

## ② Credit Card Processing

### 1. Introduction

#### 1.1 Purpose of this document

This document outlines the software requirements for credit card processing. It provides clear understanding about requirements & service it provides and goals of the software.

#### 1.2 Scope of this document

It provides the objectives, features & user requirements enabling on secure & efficient transaction processing.

#### 1.3 Overview

The credit card processing is to enable secure transaction including authorization, capture & reporting functionalities.

### 2. General description

- User objective: Enable fast, secure payment processing

- User characteristics: Merchants, customers.

- Features: Secure payment gateway, transaction history, fraud detection.

- Benefits: Enhanced security, reducing transaction time & better customer trust.

- Importance: Critical for any business that processes payment to maintain customer trust & comply with regulations.

### 3. Functional requirements

1. Transaction authorization: Validating card info & ensuring the availability of funds in the bank account.

2. Transaction capture: Capturing the transaction and securing the funds.

3. Refund processing: Allowing merchants to process refunds as necessary.

4. Reporting: Provide transaction history.

5. Fraud detection: Monitoring transactions offensively for potential fraud activity.



#### 4. Interface requirements:

- \* User Interface :: Portal for managing transactions
- \* API Interface : secure APIs for transaction processing & reporting.
- \* Data Streams: Gathering merchants banking data for safe & secure transaction.

#### 5. Performance requirements:

- \* The transaction must validate the details and complete full transfer within 3 seconds.
- \* The response time for the request must be 99.99% efficient.
- \* The system must handle upto 1000 concurrent transactions.

#### 6. Design constraints:

- \* must follow laws to security standard.
- \* Specific encryption algorithms for sensitive data.

#### 7. Non-functional Attributes:

- \* System must be reliable & make payment without failure.
- \* can be used on multiple platforms (web/app)
- \* Ensure sums of transaction without any discrepancy.

#### 8. Preliminary Schedule & Budget:

Estimated time: 10 months.

Budget: \$150,000

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