

## 2. Software Requirement Specification for Credit Card Processing.

### 1. Introduction

#### ◦ Purpose:

This document outlines the functional and non-functional requirements for a secure credit card processing system that enables transactions between people

#### ◦ Scope:

The system will support various card types and will provide real time processing. It is designed for easy integration with various platforms

#### ◦ Overview:

It aims to ensure seamless payment transaction for both online and offline purchases.

### 2. General Description:

#### ◦ Product Perspective:

The system will act as an intermediate between merchants and credit card companies, securely processing and verifying payments

#### ◦ User characteristics:

Users will include merchants, cardholders and system administrators. The interface will be user-friendly for both technical and non-technical staff.

#### ◦ System constraints:

The system must ensure secure transaction handling



### 3. Functional Requirements:

- Payment gateway integration
- Fraud detection and prevention mechanism
- Refunding process
- Card authorization.

### 4. Interface Requirements

- web API for integration with e-commerce platforms

### 5. Performance requirements:

- Transactions must be processed under 2 mins
- should support upto 1000 transactions per second.

### 6. Design Constraints:

system must allow for straightforward integration with third-party systems

### 7. Non-Functional Attributes:

- Security:  
should implement end to end encryption for credit & credit card information.

- Reliability:  
should always complete the transaction process and the failure rate must be less than 0.1 percent.

- scalability:  
should be able to handle high transaction volumes across the different systems.



8. Preliminary schedule and Budget:
- Development Timeline: 9 months
  - Estimated Budget: \$250,000 for the initial development phase