Small Scale System Development Project and Workshop (For Web, Android and IoT Systems)

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1-Worked in a team of 5 to developed a smart stick for assisting blind people using an Ultrasonic sensor integrated on the stick to detect any obstacle in front of the user, within a range of one meter.

2-Programmed Arduino to receive the data from the sensor and configured ESP8266 to transmit data wirelessly from Arduino to a Local Computer from where data is written in a file using Server socket connection programmed in Java.

3-Implemented 'Voice Alert' using Python's Text to Speech Kit to alert the person about the obstacle. In future, we aim to develop an android app to notify the person using speaker of the smartphone.

https://github.com/sajal09/Smart-Stick