This use case outlines the process of verifying the **Customer's** credit score and performing additional security and fraud checks as part of the loan application process |
| Pre-Condition | * The Customer has submitted the loan application with accurate personal and financial details.
* The Customer has authorized the system to access their credit information and perform security checks.
* The System has access to security checks, such as data validation, fraud patterns, and credit score data.
 |
| Post Condition | * The System successfully retrieves the customer’s credit score and validates it for loan eligibility.
* Fraudulent or suspicious activities, if detected, are flagged for review and the loan application may be rejected.
* The customer’s credit score and security check results are stored for future reference and analysis
 |
| Normal flow of event | * Customer submits the online loan application with required personal and financial details.
* System validates the submitted data (checking for any missing or invalid information).
* The System performs fraud checks by analyzing the customer’s information against fraud patterns (e.g., abnormal application behavior, previous fraud alerts).
* If fraud or suspicious activity is detected, the System flags the application for manual review or rejection.
* The System verifies that the customer’s credit score meets the loan eligibility criteria.
* If the customer’s credit score is valid and meets the eligibility criteria, the System proceeds with the next steps in the loan approval process (e.g., eligibility check, loan approval).
* If the credit score does not meet the required threshold or if fraud is detected, the System denies the loan application and notifies the Customer with the appropriate rejection reason.
 |
| Alternate Flow | **Flow 1: Fraud Detected*** If the System detects suspicious behavior or fraud (e.g., mismatched personal details, multiple credit checks in a short time), it flags the loan application as "suspicious."The loan is either paused for further manual review or immediately rejected.The Customer is notified that the loan application is under review or rejected due to fraud concerns.

**Flow 2: Credit Bureau Unavailable*** If the System is unable to retrieve the credit score due to technical issues with the Credit Bureau (e.g., network failure), the application is temporarily paused.The Customer is notified that there is an issue with retrieving the credit score and advised to try again later.If the issue persists, the loan application may require manual intervention.

**Flow 3: Invalid Credit Score*** If the Credit Bureau returns an invalid or corrupt credit score (e.g., incomplete data), the System logs an error and notifies the Customer that their credit score could not be retrieved.
* The loan application is placed on hold until the issue is resolved.
 |
| Expectation | * The Customer expects a quick and seamless credit score check as part of the loan application process.
* The System expects to receive accurate and timely credit score data from the Credit Bureau.
* The System expects to effectively identify any fraudulent activities related to the loan application.
* The Customer expects to be notified promptly about the outcome of their loan eligibility based on their credit score and security checks.
 |
| Frequency of use | High |
| Assumption | * The Customer has an existing credit history with the Credit Bureau and has authorized the bank to access their credit score data.
* The Credit Bureau provides accurate and up-to-date credit score information.
* The System has the capability to detect fraud and abnormal patterns using predefined rules or machine learning models.
* The Customer has submitted the necessary data in the loan application form without omissions or inaccuracies.
 |
| Constraints | * The system must retrieve the credit score within a reasonable time to ensure that the loan process is not delayed.
* Fraud checks should not impede or delay the loan application process excessively, ensuring the Customer has a smooth experience.
* The System should comply with relevant data protection regulations (e.g., GDPR, CCPA) when handling personal and credit-related information.
 |
| Dependencies | Credit Bureau integration , Fraud detection system or machine learning, Internet connectivity  |
| **Inputs and Outputs** | **Inputs:** Customer Information, Credit Bureau Request Fraud Detection Criteria **Outputs:** Credit Score, Fraud Alert: Flagging of suspicious or fraudulent activities. Eligibility Status: Loan approval or rejection Customer Notification |
| **Business Rules** | * The System must reject loan applications if the Customer’s credit score does not meet the predefined threshold (e.g., below 650).
* Fraudulent activities should automatically trigger a rejection or hold on the loan application until manual review is conducted.
* The Customer’s credit score must be valid and up-to-date before continuing with the eligibility process.
 |
| **Miscellaneous Information** | * The System must ensure that all credit-related data is securely stored and encrypted, especially sensitive data such as the Customer’s credit score and financial information.
* The System should be able to perform credit score and fraudchecks in parallel to optimize processing time.
* The Customer should be informed of how their data will be used for fraud detection and credit score evaluation at the time of submitting their loan application.
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Use case -4

