Hardware

* For Glasses

1. Raspberry pi Zero 2W model

Raspberry Pi Zero 2 W is perfect for a  IoT projects this raspberry pi having 1GHz quad-core 64-bit Arm Cortex-A53 CPU processor and having 512MB SDRAM RAM and it support 2.4GHz 802.11 b/g/n wireless LAN, Bluetooth 4.2, Bluetooth Low Energy (BLE)

It has Mini HDMI port, micro USB ports and also having CSI-2 camera connector

1. Raspberry pi Camera module

This Raspberry Pi Camera Module is a custom designed add-on for Raspberry Pi. It attaches to Raspberry Pi by way of one of the two small sockets on the board upper surface. This interface uses the dedicated CSI interface, which was designed especially for interfacing to cameras. The CSI bus is capable of extremely high data rates, and it exclusively carries pixel data.  The 5MP camera module is perfect for small Raspberry Pi projects

1. Ear buds

earbuds are a pair of small loudspeaker drivers worn on or around the head over a user's ears. We are using advanced Bluetooth 5.1

* For shoes

1. ESP32

ESP32 Development board is based on the ESP WROOM32 WIFI + BLE Module. It's a low-footprint, minimal system development board powered by the latest ESP-WROOM-32 module and can be easily inserted into a solderless breadboard.  including the USB-UART bridge, reset- and boot-mode buttons, LDO regulator and a micro-USB connector.

1. Ultrasonic sensor (HC-SR04)

This ultrasonic sensor module can be used for measuring distance, object sensor, motion sensors etc. High sensitive module can be used with microcontroller to integrate with motion circuits to make robotic projects and other distance, position & motion sensitive products. Detection distance: 2cm-400cm (0.02M - 4.0M)

1. Vibrator Motor

Vibrator Motor is a shaftless vibration motor that is fully-enclosed with no exposed moving parts. Its small size (10 mm diameter, 3.4 mm height) and shaftless design mean you can mount it on a PCB

This tiny, button-type, vibrating motor shakes with a vibration amplitude of 0.75g and draws approximately 60mA when 3V is applied to its leads.

1. Power bank

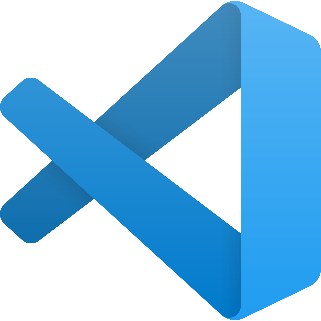
We are using power bank for power up the raspberry pi and esp32 both on operating voltage of them and it is rechargeable

1. Wires

We are using single strand wires for connecting the components.

Software

As code editor :- visual studio code, Jupyter notebook

Sources :- Kaggle , GitHub