

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, ~~It~~ 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:

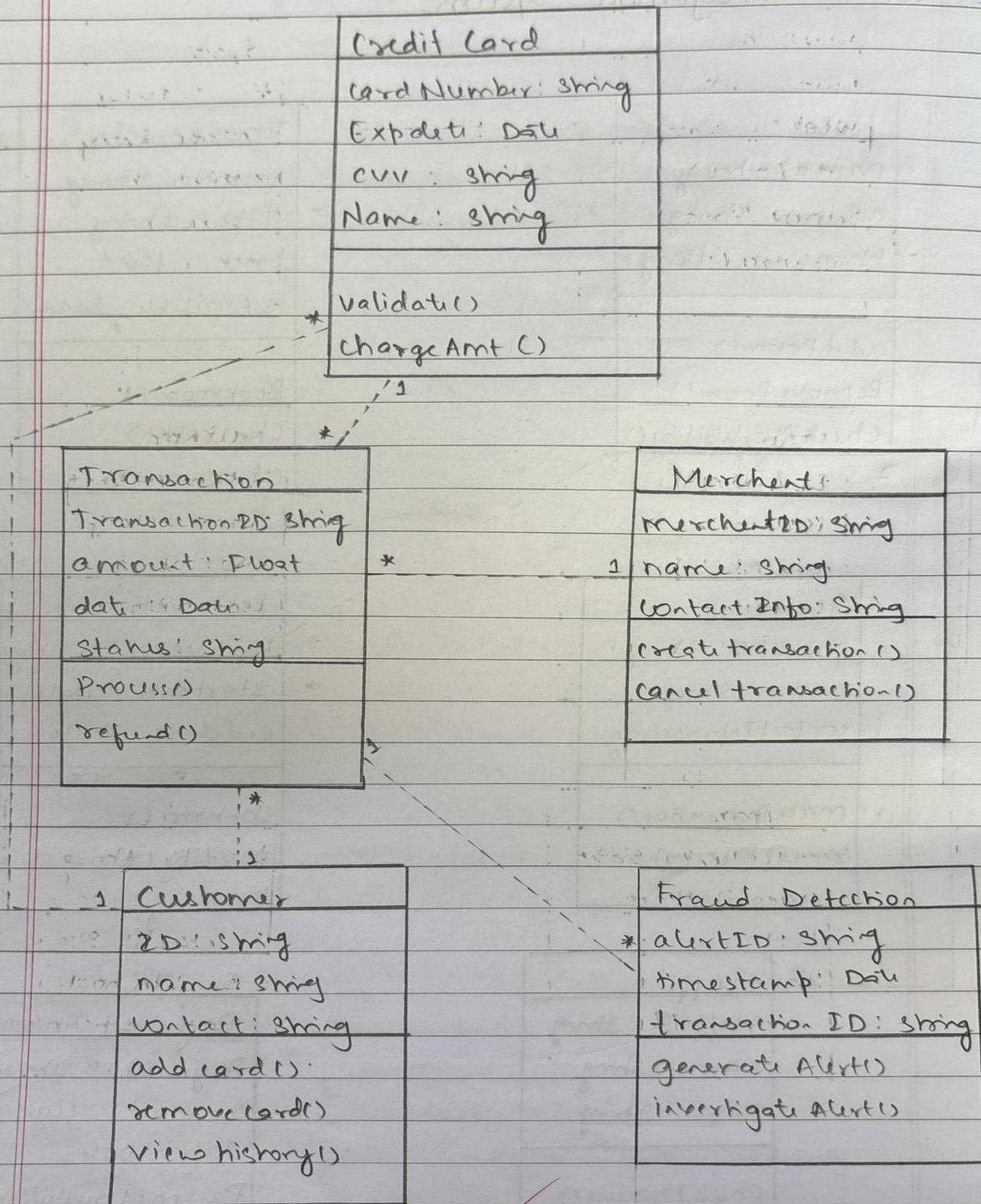
Should always complete the transaction process and the failure rate must be less than 0.1 percent.