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| USE Case ID | DC 004 |
| Use case name | Loan Approval/Denial |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | Loan Officer, System, Credit Bureau, Customer |
| Description | This use case outlines the process for approving or denying a loan application based on the customer's eligibility criteria (including credit score, income, debt-to-income ratio, etc.).  |
| Pre-Condition | * The Customer has submitted a loan application with required personal and financial details.
* The System has validated the customer’s personal and financial data.
* The Customer’s credit score has been retrieved from the Credit Bureau and assessed for eligibility.
* The System has completed any fraud checks and confirmed that no fraudulent activity is present.
 |
| Post Condition | * The Customer receives a notification regarding their loan status (approved or denied).
* If the loan is approved, the loan terms (amount, interest rate, repayment schedule) are finalized, and the loan is processed for disbursement.
* If the loan is denied, the Customer is informed of the reason(s) for denial (e.g., insufficient credit score, too high debt-to-income ratio)..
 |
| Normal flow of event | * **Customer** submits their loan application through the online portal with required personal and financial details.
* The **System** validates the application data, ensuring all fields are filled correctly.
* The **System** calculates the **Customer’s** debt-to-income ratio and evaluates whether it meets the criteria for loan eligibility.
* The **System** performs any fraud checks (e.g., ensuring no suspicious activity is associated with the application).
* Based on the information gathered, the **System** automatically decides whether the **Customer** qualifies for the loan:
* **If the customer qualifies** (meets all criteria), the **System** automatically approves the loan.
* **If the customer does not qualify**, the **System** automatically denies the loan.
 |
| Alternate Flow | **Flow 1: Insufficient Credit Score**If the **Customer’s** credit score is below the minimum threshold for loan approval, the **System** automatically denies the loan and informs the **Customer**. The **Customer** is notified with a message explaining that their credit score does not meet the eligibility requirements.**Flow 2: Insufficient Income or High Debt-to-Income Ratio**If the **System** calculates that the **Customer’s** income is insufficient or the debt-to-income ratio exceeds the predefined limits, the **System** automatically denies the loan.The **Customer** is informed that their loan application was denied due to financial eligibility criteria. |
| Expectation | * The **Customer** expects a clear and timely response regarding the status of their loan application.
* The **System** is expected to process the application efficiently and make accurate, automated decisions based on predefined criteria.
 |
| Frequency of use | High |
| Assumption | * The **Customer** has provided all the necessary information in the loan application form (e.g., financial details, employment information).
* The **System** is correctly integrated with external data sources for accurate eligibility checks.
 |
| Constraints | * The System must comply with regulatory and legal requirements regarding loan approvals, including fair lending practices and privacy regulations (e.g., GDPR, CCPA).
* The decision-making process must be completed within a predefined time window to avoid delays in processing loan applications.
 |
| Dependencies |  Credit Bureau integration, Fraud detection system ,Bank's internal systems for assessing financial data |
| Inputs and Outputs | **Inputs**: **Customer’s Loan Application, Credit Score, Financial Data**, **Fraud Check Results****Outputs**: **Loan Approval or Denial**, **Loan Term, Customer Notification**: Email or message to inform the **Customer** about the loan decision. |
| **Business Rules** | * The Customer must meet predefined financial criteria (e.g., minimum credit score, maximum debt-to-income ratio) to qualify for the loan.
* If the Customer’s credit score is below the acceptable threshold, the loan is automatically denied.
* The System must notify the Customer of the loan decision within a predefined timeframe (e.g., 48 hours).
 |
| **Miscellaneous Information** | * The System must provide a user-friendly interface for the Loan Officer to review and approve or deny flagged loan applications.
* Customer notifications should be clear and provide reasons for denial, if applicable, to ensure transparency in the decision-making process.
* The System should store the loan decision history for audit purposes and future reference.
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**Use case -5**

