

Micro:bit

Auto Challenge

The auto industry needs electrical engineers, have you thought about a career in the industry? They need you! Help start the conversation by completing one of the following tasks. You will use TINKERCAD if you do not have starter kit with the breadboard and microbit.

Level 1: 50%- one and done!

Create a demo for someone just starting out in Micro:bit with an online demo of a traffic light with the microbit and the breadboard of red, yellow and green lights. Be sure the code works to with a time between each light to let traffic through.

Level 2: 51%- 65%

With electric cars now driving themselves how is this done? Using your knowledge of sensors and select one to combine with either a button or a light. To show your understanding of electric car sensors. How can this help drivers? Or other people?

Level 3: 66% to 79%

The Cutebot is cute but powerful, just like electric cars are, demonstrate how you can show it's power by connecting it to another micro:bit as a remote control for the cutebot then show 2 feature that are built in to Cutebot (note that there are only 2 Cutebots)

Or, show your understanding of 3 luxury items in the interior dashboard of a vehicle. Create 3 items together that can be seen.



Level 4: 80%-100%

The auto industry is really having a hard time keeping vehicles from being stolen. Can you come up with a solution? 4 options of input and output combo.

If not can you program some of the already safety features that a vehicle has using the mirco:bit. A minimum of 4 using the breadboard and the microbit.

Avoid simple light and button without a bigger purpose.

If no one selects the cutebot please see me if you would like to use this option.