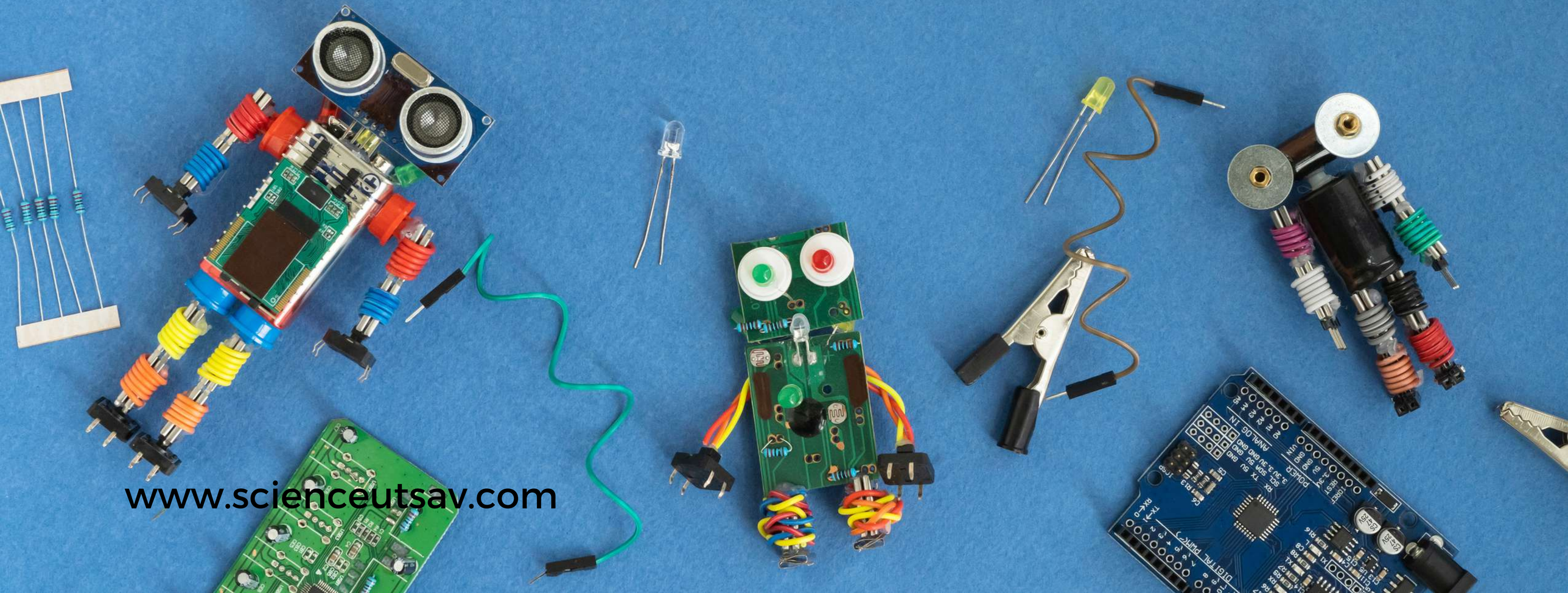
New Age STEM Lab

Makerspace and Tinkering Lab to create new age leadership

SCIENCEUTSAV®
Science is awesome



www.scienceutsav.com

Why Modern Age Lab?

1. STEM education teaches students how to solve problems by using their **critical thinking and logical reasoning skills.**

2. STEM builds confidence in children by developing clarity in Science and Math concepts with Minds-on activities paired with **Hands-on projects and experiments.**

3. STEM enables children to think smartly by allowing them to **solve day to day engineering problems.**

4. STEM promotes **design thinking, creativity, research experimentation, prototyping and project building** which lead to new ideas and innovations.

What it consist of?

ScienceUtsav aims at offering all our students a broad and balanced STEM curriculum that provides rewarding and stimulating activities to prepare them for the best social and cultural life.

1.MakerSpace Set up

Coding, Robotics, Internet of Things and Automation Lab

2.Realtime Problem Solving

STEM kits which are capable of solving realtime Engineering Build

3. LMS

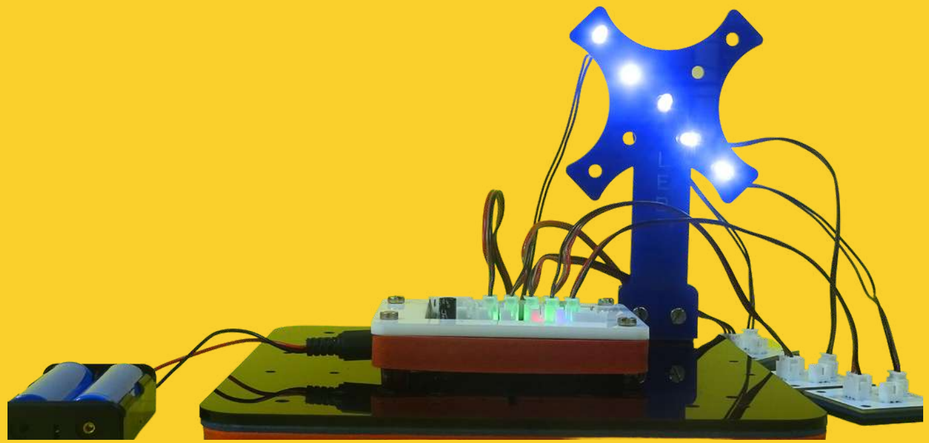
Learning Management System with structured curriculum

