Design of the UV Exposure Box

# Introduction

Basic Operation: The artist will put the image in the box, set the exposure parameters via Web Interface over WiFi, and the start the process. The internal processor will initiate the turning on of the UV LED lighting..

Text, whiteboard

Description automatically generated

The major components, from left to right:

1. LED Control Layer. Proposed name: **UVEB\_LEDControl**. This will entail turning on/off. If I can put in current sensing, it will include that as well.
2. UV Light Sensing Layer, **UVEB\_UVStats**. Measurement of light data captured.
3. UI Control. **UVEB\_UIControl**. There will be some LED status, but principal UI will be HTTP over WiFi. UI will encompass Alarms, Status, Start/Stop commands.
4. Fan Control handling. **UVEB\_FanControl**. Fan on/off. May use PWM to handle fan speed.
5. Temperature Sensing Layer. **UVEB\_TempStatus**. Discovery of 1-wire temp sensors, reading temp data.
6. System Diag handling. **UVEB\_SystemStats**. Aggregate data collection, for use by alarms and events.