- Scalability:

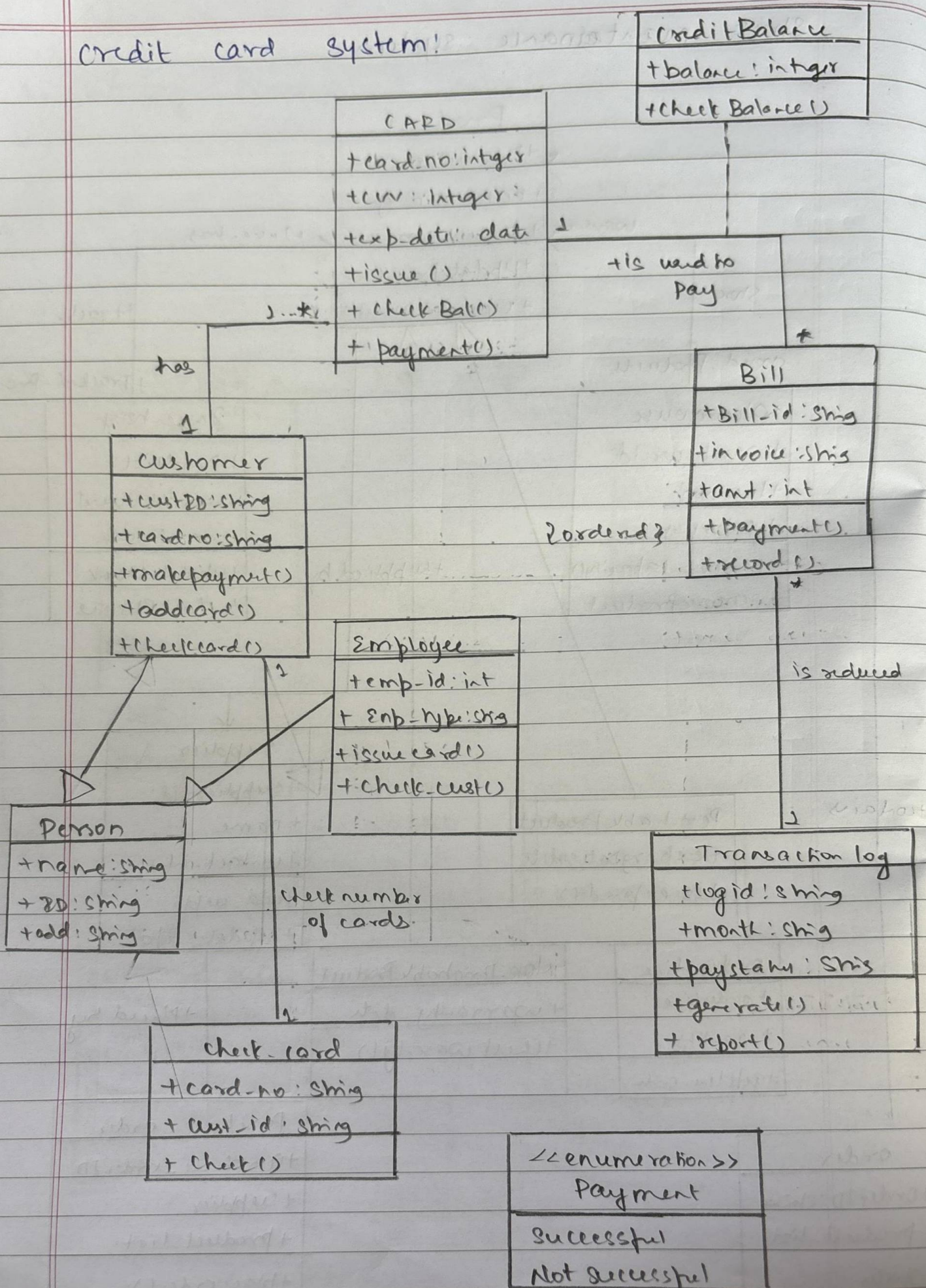
Should be able to handle high transaction volumes across the different systems.

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

2. credit card Processing:



Credit card system!



STAR UML DIAGRAM

