

swissAR

THE HITCHHIKER'S GUIDE TO SWITZERLAND

what? (1)



- ▶ HTML 5 webpage
- ▶ A-Frame 1.0.4
- ▶ AR.js 3
- ▶ open data elevation model
- ▶ open data toponymy database
- ▶ open data postcode database

what? (2)



- ▶ launch camera
- ▶ retrieve geolocation data
- ▶ retrieve compass heading
- ▶ access and process motion sensor data
- ▶ calculate height above sea level
- ▶ calculate POI within a given range
- ▶ display POI

 DOES NOT STORE ANY DATA



► compass with heading in °



- ▶ compass with heading in °
- ▶ current height above sea level



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance
- ▶ height above sea level



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance
- ▶ height above sea level
- ▶ lift cam button



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance
- ▶ height above sea level
- ▶ lift cam button
- ▶ lower cam button



- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance
- ▶ height above sea level
- ▶ lift cam button
- ▶ lower cam button
- ▶ recalibrate button

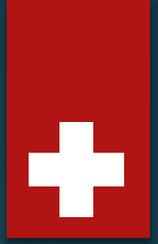


- ▶ compass with heading in °
- ▶ user height above sea level
- ▶ color code
- ▶ place, hilltop, site names
- ▶ air-line distance
- ▶ height above sea level
- ▶ lift cam button
- ▶ lower cam button
- ▶ recalibrate button
- ▶ cam height indicator



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how-to



- ▶ launch your camera app
- ▶ point your smartphone to qr code
- ▶ hold your smartphone upright
- ▶ confirm website access
- ▶ confirm camera access
- ▶ confirm geolocation access
- ▶ confirm motion sensor access (2x)
- ▶ keep still during calibration



parameters

thomasweibel.ch/swissar (Y)

thomasweibel.ch/swissar (N)

thomasweibel.ch/swissar?ort=Chur

thomasweibel.ch/swissar?plz=8001

thomasweibel.ch/swissar?lon=637071&lat=1617



topics



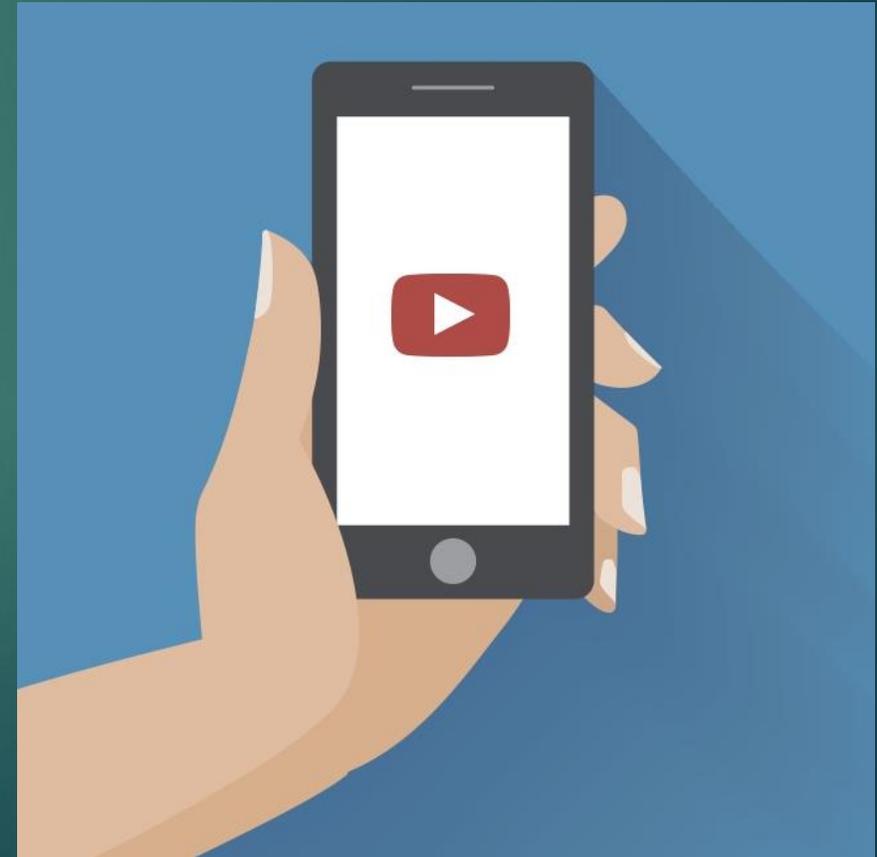
- ▶ towns and villages
- ▶ peaks and hilltops
- ▶ cultural heritage sites
- ▶ churches and monasteries
- ▶ rivers and lakes
- ▶ bus and railway stations
- ▶ cable cars
- ▶ shipping piers
- ▶ industrial sites
- ▶ sports facilities

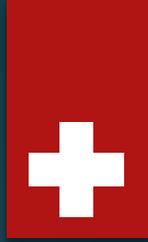
conclusion



- 👎 UI constraints
- 👎 downscaling, clipping
- 👎 interaction, UX
- 👎 recalibration

- 👍 easy, quick, cheap
- 👍 nice experiment
- 👍 more info:
hack.glam.opendata.ch/project/4





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thx!

(and never get lost again!)

