2.) SRS for Credit Card Processing System

1. Introduction:

1.1 purpose of this document: This document outlines the software requirement for the credit card processing system. It serves to provide the stakeholders, with a clear understanding of the formalities, design constraints and overall goals of software.

The purpose is to ensure all parties are aligned on expectations & requirements facilitating a smoother dvlopment process.

1.2 Scope of this document

This SRs details the objectives, features & user requirements for both systems. It will also address estimated development costs & timelin

The system focuses on secure & efficient transver handling.

1.3 Overview

The credit card processing system aims to streng and enable secure transactions, including authorization, capture and reporting functionality

eneral description :-

er objectives :- Enable fast, secure payment processing.

er characteristics :- Merchants, customers, finance personal.

eatures :- secure payment gateway, transaction history, fraud detection.

Benefits :- Enhanced security, reduced transaction times and better customer trust.

portance :- Critical for any business that processes ments to maintain customer trust and comply with regulations.

unctional Requirement :

ansaction Authorization : Validate card info. to ensure nds are available.

Transaction Capture :- complete the transaction to transfer funds.

fund Processing : Allow merchants to process refunds as necessary.

orting :- Provide transaction history to reporting or reconcilations

d detection :- Monitor transactions for potentially fradulent activity

terface Requirement

user Interface :- Merchant portal for managing transactions & settings.

API Interfaces :- Secure API's for transaction processing & reporting.

~~continuous~~ Data streams :- Continuous monitoring of transactioning activities.

Performance Requirements

Transaction must be completed in 3 seconds.

Atmost 99.99% uptime to ensure the reliability.

less than 0.01% of transactions result in errors.
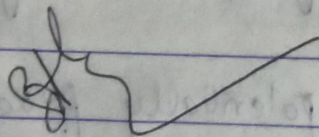
6. Design Constraints:

i) Must be compatible with existing systems & portal

ii) Must adhere to PCI-DSS security standards

iii) Limited to specific encryption algorithm sensitive data.

7. Non-functional Attributes

i) Reliability :- System must consistently process without failure.

ii) Portability :- Can be deployed on multiple platform (web, mobile).

iii) Data Integrity :- ensure accuracy of transaction and prevent tampering.

8. Preliminary Schedule and Budget

i) Estimated development time : 4 months

ii) Estimated Budget : $100,000.

23/9

2. Credit Card Processing

owns

Customer
- Name: string
- Address: string
- Phoneno: Integer
- id : Integer
- status()
- account()

Application
- Application no
- Application date
- Type of Application
- update()
- status()

check

Card Type
- Reward Point
- type
- calculate_points()

1

type

not eligible

1

Verification_office
- Application no
- check
- Approve application
- update()

verify
1..*

A/c Type Application
- Application Id
- Application type
- Application date
- process()

1..*

Credit Card
- Card no
- Card type
- Expiry date
- Cardlimit
- Annual fees
- Customer id
- cardstatus()

1...*

issue
1

Bank
- Bank_name
- Bank_address
- Availability
- issue()
- cancel()

1

Branch
- Name
- Address
- issue()
- cancel()
- pay()

1..*   own

Accounts
- Customer-name
- account_no