**L.I.S.A(LEARNING INTERPRETER FOR SPECIALLY AIDED)**

**ABSTRACT**

Many people with hearing and speech impairments find it difficult to get access to education in universities. Such people find it difficult to communicate with the teachers as well as their peers . They might find it difficult to catch up with the lectures. Our idea is to pave a way for them to keep themselves updated with the lecture content. We can create an interpreter that could convert text to speech and present an interactive experience to them.



**Benefits Proposition**

1. Difficulty of catching up with lectures can be reduced

2. Students can feel more independent.

3. Students can ask whatever doubts they have.

4. They can get a summary of their lecture readily.

5. It is cost effective and user friendly.

**User Needs Analysis**

* Original Opportunity – To look for effective ways to improve the ‘quality of learning’ for specially aided.
* Rewriting the opportunity as – To create products or services that improve the ‘quality of learning’ for specially aided.
* ‘Quality of learning’ means the need for access to higher education and to experience normalcy while having a disability.

**Outcomes & Impact on Society**

* Stereotypes can be broken, and normalcy among students can be attained.
* They can join the universities of their choice.

**Problem Assumptions**

1. Prior knowledge of English is required

2. Improvements such as converting sign language to

our language and vice versa can be done.

**Working of the model**

Our idea is to create a model that contains speech to text conversion, text summarisation and question answering system.

Speech to text conversion can be used to convert the voice input of the lecturers into text. This could be easier for them to catch up with the lectures. Text summarisation can be used to provide a summary from the text generated from the lecture. Finally the question answering system can be used to ask questions based on the lectures and get answers automatically by the model.



**Users/ Stakeholders**

**Primary users**:

• Specially Aided school/college students

**Secondary users:**

• Any student who cannot attend the class

actively can make use of this.

**List of beneficiaries:**

• Students with hearing and speech impairments.

• Students who cannot attend the class regularly.

• Educational institutions.