

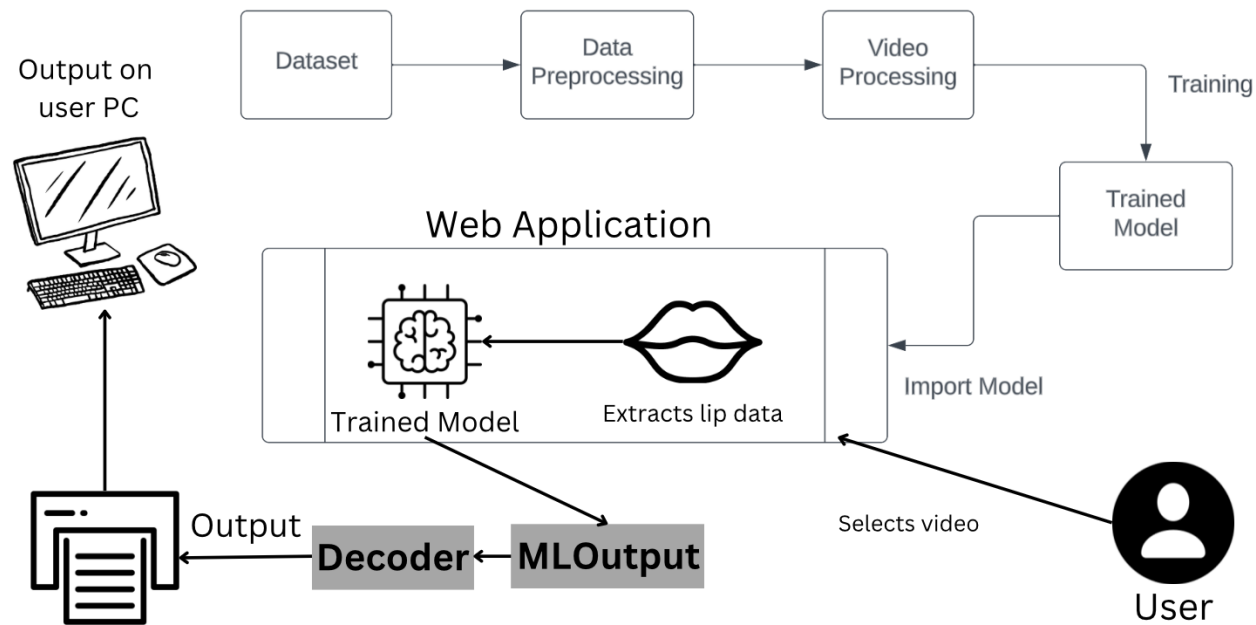
Project Design Phase-II

Data Flow Diagram & User Stories

Date	19 November 2023
Team ID	Team-593126
Project Name	Lip Reading using Deep Learning
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.



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Researchers	Project setup	USN-1	Set up the development environment with the required tools and frameworks to start the lip reading project.	Development environment is successfully configured with all necessary tools and frameworks.	High	Sprint-1
Institutes	Data Collection	USN-2	Gather a diverse dataset of videos containing people speaking with various lip movements for training the lip-reading model.	Diverse dataset collected with videos depicting different individuals sentences.	High	Sprint-1
Academics	Data Preprocessing	USN-3	Preprocess the collected dataset by extracting frames and converting the data into a suitable format for training.	Dataset preprocessed with frames extracted and converted into a suitable format.	High	Sprint-1
ML Researchers	Model Development	USN-4	Explore and evaluate different deep learning architectures (e.g., RNNs, CNNs) to select the most suitable model for lip reading.	Various deep learning architectures explored and evaluated.	High	Sprint-2
Developers	Development	USN-5	Train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	Selected model trained and validated, with satisfactory performance.	High	Sprint-2
Web Dev	Integration	USN-6	Deploy the trained lip-reading model and integrate the model into a user-friendly web interface for users to use and receive lip-reading results.	Web Interface Integration	Medium	Sprint-3
Testers	Testing & quality Assurance	USN-7	conduct thorough testing of the model and web interface to identify and report any issues or bugs.	Web App tested	Medium	Sprint-4