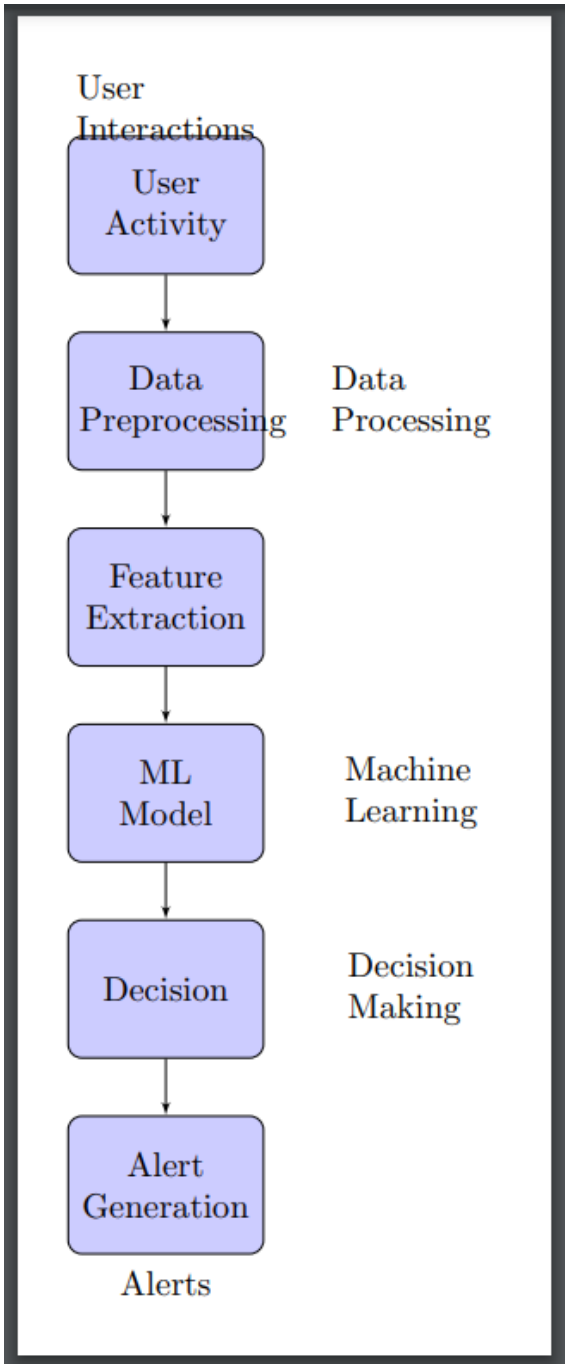
Project Design Phase-2

Solution Architecture

Date	20 November 2023
Team ID	591837
Project Title	Online Fraud Detection Using ML
Maximum Marks	4 Marks

Data Flow Diagrams:

Creating a data flow diagram (DFD) for online fraud detection using machine learning involves illustrating the flow of data within the system and how various components interact. Here's a simplified representation of the data flow diagram for an online fraud detection system using machine learning:


User Interactions
User Activity
Data Preprocessing
Data Processing
Feature Extraction
ML Model
Machine Learning
Decision
Decision Making
Alert Generation
Alerts

User Stories :

User type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Governmen t Agencies	User Authentication and Authorization	USN-1	Role-based access control for various user roles will ensure safe access to the fraud detection system.	Initalized the all the necessary aspects that required	High	Sprint-1
customers	Transaction Data Collection	USN-2	Gather and save pertinent transaction data, such as the amount, the user's identification, the timestamp, and the device's details..	Collected the dataset of customers in a particular region.	High	Sprint-1
E-commerce Retailer	Data Preprocessing	USN-3	To deal with missing data, outliers, and guarantee data quality for machine learning model training, apply preprocessing and data cleaning procedures.	Collected the dataset of customers in a particular region.	High	Sprint-1
Management and decision makers	Machine Learning Model Training:	USN-4	Utilizing past transaction data, train machine learning models to spot patterns suggestive of fraudulent activity..	Detecting the Online Fraud	Medium	Sprint-2
Retailers		USN-5	Continuously monitor incoming transactions in real-time to detect and flag potentially fraudulent activities.	We could test the scalability	medium	Sprint-3

Consultants	Alerting and Notifications	USN-6	Put in place an alerting system to inform pertinent stakeholders and fraud analysts of any suspicious transactions.	Understood the need for online fraud detection	Medium	Sprint-4