# Using GitHub as a library to share your hardware

Screenshots considered fair use CC BY-SA 4.0, @tamberg



Source on GDocs



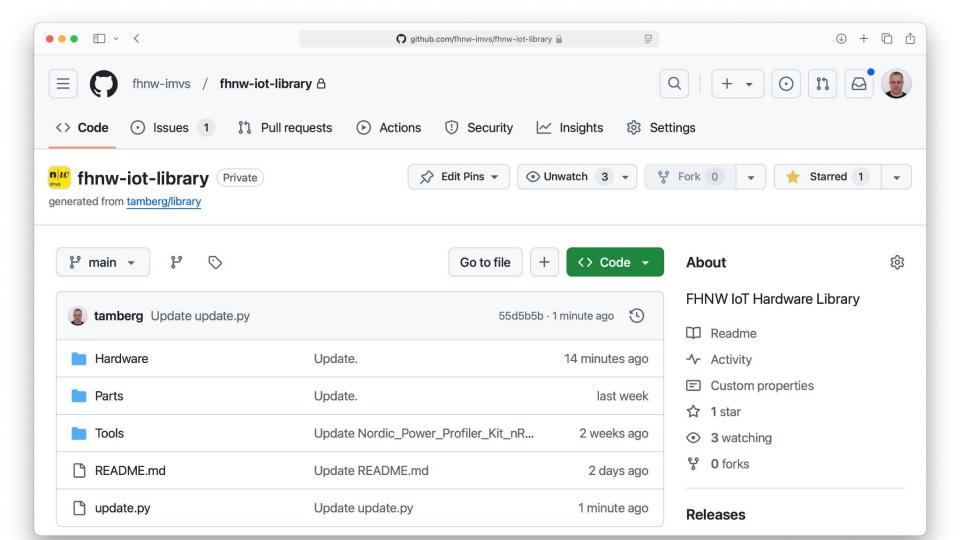
# Library users

- Look up/find items
- Check availability
- Become members
- Ask to borrow items
- List their requests
- Get notifications

