

Intern Hackathon 2025

Bridging silence and speech, across every language.

Background and Statement

70 Million Use It. Almost No One Supports It.

70M
people use sign language

<1%

Translation tools support
sign language as input

<2%

**Public websites are
fully accessible**

Problem Statement



Lack of sign language translation tools



Tone and emotion are often lost in translation



Limited multilingual accessibility



Communication gap for the deaf and hard-of-hearing

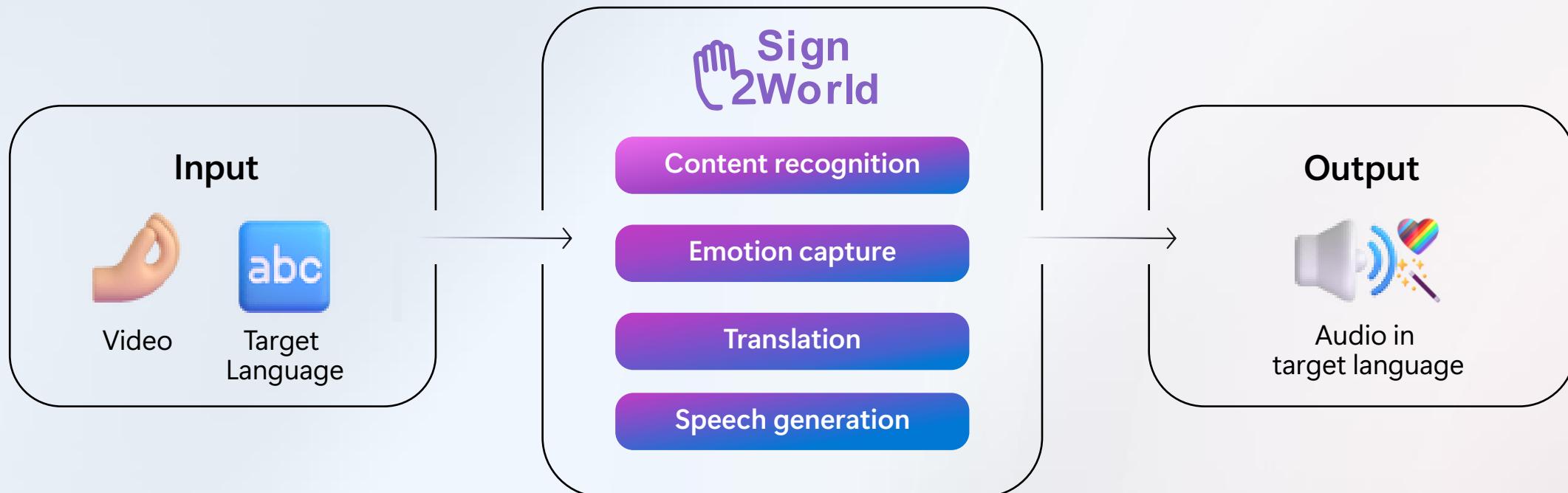
Solution and Feasibility: Sign2World

Bridging the Gap

How Sign2World Transforms Sign Language Accessibility



From input to output - What is our solution?