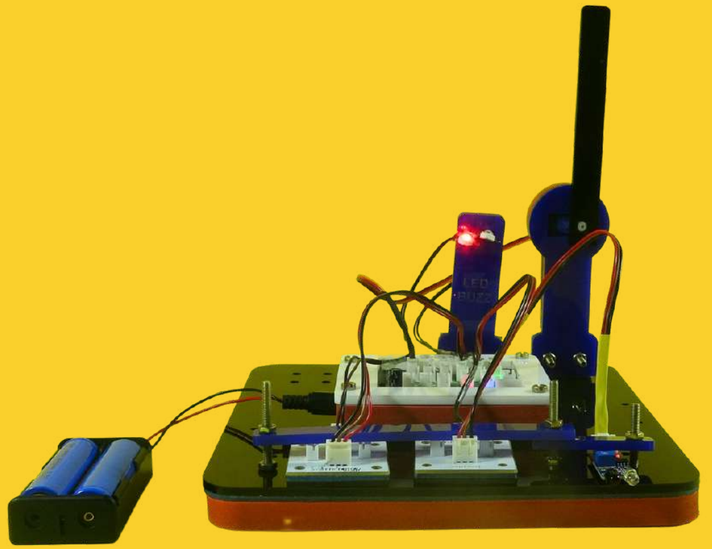
1. Arduino powered Electronic Kit

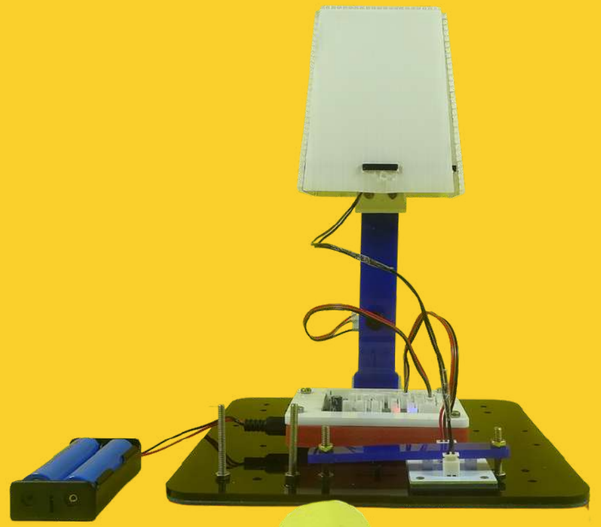
TINKERING | ROBOTICS | AUTOMATION KITS

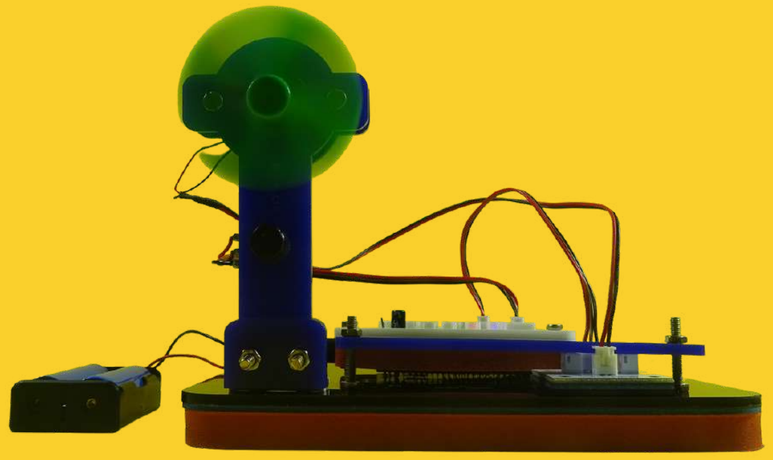
1. **Arduino powered Electronic Kit**