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| --- | --- |
| USE Case ID | DC 001 |
| Use case name | **Disburse Loan Amount** |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | Customer, System |
| Description | This use case describes the process by which the **System** disburses the loan amount to the **Customer** after the loan has been approved.  |
| Pre-Condition | * The Loan Application has been approved by the System or a Loan Officer (manual approval).
* The Customer has provided valid banking details or chosen a preferred disbursement method (e.g., direct deposit, check).
 |
| Post Condition | * The Customer receives the disbursed loan amount via the chosen method (e.g., direct bank transfer, check, or other payment methods).
* The Customer is notified that the loan amount has been successfully disbursed, and the loan account is updated to reflect the disbursement.
 |
| Normal flow of event | * System receives the approval status and loan terms from the loan approval process.
* System verifies that all necessary conditions for disbursement are met (e.g., loan agreement signed, banking details provided).
* System initiates the fund transfer or check issuance to the Customer's account.
* System updates the loan account to reflect the disbursement, including the disbursement date, amount, and transaction ID.
* System sends a notification to the Customer confirming the loan disbursement, including the amount, disbursement method, and any relevant details (e.g., loan repayment schedule).
 |
| Alternate Flow | **Flow 1: Insufficient Information for Disbursement*** If the Customer has not provided the necessary information for disbursement (e.g., bank account details or signed agreement), the System triggers a follow-up notification requesting the missing information. The disbursement process is put on hold until the required details are provided. Once the information is received, the disbursement process resumes from step 2 of the normal flow.

**Flow 2: Disbursement Failure*** If the System encounters a failure during the fund transfer (e.g., insufficient balance in the bank, network issues), the System logs the failure and retries the disbursement after a predefined period. If the retry fails, a notification is sent to the Customer informing them of the issue and suggesting further actions (e.g., contact support).The System may escalate the issue to a Loan Officer or Customer Support for manual resolution.

**Flow 3: Manual Intervention Required*** If the loan agreement or terms are disputed by the Customer or require manual verification (e.g., signatures missing), the Loan Officer manually reviews the situation before proceeding with disbursement. After review, the Loan Officer either approves the disbursement, modifies the terms, or rejects the disbursement request.
 |
| Expectation | * The Customer expects to receive the loan amount promptly after approval.
* The System expects to perform the disbursement without errors, ensuring that funds are transferred accurately and timely.
* The Customer expects to be notified of the disbursement details, including the method and the date of transfer.
 |
| Frequency of use | Moderate |
| Assumption | * The Customer has provided correct and complete banking details or other disbursement preferences.
* The Loan Agreement is valid and signed, either physically or electronically.
* The Bank or Payment Gateway system is operational and capable of processing the disbursement.
* The Customer is able to access the funds once they have been disbursed.
 |
| Constraints | * The System must comply with banking regulations and security standards for processing financial transactions.
* The Disbursement process must ensure accurate transfers with no discrepancies or delays.
* The Customer’s banking details must be kept confidential, adhering to data protection laws.
 |
| Dependencies | * Banking System or Payment Gateway, Loan Approval System, Customer’s Banking Information, Notification System
 |
| Inputs and Outputs | **Inputs:** Loan Amount,Customer Banking Information, The bank account details or preferred payment method of the Customer. Loan Agreement: Signed and completed by the Customer. Disbursement Method: Information about how the funds will be transferred (e.g., bank transfer, check).**Outputs:** Loan Disbursement Confirmation, Updated Loan Account Audit Log |

