9) Credit Card Processing System

1. Introduction

1.1 Purpose of this document:

This SRS defines all the requirement for a credit card processing system. It serves as a blueprint for the dev. team, outlining the behaviour of the system along with its capabilities.

1.2 Scope of this document:

- Authorization
- Capture
- Refund
- Charge back
- Void

1.3 Overview:

The CCPS will be integrated with a payment with a payment gateway to facilitate secure and efficient transactions. It will provide a user-friendly interface for merchants to manage their transaction & generate reports.

2. General Description

2.1 User Requirement Characteristics

- Merchants who will use system
- Customers who will provide card.

2.2 User Interface

- Easy to use & intuitive
- secure & encrypted data transaction
- support various card types.

2.3 Features

- verify validity of C.C. & availability of funds.
- Customers authorization is must for transactions
- Process a refund for a previous transaction.
- Cancel a transactions before it is captured.
- Handelle chargeback issued by banks.
- Process charges for subscription.
- Generate report.

2.4 Benefits

- Easy payment process
- Reduced fraud risk
- Improved customer satisfaction
- Enhanced business efficiency
- Save time.

3. Functional Requirement

- Authorization
  - verify c.c no, expiry date & cvv.
  - check for sufficient funds
  - response message
- Refund
  - process a refund for captured transactions.
  - up

- Void
  - Cancel a transaction before it is captured
  - Update transaction status.

- Charge back
  - Handle chargeback initiated by banks or customers
  - Gather evidence eg. respond to req.

- Recurring Billing
  - Store customer billing info
  - process charges on a scheduled basis

- Reporting
  - generation report on transaction volume, revenue, refunds eg. chargeback
  - provides data visualization tools.

4. Interface Requirements :
   - Integrate with secure & reliable payment gateway
   - Adhere to gateway's API std.
   - User - friendly interface
   - Secure data transmission

5. Performance Requirements:
   - Response time should reduced for better experience.
   - It should be scalable.
   - It should be secure.
   - It should be reliable and have less downtime.

6. Design Constraints :
   - Security must be implemented for sensitive data
   - Industry std. must be followed

- The preffered prog. language, frameworks & db must be specified.

7. Non functional Requirements:

- Easy to use for merchants
- Maintainability
- Portability & security

8. Preliminary Schedule & Budget:

- Estimate of dev & deployment timeline.
- Estimate of overall budget must be done.

- Estimated schedule for this project is:
- Requirement Gathering & analysis - (4-5 weeks)
- System Design - (2-3 weeks)
- Development - (8-10 weeks)
- Testing and validation - (4-6 weeks)
- Deployement & Training - (2-3 weeks)

Total estimated weeks - (19-23 weeks)

- Estimated budget for this project is:
  - Requirement documents - (₹ 100000)
  - Design & tools - (₹ 200000)
  - Development - (₹ 400000)
  - Testing - (₹ 200000)

Total Estimated Budget - (₹ 900000)