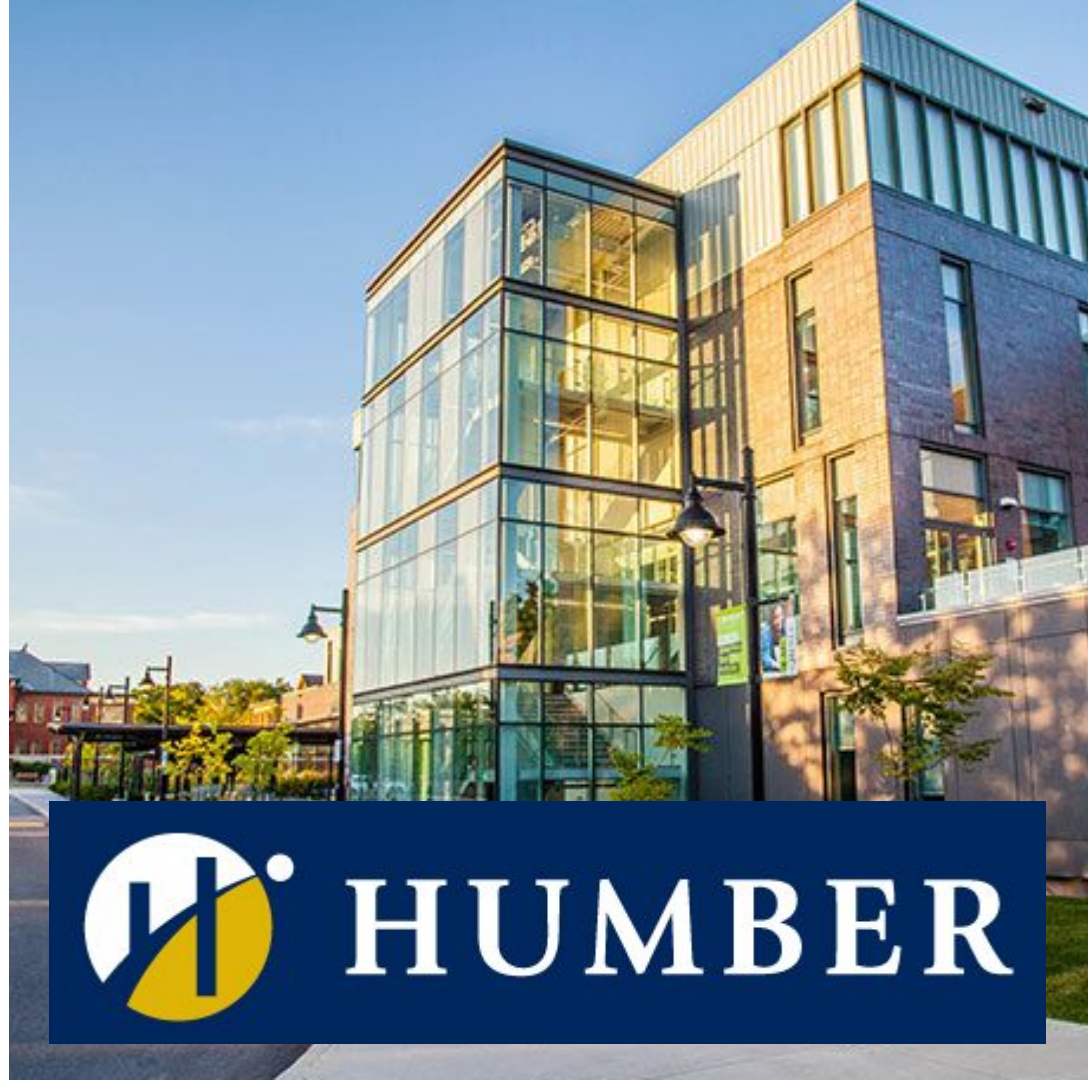


Christmas Tree

Kwasi Apenteng



HUMBER

Christmas Tree

Holiday Main Street

Batmobile Tumbler
Set #10308



The LEGO Group. (n.d.). Holiday Main Street . Retrieved 2024, from <https://www.lego.com/en-ca/product/holiday-main-street-10308>

Module Description

The christmas tree from the Holiday Main street is compatible with lights. This module will turn on the lights for 15 minutes



The LEGO Group. (n.d.). Holiday Main Street . Retrieved 2024, from
<https://www.lego.com/en-ca/product/holiday-main-street-10308>

Sensors and Motors

The lights will require a 880009 Hub for power.



The LEGO Group. (n.d.). Hub. Retrieved 2024, from <https://www.lego.com/en-ca/product/hub-88009>

Ports

The lights for the christmas tree will require the output port from the Hub to be connect.



The LEGO Group. (n.d.). Light. Retrieved 2024, from <https://www.lego.com/en-ca/product/light-88005>

Variables/Settings

Status: Can be set to "on" or "off". When on christmas tree will light up.

Length of time the lights remain on can be changed

```
{  
  "status" : "on",  
  "length" : "15"  
}
```

IOT Loop

While True

 If status == "on"

 If counter == 0
 Turn on lights

 Else If counter == 15
 Turn off lights

 Else If counter == 30
 Set counter to 0



The LEGO Group. (n.d.). Holiday Main Street . Retrieved 2024,
from
<https://www.lego.com/en-ca/product/holiday-main-street-10308>