



GesTalk

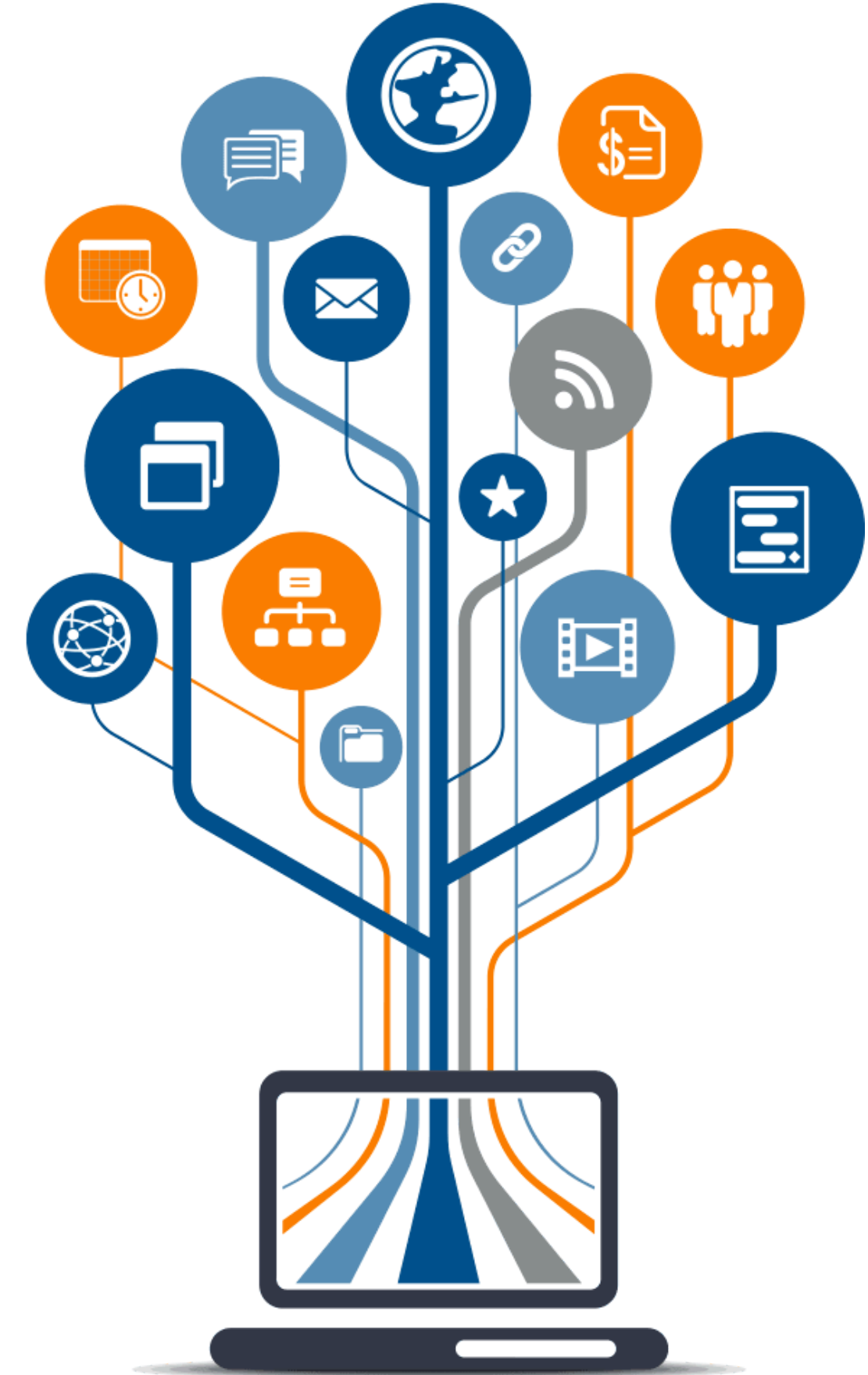
**Converting Hand
Gestures into
Voice and Text**

INTRODUCTION

The Smart Electronic Glove translates hand gestures into voice, text, and images, aiding mute individuals, physiotherapists, paralyzed patients, scuba divers, and special schools. It enhances communication and rehabilitation by providing real-time, objective assessment for therapy, replacing manual, subjective evaluations. This innovation ensures better accessibility, accuracy, and inclusivity in various fields.

