## **Procurement Guide**

For most people wanting to complete this project with a group, Element14 (<u>au.element14.com</u>) is the best place to acquire components from. They are based in Australia, and have pricing very similar to buying directly from suppliers overseas using a site such as Alibaba.

Key characteristics that are needed when finding components:

- Arduino Nano headers attached (pins along the sides)
- LEDs through-hole, 3mm casing
- Push button case dimensions of 6x6mm, 4 legs, through-hole, single-pole single-throw (SPST)
- Resistors resistances of 330ohm and 1kohm, through-hole. Does not need to be more than 500mW or have a resistance tolerance of less than 1%.

Below is a list of parts that were available at the time of writing that would be suitable for this project:

- Arduino Nano <a href="https://au.element14.com/seeed-studio/102010268/seeeduino-board-arduino-nano-board/dp/3932117">https://au.element14.com/seeed-studio/102010268/seeeduino-board-arduino-nano-board/dp/3932117</a>
- 3mm Red LED <a href="https://au.element14.com/kingbright/l-1334surtk/led-3mm-red-630nm-red-transparent/dp/4062027">https://au.element14.com/kingbright/l-1334surtk/led-3mm-red-630nm-red-transparent/dp/4062027</a>
- 3mm Green LED <a href="https://au.element14.com/multicomp/703-0087/led-green-3mm-572nm-standard/dp/2112096">https://au.element14.com/multicomp/703-0087/led-green-3mm-572nm-standard/dp/2112096</a>
- 3mm Orange LED https://au.element14.com/multicomp/mcl034at/led-3mm-32-orange/dp/1581126
- 3mm Yellow LED https://au.element14.com/lumex/ssl-lx3044yc/led-3mm-yellow-90mcd-585nm/dp/7605560
- 6x6mm push button <a href="https://au.element14.com/apem/mjtp1230/switch-tactile-spst-50ma-through/dp/4511189">https://au.element14.com/apem/mjtp1230/switch-tactile-spst-50ma-through/dp/4511189</a>
- 330ohm resistor <a href="https://au.element14.com/multicomp-pro/mcmf0w4ff3300a50/metal-film-resistor-330-ohm-250mw/dp/1126972">https://au.element14.com/multicomp-pro/mcmf0w4ff3300a50/metal-film-resistor-330-ohm-250mw/dp/1126972</a>
- 1kohm resistor <a href="https://au.element14.com/multicomp-pro/mcmf0w4ff1001a50/metal-film-resistor-1kohm-250mw/dp/1126919">https://au.element14.com/multicomp-pro/mcmf0w4ff1001a50/metal-film-resistor-1kohm-250mw/dp/1126919</a>

If these parts are not available, there should be similar components available. Element14 also has the option to search for similar products based of characteristics like size and colour.