Capable of solving Realtime Engineering Problem





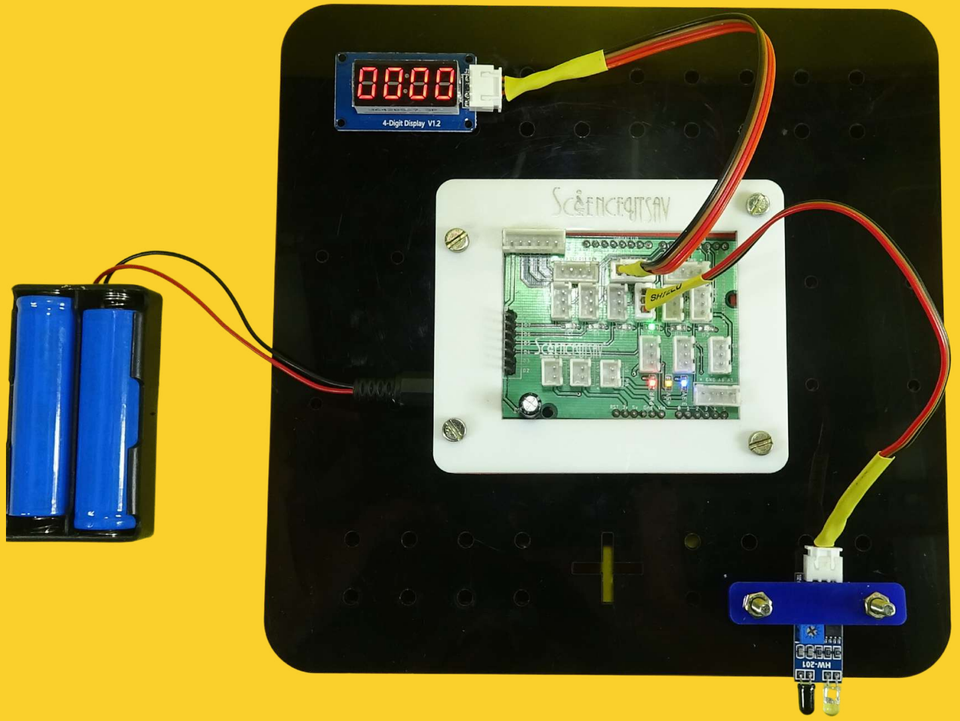




1. Arduino powered Electronic Kit

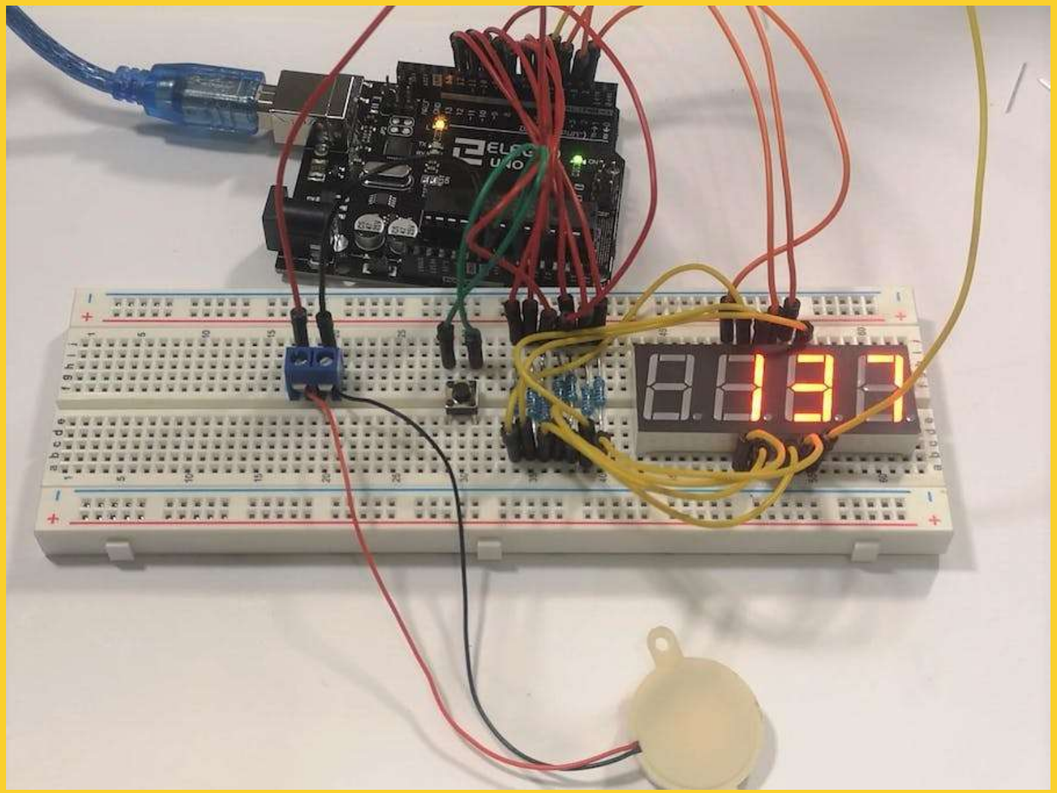
Sheild on the Arduino Uno Board which is reduces the wiring and complexing

