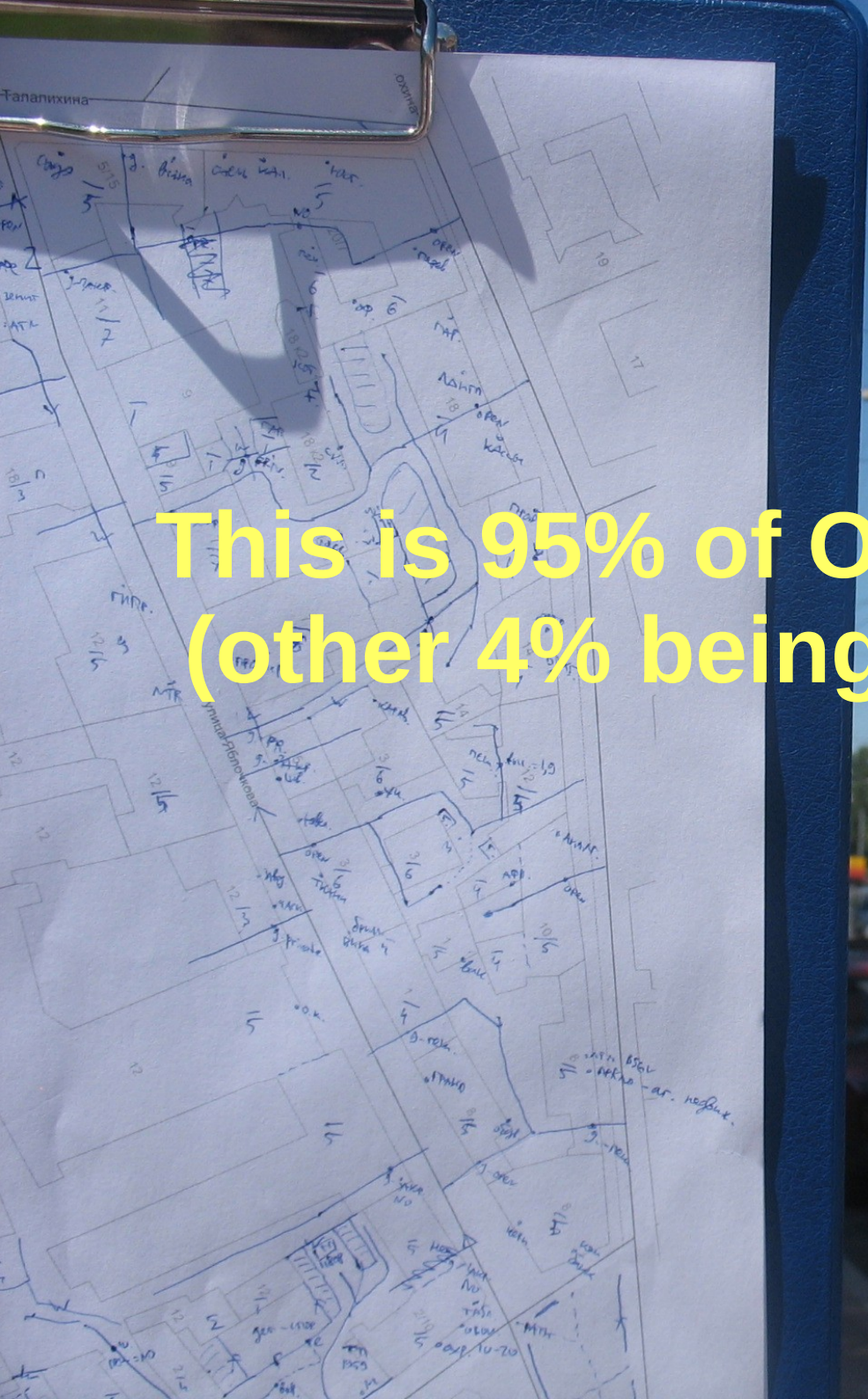


# Eyes on the road

Ilya Zverev  
SotM Baltics 2013







This is 95% of OSM data surveying  
(other 4% being bicycle mapping)





