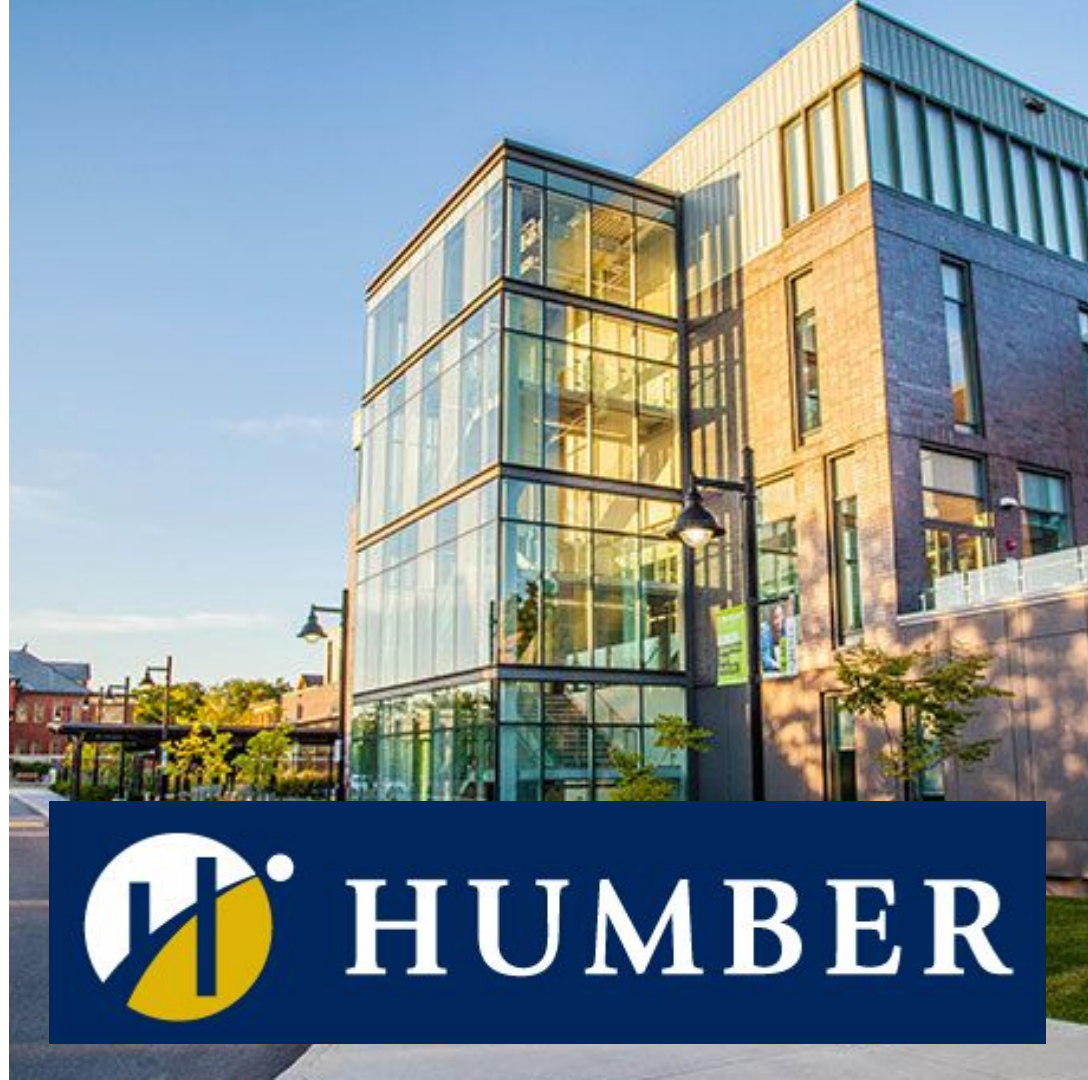Hannah Quintos
Sarah Tadele
Khushi Patel
Saloni Pawar

