1. Credit Card Processing System

1.1 Purpose of this document

This document outlines the requirements for the Credit Card Processing System (CCPS). It serves as a framework for developers and stakeholders to ensure alignment on system functionalities and performance expectations.

1.2 Scope of this Document

The CCPS will facilitate secure credit card transactions, providing functionalities for merchants and customers. Estimated development cost is $150,000 with a timeline of 4 months for project completion.

1.3 Overview

The Credit Card Processing System is designed to process credit card transactions securely and efficiently, support various payment methods & ensuring compliance with industry standards.

2. General Description

The CCPS allows merchants to accepts credit card payments, manage transactions and perform refunds. User characteristics include merchants, administrators and customers. Key features include:

- Secure payment processing
- Transaction history tracking
- Refund and dispute management.

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3. Functional Requirements:
1. Transaction Processing: Process credit card payments
   2.   security
2. User Authentication: Verify user identity payments
   Securely before processing transactions
3. Transactions History: Maintain a record of all
   transactions for user access
4. Refund Processing: Allow merchants to issue refunds to
   customers
5. Dispute Management: Provide functionality for
   managing payment disputes

4. Interface Requirements:
The CCPS will interface with
- User Interface: Web & mobile interfaces for
  merchants & customers.
- Payment Gateways: Integrate with various
  credit card networks
- Banking APIs: For fund transfer & verification

5. Performance Requirements
The system should:
- Process transactions within 2 seconds
- Handle upto 500 simultaneous transaction
- Ensure 99.99% transaction success rate.

6. Design Constraints
   Must Comply with PCI DSS standards
   - Developed using .NET & SQL Server
   - Must Operate on cloud infrastructure.

7. Non Functional Attributes

Security: End- to End encryption &
secure data storage

Reliability: Ensure system availability with
minimal downtime

Scalability: Able to handle an increase
in transaction volume

8. Preliminary Schedule & Budget
Initial Budget : $150,000
Project Duration : 4 months
Requirements Gathering : 1 month
Design: 1 month
Development : 1.5 months
Testing: 0.5 months