

Blue to Green Yo-Yo

- This shows the fade code on the entire 60 LEDs.
- It also yo-yos back and forth.
-

```
on start
  set haloDisplay to to Halo HD with 60 ZIP LEDs
  set direction to 0
  set b to 0
  set g to 255
  haloDisplay set color red 0 green g blue b
  haloDisplay show
```

The image shows a Scratch code editor with a blue 'on start' block containing several red 'set' blocks and two green 'haloDisplay' blocks. The first red block sets 'haloDisplay' to 'to Halo HD with 60 ZIP LEDs'. The second red block sets 'direction' to 0. The third red block sets 'b' to 0. The fourth red block sets 'g' to 255. The first green block is 'haloDisplay set color red 0 green g blue b'. The second green block is 'haloDisplay show'.

forever

if $\langle \text{direction} \rangle = \langle 0 \rangle$ then

change $\langle b \rangle$ by $\langle 1 \rangle$

change $\langle g \rangle$ by $\langle -1 \rangle$

+

if $\langle \text{direction} \rangle = \langle 1 \rangle$ then

change $\langle b \rangle$ by $\langle -1 \rangle$

change $\langle g \rangle$ by $\langle 1 \rangle$

+

haloDisplay set color red $\langle 0 \rangle$ green $\langle g \rangle$ blue $\langle b \rangle$

haloDisplay show

if $\langle \text{direction} \rangle = \langle 0 \rangle$ and $\langle b \rangle \geq \langle 255 \rangle$ then

set $\langle \text{direction} \rangle$ to $\langle 1 \rangle$

If reach the end, change direction

+

if $\langle \text{direction} \rangle = \langle 1 \rangle$ and $\langle b \rangle \leq \langle 0 \rangle$ then

set $\langle \text{direction} \rangle$ to $\langle 0 \rangle$

+

pause (ms) $\langle 10 \rangle$

Move the b and g values, depending on the direction.