isDoorLocked

# Problem Statement

Often I find myself having to unnecessarily reverify if all doors are locked and closed at the end of each day. I figured it would be significantly more consistent and easy to have an AI Enabled solution that could track this, with some reporting to IoT services.

# General Objectives

This solution should

* Determine if a lock is positioned to the left or right
* Determine if the door is left-hinged or right-hinged
* Determine if the door is locked based on the two above
* Determine if the door is closed (i.e. locked but not in the slot)
* Report all this data to a cloud service
* Cloud service will report to mobile phone somehow

# Challenge Constraints

The solution should use the **OpenCV Library** one way or another. Any hardware is allowed.

* This will use OpenCV to actually detect and analyze the locks.

# Approximate Diagram