I've got a car lol







**Photomapping? No way**



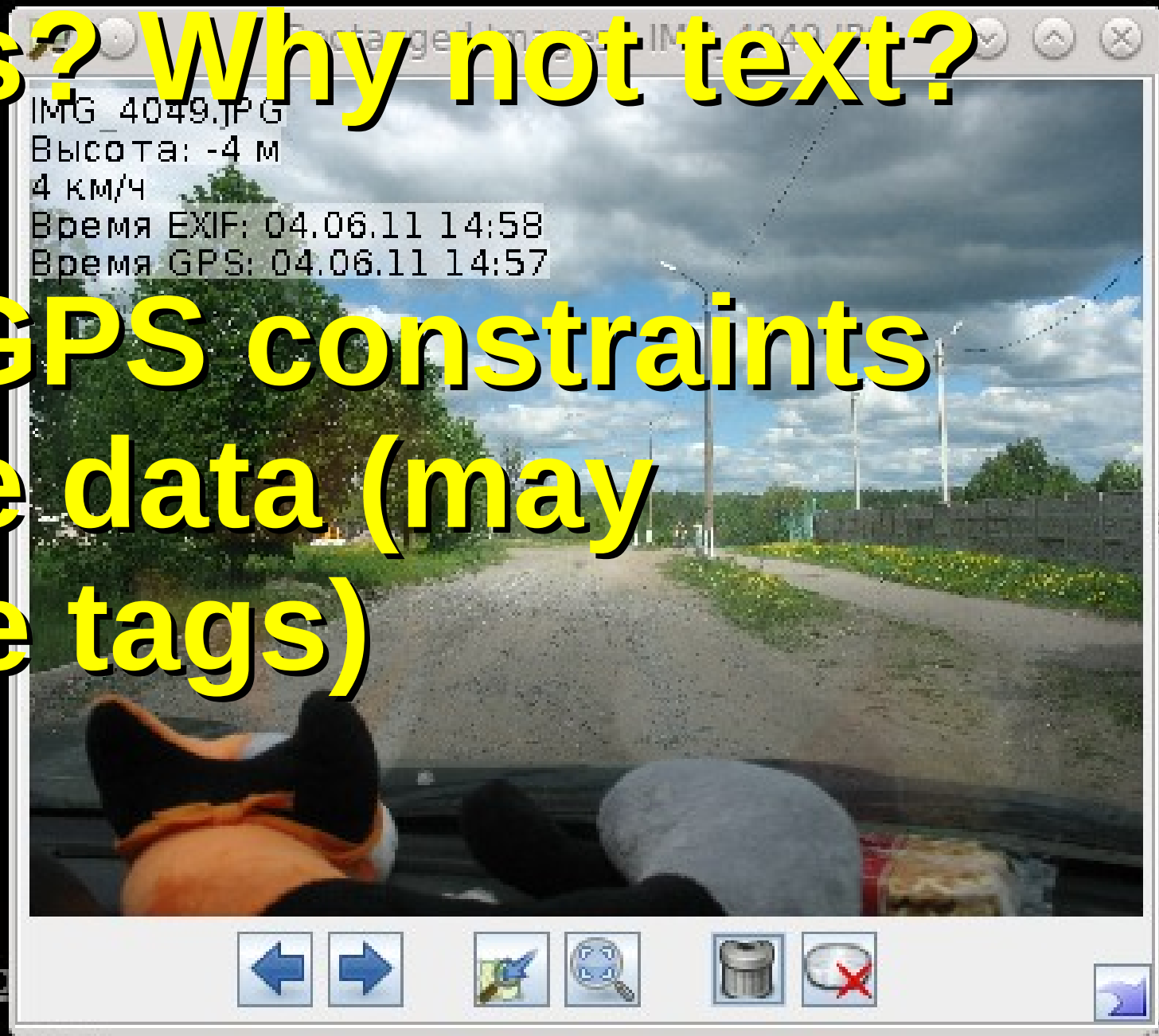
A man with short brown hair, wearing a white checkered button-down shirt, is speaking into a black handheld microphone. He has a name tag that reads "STEVE COAST" and "Geegree" on his chest. He is gesturing with his left hand. The background is a plain wall with a dark grey section on the right.

**Audiomapping  
is better, but  
...you've been warned**

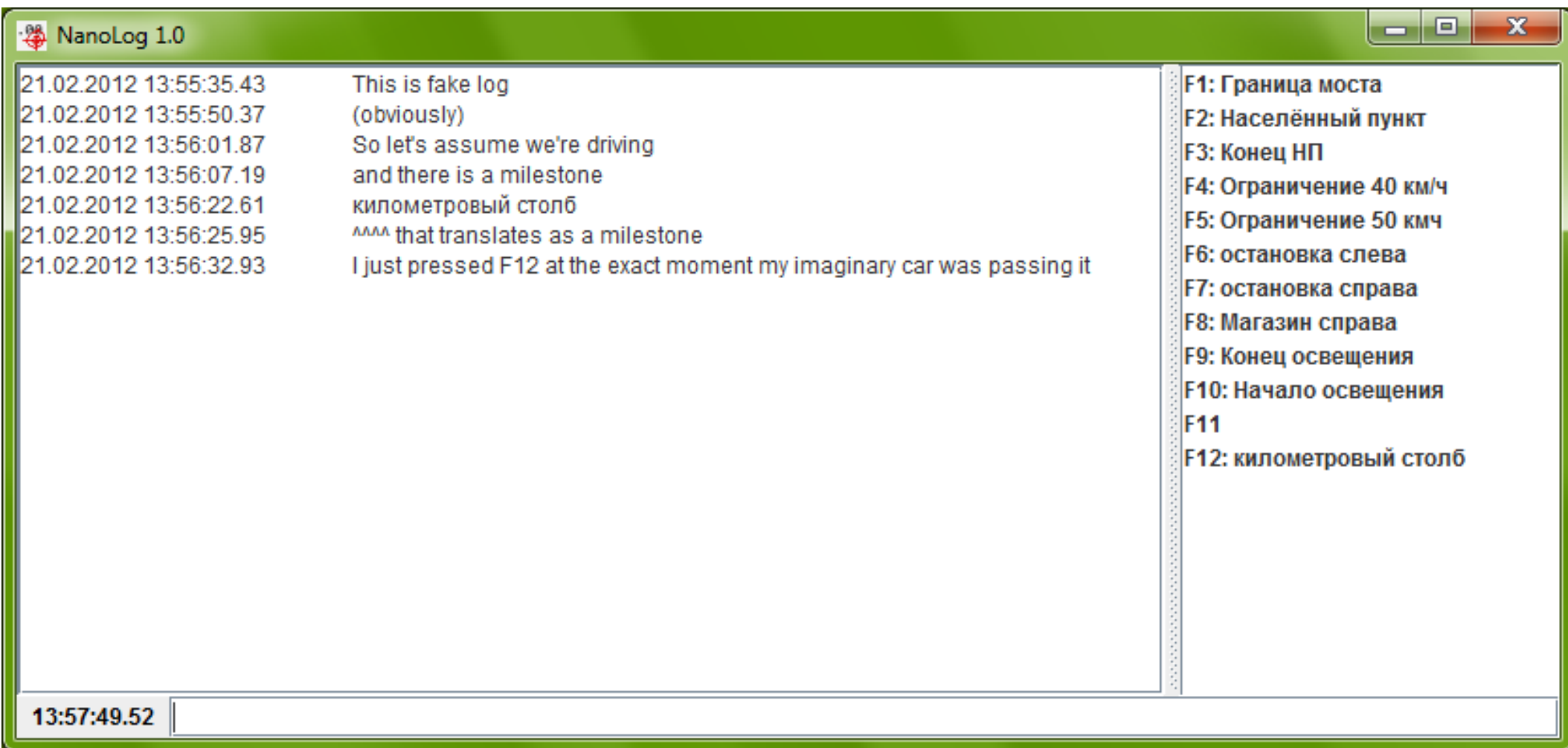


# Images? Why not text?

- no GPS constraints
- pure data (may include tags)