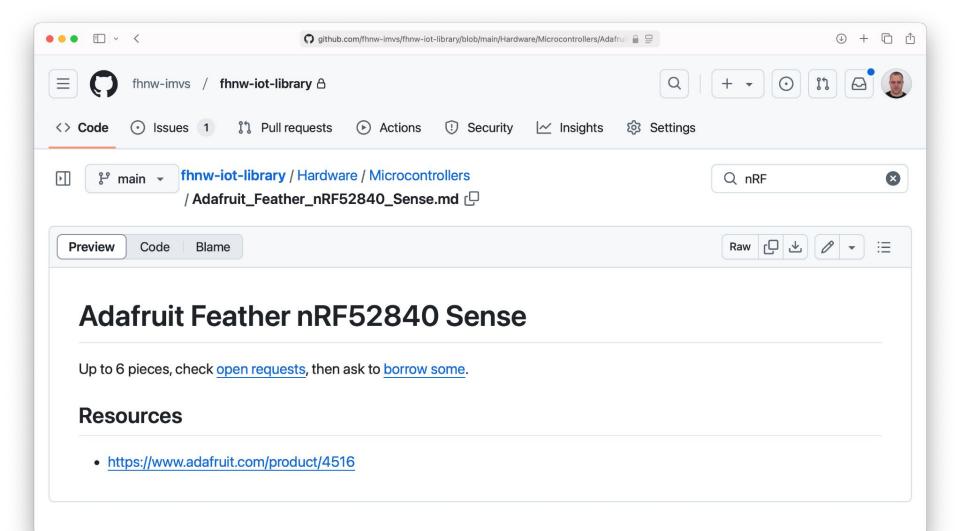
#### GitHub users

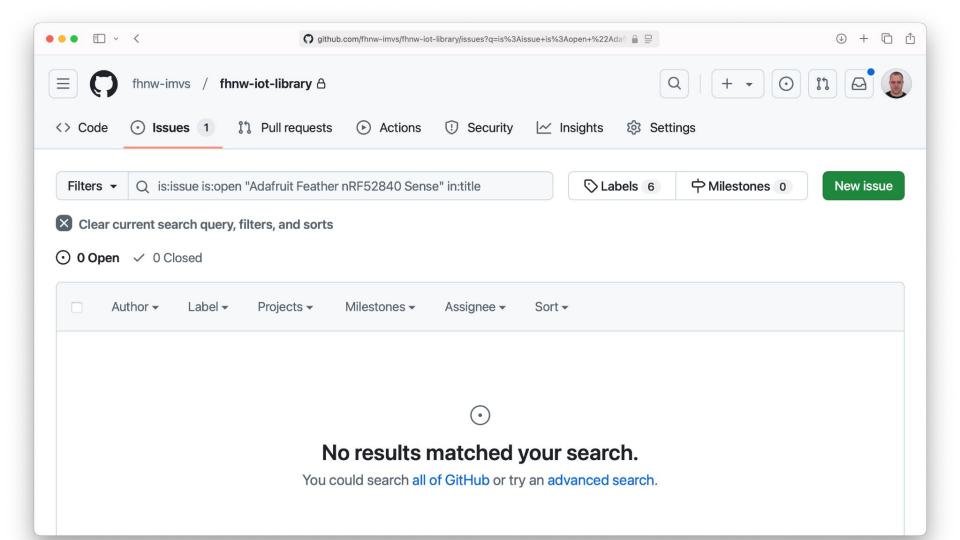
- Find files by name
- Check open issues
- Sign up to GitHub
- Create new issues
- List their issues
- Get notifications





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fhnw-imvs	/ fhnw-iot-library ≙		
> Code  • Issues	1 1 Pull requests () Actions () Security 🗠 Insights	s tô: Settings	
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Name	Hardware/Microcontrollers/Adafruit_Feather_ <b>nRF</b> 52840_Express.r	md Last commit da	ate
Hardware	Update.	1 hour ag	igo
Parts	Update.	last we	ek
Tools	Update Nordic_Power_Profiler_Kit_	_nRF_PPK2.md 2 weeks ag	igo
README.md	Update README.md	2 days ag	igo
update.py	Update update.py	1 hour ag	igo
README.md		Ø	:=





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	fhnw-imvs / fhnw-iot-library A	Q   + • • • 11 🗗 👷
	l a title prrow request for Adafruit Feather nRF52840 Sense	Assignees දරා No one—assign yourself
	I a description         /rite       Preview       H       B       I       i=       <> $c^2$ $\frac{1}{2}$ i=       9       @       C <sup>2</sup>	Labels 🐯 None yet
	piece of [this] ./blob/main/Hardware/Microcontrollers/Adafruit_Feather_nRF52840_Sense.md) for ~2 weeks.	Projects 👸 None yet
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		Development Shows branches and pull requests linked to this issue.

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1 piece of <u>this</u> for $\sim$ 2 weeks.	Projects None yet	Ę
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	Helpful resources	

