

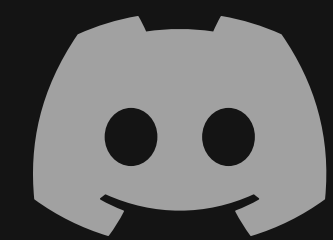
Beginners workshop

# Learn PCB design with KiCad

Workshop files: [pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)



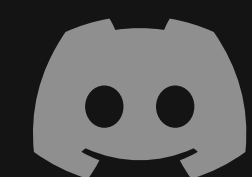
# Join us on Discord



discord.glowingkitty.com

- share projects you are working on
- get help, inspiration & feedback
- meet other LED enthusiasts

# What do we learn today?

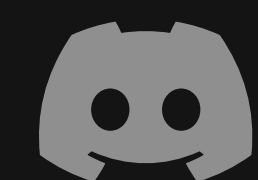


[discord.glowingkitty.com](https://discord.glowingkitty.com)

- what is a PCB used for?
- why design your own PCB?
- is it difficult?
- (practise) how to design a super simple PCB?
- (practise) how to order a PCB online?
- (practise) how to design a more complex PCB?



# What is a PCB used for?

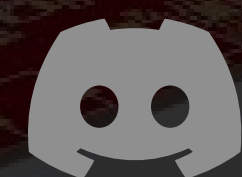
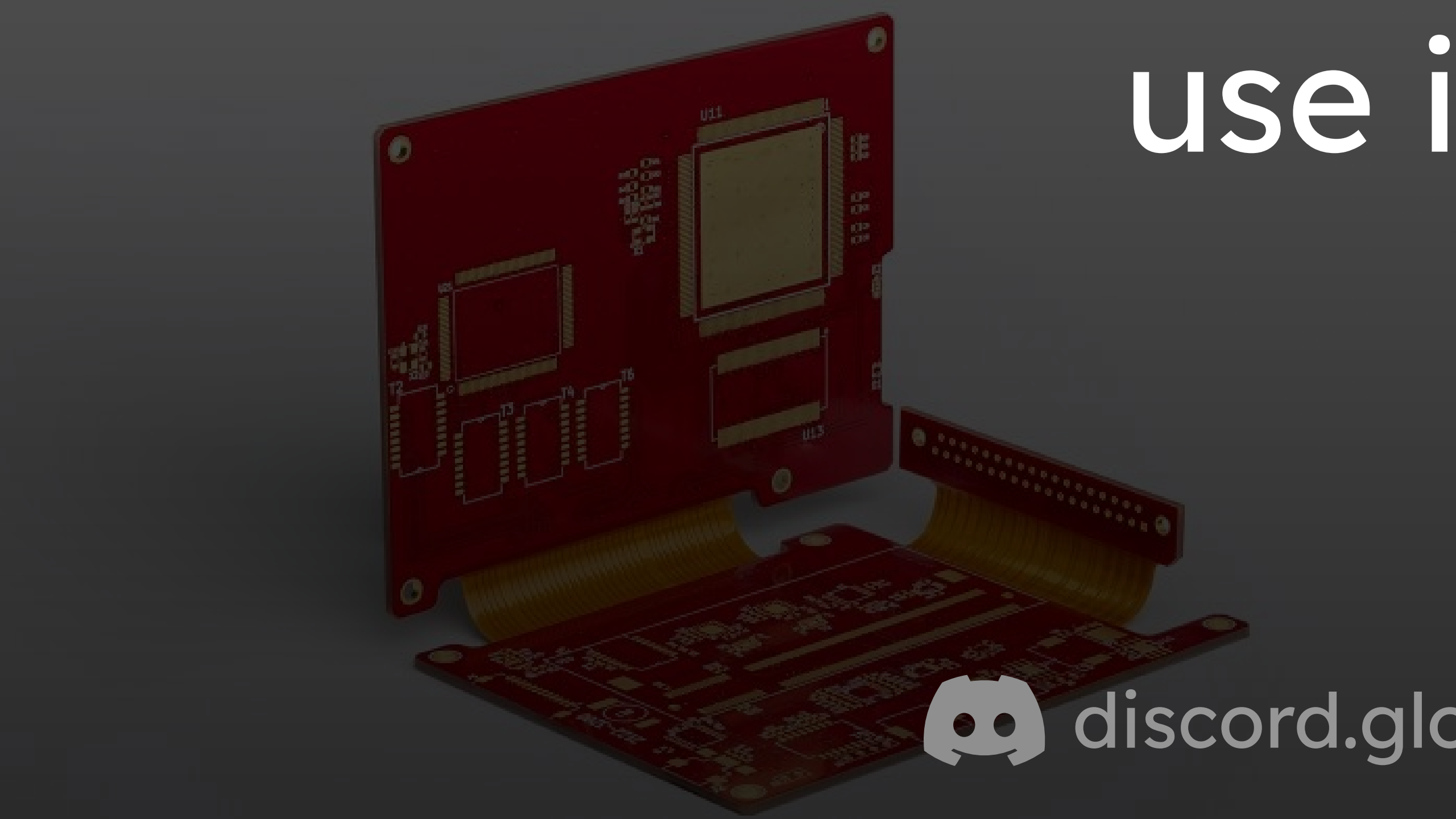


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Whatever you want to  
use it for.



