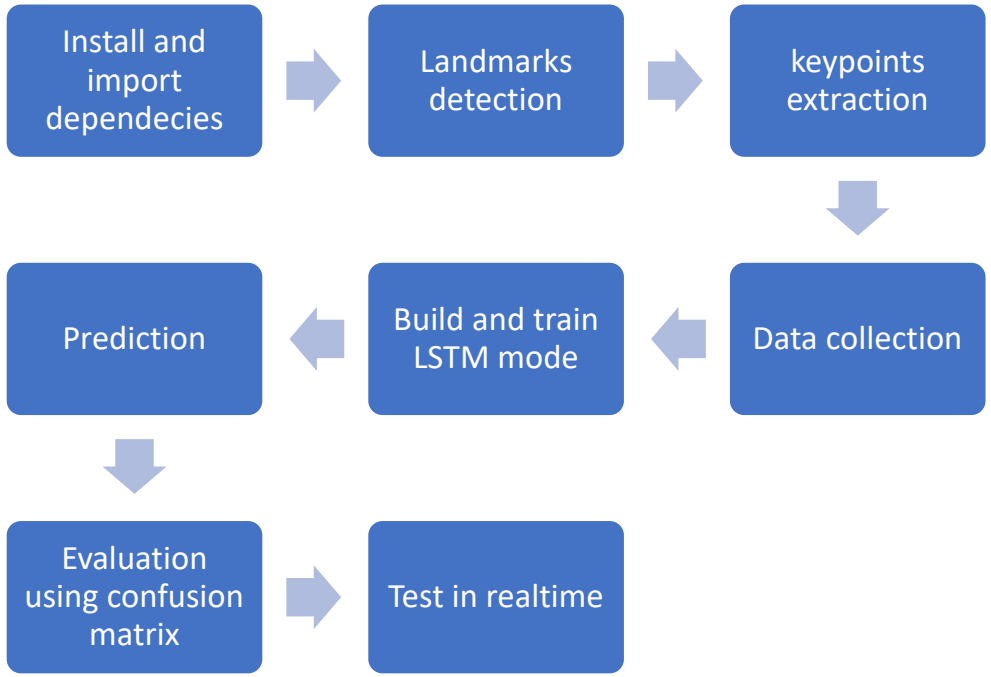
Project Design Phase-II
Data Flow Diagram & User Stories

Date	13 October 2022
Team ID	PNT2022TMID17511
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	4 Marks

Data Flow Diagram:



Flow:

- We start by collecting key points from media-pipe holistic and collect a bunch of data from key-points
- Save data in the form of numpy arrays.
- We then build a LSTM model and train with our stored data
- The number of epochs for the model is determined by us, if we increase the number of epochs the accuracy increases but time taken to run the model also increases and overfitting of model can happen, for gesture recognition.
- Once training is done, we can use this model for real time hand gesture detection and simultaneously convert the gesture to speech using OpenCV.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Developer	Model Building	USN-1	Collect Dataset		High	Sprint-1
		USN-2	Collecting Key points using Media Pipe Holisitic		High	Sprint-1
		USN-3	Training a Model Using LSTM from key Points		High	Sprint-2
		USN-4	Convert text to Speech using google Api		Medium	Sprint-2
		USN-5	Model is integrated in flask app		High	Sprint-3
Customer (Web user)	Communication	USN-1	Communicating in Front of camera		High	Sprint-1
		USN-2	Speech and text are delivered by web interface		High	Sprint -1