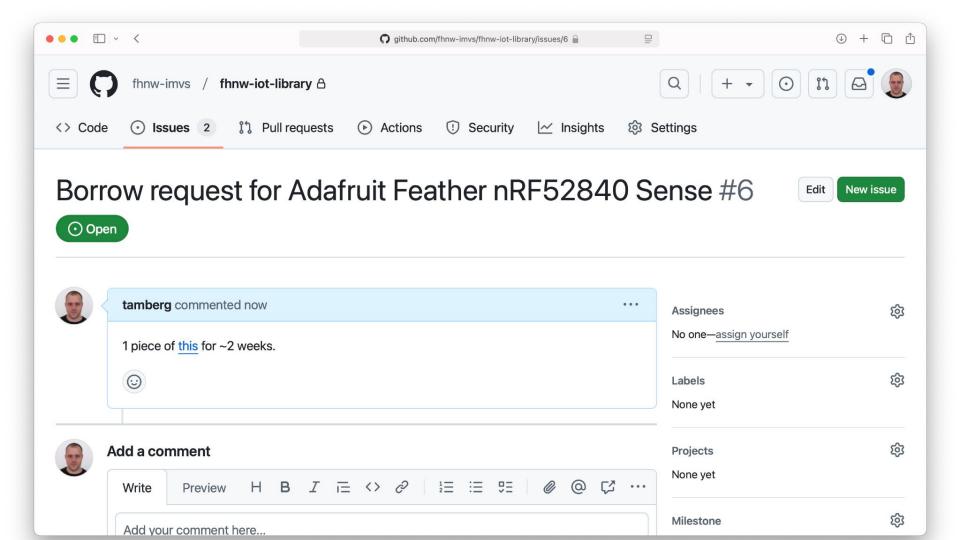
### Staff workers

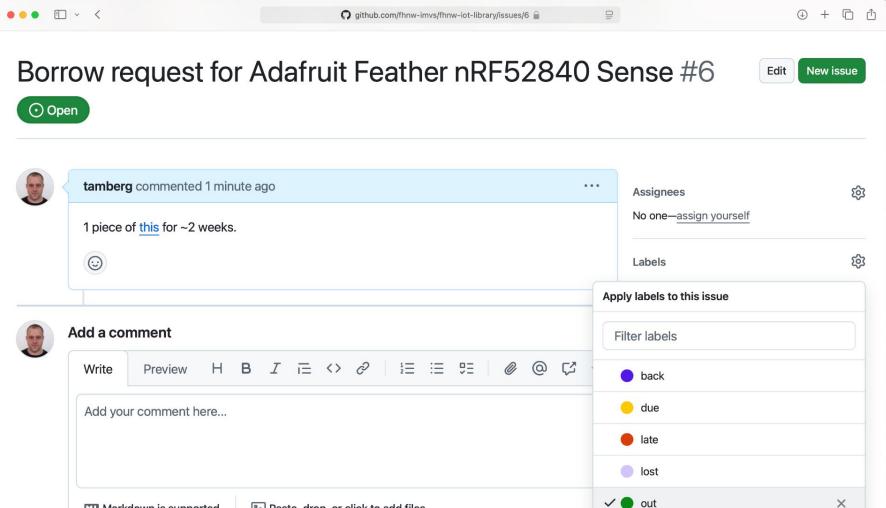
- Answer requests
- Hand items out
- Recall due items
- Remind late users
- Deal with lost items
- Take back items

## Collaborators

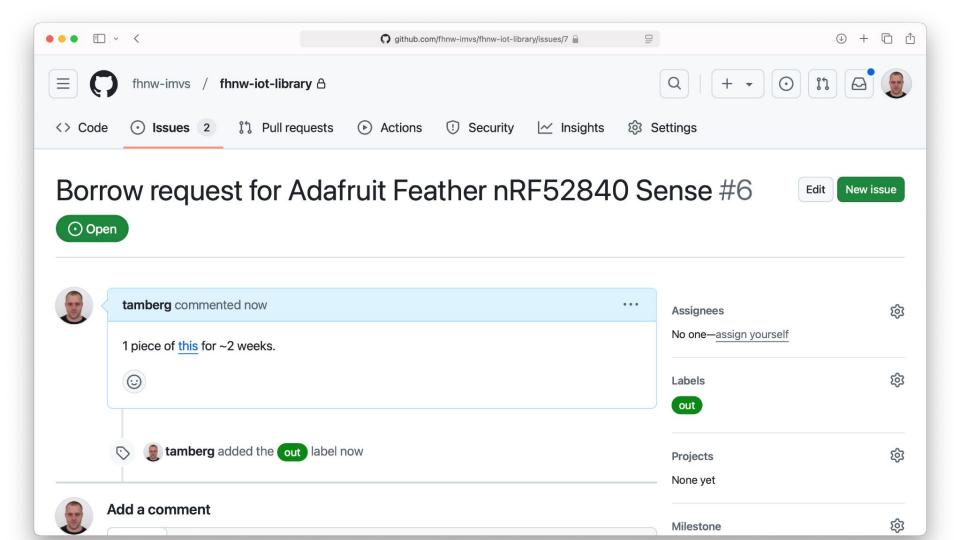
- Respond to issues
- Label issues as *out*
- Change label to *due*
- Change label to *late*
- Change label to *lost*
- Label as *back*, close