**Use case-6**

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| --- | --- |
| USE Case ID | DC 006 |
| Use Case name | Reject Loan Application |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | System, Customer |
| Description | This use case describes the process of rejecting a loan application when the customer does not meet the predefined eligibility criteria (such as credit score, income level, debt-to-income ratio, etc.) or fails any of the necessary checks (such as fraud detection).  |
| Pre-Condition | * The Customer has submitted a complete loan application, including all required personal, financial, and supporting documentation.
* The System has completed all initial checks, including credit score verification, fraud checks, and eligibility calculations (e.g., debt-to-income ratio).
* The System has determined that the Customer’s application does not meet the criteria for approval (e.g., insufficient credit score, too high debt-to-income ratio, fraud concerns).
* A notification platform (email/SMS/phone) is available to inform the Customer of the rejection
 |
| Post Condition | * The Loan Application is officially rejected, and the Customer is informed of the decision.
* The rejection reasons are logged in the System for future reference or audits.
* The Customer receives clear information about the rejection, including why the loan was denied and, if applicable, any corrective actions or advice for reapplying.
 |
| Normal flow of event | * **System** receives the completed loan application from the **Customer**.
* The **System** verifies the **Customer’s** eligibility, including credit score, income, debt-to-income ratio, and fraud checks.
* **System** identifies that the **Customer’s** application fails to meet one or more of the eligibility criteria (e.g., credit score below the minimum threshold, excessive debt-to-income ratio, fraudulent activities).
* The **System** automatically rejects the loan application.
* **System** generates a rejection notification, which includes:The decision (rejection).The reason(s) for rejection (e.g., insufficient credit score, high debt-to-income ratio, fraud detection).

**System** sends the notification to the **Customer** through the preferred communication channel (e.g., email, SMS, phone).The **Customer** receives the rejection notification and reviews the reasons for rejection.The **System** logs the rejection event and the reasons for denial for future reference and auditing purposes. |
| Alternate Flow | **Flow 1: Manual Review Required*** If the **System** identifies that the rejection is due to exceptional circumstances (e.g., borderline credit score or questionable financial data), the application is escalated for manual review by a **Loan Officer**.
* The **Loan Officer** reviews the application and associated data to confirm the rejection or potentially override the rejection decision.
* If the loan is manually rejected, the **Loan Officer** adds notes to the system explaining the reason for denial.
* The **Customer** receives a rejection notification, and the decision is logged in the system.

**Flow 2: Notification Failure*** If the **System** is unable to send the rejection notification to the **Customer** (e.g., invalid contact information or technical issues), the system logs the failure.
* The **System** retries sending the notification, or an alert is triggered for the **Customer Support Team** to follow up with the **Customer** manually.
 |
| Expectation | * The Customer expects to be notified promptly regarding the status of their loan application.
* The Customer expects to receive clear and concise information about why their application was rejected and how they can potentially improve their eligibility for future applications.
* The System is expected to automatically handle the rejection of applications based on predefined rules and criteria.
 |
| Frequency of use | Moderate |
| Assumption | * The Customer has submitted a complete application with accurate and up-to-date information.
* The System is able to access necessary data, such as credit score, income level, debt-to-income ratio, and fraud checks, to evaluate the loan application.
* The Customer has provided valid contact information for notifications.
 |
| Constraints | The System must comply with privacy and regulatory guidelines (e.g., GDPR, CCPA) while processing and rejecting loan applications.The System must be able to process a high volume of applications in a timely manner, including automatic rejection of applications that do not meet eligibility criteria.The Customer should not feel discriminated against or unfairly treated when their loan is rejected. Rejection reasons must be communicated clearly and respectfully. |
| Dependencies |  Credit Bureau, Fraud Detection System, Integration to flag potential fraud risks associated with the Customer’s loan application. Bank’s Internal Eligibility Rules, Notification Service |
| **Inputs and Outputs** | **Inputs**: **Loan Application**: The data provided by the **Customer** (personal details, financial details, requested loan amount). **Credit Score**, **Fraud Check Results**, **and Eligibility Rules****Outputs**: **Rejection Notification, Log Entry**: Record of the rejection event. |
| **Business Rules** | * A loan application will be rejected if the **Customer’s** credit score is below the minimum threshold required for loan approval.
* The **Customer’s** debt-to-income ratio must not exceed the predefined maximum ratio; otherwise, the loan will be rejected.
* The **Customer** must meet specific fraud criteria; if any suspicious activity is detected, the loan application will be rejected.
* If the loan application is rejected, the **System** must send a rejection notice, detailing the reason(s) for the rejection.
 |
| **Miscellaneous Information** | * The System should allow for easy tracking and management of rejected loan applications to identify patterns or common reasons for rejections.
* The Customer should have the ability to request further clarification or appeal the rejection through the Customer Support Team.
* The rejection process should be fully automated where possible, with manual review only occurring for borderline or exceptional cases.
 |