HUMBER

Car Wash

Car Wash

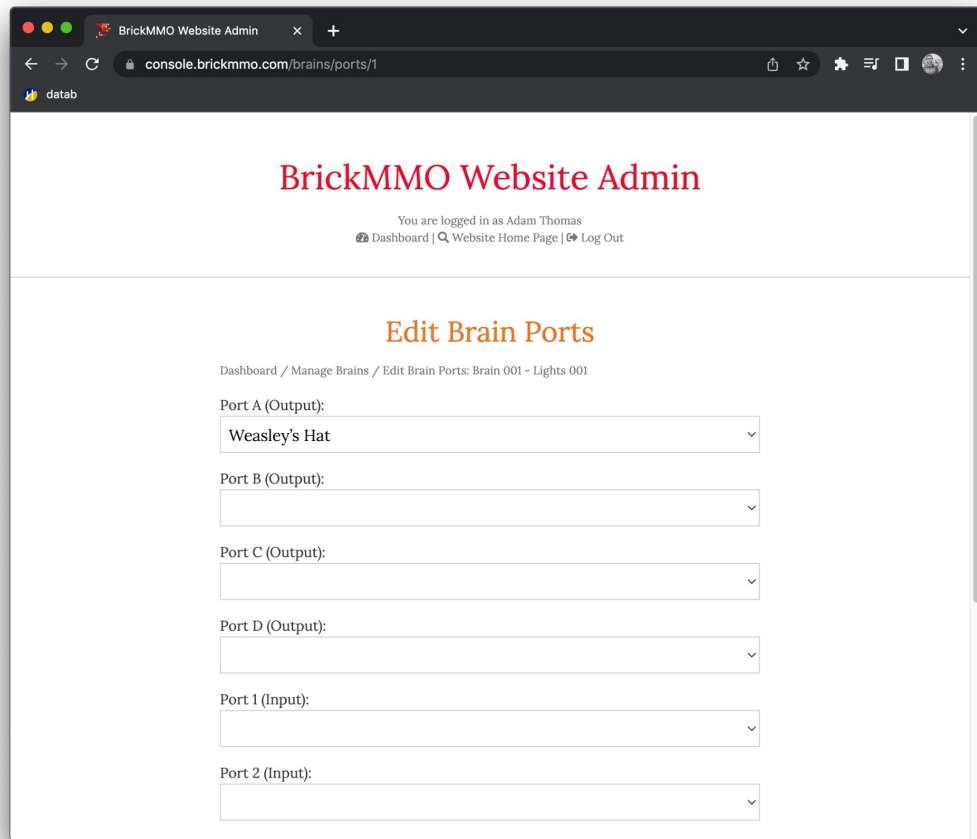Set #60362

Module Description

The Car wash set includes a car and the car wash building with brushes that turn once a car is pushed through.

This module will have a car that automatically drives through the car wash. Once a car enters the car wash, a light will turn red to signal that the car wash is in use. A countdown will start. Once the countdown reaches 0, the "car wash process" will be complete. The car will drive out of the car wash and the light will turn green signaling that the car wash is open and available.

Requirements

The car wash will require three output ports on an EV3 brain.

Sensors and Motors

The first output port will be attached to a motion sensor.

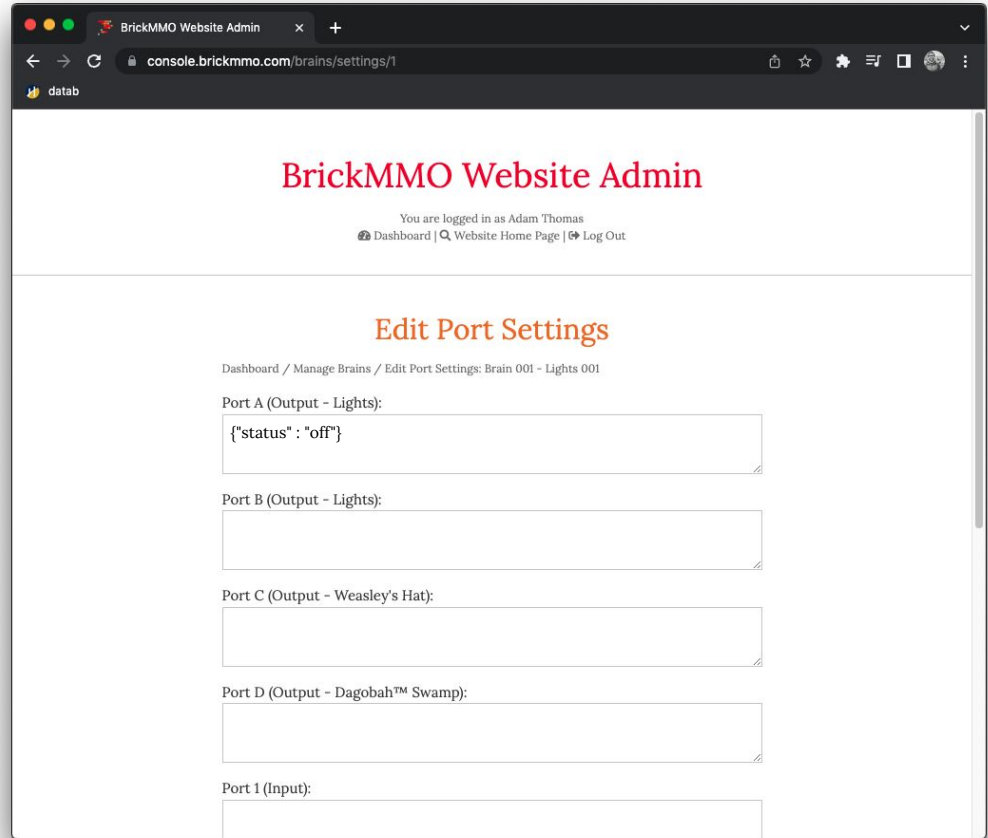The second output port will be attached to a motor pair.

