**Tips for the Vivid Light Challenge (July 2016)**

1. Must use one or more sensors found on the FEZ HAT
   1. Temperature Sensor, Accelerometer, Light Sensor or user buttons.
   2. [**https://www.ghielectronics.com/docs/329/fez-hat-developers-guide**](https://www.ghielectronics.com/docs/329/fez-hat-developers-guide)
2. The following Nuget libraries are required

* M2Mqtt - MQTT Client Library for .Net: <https://www.nuget.org/packages/M2Mqtt>
* Json.net: <https://www.nuget.org/packages/Newtonsoft.Json/8.0.3>

1. MQTT Broker IP Address: Will be made available on the day
2. The Colour Class (found in the Challenge Directory)

* Light IDs available: 1-4.
* You can use as many lights as you like but they are a shared resource so you’ll have to negotiate with others in the workshop.
* You need to provide Red, Green, Blue colours between 0 (off) and 255 (full brightness) to mix your colours.

1. Throttle MQTT messages: don’t send more than every 10 milliseconds.
2. Lights are refreshed every 20 milliseconds (50 Hz)

**Winning criteria**

* To be judged on subjective/artistic appeal by the rest of the workshop attendees
* In case of hang vote, the DaveG will have casting vote