# NanoLog





Кёрстово

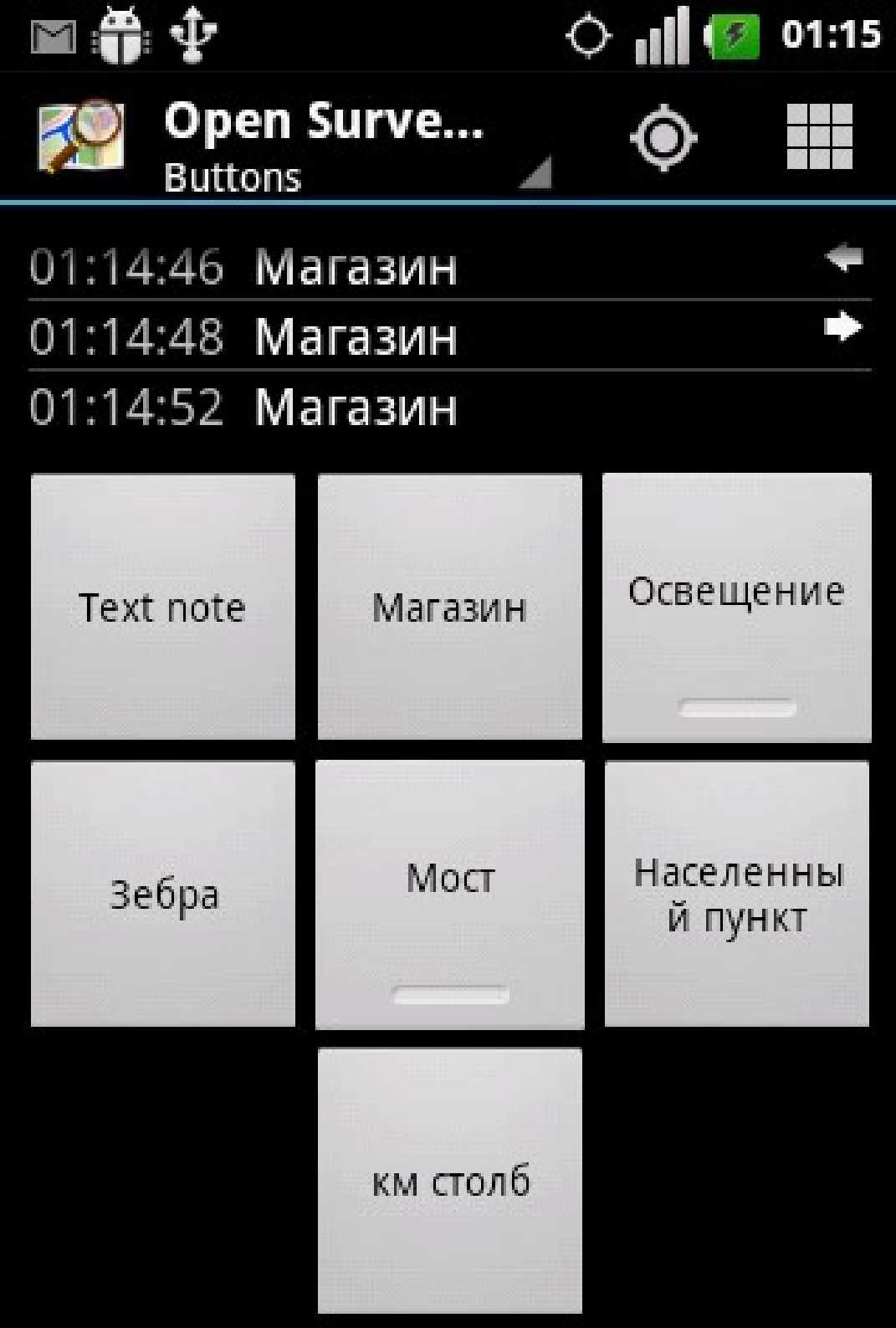
Конец НП

Лялицы

Ополче

(this is fake)





open  
surv  
eyor





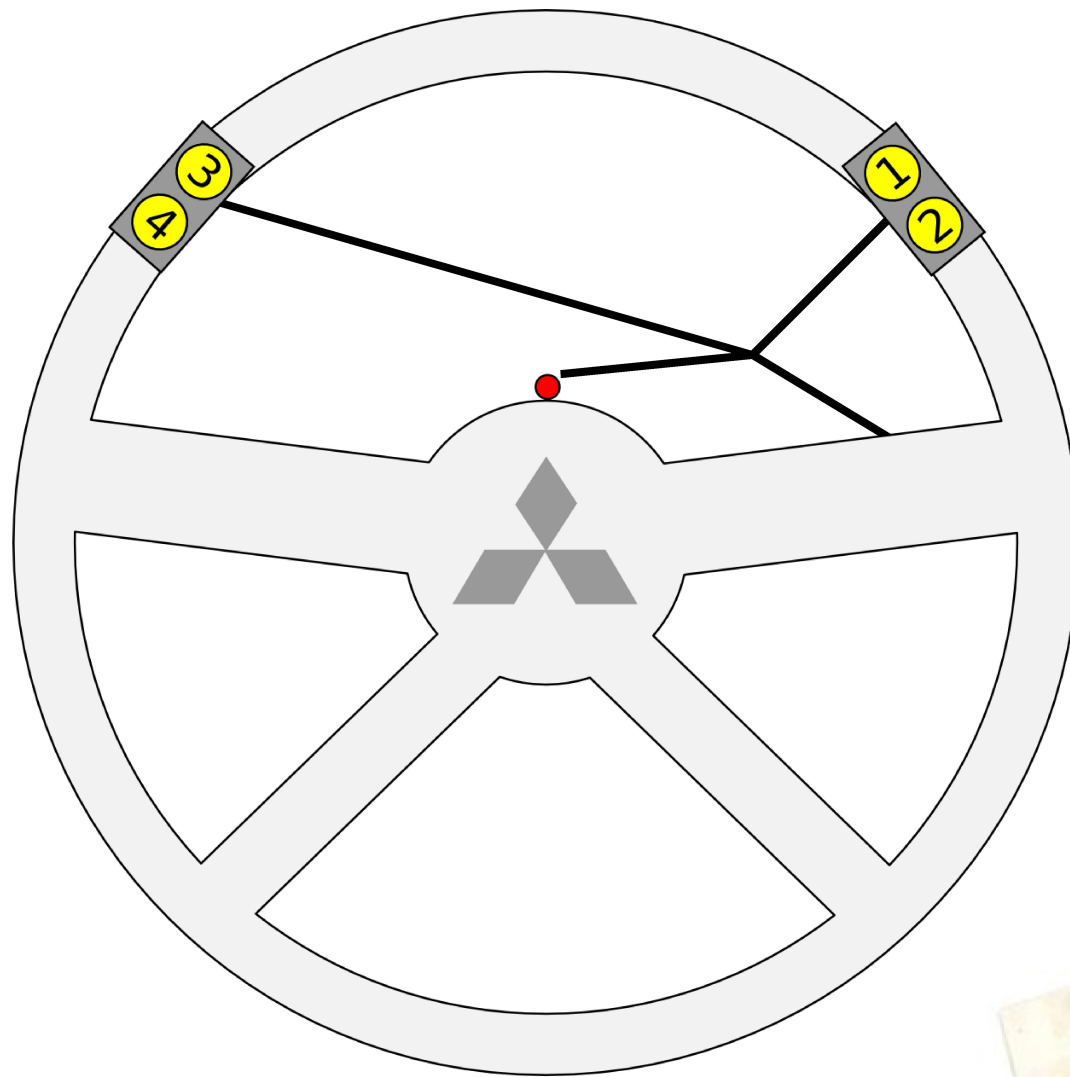
Idea 0:

# USB Numpad +NanoLog

(will possibly  
be supported  
in NanoLog 2)

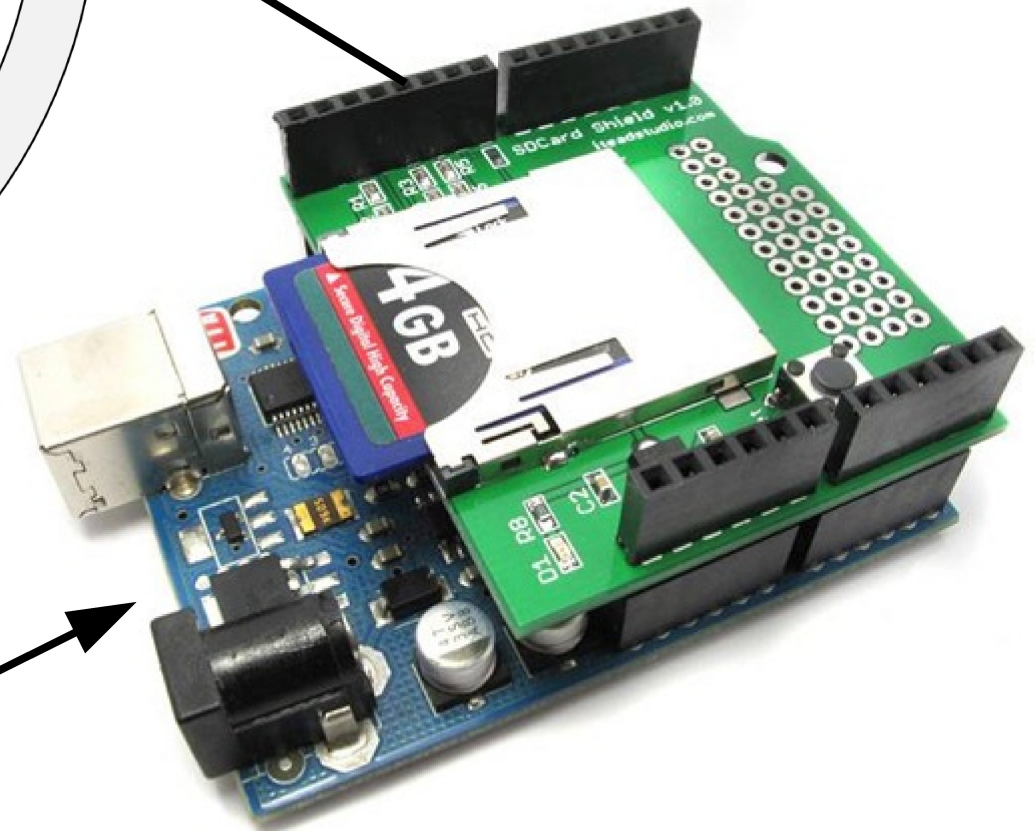






Idea 1: Four buttons,  
12 combinations,  
write to SD shield,  
LED for status

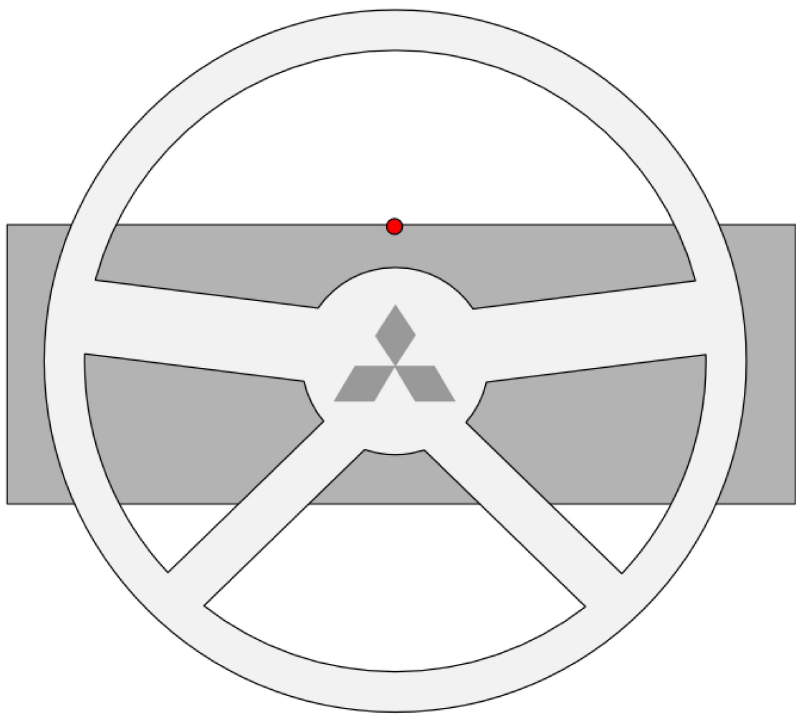
Arduino Uno



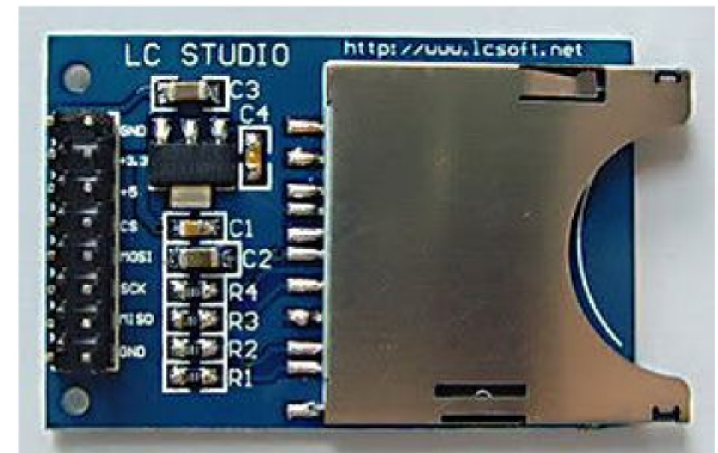
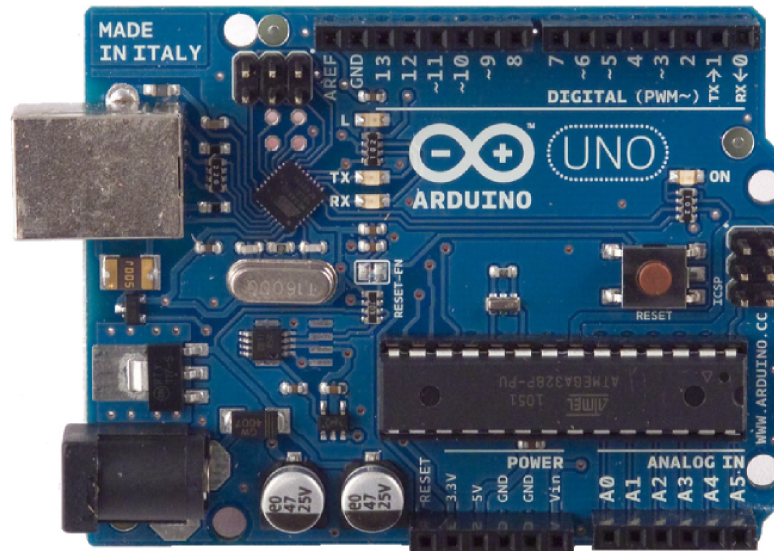
