Scenarios

1. If the rover does not encounter any hikers in need.
    a. Patrol a preset 50 foot trail
    b. Avoiding any obstacles (rocks, branches, etc) using ultrasonic sensors
2. Human is standing in front of the rover, using infrared sensor and camera
    a. Use audio* to ask “Do you need the assistance of a park ranger?”
    b. If hiker presses the “no” button or doesn’t press a button, move on
    c. If the “yes” button pressed on rover, it means hiker needs assistance
        i. Send signal back to base station
        ii. Signal contains current GPS location, time of distress signal
        iii. Audio*: “Assistance is on the way, remain by the rover”
3. Human is lying down, not moving, in front of rover
    a. Use audio* to ask “Do you need the assistance of a park ranger?”
    b. If no response, start sending video capture
        i. As well as GPS location, time of distress signal
    c. If “No” button pressed, move on

*Might implement LCD display later

Not addressed

1. Uninjured hiker looking for help for someone at different location
    a. We would have to implement a way to track to a new location/ follow the hiker
    b. 2 solves it already slightly
2. If a hiker needs assistance, but not of a park ranger
    a. Later on we can implement a more detailed prompt
    b. Maybe carry supplies on rover to distribute
3. If the hiker does not speak English
    a. Too complicated to implement multiple languages for this current stage
4. What if the hiker is walking in the same direction as the rover and keeps getting stopped
    a. We’ll skip this issue for now
    b. Maybe we can fix by adjusting the speed of rover?