II Credit card processing

I Problem Statement

The existing credit card processing system lacks efficiency and security measures, leading to potential fraud risks and customer dissatisfaction. An upgraded credit card processing system is imperative to ensure seamless transactions, enhance security & maintain customer trust.

I Introduction:

1.1 Purpose of this Document

The purpose of this document is to outline the specifications & requirements for the development of a credit card processing System (CCPS). It serves as a comprehensive guide for the development team, stakeholders & users, detailing the objectives, scope & overview of the system.

1.2 Scope of this Document

This document defines the overall working and objectives of the Credit Card processing system. It describes the value it will provide to customers and stakeholders, includes secure & efficient handling of credit card transactions.

1.3 Overview

The Credit Card processing system is designed to facilitate the processing of credit card transactions securely and efficiently. It provides a centralized platform for merchants to accept payments from customers.

2 General Description

The credit card processing system facilitates the following functions:

- Authorization of credit card
- Settlement of transactions,
- Management of customer accounts and payment methods
- Integration with payment gateways

3] Functional Requirements

3.1 Authorization

- Ability to verify the validity of credit card information, including card number, expiry date, & CVV
- Real-time authorization of transaction

3.2 Settlement

- Capture funds from authorized transactions.
- Generation of transaction receipts

3.3 Customer Management

- Registration of new customers.
- Ability to update & manage customer accounts.

3.4 Integration:

- Integration with payment gateways
- Compatibility with various payment methods

4] Interface Requirements

4.1 User Interface

- An intutive & user friendly interface
- Secure login & authentication

4.2 System Interfaces

- Integration with external payment gateways
- Secure communication protocols for transmitting sensitive payment data

5 Performance Requirements:

5.1 Response Time

- Quick response time
- Scalable architecture to handle peak transaction

5.2 Reliability:

- Reliable transaction processing
- Fault tolerance to ensure uninterrupted service availability.

6] Design Constraints

6.1 Security

- Compliance with industry standard
- Encryption of sensitive payment information

6.2 compliance:

- Adherence to regulatory require-ments and standards governing credit card processing including GDPR & CCPA
- Regular audits & security assessments to maintain compliance

7 Non-Functional Attributes

7.1 Scalability:

- Ability to scale the credit card processing system to accommodate growth in transaction volume.
- Elasticity to adapt to changing business needs & market demands

7.2 Portability:-

- Compatibility with different OS & h/w platforms.
- cloud deployment options.

8 Preliminary Schedule & Budget

→ The development of the credit card processing system.
→ The schedule includes phases for requirements gathering, design, implementation, testing & deployment.