Facility to connect Sensors and Output devices without Bread Board



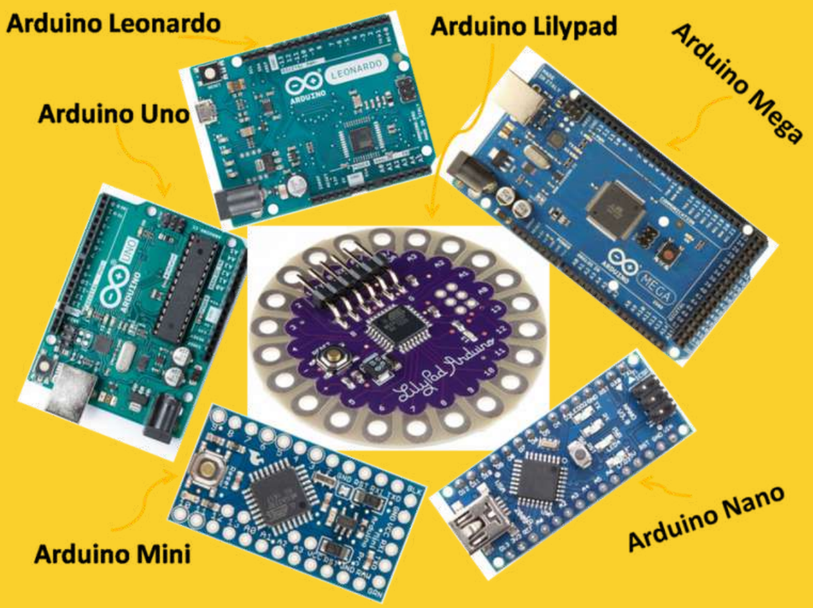
Arduino based ScienceUtsav Kit

VS



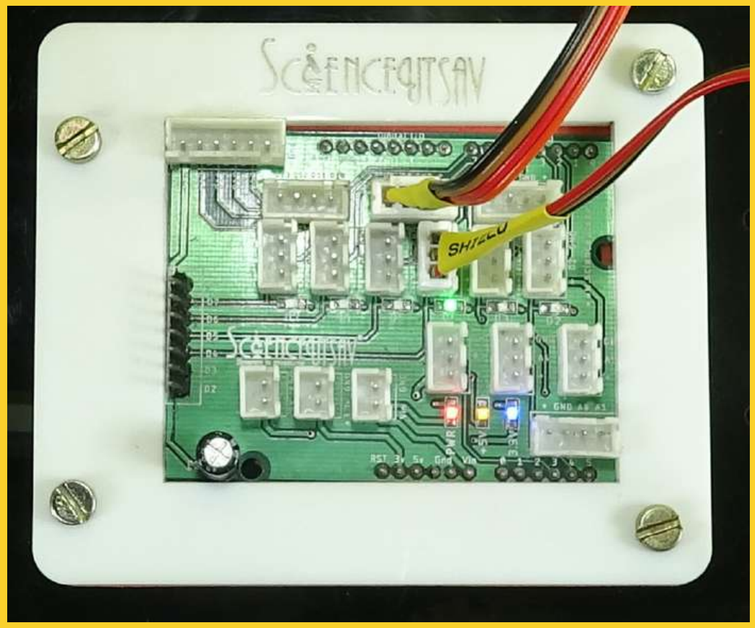
Classical Way

1. **ScienceUtsav - Advantage**



Arduino technology is an open-source electronics platform that's widely used for creating various electronic projects across the globe

Different microcontrollers with wide range of applications



Open sources Kit made easy with help of Sheilds and Add on PCBs which helps us to captures children’s dreams eaily

STEM
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STEM
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The important thing is to never stop questioning!

Design thinking Takeaway Kits – Add on Support

Engineering an emergency Lamp

Prototype > Create > Ideate

Prototype: Prototype a Tilt Switch

Create: Design a Gravity Switch lantern

Ideate: Ideate your own emergency Lamp

Enginnering with Newton's Laws

Prototype > Create > Ideate

Prototype: Prototype a Tilt Switch Create Thurst with Fan

Create: Design a Motor Boat

Ideate: Ideate your own Fan powered cart

Create Spying Devices

Prototype > Create > Ideate

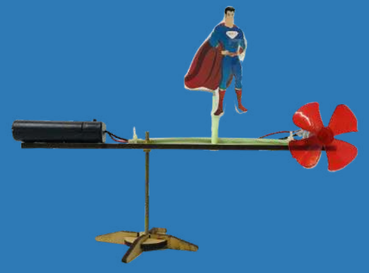
Prototype: Prototype a Simple Morse code circuit

Create: Design a Trip Alarm

Ideate: Ideate your own Spy device

Air in Action

Prototype > Create > Ideate



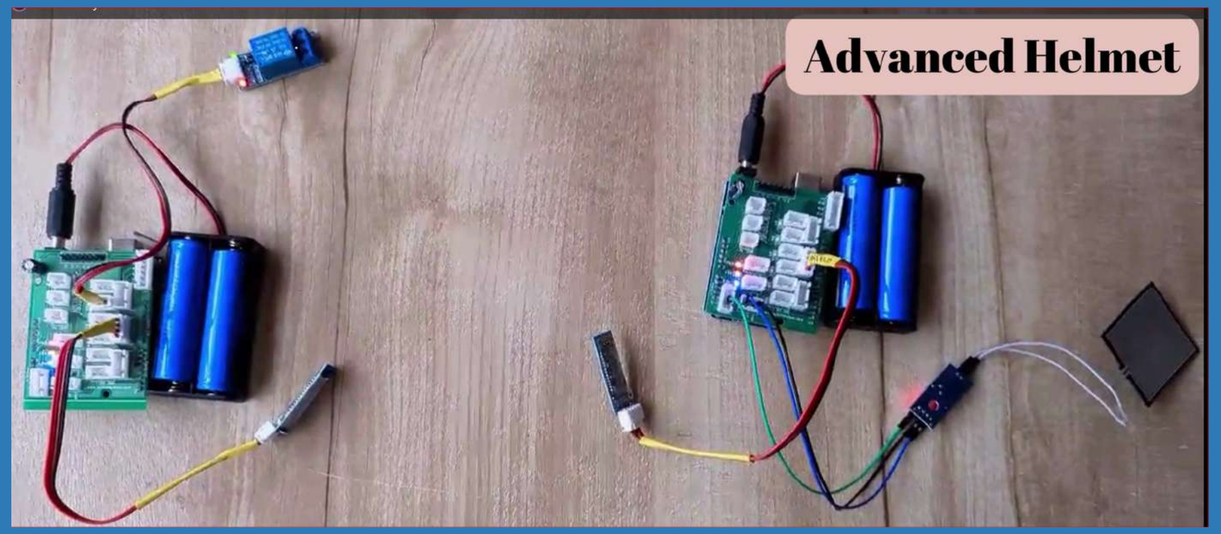
Prototype: Prototype different types of propellers

