

Smart Cane

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Class: 6C

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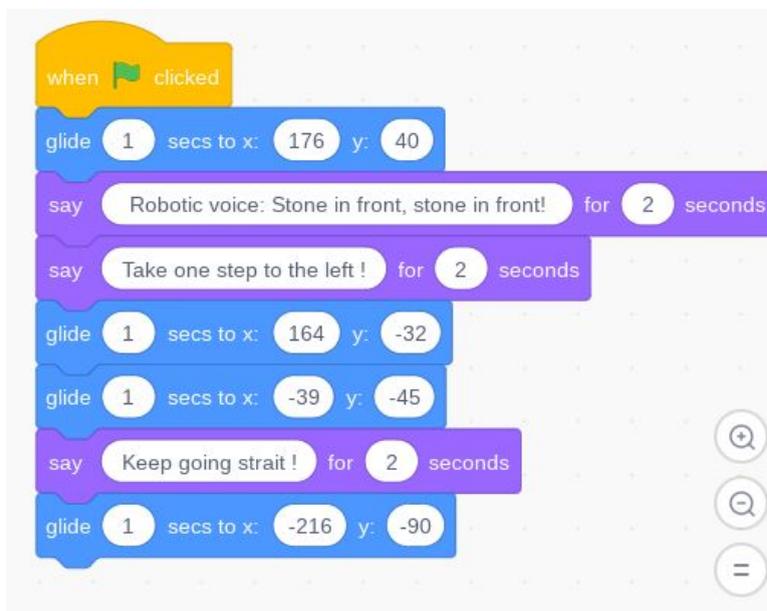
Project Name: Smart cane

- 1) **Idea description** - The idea of the Smart cane is that it helps newly blind people to get used to a cane. There are many diseases that can make you blind unexpectedly. The smart cane is easily going to make it easier to learn how to use a cane and make people go into their regular life faster after a tragedy.
- 2) **Target group** - The target group for the Smart cane is Health/ Medical care.
- 3) **Design** - The design of the Smart cane is a normal cane but there you are holding the cane are 3 buttons. The first button has a circle and is for putting the cane on and off. The second button has a triangle on it and that is for putting the camera on and off. Lastly, the last button has a circle and it is for connecting the camera with a single earbud that tells you if there is something in front of you, and it also navigates you if you have to go somewhere new. The little knob in the end of the cane is for sensing how tall or how much the distance is from an object to another is. When the knob senses the material of something the handle will start vibrating. This is also good if the ear bud somehow is not working.
- 4) **Technical solutions** - The smart cane is not only good for the person using it, it's also good for the environment since it uses a mix of both solar energy

and batteries because the blind person will not now when it is sunny and when it is rainy or cloudy. It is also going to be used regularly which means that the weather does not matter. The Cane it's self is made out of recycled plastic and can be reused again.

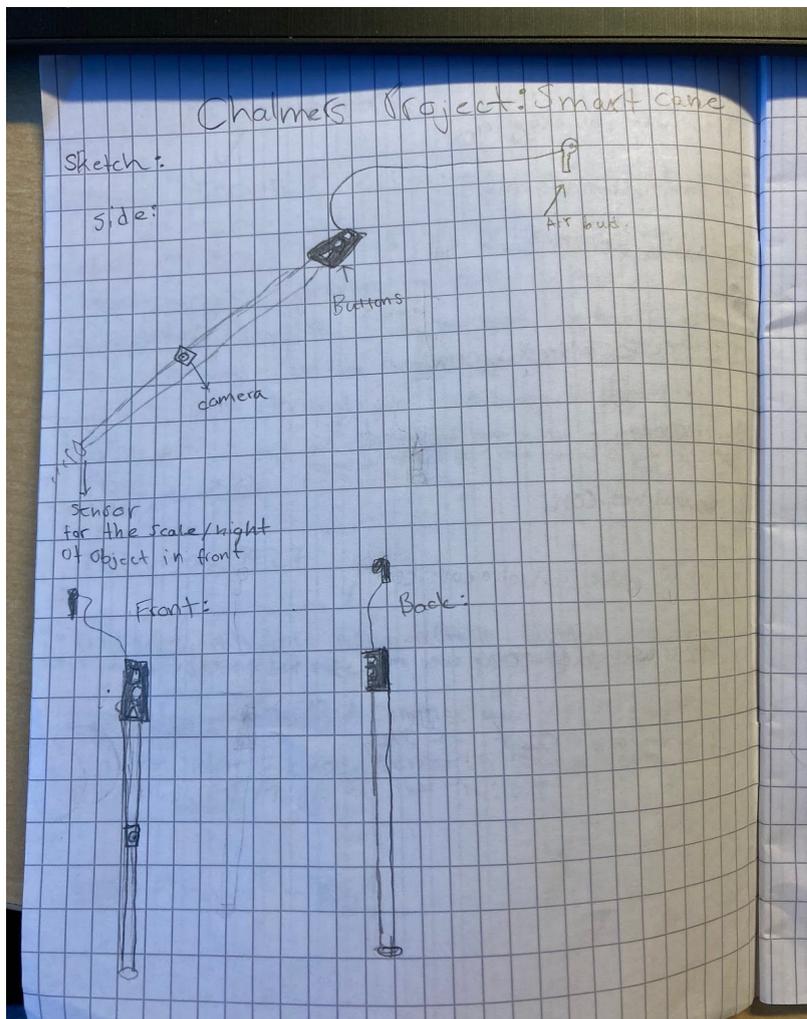
- 5) **Threats and opportunities** - The danger of replacing robots can be that it will take over jobs so many people will be jobless. Another negative thing about robots could be that, if the robot gets programmed wrong it could do dangerous things like opening a stove when it is supposed to lock it for kids. The positive effect of replacing robots could be that it is helping elderly people if they don't have anyone to help them. Another thing that is good about robots is that it helps education. Without computers, people in for example America would not be able to have online classes and the virus would spread more actively.

- 6) **Flowchart:** <https://scratch.mit.edu/projects/446093580/editor>



Video is attached

7) Sketches-



- 8) **Logbook** - The first thing that I started doing while building was gluing popsicle sticks together to form a cane (stick). Then I did a camera out of cardboard and glued it on top of the cane. After that I cut out a string and glued that on the top of the cane. On top of the string I made an earbud by glueing two very small pieces of popsicle sticks together. In the last lesson I started painting the cane in 2 colors which was blue and silver. That made my cane look awful but I do think you still can see that it is a cane.

