CREDIT CARD FRAUD DETECTION USING DEEP LEARNING.



ABSTRACT

The Usage of cards for online and regular purchases is increasing and so is the fraud related to it. A large number of fraud transactions are made everyday. It become a significant security issues for customers, companies and financial sector. Recent development of deep learning has been applied to solve complex problems in various areas, deep learning presents a solution to the problem of credit card fraud detection make optimal use of their historic customer data as well as real time transaction details that recorded at the time of transaction.

INTRODUCTION

As cases of credit card fraud transactions have been increased dramatically in recent years, the amount of card fraud has risen simultaneously. In our project it was mainly focused on credit card fraud detection in the real world initially. We will collect the credit card dataset and then will provide the user credit card queries for testing the dataset.



MOTIVATION

Millions and billions of people use credit card for payment in both online and offline transactions, due to this countless transactions occur per minute everywhere on the planet. The reason behind fraud is negligence of the user, when a third person steals the most important information about credit card and user details easily fraud can be achieved. To detect what type of fraud occurs during a transaction, we need to face several challenges. Fetching that among all the transactions that occurred and which one is real could be the task.



PROBLEM STATEMENT

In the case of the existing system the fraud is detected after the fraud is done and so the card holder faced a lot of trouble before the investigation finished. And nowadays lot of online purchases are made so we don't know the person using the card online, So they need help from cyber crime to investigate the fraud. To avoid this we propose the system to detect the fraud in a best way.

REQUIREMENT ANALYSIS Functional Requirements:

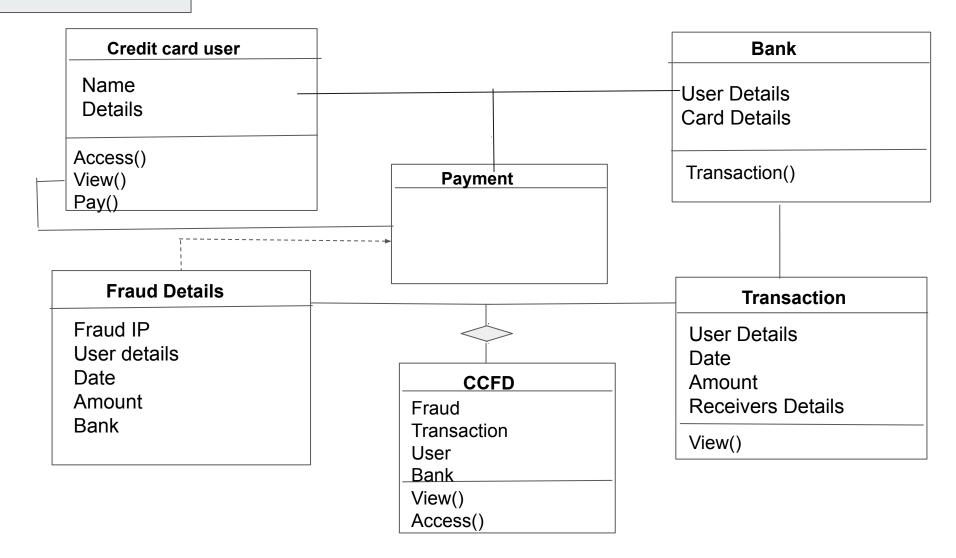
- ☐ User details
- ☐ Account details
- ☐ Credit card details
- ☐ Transaction details
- User Accounts to control the access and maintain security.