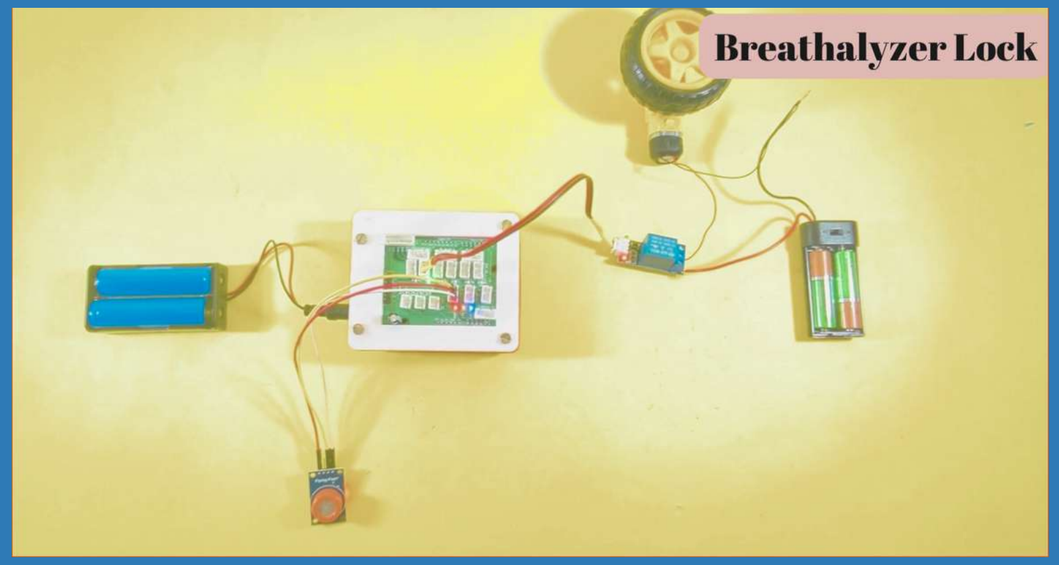
Create: DDesign a Newton's Super Hero

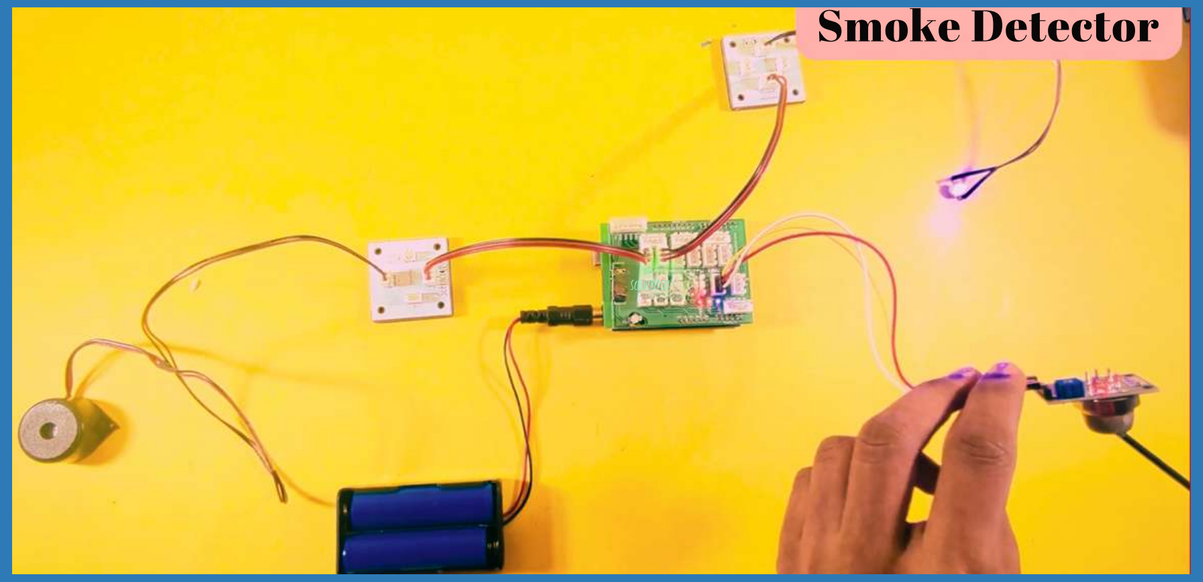
Ideate: Ideate your own Wind gadget

Design Thinking Projects – Add On

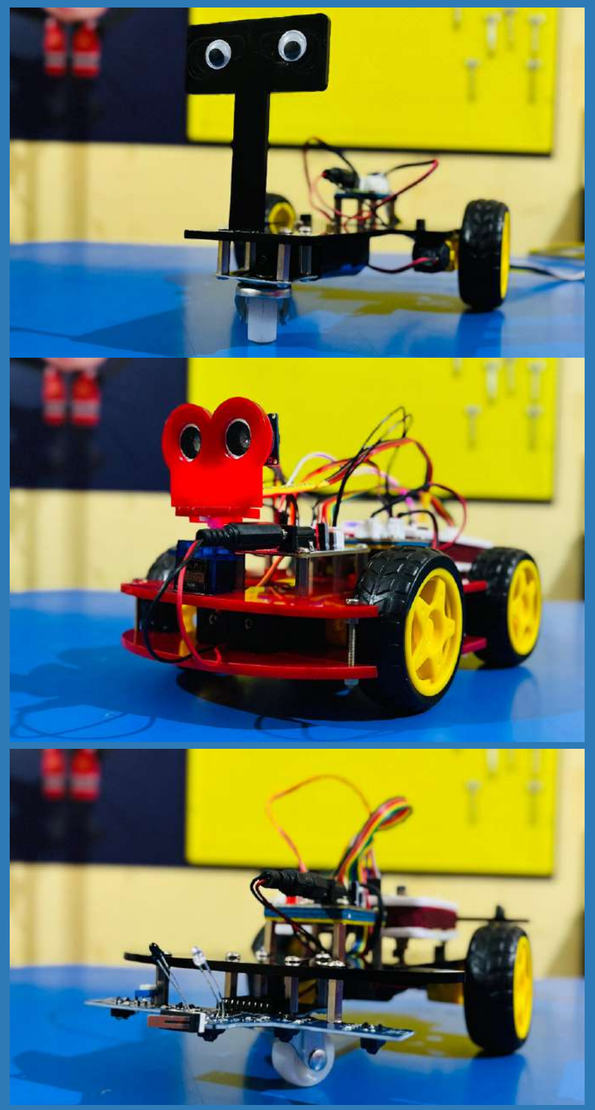
Realtime projects -Case Study

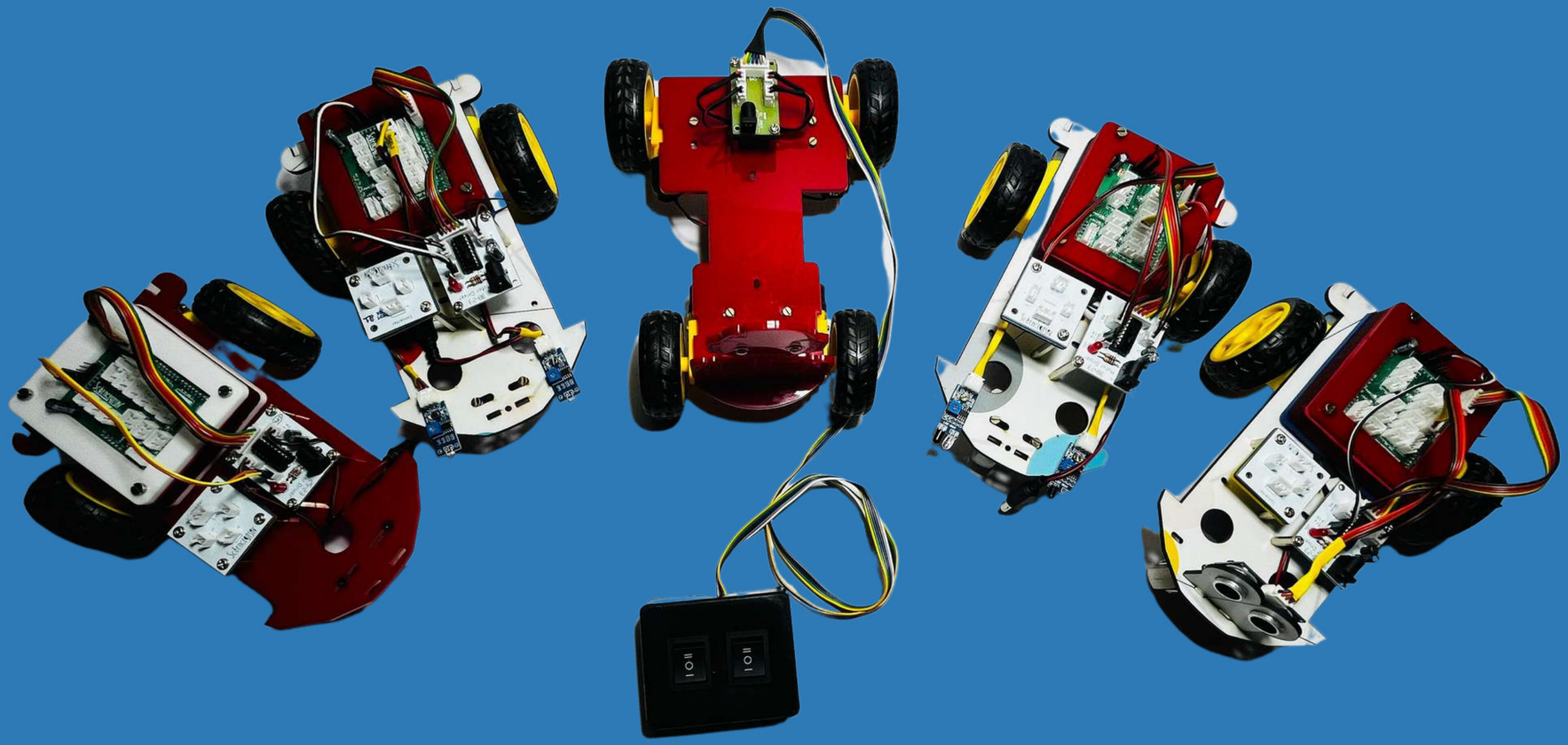


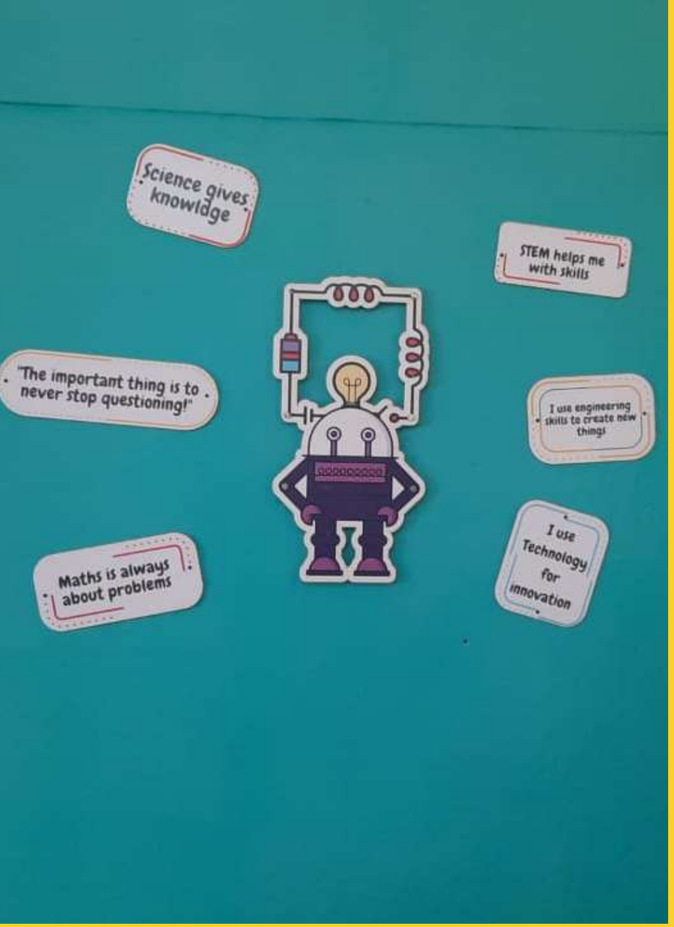




Easy to build multipurpose robots







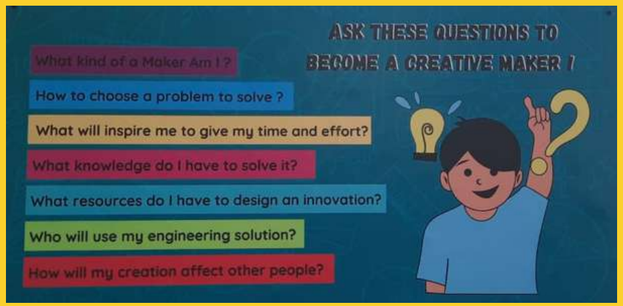
Tinkering Lab & MakerSpace set up

Before

After

Installations

Installations



Explore
Elaborate