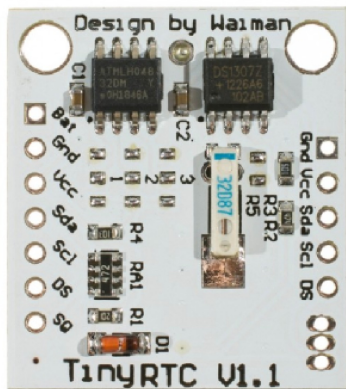
## Drawbacks:

- shields are way too expensive
- no soldering -> how to attach cables to buttons?
- turning a steering wheel will damage cables
- arduino clock is highly inaccurate





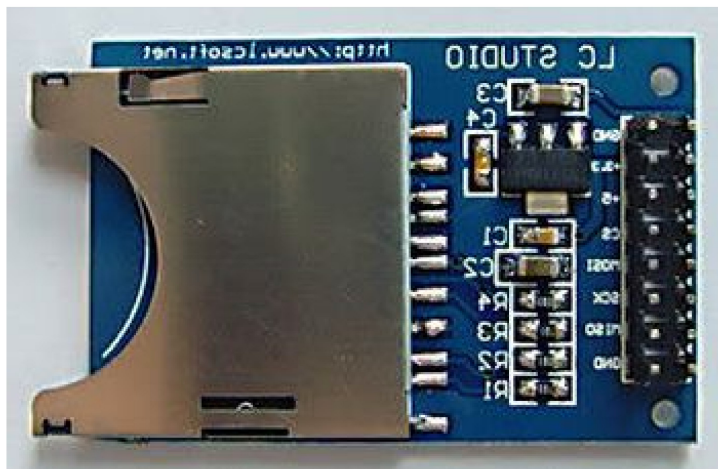
Idea 2:  
Keypad  
12 buttons  
+ real-time  
clock





