

Smart House

Suggested Time

60 minutes

Age

8 - 18

Challenge

In this activity, design and construct an NXT house which utilizes sensors. For example, have the house greet oncoming cars by turning the house lights on.

***Topics***

Building & Programming

Subjects

Engineering & Technology

Programming Themes

Wait For

Materials

- NXT or RCX
- Assortment of LEGO pieces
- Sensors

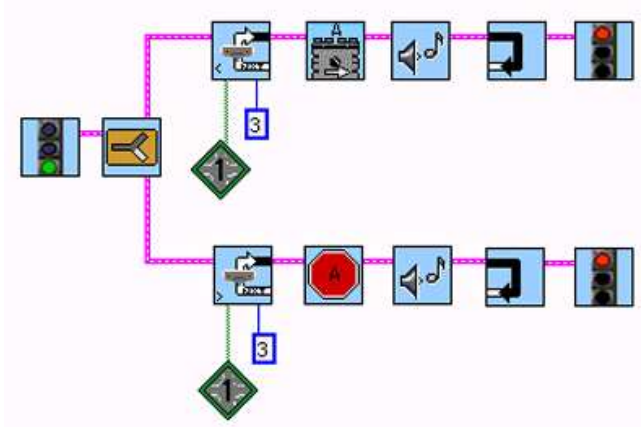
Building Instructions

1. Build a structurally sound RCX or NXT house, including a light and a driveway big enough to fit a car to trigger the sensor.

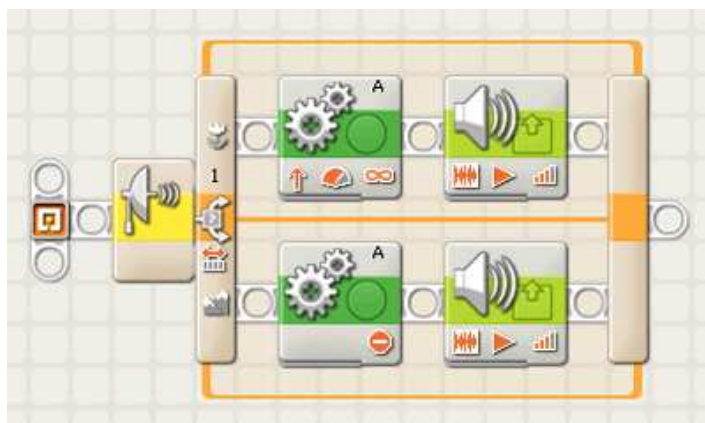


Programming Instructions

1. Choose whether to use ROBOLAB or the LEGO NXT-G software to program.
2. Here is an example ROBOLAB Inventor 4 program:



3. Here is an example NXT-G program:



***Building and
Programming
References***

- Building With Bricks
- Building With Plates
- Building With Beams
- Axle Uses
- Connector Pegs and Bushings
- Gears
- The RCX
- RCX Motors and Wires
- RCX Sensors
- The NXT
- NXT Motors and Wires
- NXT Sensors