# Project Perceiving the World through Technology Milestone 2 - Product Design Behavior

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1. Functionality:

The project aims to develop a portable sensor system that can assist visually impaired individuals in navigating their surroundings with greater ease and safety.

The system consists of two input sensors, two IR Obstacle Avoidance Sensor, two Tilt-Switch sensors along with two buzzers and two vibrating sensors that provides a quick audible output.

The IR sensor detects obstacles in the path of the user and provides a warning through the buzzer, which helps the user to avoid collisions. The tilt sensor detects changes in the orientation of the user, which can help the user to maintain balance and avoid falls. The vibration sensor can alert the user to stop and avoid any sort of disbalancing or any sort of discomfort while walking or doing any sort of stuff.

The system is designed to be easy to carry and use, with the sensors mounted on a fanny pack that can be worn around the waist. The user can activate the system with a simple button press, and the audio feedback from the buzzer helps to guide the user through their environment.

2.Working:

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3. State Diagram:

