2) Credit Card Processing System :-

a) Problem Statement :
The aim is to design & implement a robust Credit Card Processing System that facilitates secure & efficient transaction between merchants & customers.

b) Purpose of this document :
The purpose of this document is to outline the specification & requirements for the development of a Credit Card Processing System. It serves as a comprehensive guide for the development team, stakeholders & overview of the system.

c) Scope of this Document :
This document defines the overall working & objectives of the Credit Card Processing System. It describes the value it will provide to customers & stakeholders, including secure & efficient handling of credit card transactions.

d) Overview :
It is designed to facilitate the processing of credit card transactions securely & efficiently. It provides a centralized for merchants to accept payments from customers using credit card.

e) General Description :
- Authorization of credit card transaction in real time
- Settlement of transaction
- Management of customer accounts
- Integration with payment gateway & merchant.

f) Function Requirements:

- Authorization:
  Ability to verify the validity of credit card information including card no, expiry date & cvv.
- Settlement:
  Capture funds from authorized transactions and initiate the settlement process.
- Customer management:
  Registration of new Customers with payment information & preferences.
- Integration:
  Compatibility with various payment methods, including credit card, debit card.

g) Interface Requirement:
- User Interface:
  Intuition & user friendly Interface for merchants.
- System Interface:
  Integration with external payment gateways.

h) Performance Requirement:
○ Response Time: Quick response time for transaction
○ Reliability: Reliable transaction processing

(i) Design constraints:
• Security
○ Compliance

(j) Non functional attributes:
• Scalability: Elasticity to adapt to changing business need
• Portability & Compatibility with operation systems

k) Preliminary Schedule & Budget:
for development of credit card system is estimated to take approximately 9 months with ₹10000 budget