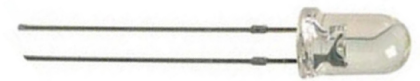
Second best instrument in the world



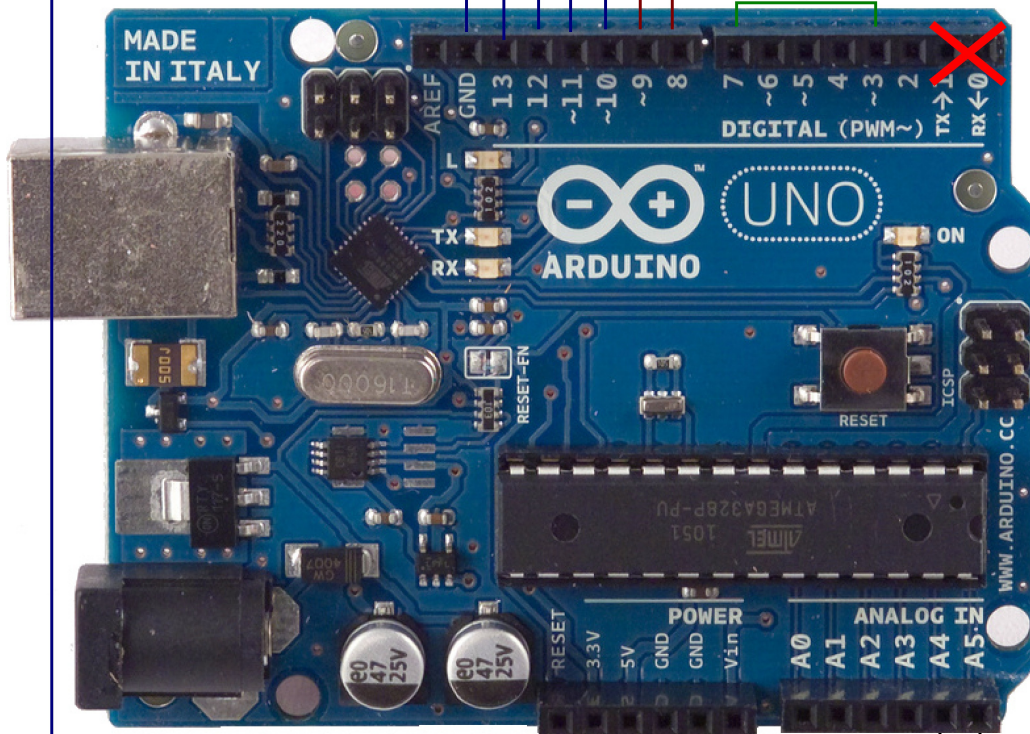


GND	○	GND
3.3V	○	3.3V
5V	○	
CS	○	10
MOSI	○	11
SCK	○	13
MISO	○	12
GND	○	

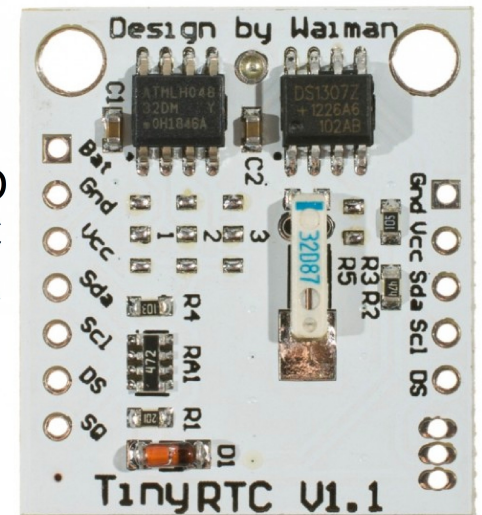
9 ○  
8 ○



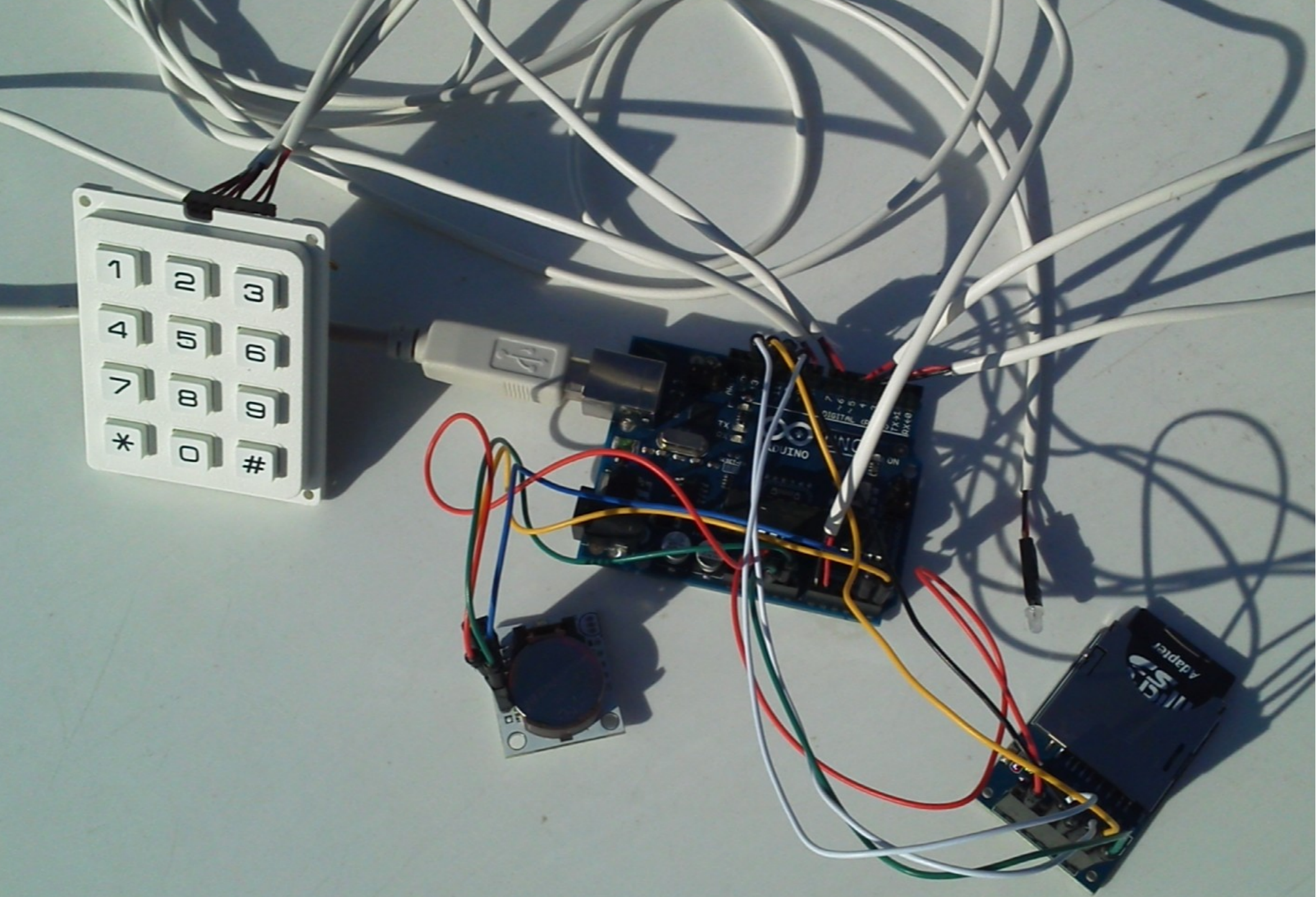
7 ○  
6 ○  
5 ○  
4 ○  
3 ○  
A1 ○  
A0 ○