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# Why design your own PCB?

## **WITHOUT custom PCBs:**

- projects are limited in terms of their shape, materials & components you can use
- get easily frustrating to solder together
- more expensive





## **WITH custom PCBs:**

- thousands of components to choose from
- design in whatever shape you like
- FR4, Aluminum, flexible PCB - your choice
- have fun by combining multiple PCBs,  
materials and thicknesses
- possibilities are endless!



# Is it difficult?

## **Simple PCBs:**

simple to design

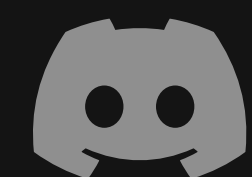
## **More complex PCB:**

not as complicated as you think, thanks to  
open source hardware + datasheets



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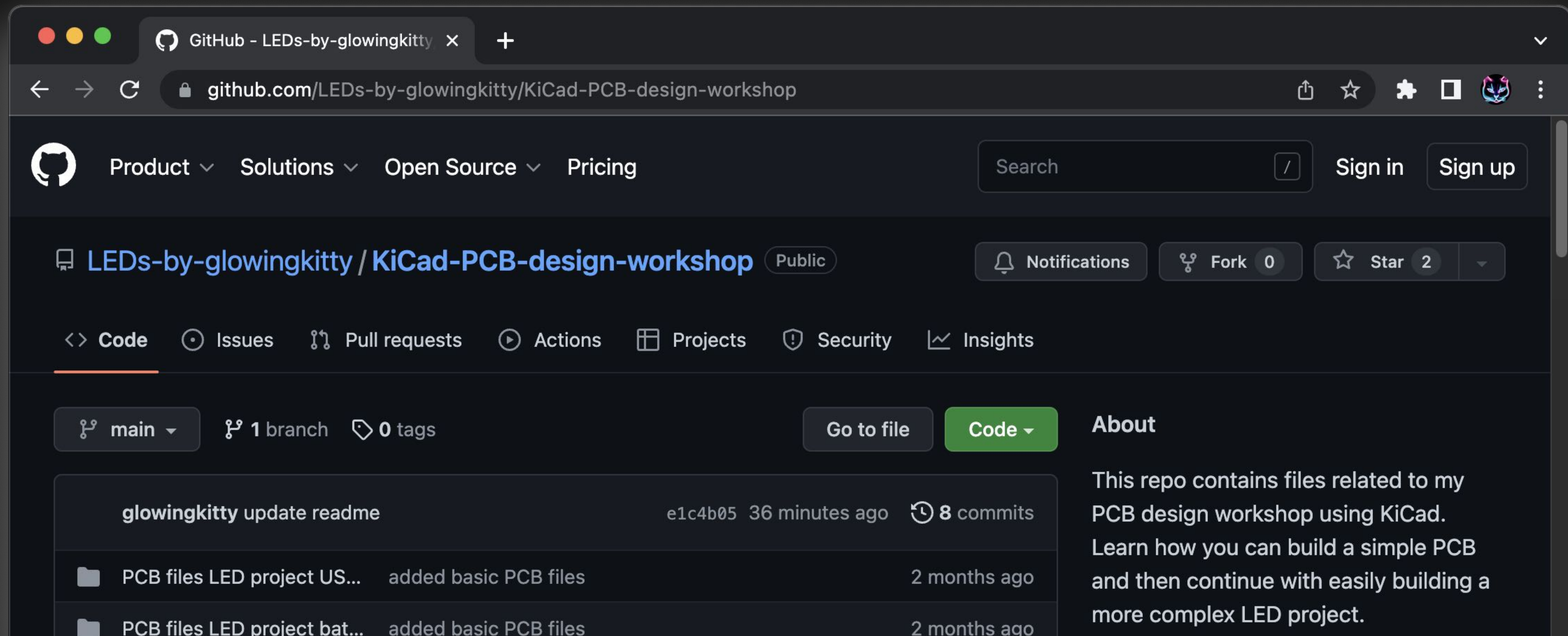
Let's build a super  
simple PCB!



[discord.glowingkitty.com](https://discord.glowingkitty.com)

# Let's build a super simple PCB!

## Step 1: Download zip from: pcb-workshop.glowingkitty.com



# Let's make a schematic

[pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)



# Let's make a PCB layout

[pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)

# 3D preview

[pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)

# Export (& useful plugins)

# Ordering a PCB

[pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)

# Let's make a more complex PCB!

[pcb-workshop.glowingkitty.com](http://pcb-workshop.glowingkitty.com)

# Want to see the slides again?

[slides.glowingkitty.com](https://slides.glowingkitty.com)

# Need some dev boards for LEDs?

 [glowingkitty.com](https://glowingkitty.com)

