Project Design Phase-II
Data Flow Diagram & User Stories
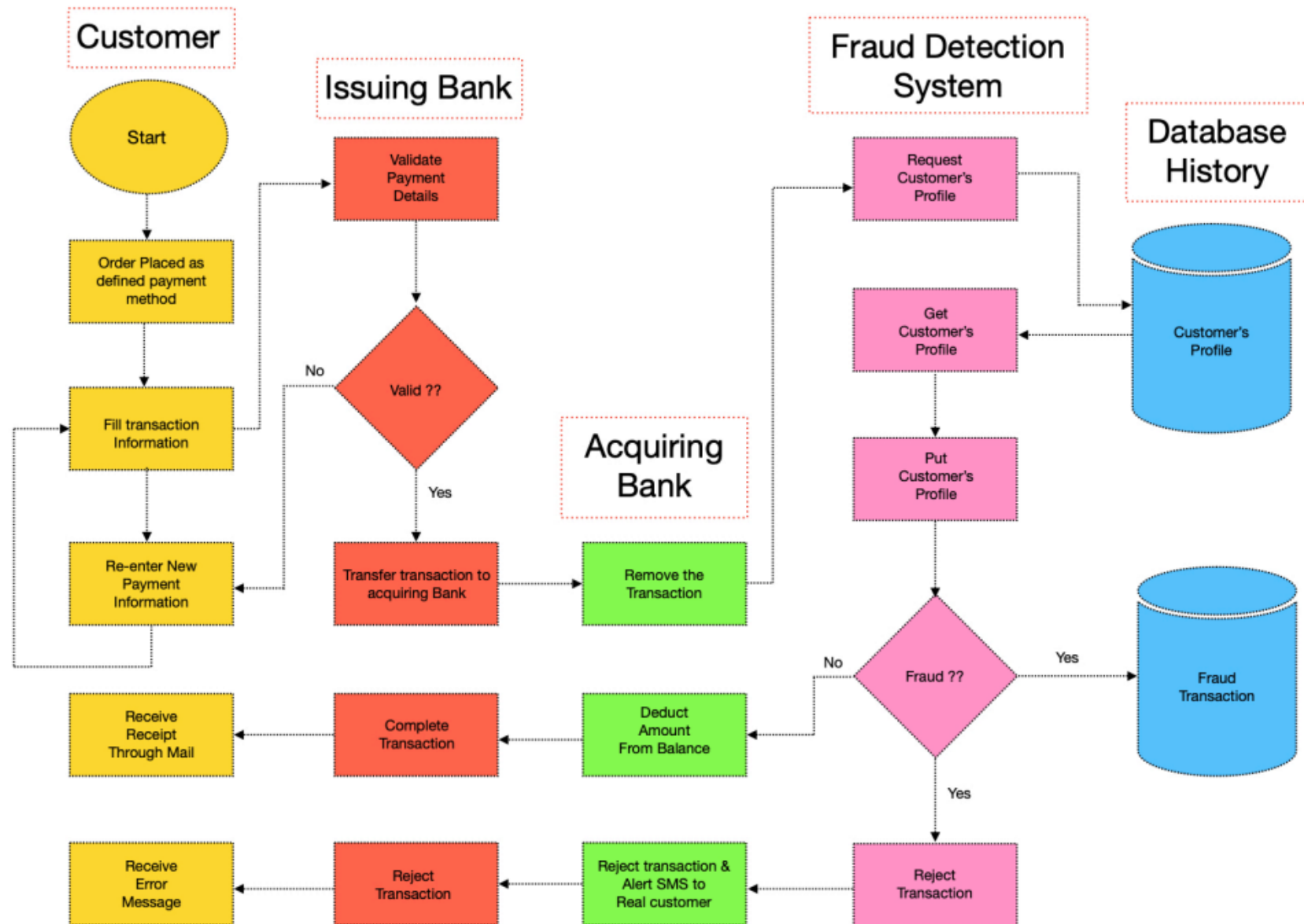
Date	31 October 2023
Team ID	Team-593387
Project Name	Online Payments Fraud Detection using ML
Maximum Marks	4 Marks

Data Flow Diagrams:

In this diagram:

- Customers initiate transactions through the Payment Gateway.
- Transaction data is stored in the Transaction Database.
- The Data Preprocessing and Feature Extraction processes prepare the transaction data for the Machine Learning Classification.
- The Machine Learning Model uses historical data and the transaction's features to classify it as legitimate or fraudulent.
- The Fraud Detection Decision process determines the outcome of the fraud detection and takes appropriate actions.
- Notifications are sent to customers and the fraud detection team as necessary.
- System activities and logs are recorded in the System Logs.
- The Fraud Data Repository stores information about previous fraud cases for reference and improvement of the ML model.

This data flow diagram outlines the major components and data flows in an online payment fraud detection system using machine learning. Depending

on the specific requirements of your system, you may need to further detail and expand on individual processes and data interactions.

Customer

Start

Order Placed as defined payment method

Fill transaction Information

Re-enter New Payment Information

Receive Receipt Through Mail

Receive Error Message

Issuing Bank

Validate Payment Details

Valid ?? — No / Yes

Transfer transaction to acquiring Bank

Complete Transaction

Reject Transaction

Acquiring Bank

Remove the Transaction

Deduct Amount From Balance

Reject transaction & Alert SMS to Real customer

Fraud Detection System

Request Customer's Profile

Get Customer's Profile

Put Customer's Profile

Fraud ?? — No / Yes

Reject Transaction

Database History

Customer's Profile

Fraud Transaction

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Functional	Online Shopping Cart	USN-1.	As a customer, I want to add products to my shopping car	I can view a list of products. I can add a product to my shopping cart. The quantity in the shopping cart updates correctly. I can see the total price in the shopping cart.	High	v1.0
		USN-2	As a customer, I want to remove products from my shopping cart.	I can remove a product from my shopping cart. The shopping cart updates to reflect the removal. The total price in the shopping cart updates correctly.	High	v1.0
		USN-3	As a customer, I want to apply a discount code to my order.	I can enter a discount code during checkout. The system validates and applies the discount. The total price reflects the discount.	Medium	v1.1

		USN-4	As a customer, I want to select a shipping method.	I can choose a shipping method during checkout. The shipping cost is added to the total price.	Medium	v1.1
		USN-5	As a customer, I want to view my order history.	I can access a list of previous orders. I can view details of a specific order. I can see the order status and tracking information.	Medium	v1.2
Log in	User Management System	USN-6	As a User, I want to log in to the system with my username and password.	Users can access the login page. Users can enter their username and password. The system authenticates the user. Users are redirected to the appropriate dashboard based on their role after successful login.	High	v1.0
		USN-7	As a User, I want to reset my password if I forget it.	Users can request a password reset. Users receive an email with a password reset link.	Medium	v1.1

				Clicking the link allows users to set a new password.		
		USN-8	As a Customer (Web User), I want to view my order history on the dashboard.	Customers can access their order history from the dashboard. Orders are displayed with details and status. Customers can click on an order to view more information.	High	v1.2