Color detection for Visually impaired people

System Design

Outline

- Introduction
- Problem statement
- Project specifications
- System Design
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Introduction

- Blindness is a condition of poor visual perception.
- Multiple Levels of Blindness.
- 285 Million person are visually impaired.
 - 39 million completely blind.
 - 246 million with low vision.

Problem Statement

Inability to detect or Distinguish between colors.

Daily Challenges.

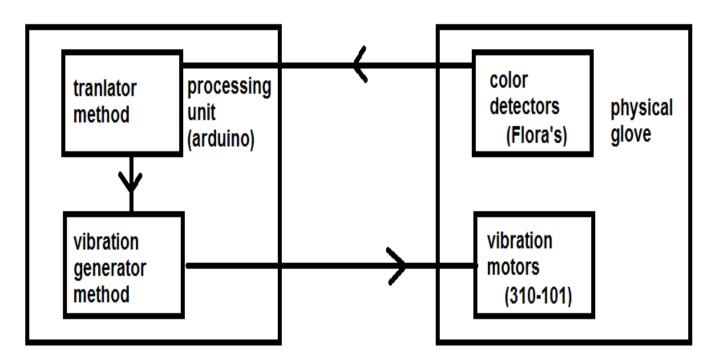
Project specifications

- User requirements :
 - reliability in detecting and translating different colors to predefined vibrations accurately.
 - Fast and Instant in reading colors
- Technical specifications:
 - Sensor range: must touch to detect color.
 - Vibrators voltage: 2V to 3V to indicate color intensity.
 - Arduino: two will be used one for each hand.



Flora sensor

System Architecture











 Solution for a challenge faces the visually impaired people

Thanks for your time

Q & A