

Blind's Eye

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Through our volunteer work in the blind school in our region, we have experienced the suffering and the intensity of their need for help by a device that facilitates their lives and integrates them with other people. According to the (WHO) in 2017, there are more than 45 million blind people in the world, and the number is expected to reach 75 million by the year 2020. So we think to help them and because voice communication is the best way to deal with the blind, we decided to design the(blind's eye) , which consists of the Raspberry Pi, GPS , NFC tags and NFC which we have programmed to connect sensors' ID to speech and added several possibilities, such as definition speech and connecting them to a database with NFC tags ID in addition to use of position maps to search and find the locations of the surrounding things, which led to its ease of use, especially that he can speak with the blind in the language he wants, either during the introduction of instructions or tell him the names of unknown things around him according to the voice profile Registrar. It can also identify the blind through the sound of his voice while giving orders to the device and can also communicate the blinds on social networking sites. Where we tested the device on the blind, the results were impressive for us and them. We can also use the device in many fields as education, medicine, tourism and in trade, but the time did not help to add what we aspire to add a camera for the device and provide with a database of general images of fixed objects around the blind, the device analyzes these images and tells them verbally about them.

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