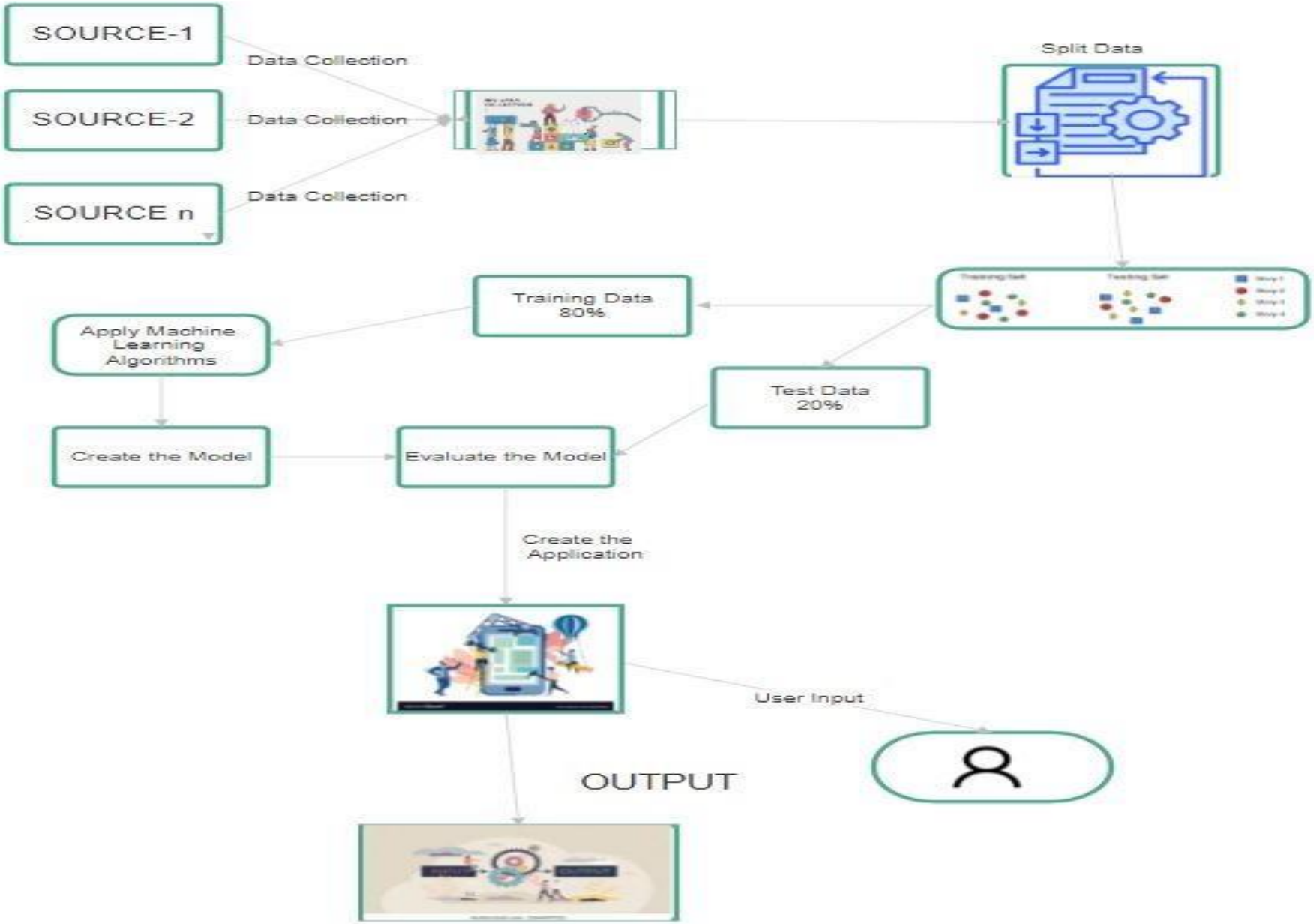
Project Design Phase-II
Data Flow Diagram & User Stories

Date	03 October 2023
Team ID	Team-591695
Project Name	Fraud detection using ML
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.


SOURCE-1
SOURCE-2
SOURCE n
Data Collection
Data Collection
Data Collection
Split Data
Training Data
80%
Test Data
20%
Apply Machine
Learning
Algorithms
Create the Model
Evaluate the Model
Create the
Application
User Input
OUTPUT

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
	Project setup & Infrastructure	USN-1	Set up the environment with the requires tools and frameworks to start the hospital readmission prediction project.	Successfully configures with all necessary tools and frameworks.	High	Sprint-1
Fraud Detection	Development environment	USN-2	Make all necessary arrangements to complete the project.	Install all necessary frameworks and modules.	High	Sprint-1
Fradulent Transactions Data Collection	Data collection	USN-3	Gather a diverse dataset of readmissions containing different types of features for training the Machine learning model.	Gathered a diverse dataset depicting various fradulent features.	High	Sprint-2
Data preprocessing for fraud detection.	Data preprocessing	USN-4	Preprocess the collected dataset by handling all types of null values, missing values and selecting correct features for predicting and selecting correct model.	Pre-processed the Fradulent transactions dataset.	Medium	Sprint-3

Model development for fraud detection	Model development	USN-5	Train the selected machine learning model using preprocessed dataset and monitor its performance on the validation set.	Explored various Machine learning algorithms.	High	Sprint-3
	Training	USN-6	Implement data augmentation techniques to improve the models robustness and accuracy.	Conducted testing.	medium	Sprint-4
	Model deployment & Integration	USN-7	Deploy the trained machine learning model as an API or web service to make it accessible for readmission prediction. Integrate the models API into user-friendly web interface for users to give input and predict .	checked scalability.	medium	Sprint-5
	Testing & quality assurance	USN-8	Conduct thorough testing of the model and web interface to identify and report any issues or bugs. Optimize its performance based on user feedback and testing results.	Created web application.	medium	Sprint-5