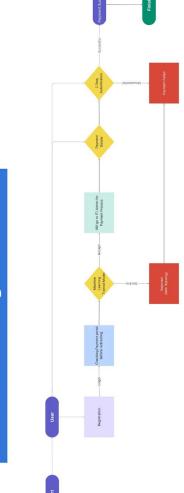
Project Design Phase-II Data Flow Diagram & User Stories

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Date	23 October 2023
Team ID	592380
Project Name	Online Payments Fraud Detection using ML
Maximum Marks	4 Marks

Data Flow Diagrams:

Data Workflow Diagram



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		NSN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Гом	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	0SN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
Fraud Analyst	Model Training and Testing	UFA-1	As a fraud analyst, I can access and prepare historical transaction data for model training.	I can clean, preprocess, and prepare the data for training.	High	Sprint-3
		UFA-2	As a fraud analyst, I can train machine learning models using classification algorithms such as Decision Tree, Random Forest, SVM, Extra Tree Classifier, and XGBoost.	Models are trained with the selected algorithms.	High	Sprint-3

UFA-3 As a frau models' metrics.	id analyst, I can test and evaluate the performance using appropriate	Models' performance is evaluated using metrics like accuracy, precision, recall, F1-score, and ROC	High	Sprint-3

				AUC.		
		UFA-4	As a fraud analyst, I can select the best-performing model and save it in .pkl format for deployment.	The best model is chosen based on evaluation metrics, and it is successfully saved in .pkl format.	High	Sprint-4
IT Administrator	Deployment and Maintenance	UADM-1	As an IT administrator, I can integrate the selected model into a Flask web application. As an IT administrator, I can integrate the selected model into a Flask web application.	The model is successfully integrated into the Flask web application.	High	Sprint-4
		UADM-2	As an IT administrator, I can deploy the Flask application on the IBM cloud.	The Flask application is successfully deployed on the IBM cloud.	High	Sprint-4
		UADM-3	As an IT administrator, I can set up monitoring for the deployed model's performance.	Monitoring is established to track the model's accuracy and performance over time.	High	Sprint-4
		UADM-4	As an IT administrator, I can regularly update the model with new data to maintain its accuracy.	The model is updated with new data as per the defined schedule.	High	Sprint-5