The third output port will be attached to a light matrix.

Port Settings

Status: Can be set to "on" or "off".

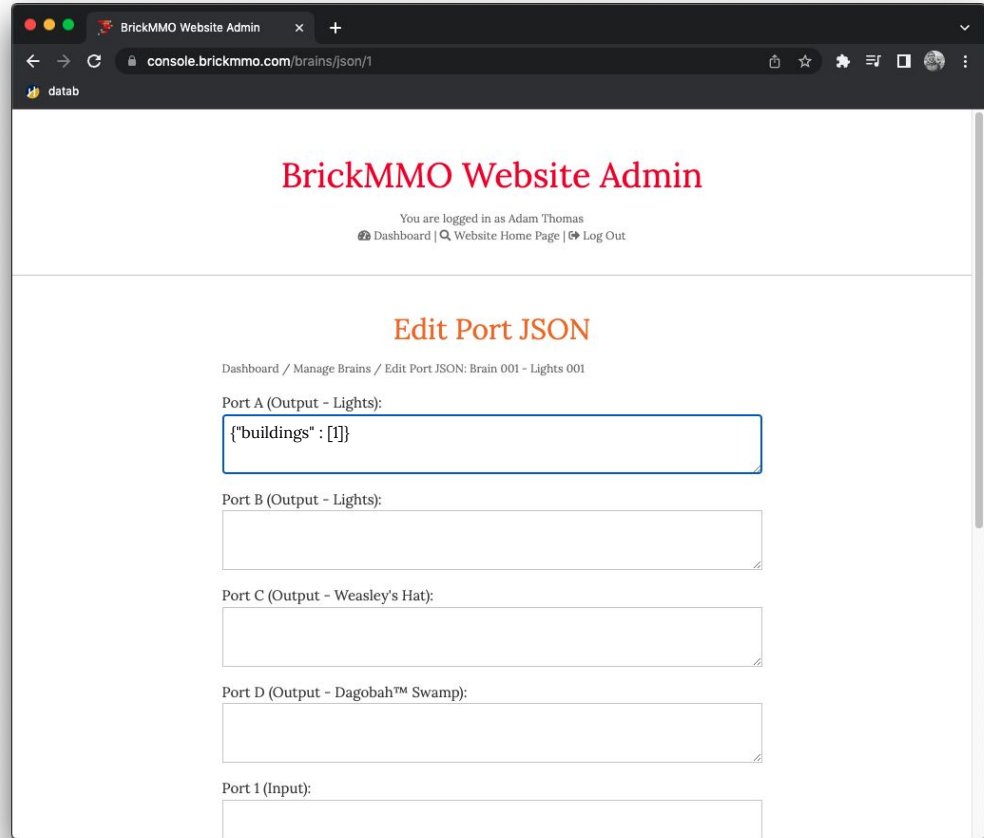When on car moves through the car wash, the lights turn red and the timer starts. Once the timer hits 120s the light turn green it's set to off.

Port JSON

Buildings: The ID of the Car Wash building.

IOT Loop

If motion sensor = true

Then matrix light = red and countdown starts

If countdown = 0

Then car drives off