FEATURES

- 1** Hand Gestures to Voice ,Text and Images Conversion
- 2** Finger Flexuation Monitoring
- 3** Multi-standard language support
- 4** Hand gesture customization





Technology

- The smart glove uses Arduino Nano as the core microcontroller.
- It processes data from multiple sensors to detect hand orientation and gestures.
- The system compares sensor values with pre-stored gesture data in memory.
 - When a match is found, it produces output as voice or text.

Web Platform

Displays gesture data as text and plays corresponding audio.

Applications



Applications

For mute peoples

Learning aid for special schools



Other Potential Applications

Bio-medical tool

for physiotherapy

For paralyzed patients



**Gaming
console/controller
for VR/AR platform**



**To control
machinery or
equipment**



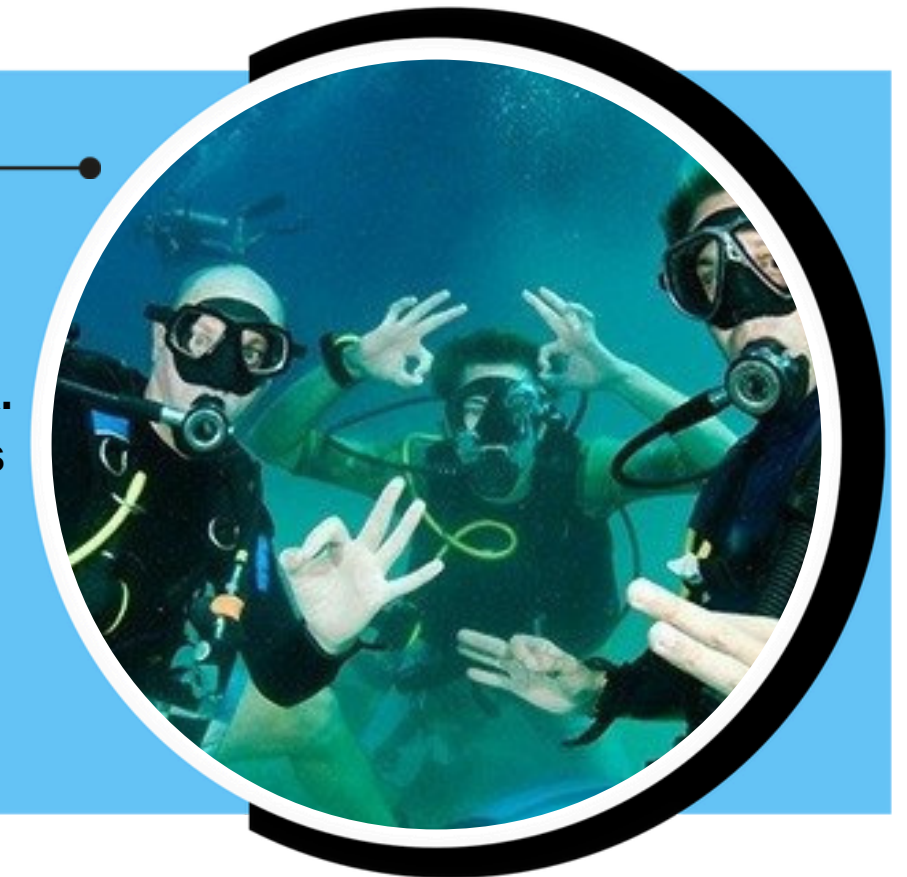
For old age peoples

- For translating fingers actions to Voice Conversion



Under water communication

- Communicating to each other while being under water is difficult.
- communicating while being under water can be carried out with Gestalk. Gestalk can be connected to wireless
- radios to transmit audio signals corresponding to gestures.



THANK YOU