

Sleep Catcher

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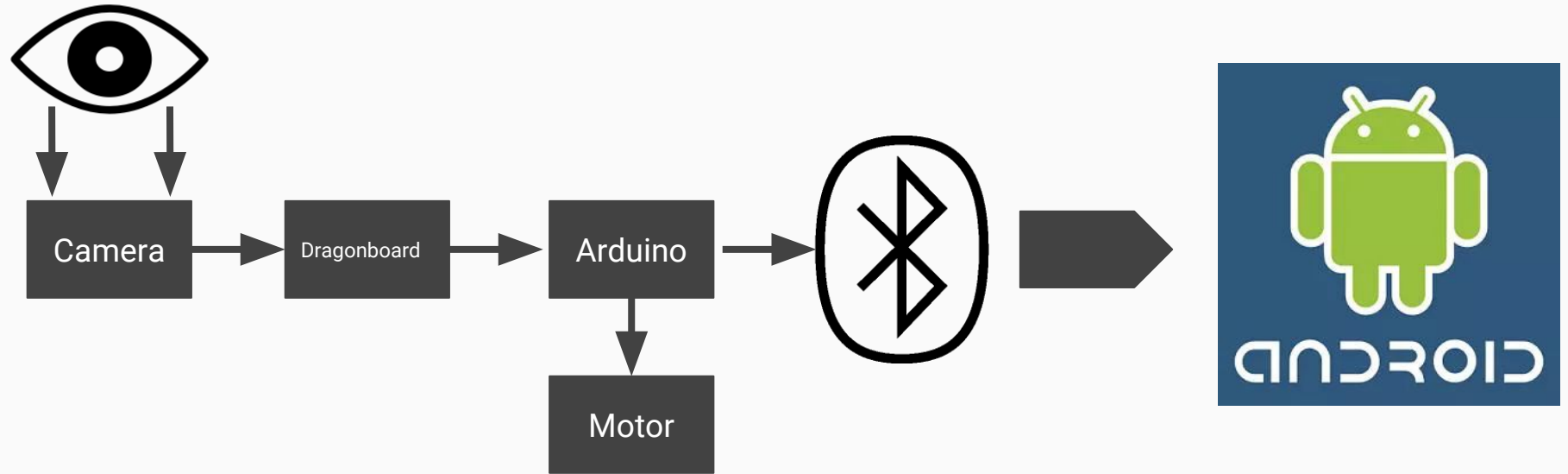
Purpose

- In 2015, 5000 people died by falling asleep while driving
- Annual cost of drowsy driving is estimated to be around \$109 billion
- People tend to doze off while studying on their computer

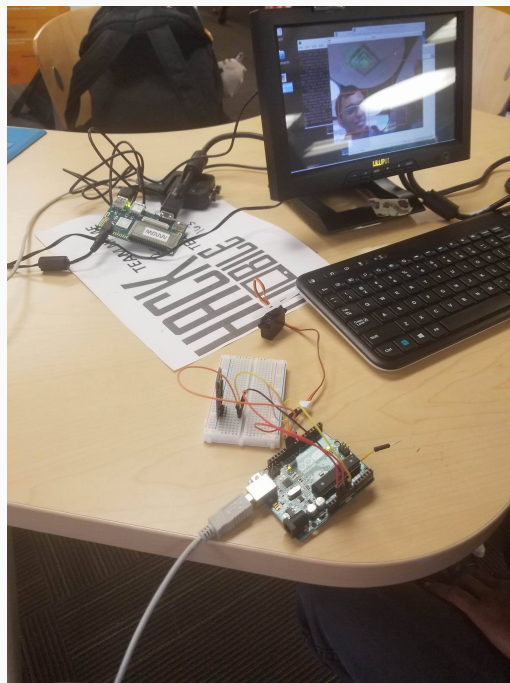
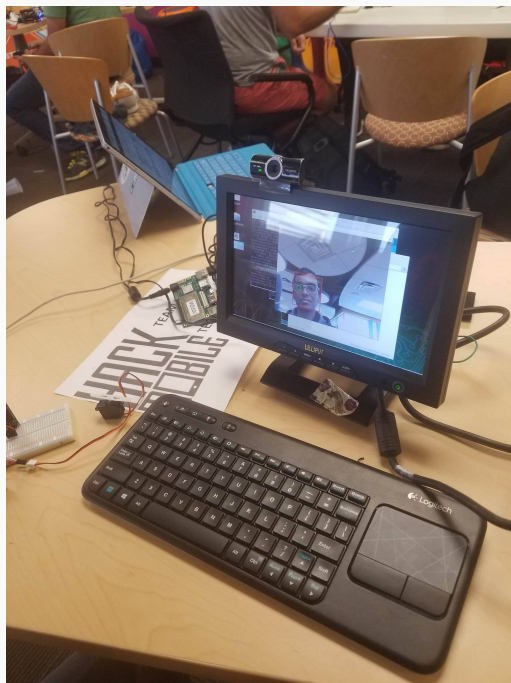
Solution

- Develop a lightweight program to ensure user does not doze off
- Easy to set up on any Android device
- Can be set up in a car environment or with any computer with a camera

Component Breakdown



Project Demonstration



Don't fall asleep!

BUZZ AND RING

START DRIVING

Challenges

- Set up took large part of our time
 - Not able to use Seeed Sensor Kit
 - Replaced first Dragonboard after 4 hours of tinkering
- Integrating Components
 - Using Camera with Dragonboard
 - Using Aduino with Dragonboard
 - Using Aduino with Bluetooth
 - Using Bluetooth with Android