Evaluate
Imagine
Invent
Inspire
STEM
TOOLS

Before

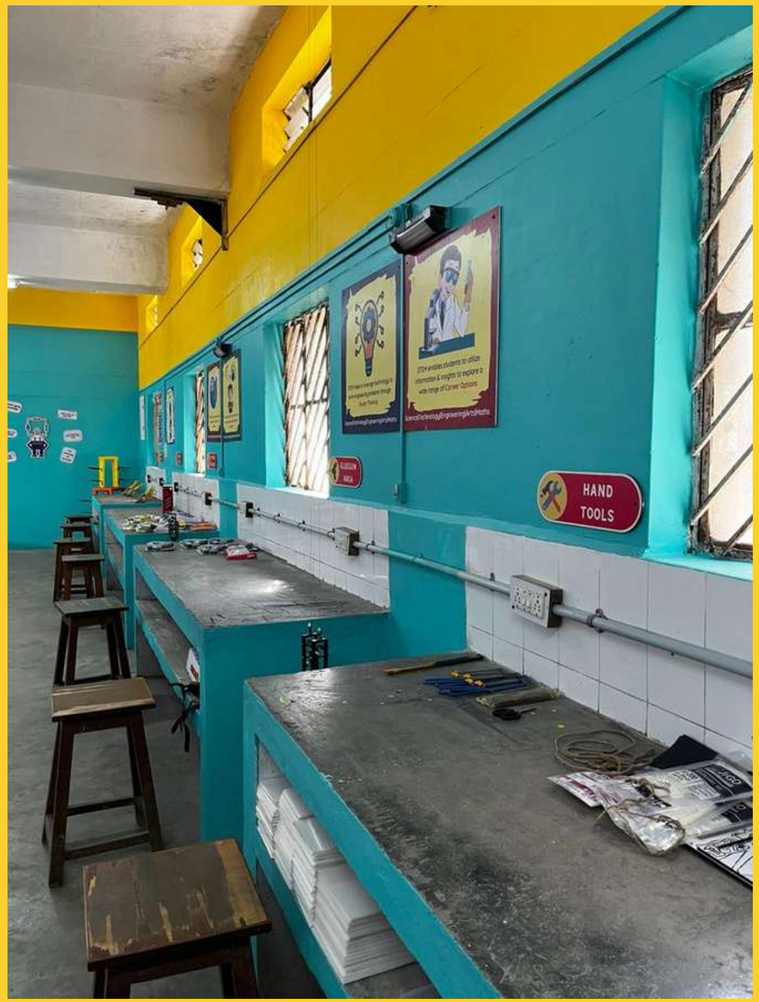
After

Before

After

Before

After



Before

After

Before

After

Explore
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Before

After

Learning Management System

Structured curriculum – Sample

UNIT 01

Topics - Introduction to Robotics, Learn to program your Arduino with ardublocks and make output devices work in different pattern

How it helps - Cognitive ability, Presentation skills, Creativity

UNIT 02

Topics - Learn about Different Sensors and integrate it with Arduino to make different projects

How it helps - Adaptability, Decision making, Critical thinking

UNIT 03

Topics - Build a cart using Bo Motor, Wheels, Platform and start automating its operation using sensors

How it helps - Application of knowledge, Analytical skills, Problem Solving

UNIT 04

Topics - Build an android application to operate a bot for different day to day applications

How it helps - Design Thinking and Problem Solving, Communication, Self management, Futuristic Applications

