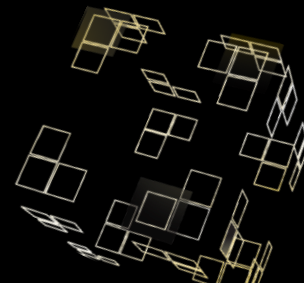
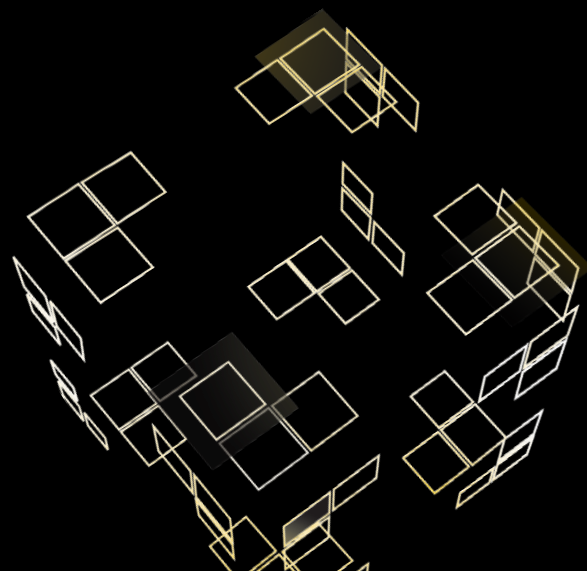


Workshop Arduino & Programming

By Fjodor van Slooten



**UNIVERSITY
OF TWENTE.**

Workshop Arduino & Programming

This presentation & tutorials available on Canvas

- Introduction to various prototyping techniques
- Physical prototypes
 - **Arduino**
 - (Other: Lego Mindstorms, LittleBits)
- ‘Virtual’ prototypes
 - **Simulating physical prototypes (Tinkercad)**
 - **Creating App Mockups**

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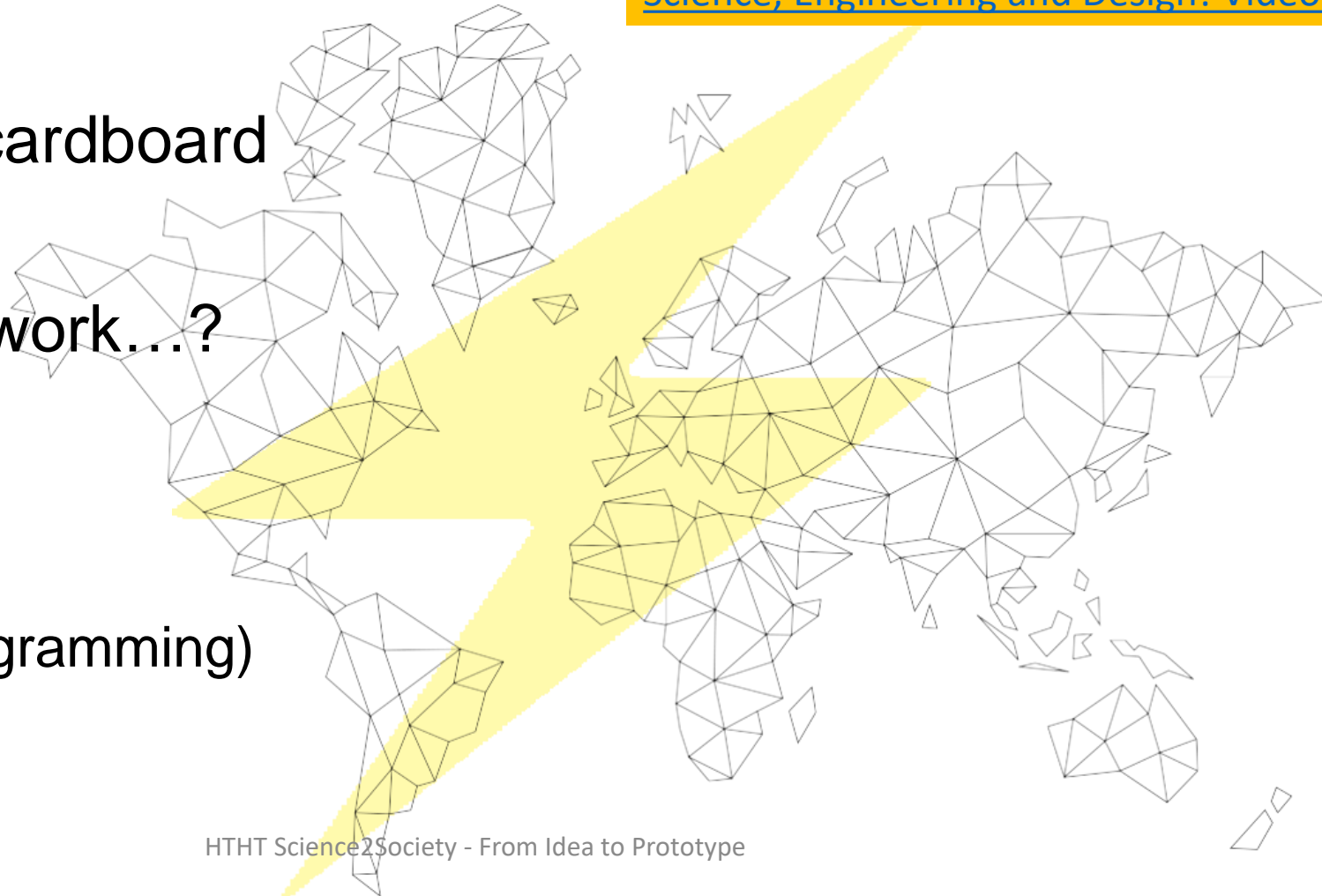
In blue: separate 'hands-on' tutorials
you can work on this afternoon

