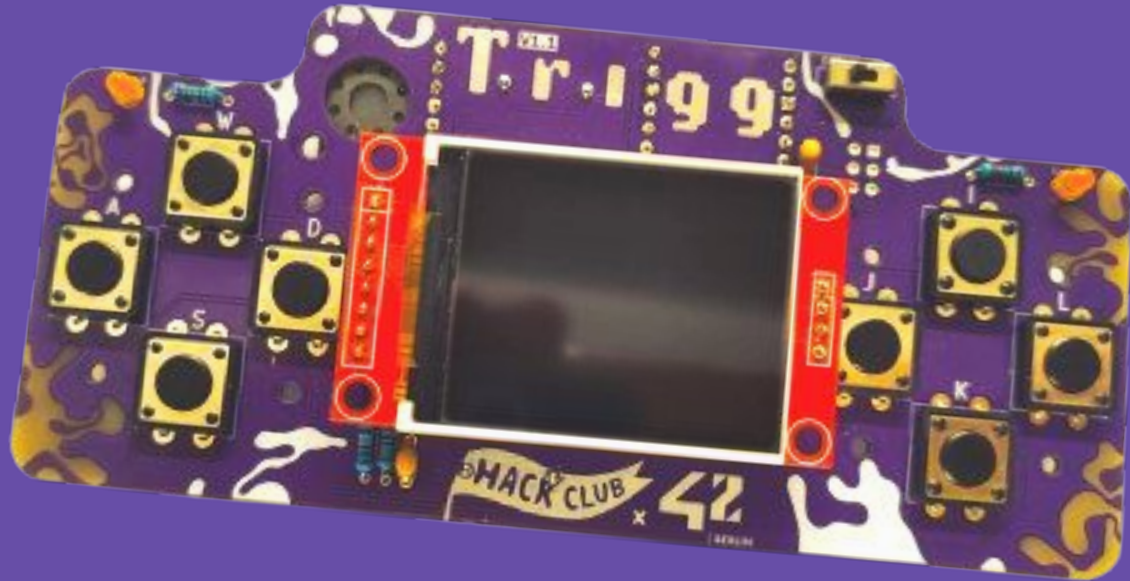


# TRIGG: UNDER THE HOOD

42  
| BERLIN



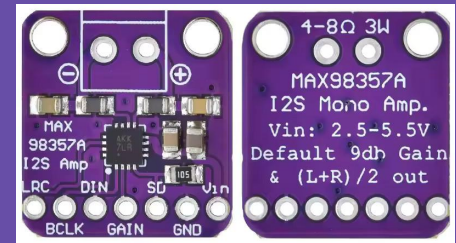
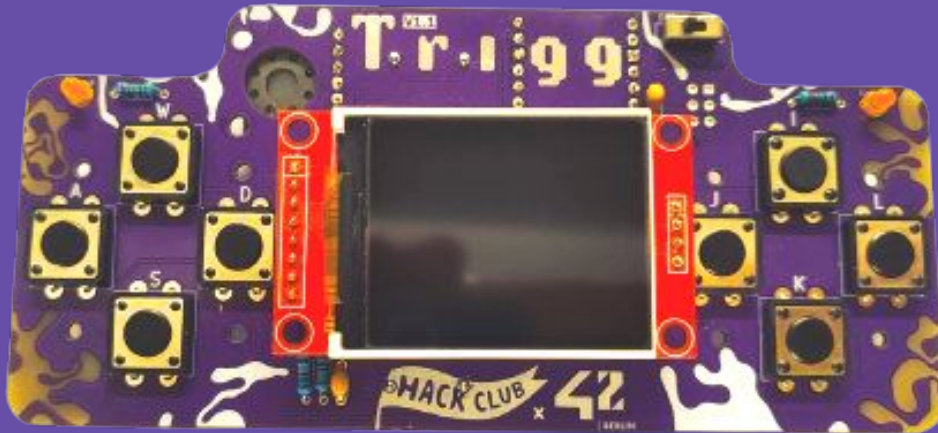
# TODAY'S AIM:

## TRIGG SPEED RESEARCHING

1. Split into groups (pairs or threes)
2. Pick a part of the Trigg you're interested in
3. Create a short how-to guide (i.e. a README.md) & code/design example
4. Submit a pull request to the UnderTheHood repo (see below)
5. Share your findings with the group

