Documentation Overview for Shrote (श्रोत)

Project Name: Shrote (श्रोत)

Problem Statement:- The problem addressed by Shrote is enabling visually impaired individuals to interact with their real-time environment using voice commands.

Our Approach:- Shrote is a groundbreaking eyewear device featuring an AI-enabled virtual assistant. It incorporates several essential components:-

1. Imaging Sensor (Camera): - Captures live video from the user's perspective.

2. Microphone: - Allows users to issue voice commands and input queries.

3. Speaker:- Provides audio responses after processing user queries and environmental data.

4. Other Sensors: - Includes motion, compass, obstruction detection, and navigation sensors to enhance functionality.

How It Works:- Shrote operates by utilizing its built-in camera to perceive the user's surroundings. Users interact with the device via the integrated microphone, issuing voice commands to the AI virtual assistant. The device processes environmental data and provides real-time feedback through the speaker. Additionally, Shrote offers:

1. Connectivity: - Easily connects to Bluetooth and WiFi networks for extended capabilities.

2. Voice Commands:- Users can issue various voice commands for specific functions,

such as:

- "What is in front of me?" for object and facial recognition, with audio responses.

- "Help" to send emergency SMS messages with GPS location to predefined contacts.

- "Voice search" for tasks like checking the weather, querying the time, and web browsing.

- Commands for taking photos, playing music, making phone calls, and more.

3. Facial Recognition:- Utilizes a pre-trained face recognition module to identify individuals and respond with their names.

Social Impact:-

Shrote has the potential to make a significant positive impact on society, especially for visually impaired individuals. It aims to empower them by facilitating seamless interaction with their environment, ultimately eliminating feelings of exclusion and enhancing their daily lives.

Tagline: -"Shrote: Empowering Vision Beyond Sight."

Gist :-“Shrote is an AI-powered eyewear device enabling visually impaired users to interact with their surroundings through voice commands, offering real-time feedback and connectivity. Its mission is to empower a more inclusive and accessible world.”

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