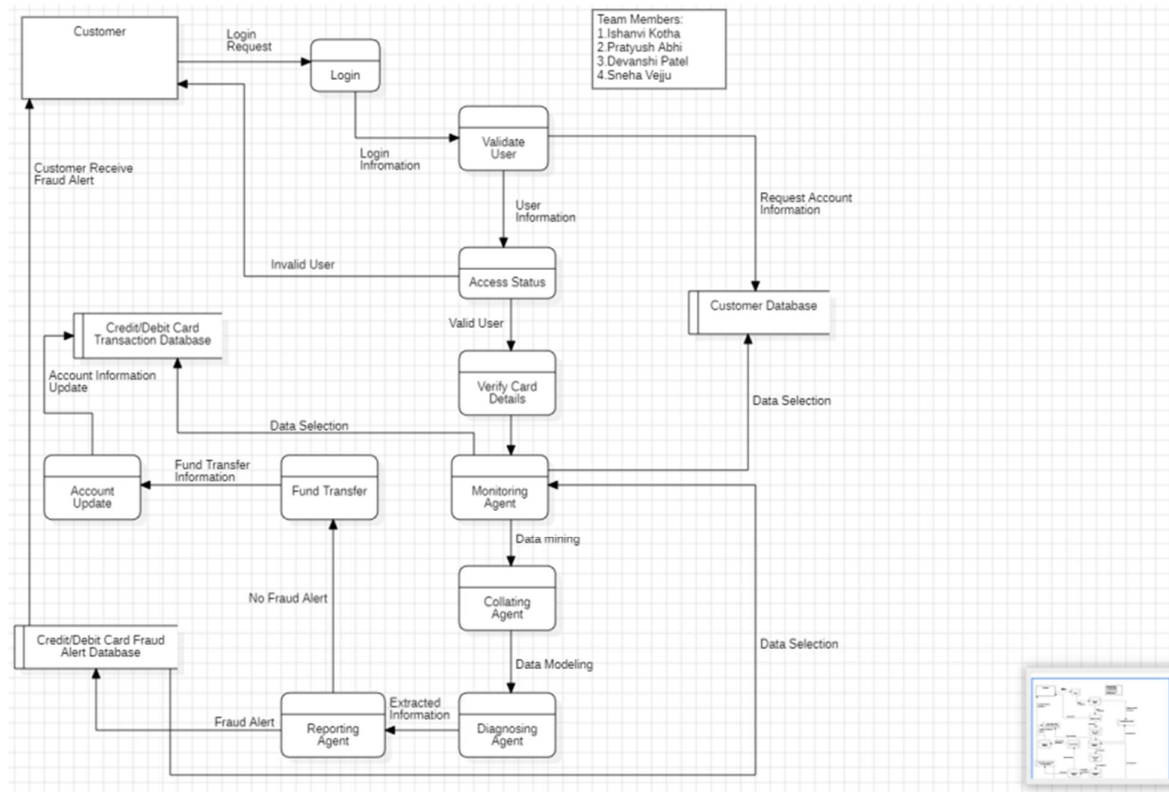


Project Design Phase-II

Data Flow Diagram and User Stories

Date	15 February 2026
Team ID	LTVIP2026TMIDS51614
Project Name	Project – Online Payments Fraud Detection Using Machine Learning
Maximum Marks	4 Marks

Data Flow Diagram



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Fraud Analysts	Project Setup & Infrastructure	USN-1	Set up a dedicated fraud detection environment with necessary tools and frameworks to initiate the project.	Successfully configured environment with all required tools.	High	Sprint - 1
Data Scientists	Data Collection	USN-2	Curate a comprehensive dataset of historical online transactions, including both legitimate and fraudulent examples.	Gathered a diverse dataset representing various transaction types.	High	Sprint - 1
Data Analysts	Data Preprocessing	USN-3	Preprocess the collected dataset by handling missing values, outliers, and ensuring compatibility with machine learning algorithms.	Successfully preprocessed the dataset.	High	Sprint - 2
Machine Learning Engineers	Model Evaluation	USN-4	Explore and evaluate different machine learning algorithms to select the most suitable model for online payments fraud detection.	Explored various machine learning models.	High	Sprint - 2
Security Administrators	Model Training	USN-5	Train the selected machine learning model using the preprocessed dataset and monitor its performance on a validation set.	Conducted successful training and validation of the model.	High	Sprint - 3
Software Developers	Model Optimization	USN - 6	Implement techniques to optimize the model's performance, reduce false positives, and enhance its accuracy in real-time scenarios.	Improved model performance with reduced false positives.	Medium	Sprint - 3
IT Operations	Model Deployment & Integration	USN - 7	Deploy the trained machine learning model as an API for real-time fraud detection. Integrate the model into a user-friendly interface for administrators.	Checked the scalability and accessibility of the deployed model.	Medium	Sprint - 4
Quality Assurance Engineers	Testing & Quality Assurance	USN - 8	Conduct thorough testing of the model and user interface. Identify and report any issues or bugs. Fine-tune model hyperparameters based on feedback.	Created a web application and optimized model based on testing results.	Medium	Sprint - 5