# TRIGG HARDWARE

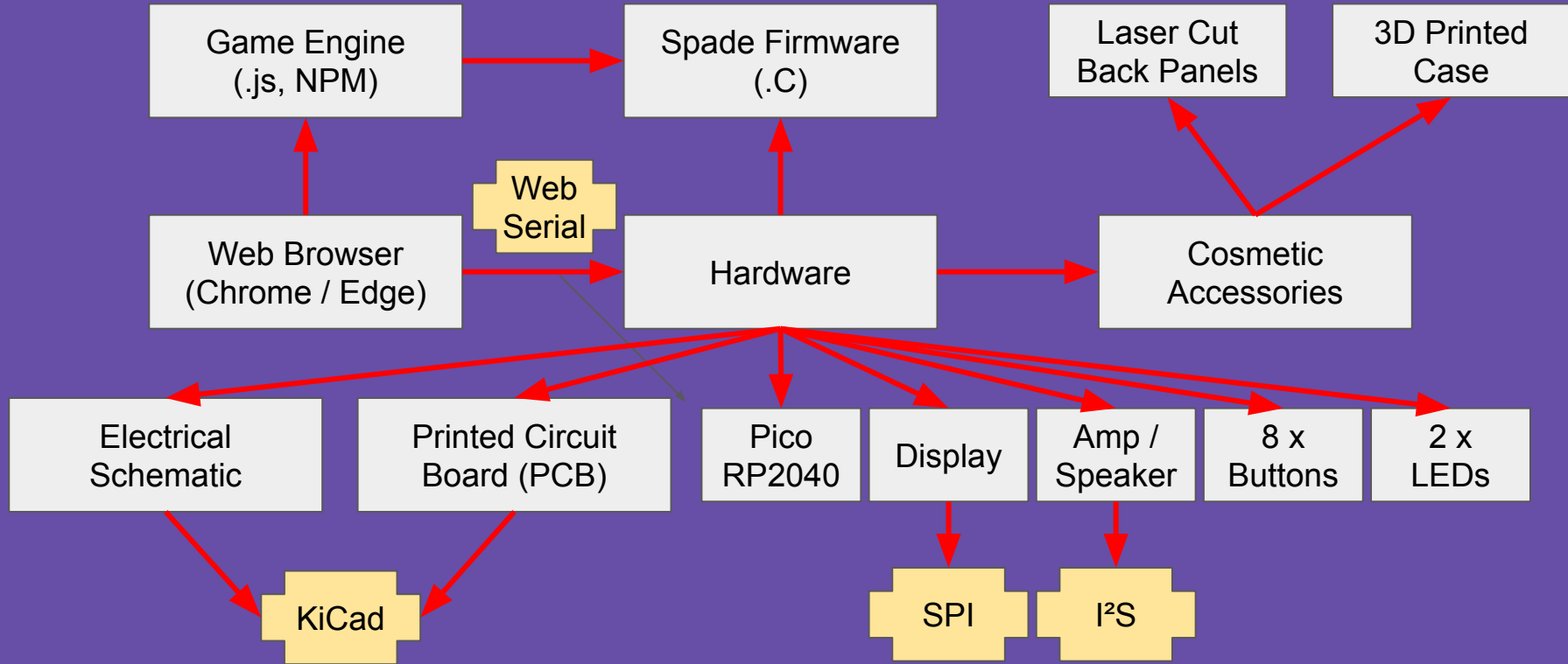
- Microcontroller: Raspberry Pi Pico (RP2040)
- Display: TFT7735, a 160×128 color LCD screen
- Sound: MAX98357A breakout board and speaker
- Controls: 8 buttons (2 D-pads) for user input
- LEDs: x2, purpose unknown!



<https://github.com/fablabnk/TriggUnderTheHood>

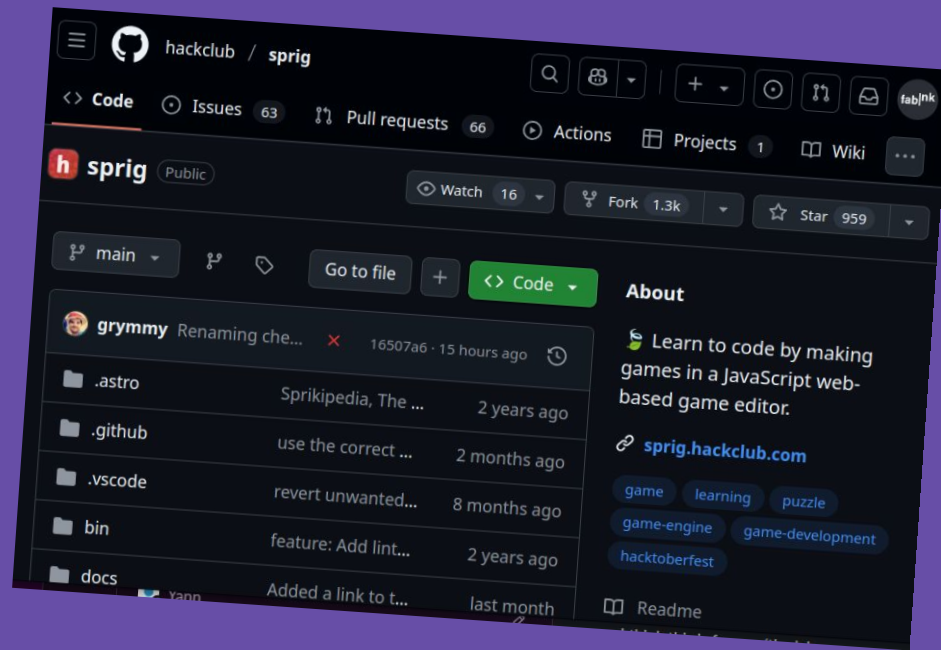
# TRIGG “FULL STACK”

JerryScript - javascript runtime for  
Microcontrollers



# TOUR OF THE REPO

- /engine:
  - standalone games engine
  - (as used in the web editor)
- /firmware:
  - spade (.C game engine)
  - hardware abstraction layer code
- /hardware: PCB (KiCad), 3D printer & laser cutter files
- /sprig-hax: adding a gyroscope, etc



# TOPIC IDEAS

How to...

- run the game engine in a floating window without the browser
- make the LEDs usable in games
- write DIY graphics code for the 1.8" TFT display" (minilibx?)
- use the Trigg as a controller for another device (i.e. LED wall)
- understand how JerryScript makes JavaScript code runnable on resource-constrained microcontrollers
- solve the problem that some browser games don't run on the hardware
- add an audio jack output the Trigg to use it for music-making