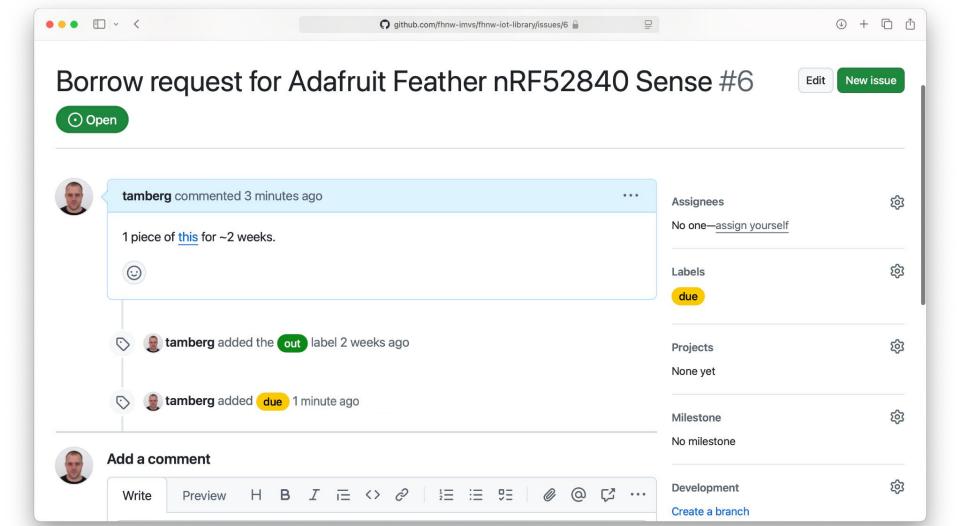


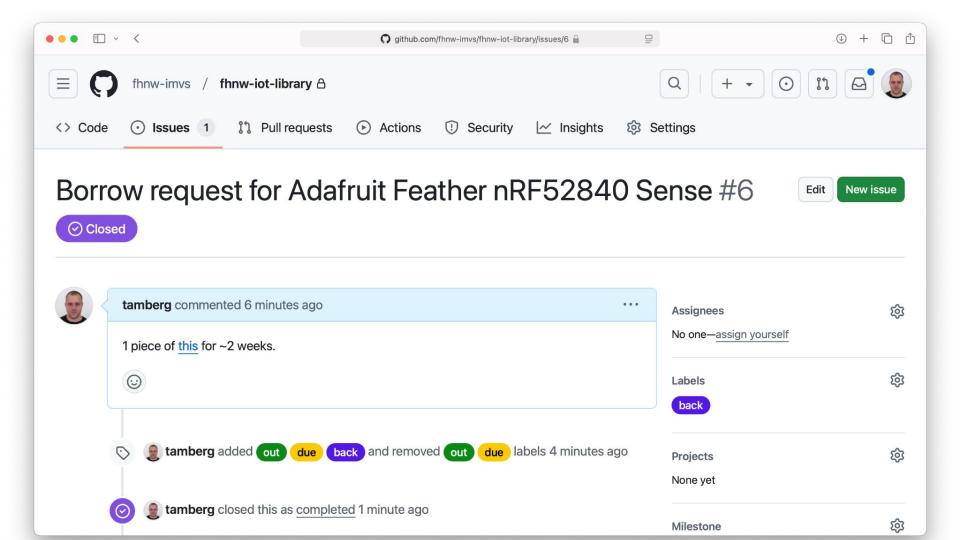




Paste, drop, or click to add files MU Markdown is supported







#### Librarians

- Enter the library
- Read the catalog
- Add new topics
- Add subtopics
- Add items
- Add info

#### Hackers

\$ git clone .../library \$ cd library && tree \$ mkdir topic \$ mkdir topic/sub \$ touch topic/sub/it.md \$ python update.py



```
tamberg — git-remote-https < git clone https://github.com/fhnw-imvs/fhnw-iot-library — 80×24</p>
tamberg@m3 ~ % git clone https://github.com/fhnw-imvs/fhnw-iot-library
Cloning into 'fhnw-iot-library'...
       .
                                       🚞 fhnw-iot-library — -zsh — 80×24
      tamberg@m3 ~ % cd fhnw-iot-library && tree
          Hardware
               Actuators
                  - Grove_IR_Emitter.md
                  - Grove LED Bar.md
                  - Grove LED Circular.md
                  - Grove LED Red.md
                  – Grove_LED_Ring_20_WS2813_Mini.md
                  – Grove_LED_Stick_10_WS2813_Mini.md
                 — Grove_LED_Strip_Driver.md
                  - Grove Piezo Buzzer.md
               Adapters
                 — Feather_to_Grove_Adapter.md
                   Pi_Zero_to_Grove_Adapter.md
                   Xiao_to_Grove_Adapter.md
               Cameras
                 — Raspberry Pi Camera Module 2.md
```

	🚞 fhnw-iot-library — -:	zsh — 80×24
tamberg@m3 fhnw Hardware/ Part	-iot-library % mkdir Other s/ Tools/	]
	🚞 fhnw-iot-l	library — -zsh — 80×24
tamberg@m Actuators Adapters/ Cameras/		Microcontrollers/
		🚞 fhnw-iot-library — -zsh — 80×24
	tamberg@m3 fhnw-iot-library Grove_IR_Emitter.md Grove_LED_Bar.md Grove_LED_Circular.md Grove_LED_Red.md	% touch Hardware/Actuators/Grove_ Grove_LED_Ring_20_WS2813_Mini.md Grove_LED_Stick_10_WS2813_Mini.md Grove_LED_Strip_Driver.md Grove_Piezo_Buzzer.md