PHYSICAL PROTOTYPES



[Science, Engineering and Design! Video: Prototyping](#)

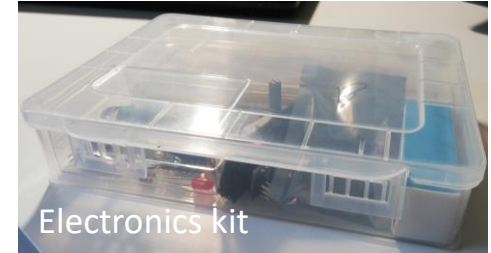
- Build something
- Wood, paper, cardboard
- But to make it work....?
- Electronics
 - Sensors
 - Actuators
 - Behavior (programming)



BORROW

MATERIALS

- Arduino kit
- Lego Mindstorms kit/LittleBits kit (make appointment)
- More: Arduino Leonardo/Nano/Wemos D1, [ESP32](#), Wifi module, Bluetooth module, Blue bean, various sensors, [touchscreen](#), displays



LET'S DO...

- Build a physical model or practice using:
 - Arduino + electronics
- Start creating a 'virtual' prototype
 - Do a tutorial
 - Create an App Mockup

Use this afternoon to:

- Practice
- Try out ideas
- Get advice

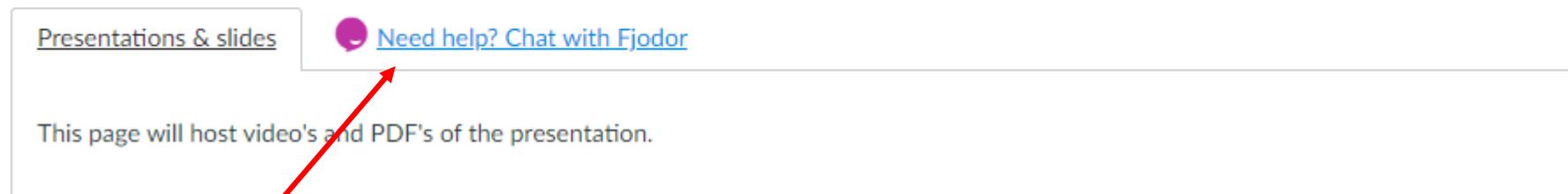
Follow-up workshop planned for November...
(HTHT Science2Society – Prototype to Society)
What topics?

Contact: via chat  or email: f.vanslooten@utwente.nl

Getting help & finding the (video) lectures

- Canvas: under Modules @ [“Lectures and Workshops Slides”](#):

Arduino & Programming lecture, slides & chat



- Get help: use chat or [email](#)
- Make an appointment to visit Fjodor: f.vanslooten@utwente.nl