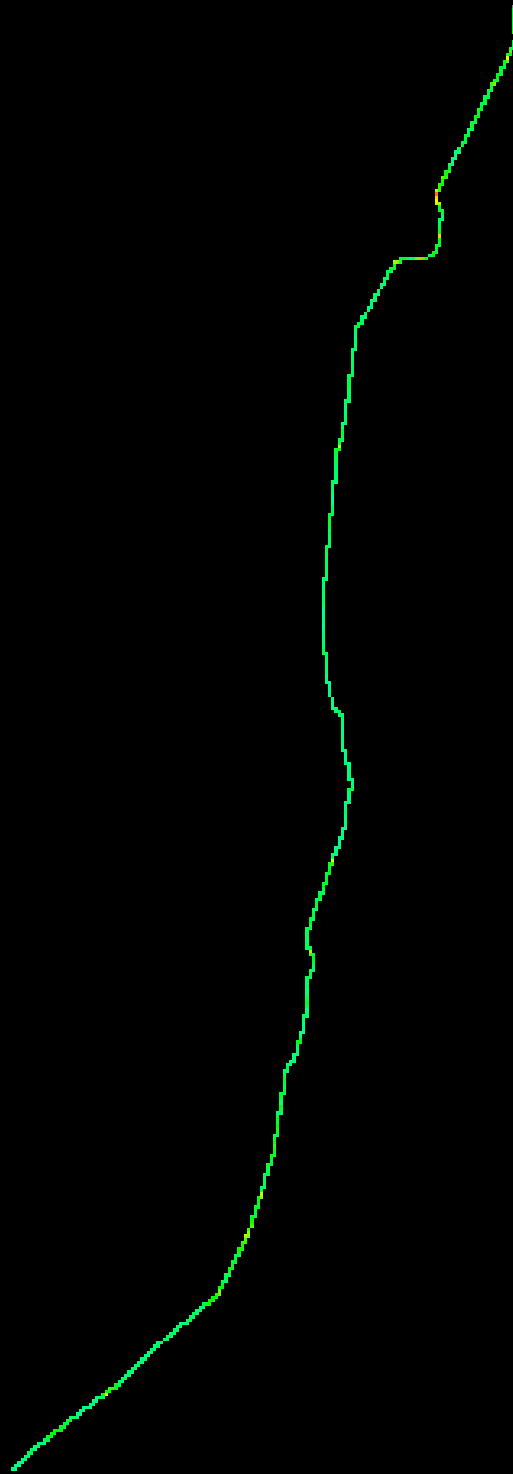
GND	○	GND
5V	○	VCC
A4	○	SDA
A5	○	SCL
	○	DS
	○	SQ





