

# LAB 01 (b): SRS FOR CREDIT CARD SYSTEM

## 1. Introduction

### 1.1 Purpose:

The document specifies functional, non functional and domain requirements of Credit Card Management System. The system facilitates credit card operations such as account creation, credit limit management, transaction processing, fraud detection, billing and customer support.

### 1.2 Scope:

This system will allow banks and financial institutions to issue credit cards, monitor transactions, manage user accounts and generate billing statements. It will also allow customers to manage their accounts, review transactions and make payments.

### 1.3 Overview:

This document provides a detailed description of the system requirements, including the functional and non functional aspects of credit card system. It also outlines external interfaces, system features and performance metrics.

## 2. General Description:

This system will interact with external systems such as banks, payment gateways, and fraud detection service. It will provide a web interface for customer use and administrative interfaces for bank staff and managers.

## 3. Functional Requirements:

### Credit card issuance:

- The system shall allow bank staff to create new credit card accounts.
- The system shall validate customer information based on KYC standards.
- The system shall generate a unique credit card number, CVV, and expiration date.

### Transaction Processing:

- system shall authorize process transactions in real-time
- system shall verify available credit before authorizing transaction.

- System shall log all transactions with date, time and merchant details

- system shall send OTP for high value transactions.



### • Billing and statement Generation:

- The system shall generate a monthly statement for each credit card holder.

- The system shall calculate the minimum payment and due date for each billing cycle.

### • customer Portal:

- view transaction history
- increase credit limit

### • Fraud detection and alerts:

- flag transactions which deviate from normal customer alerts.
- real time alerts for suspicious activity.

## 4. Interface Requirements:

### • web interface:

- secure web based interface for customers and bank staff.
- provides mobile friendly interface for account management & payments.

### • Hardware interface:

- system interacts with POS terminals for credit card payments.
- integration with external modules for cryptographic operations.

## 5. Non Functional Requirements:

### Performance requirement:

- The system shall process transactions within 2 seconds.

### Maintainance requirement:

- system should be scalable.

### Availability:

- shall have availability of 99.99%.

### Security requirement:

- shall comply with PCI-DSS
- use encryption for all sensitive data
- implement 2 factor authentication.

## 6. Performance requirement:

- The system shall handle upto 10,000 simultaneous users during peak times.

- The system shall process transactions with 2 seconds.

## 7. Design constraints:

- The number of max credits can be limited
- one person can hold maximum of 2 cards.



## Preliminary Schedule and Budget

### 8.1 Timeline:

- Requirement gathering : 2 months
- Design and architecture : 2 months
- Development : 6 months
- Testing : 1 month
- Deployment : 1 month

### 8.2 Budget:

- Development costs : \$500,000
- Testing & QA : \$100,000
- Infrastructure & cloud hosting : \$50,000
- On going maintenance : \$30,000 per year.

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