Lesson 6 & 7: Building and Programming

Concept

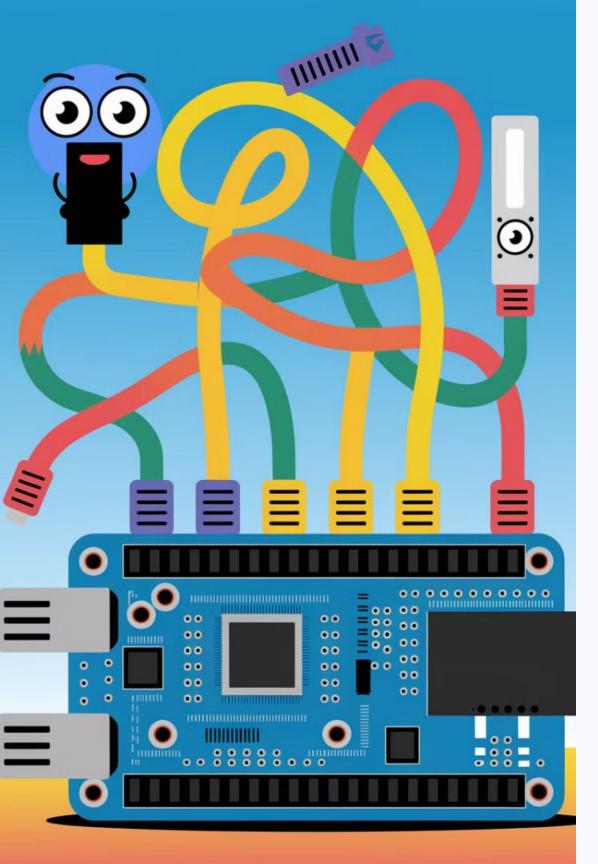
Brainstorming interactive music ideas.

Materials

Selecting the right conductive ink or objects.

Prototyping

Creating a paper prototype for testing.



Wiring the Arduino

Connections

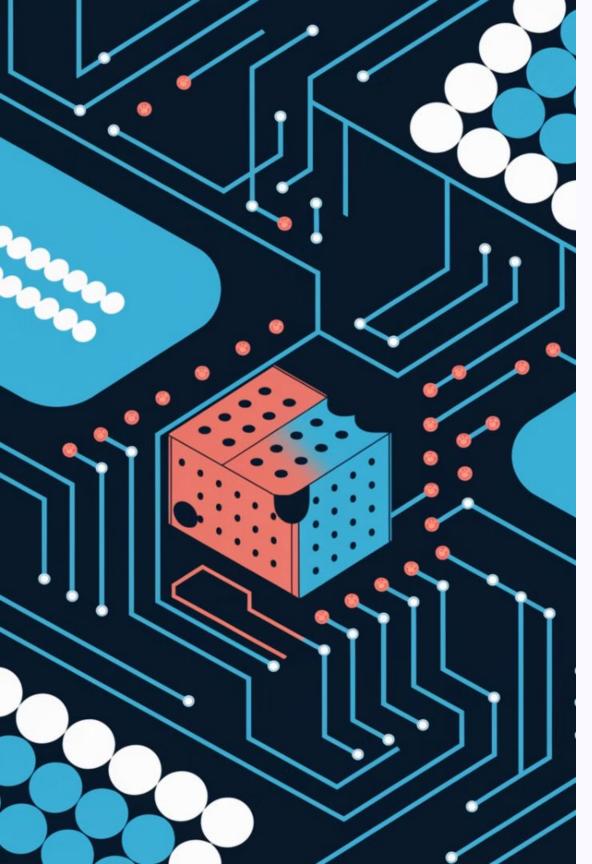
Connecting sensors to Arduino pins correctly.

Power

Ensuring stable power supply for the instrument.

Testing

Verifying all connections before programming.



Circuit Design

Layout

Plan the conductive ink patterns carefully.

2

Integration

Connect to Arduino pins for sensing.

Testing

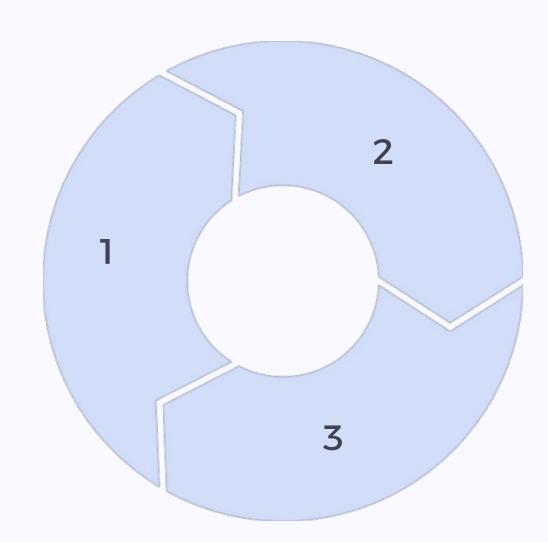
3

Ensure all connections are working properly.

Sound Design

Parameters

Choose synth parameters to control.



Mapping

Link gestures to sound variations.

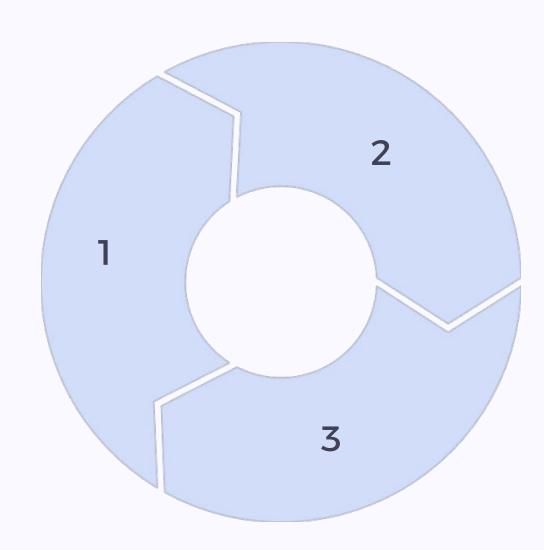
Experimentation

Fine-tune the sound for desired effects.

Programming

Main Sketch

Writing the Arduino code to control the instrument.



Recognition

identify Typical problems with code and solutions.

Optimization

Tuning the code for responsiveness.



Testing and Debugging

Systematic

Test each function thoroughly.

Common

Identify typical issues and their solutions.

Refinement

Fine-tune for optimal performance.

Project Showcase and Reflection



Thank You and Q&A