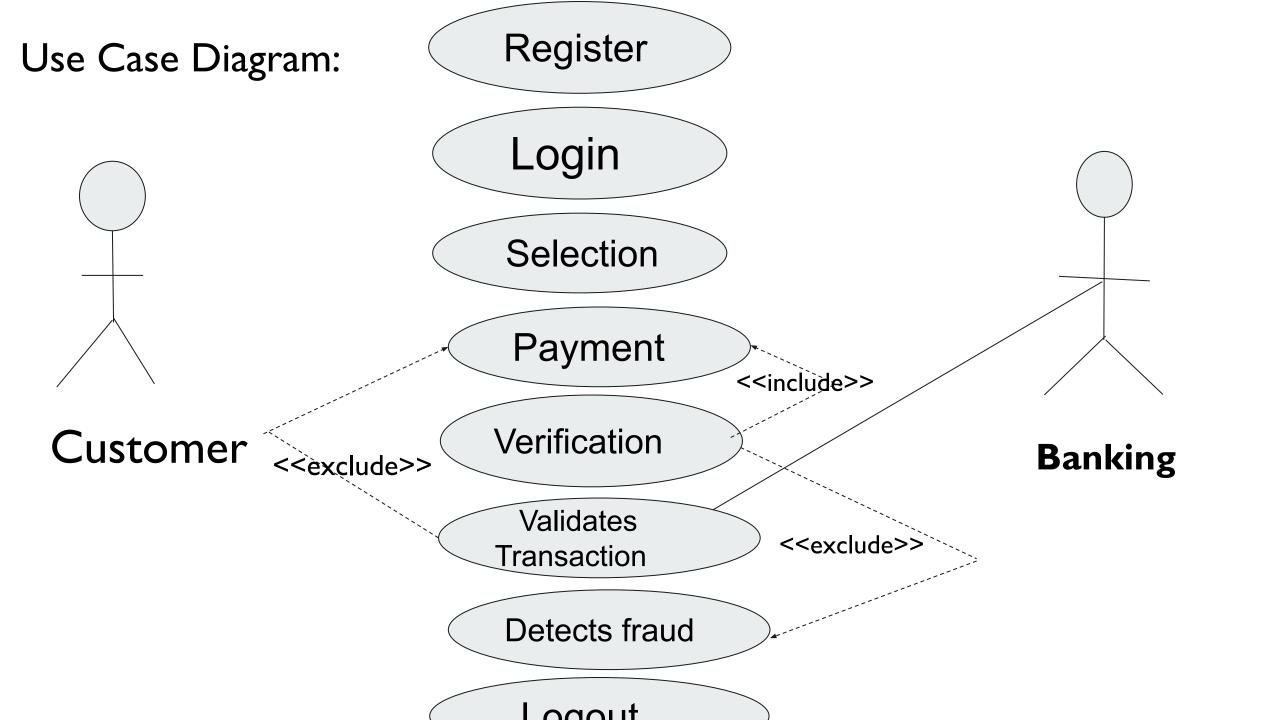
Non-functional Requirements:

- Performance
- ☐ Peak workload performance
- Maintainability

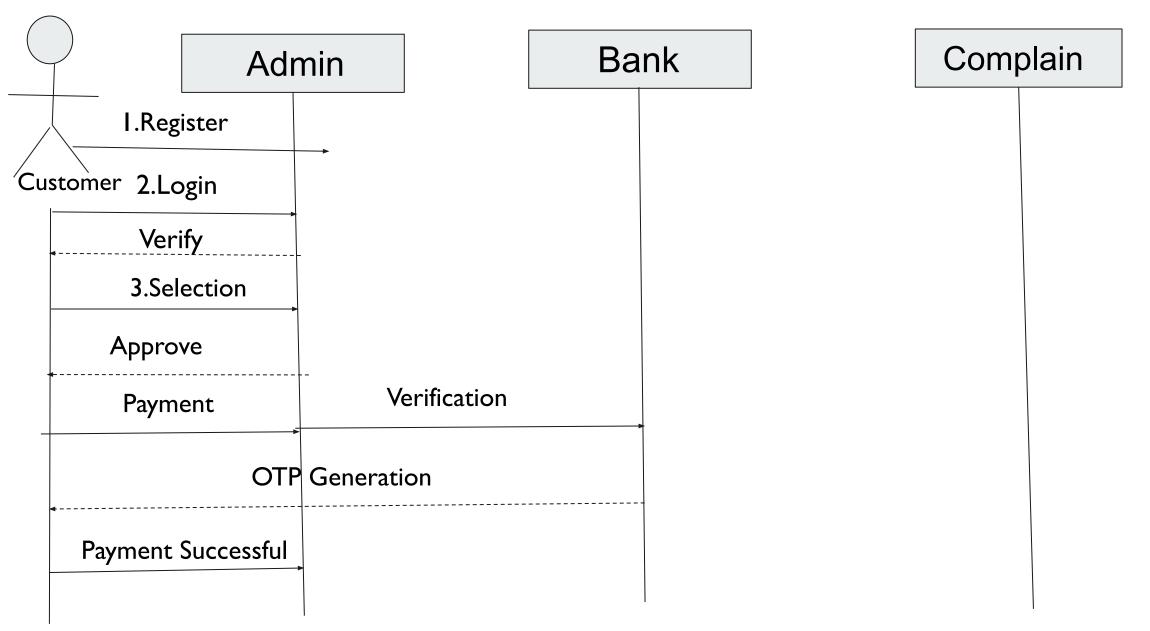
UML Diagrams

Class Diagram:





Sequence Diagram: Module 1



Module 2

