

AI expressions

Hand out

Getting Started:

- **Discuss:** Share a favorite AI (Sci-fi, smart assistant etc.). consider how its expressing itself (sound, light, movements or similar)
- **Ideation & Sketching:**
 - a. Generate 5-10 **specific** AI-interactions as scenarios... - keep it open and don't be afraid to include weird ideas! (*For instance "ChatGPT falls in love", or "Siri yelling at the user to speak up"*)
 - b. Go over your favorite scenarios, adding notes on what emotions (~vibes~) are present in each
 - c. Consider your materials: How can these emotions be represented via the technologies you have available (*see next page*)
- **Return to your code:** Try and prototype specific parts of your scenarios by building and coding. Start small (*ie. a simple movement, or a single flash of light*).
- **Have fun** - Grab something to drink and get coding! :)

AIR LAB
Creative Club
coding
#02

Important questions:

Q: How do we hand in our designs?

A: You don't! :) We don't expect you to hand in anything, or showcase anything. We like to prioritize workshop time on coding and having fun ♡ However, If you do want to share - tag us on instagram: @airlabitu!

Q: What can we do besides LED's, servos and sound?

A: Great question! Remember the different types of analog input from part 1? Why not combine the expression of your AI with some of these sensors?

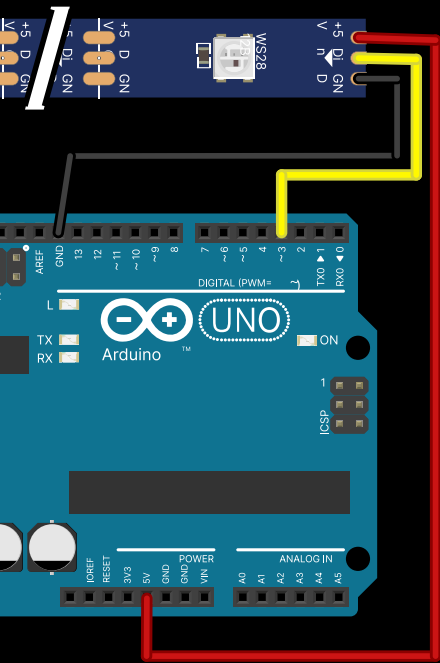
Material cheatsheet

Your kit includes 1x LED-strip, 1x Servomotor, 1 x IR distance sensor and Headphones + adapter. Our Github-repository contains code-examples for all of these technologies to start from.

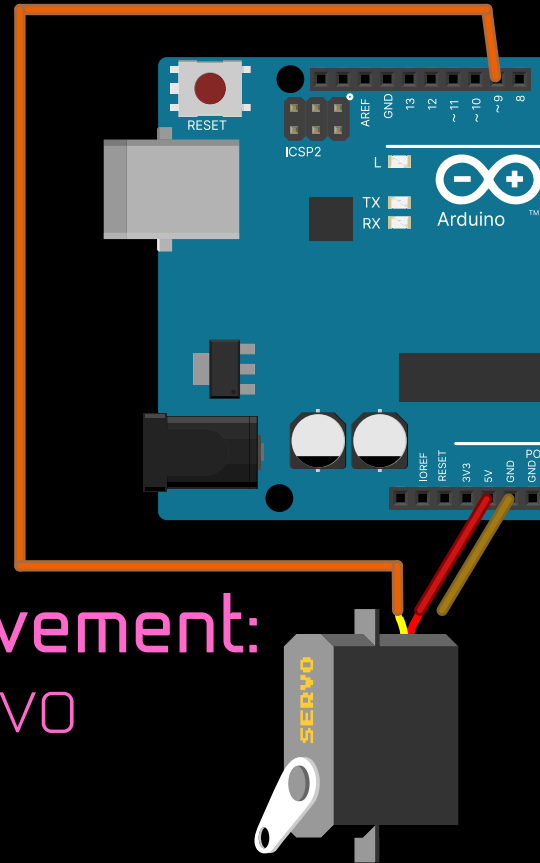
To get started, download the full repository, open a code example and follow the drawings below to build a specific setup!



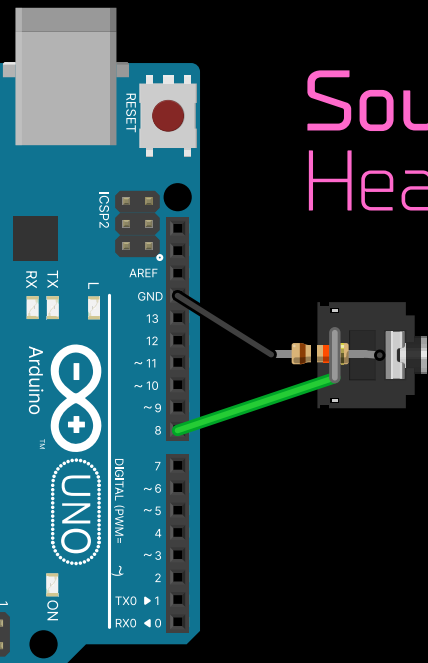
[Link to CCC#2
GitHub repository](#)



