II   Credit Card processing system

Problem Statement : The credit card processing
system seeks to provide a secure, efficient,
and reliable platform for merchants to accept
electronic payments from customers. It
addresses the challenge of faciliting seamless
transactions while adhereing to strigent
security standards, minimizing fraud
risks, and ensuring timely processing
of payments across various channels

1. Introduction:
    1.1 Purpose : Outline the specs & reqs of
        development of credit card processing
        system.
    1.2 Scope of the Document: Overall working &
        objective of credit card processing system
    1.3. Overview
        The credit card processing system is
        designed to facilitate the processing of
        transactions securely & efficiently.
        Centralized platform for merchants
        to accept payment through cards

2. General Description:
    • Authorization of credit card transaction
      in real time
    • Settlement of transaction, funds & recipt
    • Management of accounts, payment
      methods
    • Payment gateways, merchant service
      provides

3. **Functional Requirements:**
Authorization : Validate info, card no, date, CV, transactions
Customer Management : Registration of new customers updation.
Integration : Payment gateway compatibility with credit cards, debit cards, UPI

4. **Interface Requirements :**
- User interface : Initiate & manage transactions secure login & authentication.
- System interfaces : external payment gateway secure communication protocols

5. **Performance Requirements :**
- Response time : Quick, minimal downtime, scalable architecture.
- Reliability : Reliable transaction, fault tolerance

6. **Design Constraints :**
Security : Encryption. compliance with PCI DSS
compliance : Regulatory requirements, regular audits.

7. **Non functional attributes :**
Scalability : Scale credit card processing system for growth in transaction adapt to changing business needs.
Portability : Compatibility with different OS cloud deployment options for flexibility

8. Preliminary Schedules & Budget
- Estemated timeline : 9 moths.
- Budget : £ 500,000