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```
fhnw-iot-library — Python update.py — 80×24
```

tamberg@m3 fhnw-iot-library % touch Hardware/Actuators/Grove\_Servo.md tamberg@m3 fhnw-iot-library % python3 update.py update ./Hardware/Actuators/Grove\_Servo.md? [y|n|q] y

📄 fhnw-iot-library — -zsh — 80×24

tamberg@m3 fhnw-iot-library % cat Hardware/Actuators/Grove\_Servo.md # Grove Servo

If there are no [open requests](../../../issues?q=is%3Aissue+is%3Aopen+%22Gro ve+Servo%22+in%3Atitle) you're welcome to [borrow this](../../../issues/new?t itle=Borrow+request+for+Grove+Servo&body=1+piece+of+%5Bthis%5D%28..%2Fblob%2Fmai n%2F.%2FHardware%2FActuators%2FGrove\_Servo.md%29+for+~2+weeks.).

🚞 fhnw-iot-library — -zsh — 80×24

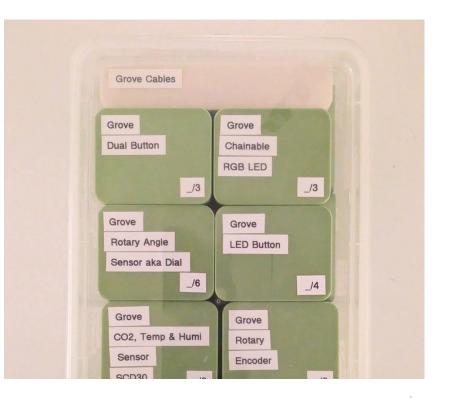
tamberg@m3 fhnw-iot-library % git add Hardware/Actuators/Grove\_Servo.md tamberg@m3 fhnw-iot-library % git commit Hardware/Actuators/Grove\_Servo.md [main 8c32b18] Update.

```
1 file changed, 5 insertions(+), 1 deletion(-)
tamberg@m3 fhnw-iot-library % git push
```

#### Books



#### Hardware



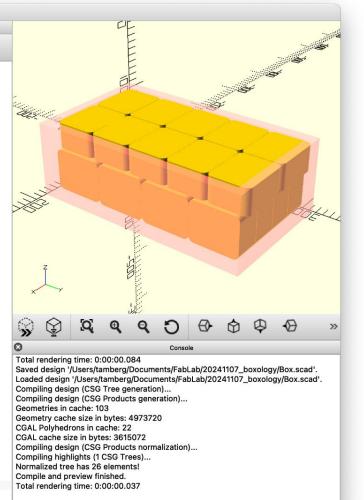
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	<pre>//rotho_box_packed2(wx, wy, h);</pre>								e has 6 e		s!						
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297	<pre>//rotho_box_packed4(wx, wy, h);</pre>						Total re	endering	time: 0:	00:01.4	28						
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263 264	<pre>//round_box_matrix(wx, wy, h, 7.95, 1.2, 2, 4);</pre>											
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	<pre>//#translate([1.2, 1.2 + 3, 1.2]) ranger();</pre>							PP				
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277	<pre>//#translate([1.2 + 5, 1.2 + 2, 1.2]) sd_card2();</pre>							. 1				
278	<pre>//round_box_matrix(wx, wy, h, 8, 1.2, 4, 3);</pre>							0				
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281 282	//round_box_grove2(wx, wy, h, 7.95, 1.2);			0				Console				
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295							15					
	<pre>//rotho box packed3(wx, wy, h);</pre>			Compile and r	preview fi	inished.						
296	<pre>//rotho_box_packed3(wx, wy, h); //rotho_box_packed4(wx, wy, h);</pre>			Compile and p Total renderin			27					

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276	//round_box_matr	ix(wx, wy	, h, 8, 1	.2, 4,	2);									
277	<pre>//#translate([1.</pre>	2 + 5, 1.	2 + 2, 1.	2]) sd_	card2()	;								
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283	//round_cover(wx	, wy, 8,	1.2);											
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285	//round_box_matr	ix(2 * wx	, wy / 2,	h - 8,	8, 1.2	2, 2, 1)								
286	//round_box_matr	ix(2 * wx	, wy / 2,	h - 8,	8, 1.2	2, 1, 1)								
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296	<pre>//rotho_box_pack</pre>													
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### More



- github.com/fhnw-imvs/fhnw-iot-library
- github.com/tamberg/library
- github.com/tamberg/boxes

Thanks.