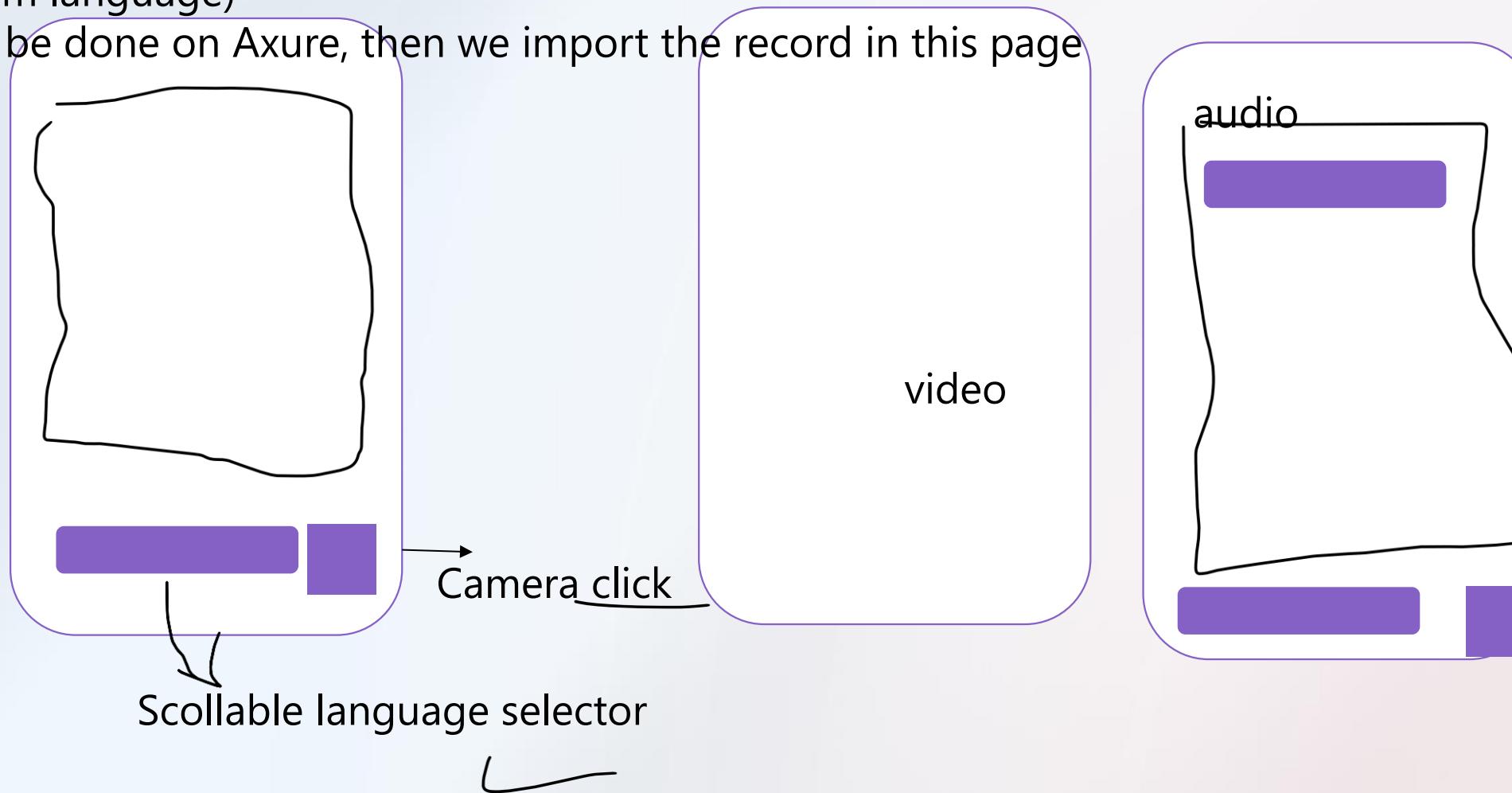
Technical Showcase

Story 1: input to output (emotion doesn't matter)

Hello(signlanguage) as input

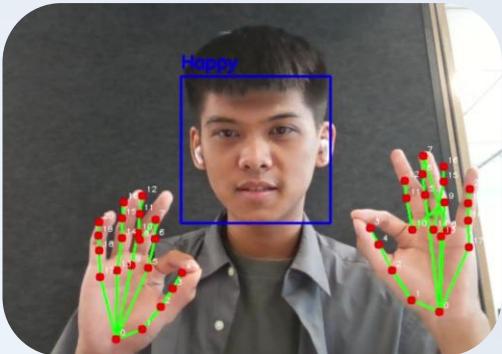
Hello(as output in random language)

Whole interaction could be done on Axure, then we import the record in this page



Emotional Speech Automation

Sign Language



English

Let's come together to unleash our creativity and innovation, empowering the world with our collective ideas.