PLATFORM

ARDUINO

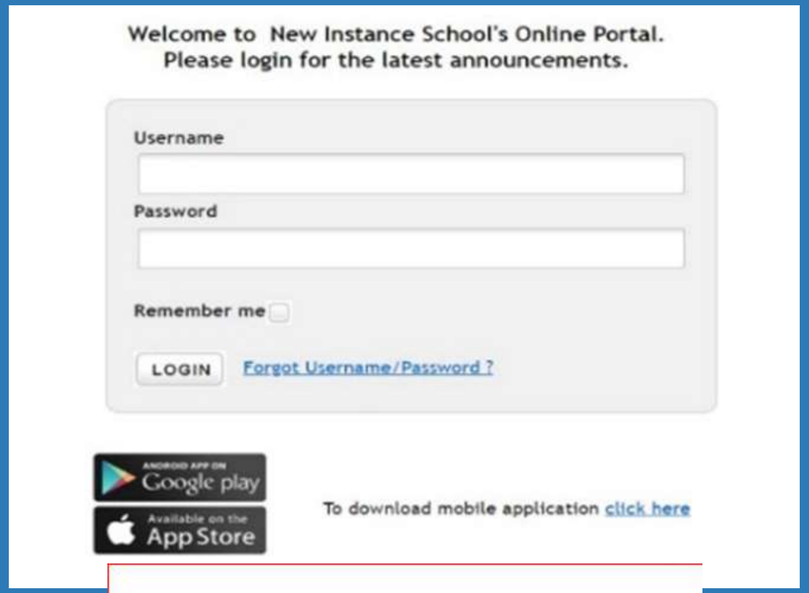
Ardublock

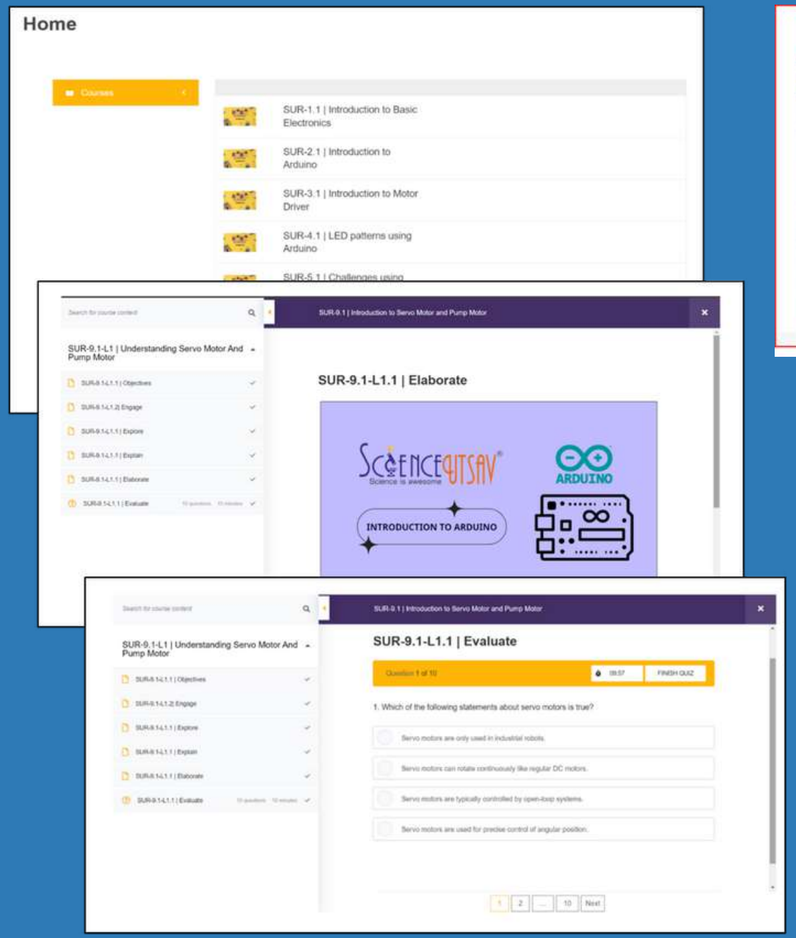
INCLUSIONS

- ALL PRACTICAL 20 CLASSES
- CONCEPT CLASSES
- PROJECT CLASSES
- REVISION CLASSES
- ASSESSMENT
- QUIZZES
- CLASS SUMMARY
- PRACTICE PROJECTS
- PROCEDURE DOCS

STEM Ecosystem

Unique Login Credentials | Structured Curriculum | On-demand Live Classes Hackathons and codathons | Awards and Recognitions | Quiz | Reprts





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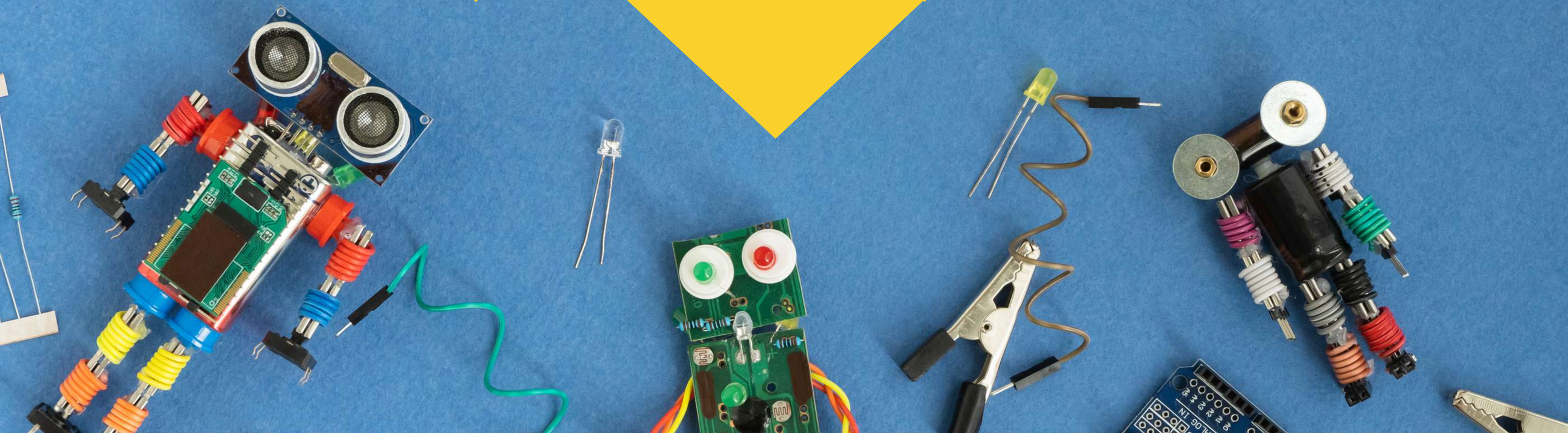
Thank you