

User Stories

Hands position

As an user who can't talk

I want the program can recognize the position of my hands

To calibrate the subsequent motion recognition

Identify movements

As an user who can't talk

I want the program can identify the movements of my hand

To that it can search for patterns in the motion that match Mexican Sign Language positions.

Transcription text

As an user who can't talk

I want the system to write a text with the transcription of the user's sign language.

To that a person who doesn't know sign language can understand what I'm trying to communicate.

Feedback

As an user who is using the program

I want the program provides feedback to indicate that the movements or gestures have been recognized correctly

To that the user knows that there were no complications in the transcription process.

Visual or text indicators

As an user who is using the program

I want the system provides visual or text indicators about the current state of the system.

To that I can know what process the program is performing and whether I need to interact at any point

Acceptance criteria

Hands position

- The hand position recognition is done through the camera
- The motion recognition system should be accurate and consistent after calibration, so that the user can effectively control the connected program or device.
- Provide clear and easy-to-understand documentation explaining how to perform calibration and how to use the motion recognition system once calibrated.
- Conduct usability tests with non-speaking users to ensure that the calibration process is intuitive and effective.

Identify moviments

- The program should allow the user to search for specific signs in Mexican Sign Language and provide information about their meanings and usage.
- Machine Learning (Optional): If machine learning is used, the program should be capable of improving its ability to identify signs as it is provided with more examples.
- The program should be adaptable to the nuances and variations in Mexican Sign Language movements, as they can vary between different individuals and regions.

Transcription text

- There is a space where the transcribed text will appear.
- The program recognized all or enough of the movements to form a result.

Feedback

- The program displays a visual or text notification when it correctly recognizes a movement or gesture.
- The correct recognition notification is displayed in real-time or with a brief delay so that the user is aware of recognitions while using the program.
- If a complication arises in the transcription process, the program must inform the user clearly and provide details about the issue.

Visual or text indicators

- These indicators are easily visible and comprehensible to the user.
- The system ensures that users can easily differentiate between different states and understand their significance.
- The indicators are updated in real-time or with minimal delay to keep users informed of the system's status and any necessary actions.