Target: Chinese

让我们齐心协力，释放我们的创造力和创新能力，用我们的集体想法为世界赋能。

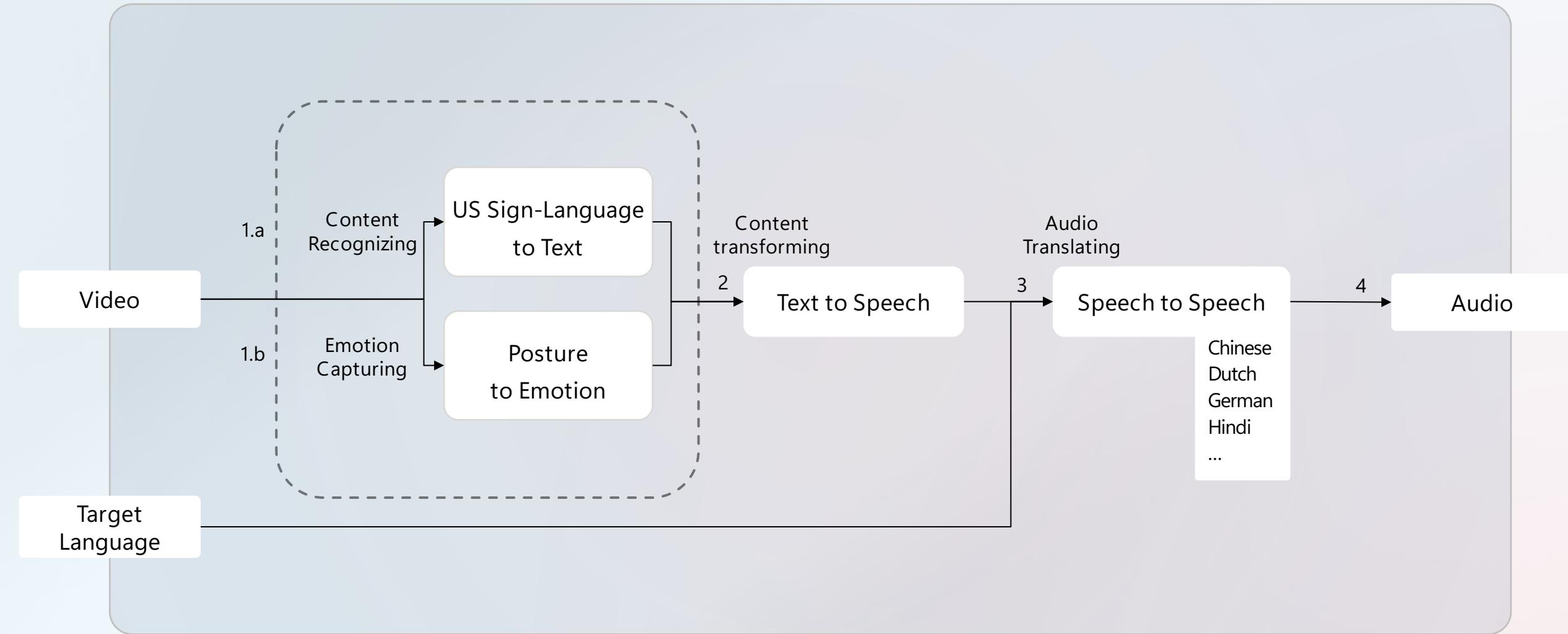
Emotion:
Happy



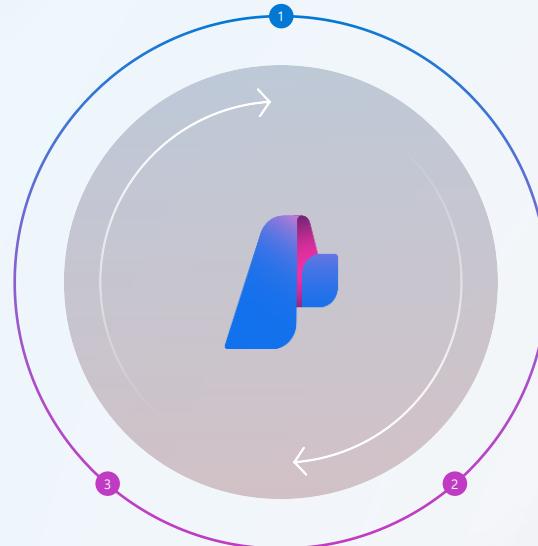
Most TTS works only support a neutral tone...



Sign2World: Technical Architecture



About Feasibility: Tech Stack



Posture to Text



Multi-lingual Translation With Tone



MetaAI
SeamlessM4T
All-in-One, Massively Multilingual and
Multimodal Machine Translation

Impact, Value, and Market Potential

Our Value Proposition

- **All-in-one AI pipeline:** Sign recognition → Emotion detection → Multilingual translation → Human-like speech.
- Adds **emotional tone** through facial expression analysis — a first in accessibility tech.
- Modular and integrable into **customer service, healthcare, education, and smart cities.**

Impact Potential

Increases access for hundreds of millions with communication disabilities.

Boosts customer satisfaction & inclusion metrics for businesses and public services.

Supports compliance with accessibility laws like ADA, WCAG, and EU Accessibility Act.

Market Opportunity

\$50.6B

By 2030 (Assistive
technology market)



\$32B

By 2027 (Speech &
language AI Market)



Growing
Demand for
multilingual



What's Next

Integrate Live Video Stream

Launch web/mobile app

Two-way communication
Speech-to-sign

Multi-National Sign Language

Inclusive schools & universities

Healthcare providers

Public service agencies

धरती पर हर व्यक्ति और हर संगठन को अधिक हासिल करने के लिए सशक्त बनाना।

Jede Person und jede Organisation auf der Welt befähigen, mehr zu erreichen.

Empower every person and every organization on the planet to achieve more.

Iedere persoon en elke organisatie op de planeet in staat stellen om meer te bereiken.

赋能地球上的每一个人与每一个组织，帮助他们达成更多目标

Thank you