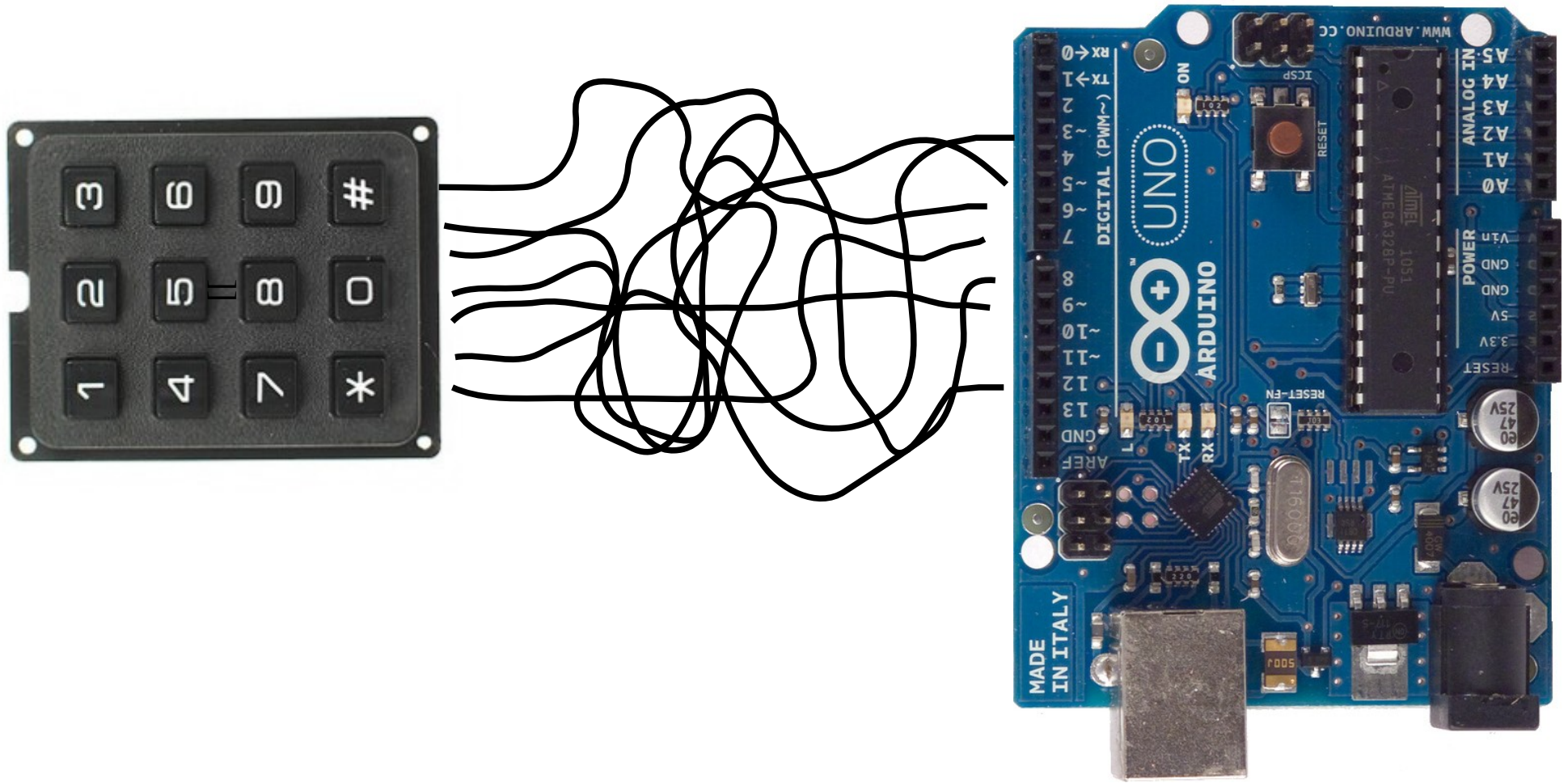






POIs  
collected:

0



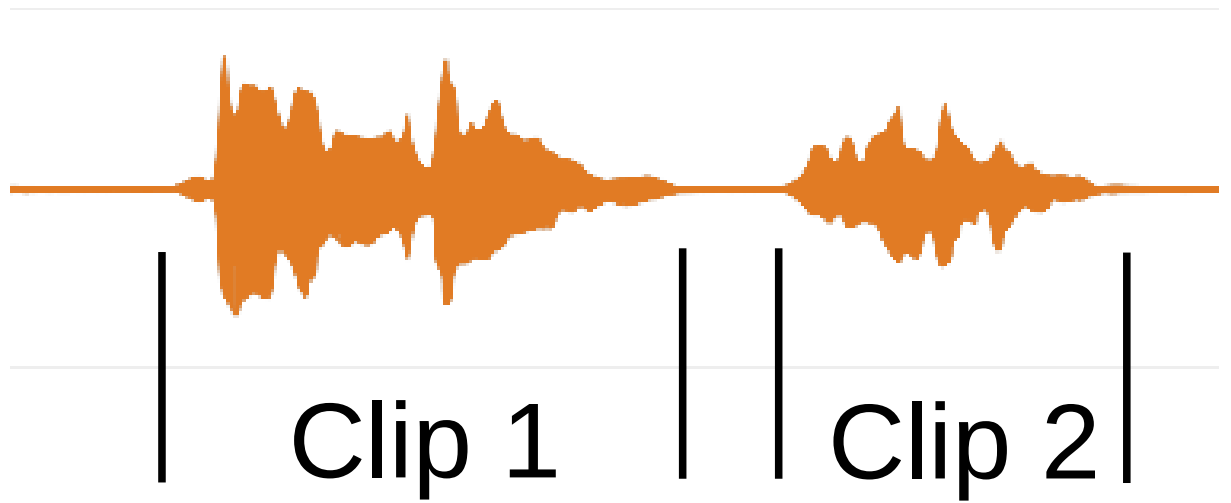
Needs autoconfiguration



# But really

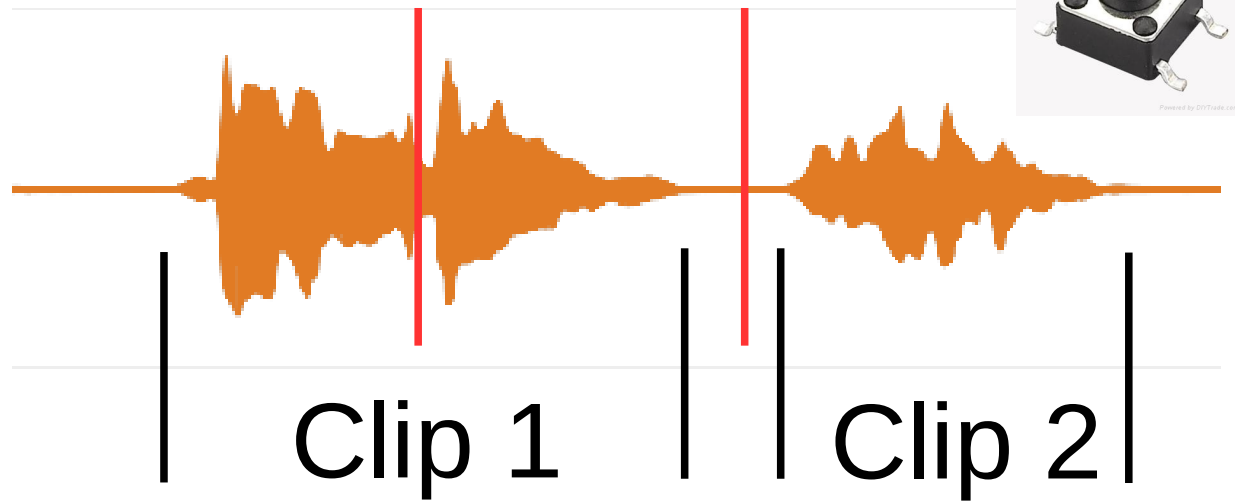
- 12 buttons is still too much
- though not enough
- keyboard would be best  
(see NanoLog)
- but not for a driver

# Idea 3



# Idea 3

Button marks an exact location





# Idea 3



Press a button to take a photo  
Release it to set location of the photo



Release here

ХОРОШАЯ

Press here







# To conclude

- **Two buttons**
- **No POIs**, tags, directions, etc
- **Audiomapping, but better**: precise locations, small pieces, no shouting and measuring
- **Photomapping, but better**: precise locations, does not require attention, can be described
- **Easier processing**: precise georeferencing, dense information, universal file format

Thanks!

# Eyes on the road

Mapping while driving

Ilya Zverev, SotM Baltics 2013