Lights:
LED-strip

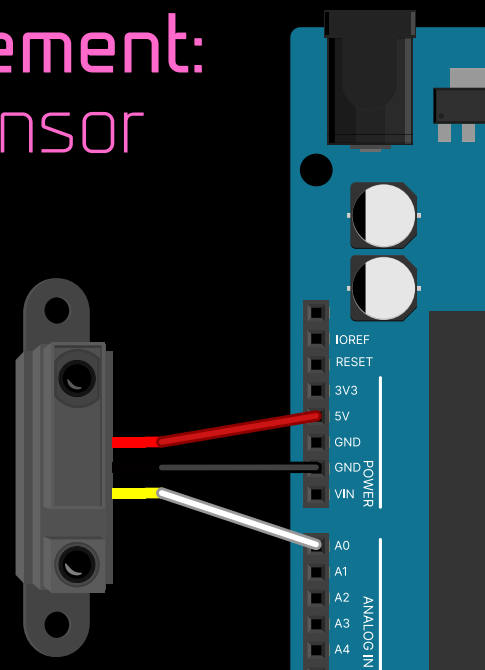


Movement:
Servo

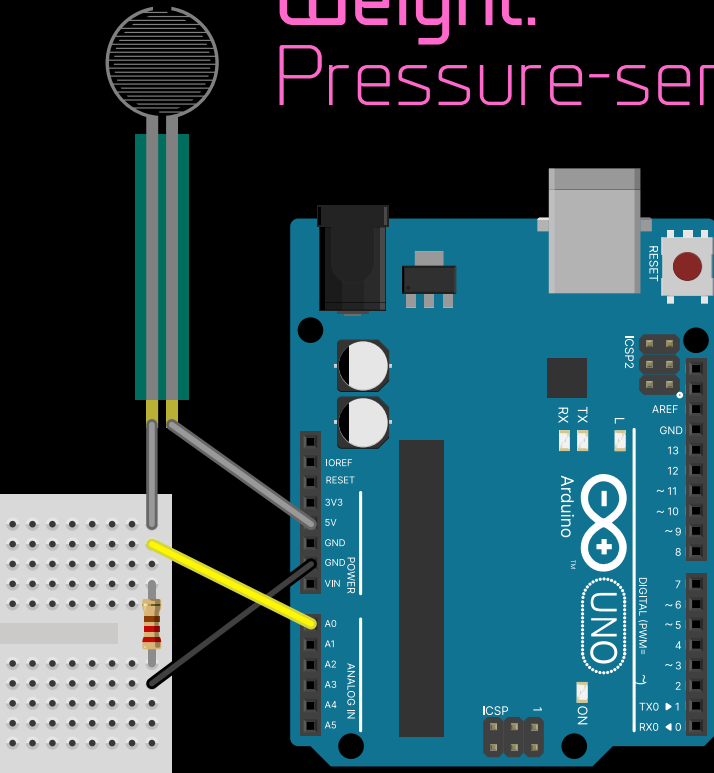


Sounds:
Headphones

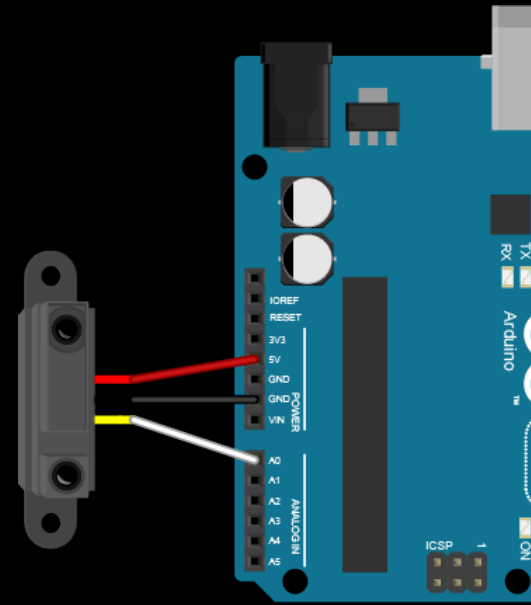
Movement:
IR-sensor



Weight: Pressure-sensor



Proximity: IR-sensor



Useful functions:

I/O pin functions:

- `pinMode(..., ...)`
- `digitalWrite(..., ...)`
- `analogWrite(..., ...)`
- `analogRead(...)`
- `digitalRead(...)`

Debugging functions:

- `Serial.begin(...)`
- `Serial.println(...)`

Other helpful functions:

- `millis()`
- `map(..., ..., ..., ..., ...)`
- `random(..., ...)`