# Credit Card Processing

1] Problem Statement:-

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

2] Introduction:-

2.1:- Purpose of this document:-

→ The purpose of this document is to outline the specifications and requirements for the development of a credit Card Processing System (CCPS).

2.2:- Scope of this Document:-

→ This document defines the overall working & objectives of the CCPS. Additionally, it outlines the development cost & time required for the project.

2.3:- Overview

The CCPS is designed to facilitate the processing of credit card transactions securely and efficiently.

3] General Description:-

The CCPS facilitates the following functions:-

- Authorization of credit card transactions in real-time

- Settlement of transactions, including capturing funds & generating receipts.
- Mangement of customer accounts & payment methods.
- Integration with payment gateways & merchant service providers.

4] Functional Requirements:-

4.1 Authorization:
→ Ability to verify & validate of credit card info, including card number, expiry date, & CVV.
→ Real-time authorization of transactions based on available credit and fraud detection mechanisms.

4.2 Settlement:-
→ Capture funds from authorized transactions & initiate the settlement process.

4.3 Customer Management:-
→ Registration of new customers with payment information and preferences.

4.4 Integration:
→ Integration with payment gateway & merchant services providers for processing.

5] Interface Requirements:

5.1 User Interface:
→ Intuitive & user-friendly interface for merchants to initiate & manage transactions.
→ Secure Login & authentication.

5.2 System Interfaces:
→ Integration with external payment gateways & merchant service providers via API's.
→ Secure communication protocols for transmitting sensitive payment data.

6] Performance Requirements:

6.1 Response time:
→ Quick response time for authorizing transactions & processing payments.
→ Scalable architecture to handle peak transaction loads without degradation in performance.

6.2 Reliability:-
→ Reliable transaction processing with minimal downtime or system failures.
→ Fault tolerance to ensure uninterrupted service availability.

7] Design Constraints:-

7.1 Security:-
→ Compliance with industry standards such as PCI DSS for securing payment card data.
→ Encryption of sensitive payment information during transmission & storage.

7.2 Compliance:-
→ Adherence to regulatory requirements & standards governing credit card processing, including GDPR & CCPA.

8] Non- Functional Attributes:

8.1 Scalability:-

-> Ability to scale the CCPS to accomodate growth in transaction volume & user base.

-> Elasticity to adapt to changing business needs & market demands

8.2 Portability:-

-> Compatibility with different OS & hardware platforms.

-> cloud deployment options for flexibility & scalability

9] Preliminary Schedule & Budget:-

The development of the CCPS is estimated to take approximates 7 months with a budget of ₹9,00,000. The schedule includes phases for requirements gathering, design, implementation, testing & deployment.

This SRS serves as a foundation for the development process, ensuring that CCPS meets the specified requirements & delivers secure & efficient credit card transaction processing for merchants & customers.