USe case-7

|  |  |
| --- | --- |
| USE Case ID | DC 007 |
| Use case name | Use Case: Notify Customer of Loan Decision |
| Created By | Kalyani |  |  |
| Date created | 14-1-2025 |  |  |
| Actor | System, Customer |
| Description | This use case describes the process by which the **System** notifies the **Customer** about the outcome of their loan application—whether it is approved, denied, or requires further review.  |
| Pre-Condition | * The Customer has completed the loan application process, including submitting all necessary information and documents.
* The loan application has gone through eligibility checks, fraud checks, and approval/denial steps (either automated or manual).
* The System has generated the loan decision (approved, denied, or under manual review).
 |
| Post Condition | * The Customer has been informed of the loan decision and any next steps.
* The Customer is provided with the necessary details (e.g., loan terms for approval, reasons for denial, or instructions for further action).
 |
| Normal flow of event | * System receives the final loan decision from the loan processing system (either approved or denied).
* System prepares the notification content, including:
* The loan decision (approved, denied, or manual review).
* System sends the notification to the Customer via the provided contact method (email, SMS, or phone call).
* The Customer receives the notification and reviews the loan decision.
 |
| Alternate Flow | **Flow 1: Notification Failure**If the **System** is unable to send the notification due to technical issues (e.g., invalid email address or server errors), the **System** logs the failure.If the issue persists, the **Customer** is contacted directly by the **Customer** support team to notify them of the loan decision.**Flow 2: Multiple Attempts to Notify Customer**If the **Customer** does not respond to the initial notification within a specified period, the **System** may send a reminder notification.If the **Customer** still does not acknowledge the notification, a follow-up call or email from **Customer** support is initiated. |
| Expectation | * The **Customer** expects to receive a timely and clear notification regarding the outcome of their loan application.
* The **Customer** expects to understand the reason(s) for the decision (whether approved or denied).
 |
| Frequency of use | High |
| Assumption | * The Customer has provided valid contact details for notification.
* The System is integrated with a reliable communication platform (email, SMS, etc.).
* The Customer will review the notification promptly and follow any instructions provided.
 |
| Constraints | * The System must comply with communication regulations (e.g., ensuring the Customer can opt-out of certain notifications).
* The System must handle notification failures gracefully and ensure that the Customer is informed through alternative means if necessary
 |
| Dependencies | Email/SMS/Phone Notification Service, Customer’s Contact Information Loan Decision System |
| **Inputs and Outputs** | **Inputs**: **Loan Decision**: The loan application outcome (approved, denied, or manual review).**Customer Contact Information**: The email, phone number, or preferred method of communication. **Loan Terms or Denial Reasons**: Details about the loan (if approved) or reasons for denial.**Outputs**: **Loan Decision Notification**: Email, SMS, or phone notification sent to the **Customer**. |
| **Business Rules** | * The **System** must notify the **Customer** of the loan decision within a predefined timeframe (e.g., 24-48 hours after the decision).
* If the loan is approved, the **Customer** must be informed of the loan amount, interest rate, repayment schedule, and any other pertinent terms.
* If the loan is denied, the **System** must provide reasons for denial in a clear and understandable manner.
 |
| **Miscellaneous Information** | * The **System** should be able to send notifications through multiple channels (email, SMS, or phone) based on the **Customer’s** preferences.
* The **Customer** should be able to acknowledge receipt of the notification (e.g., clicking a link in the email) to confirm they have reviewed the decision.

