

SignStream

Empowering Communication

Context

3 Million Kenyans are deaf

Hearing Impaired students often do not feel as much a part of the “university family” as their hearing peers

The Problem

Videoconferencing tools lack support of real-time sign language translation specifically of technical jargons for deaf students



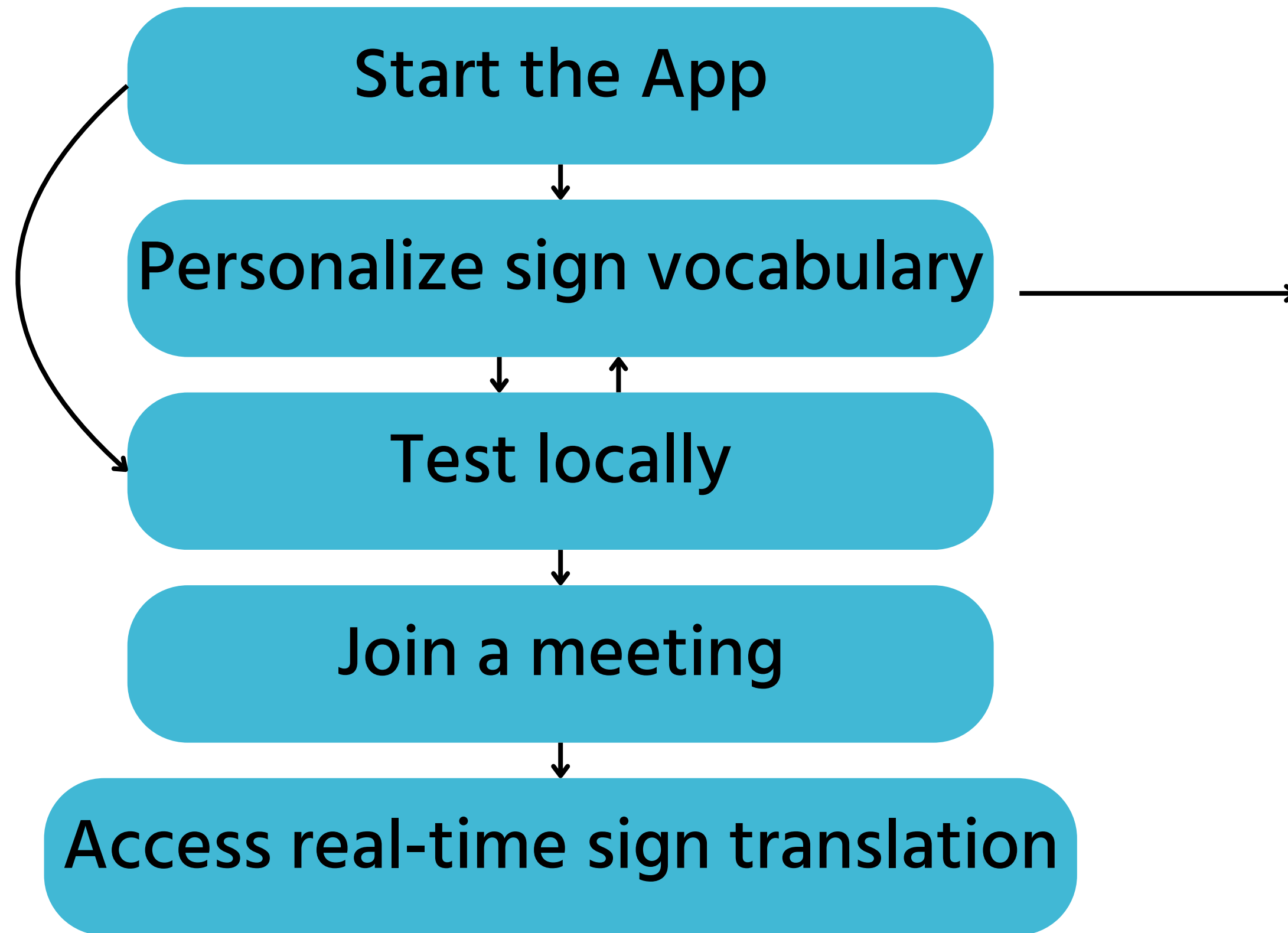
Winnie

USIU-A Deaf Tech Student

Approach

A Machine Learning model that utilizes user input of sign language to train a model for real time translation in video conferencing applications

Solution



ML Model (Sign image sequence of words from user, k-nearest neighbor algorithm) = learned sign language of vocabulary by model

Potential Benefit

A personalized learning experience for each deaf student who uses video conferencing tools

Responsible Computing Practiced

1. Accessibility
2. Inclusion
3. Accountability
4. Privacy and Security

Team



Victoria Rotich
Frontend developer



Danny Ercy
**Machine Learning
Engineer**



Fidel Otieno
Backend Engineer

LIVE DEMO

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