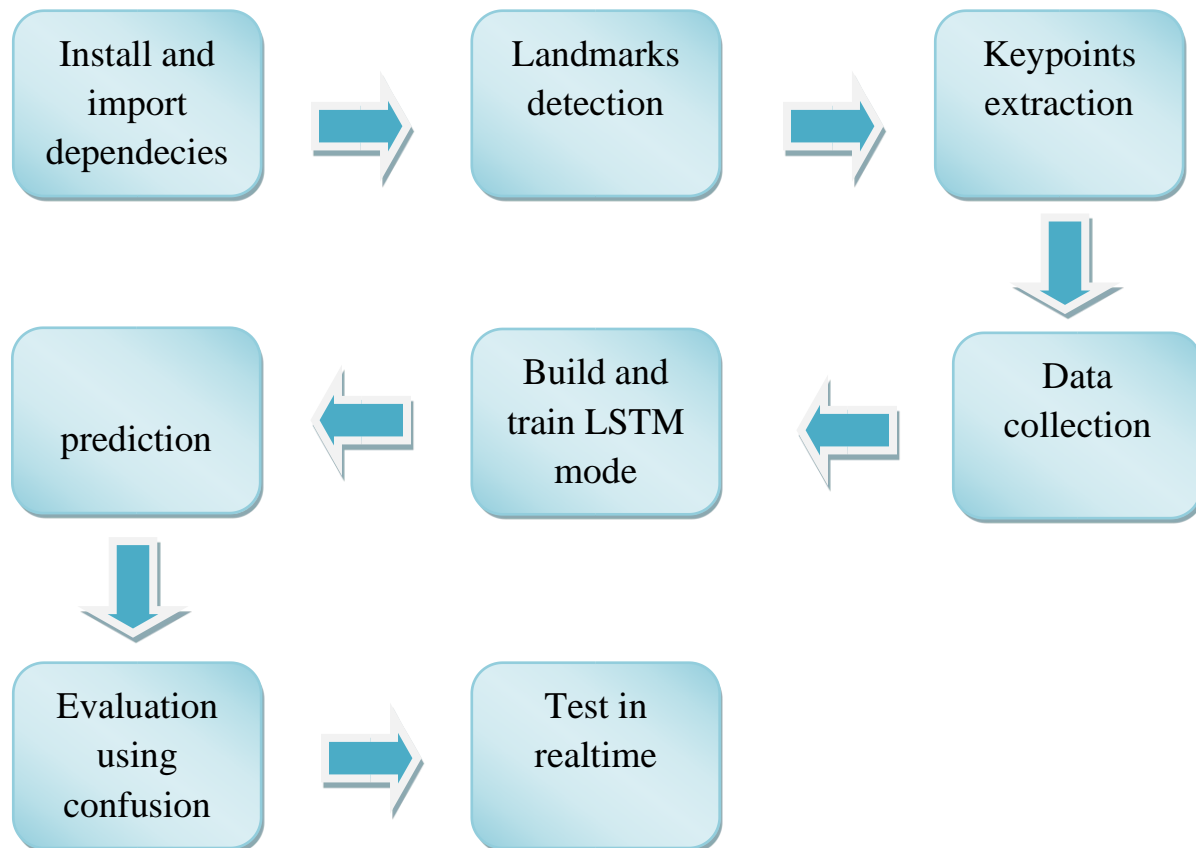


Project Design Phase-2

Data Flow Diagram & User Stories

Date	15 NOVEMBER 2022
Team ID	PNT2022TMID10824
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

User Type	Functional Requirement (Epic)	User Story Number	User Story/Task	Acceptance criteria	Priority	Release
Develop	Model building	USN-1	Collect Dataset		High	Sprint1
		USN-2	Collecting key points using media pipe Hoslisitic		High	Sprint1
		USN-3	Training a model using LSTM from key points		High	Sprint2

		USN-4	Convert text to speech using google Api		Medium	Sprint2
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- The number of epochs for the model is determined by us, if we increase the number of epochs the accuracy increase 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.

		USN-5	Model is integrated in flask app		High	Sprint3
		USN-1	Communicating in front of camera		High	Sprint1
Customer (Web user)	Communication	USN-2	Speech and text are delivered by web interface		High	Sprint1