**Smart Blinds**

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Smart blinds are not any ordinary blinds. Smart Blinds (SB) will operate on the amount of external light, when it gets darker SB will close and it will open as it gets brighter in the morning. SB can be operated from anywhere in the world while connected to Internet from a mobile device. No more walking around the house to make sure all blinds are closed before going to bed or open the blinds to let some sun light in the morning. Along with remote open and close functionality, SB can be scheduled to operate. Instead of setting up alarms and waking up with a noise, users can now schedule their SB to wakeup with natural light or close depending on your sleeping time. Users don’t have to worry if they fall asleep and leave the blinds open. This functionality will help people with restricted mobility. SB can also be used as a deterrent for burglars as opening and closing of SB will indicate someone is at home while user is on holidays or at work in winter when the days are shorter.

SB can be set up to operate in the following ways.

1. Open and close on a schedule.
2. Open and close depending on amount of external light, this means it can open in the morning while will close when it starts to get dark.
3. Open and close remotely on Ad hoc.

**Tools, Technologies and Equipment**

Below Technologies, Tools and Equipment will be used.

Programming Language: Python

Web Technologies: HTML, CSS, JavaScript, BSON

Database: MongoDB

Cloud Technologies: CloudMqtt, wia.io, Azure or AWS

Hardware: Raspberry Pi, GPIO Extension Board, Photoresistor, Jumpers, Resistors, Motor, Breadboard power Module, 9V Battery

Connectivity: Wifi

**Project Repository**

<https://github.com/gibbsali87/SmartBlinds>