The **System** should track notification responses for audit purposes. |

**Use case-8**

|  |  |
| --- | --- |
| USE Case ID | DC 008 |
| Use case name | Perform Security and Fraud Checks |
| Created By | Kalyani |  |  |
| Date created | 1-14-2025 |  |  |
| Actor | System, Customer |
| Description | This use case describes the process of performing security and fraud checks on a **Customer**'s personal loan application. The **System** will verify the identity and financial history of the applicant to ensure that there are no signs of fraud and that the applicant meets the required criteria for loan approval |
| Pre-Condition | * The Customer has submitted a complete loan application with all required personal and financial details.
* The Customer has provided valid identification and authorization for credit and fraud checks.
* The System is integrated with fraud detection systems and credit bureaus for verification.
 |
| Post Condition | * The Customer’s loan application is either approved, flagged for further review, or rejected based on the results of the security and fraud checks.
* The System logs all checks, results, and decisions made during this process.
* If fraud is detected, the Loan Application is either rejected or placed under manual review.
 |
| Normal flow of event | * **Customer** submits a complete loan application
* **System** initiates the fraud detection process by checking the **Customer’s** provided details.
* **System** verifies the **Customer’s** identity by checking personal details, such as name, address, and social security number, against external databases (e.g., government databases, credit bureaus)
* If no fraud is detected, the **System** proceeds to the next loan processing stage (such as credit score verification or loan approval).
* **Customer** is notified about the results of the fraud checks and informed about the status of their loan application (approved, flagged, or rejected).
 |
| Alternate Flow | **Fraud Detection System Timeout or Error**If the **System** encounters an issue while performing fraud checks (e.g., system timeout, database connection failure), it logs the error and retries the fraud detection process.If the error persists, an alert is triggered for manual intervention by a **Loan Officer** to investigate the issue further. |
| Expectation | * The System expects to identify and flag any fraudulent loan applications promptly.
* The Customer expects to have their loan application processed securely, with no exposure to fraudulent activities.
* The System must ensure that the fraud checks do not create unnecessary delays in processing eligible loan applications.
 |
| Frequency of use | Moderate |
| Assumption | The Customer has provided accurate and truthful information during the loan application process.The Fraud Detection System and external databases are up-to-date and operational |
| Constraints  | System , Customers |
| Dependencies  | Fraud Detection System, External Verification Systems, **Notification System** |
| Inputs and Outputs  |  **Inputs**: Loan Application Details, Customer’s Identity Information, Customer’s Credit History, Fraud Detection Algorithms **Outputs:** Fraud Detection Results, Loan Application Status: The result of the loan application (approved, flagged for review, or rejected), notifications: Alerts sent to the Customer regarding the status of their application, including any fraud-related issues. |
| Business Rules  | * A loan application will be rejected if fraudulent activity is detected (e.g., identity theft, false information).
* The System must automatically flag applications that display signs of suspicious behavior (e.g., mismatched or inconsistent data, multiple applications from the same IP address).
* The Customer must be informed about the fraud check results, including any issues or irregularities that could affect the loan application.
 |
| Miscellaneous Information | * The System should allow for continuous monitoring and updating of fraud detection criteria to ensure it is effective in detecting new and emerging fraud tactics.
* In case of manual review, the Loan Officer has the final authority on whether a loan is approved or rejected, based on the fraud findings.
* The Customer’s privacy must be maintained, and they should be informed of the reasons for fraud detection or rejection.
 |