Project Design Phase-II
Data Flow Diagram & User Stories

Date	6-10-2023
Team ID	Team – 593081
Project Name	Car Purchase Prediction
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 enter and leaves the system, what changes the information, and where data is stored.
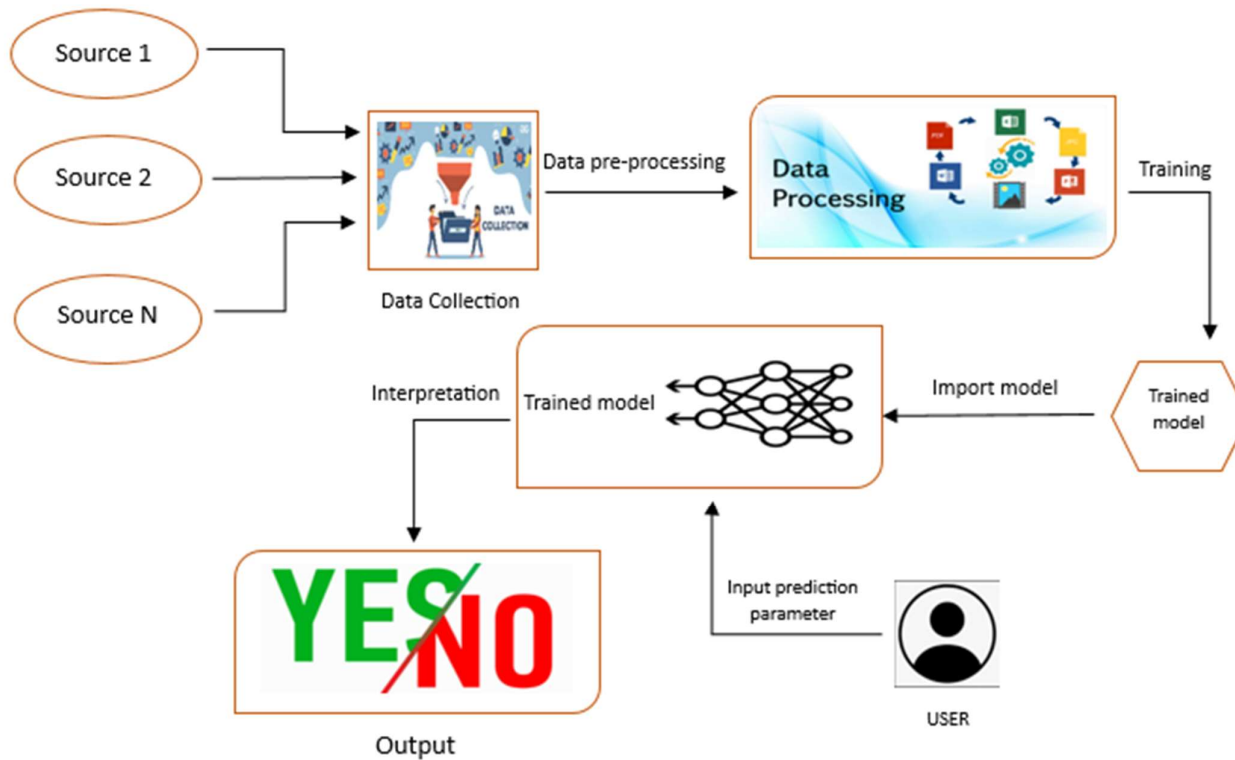
User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Car Companies	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the car purchase prediction project.	successfully configured with all necessary tools and frameworks	High	Sprint 1
Data Collection and Analytic department	development environment	USN-2	Gather a dataset of information of consumers along with their preference to buy a car or not for training the deep learning model.	Gathered a diverse dataset of people along with their purchase preferences	High	Sprint 1
Researchers and Academics	Data collection	USN-3	Preprocess the collected dataset by normalizing dataset values, removing empty values and splitting it into training and validation sets.	preprocessed the dataset	High	Sprint 2
Researchers and Academics	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for car purchase prediction.	we could explore various DL models	High	Sprint 2
Data Analyst	model development	USN-5	Train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	we could do validation	High	Sprint 3
Researchers and Academics	Training	USN-6	Implement data augmentation techniques (e.g., rotation, flipping) to improve the model's robustness and accuracy.	we could do testing	medium	Sprint 3
Software Engineer	model deployment & Integration	USN-7	Deploy the trained deep learning model as an API or web service to make it accessible for car purchase prediction. Integrate the model's API into a user-friendly web interface for users to enter details about a potential buyer and receive the prediction results.	we could check the scalability	medium	Sprint 4
Software Engineer	Testing & quality assurance	USN-8	Conduct thorough testing of the model and web interface toidentify and report any issues or bugs. Fine-tune the model optimize its performance based on user feedback and testing results.	we could create web application	medium	Sprint 5