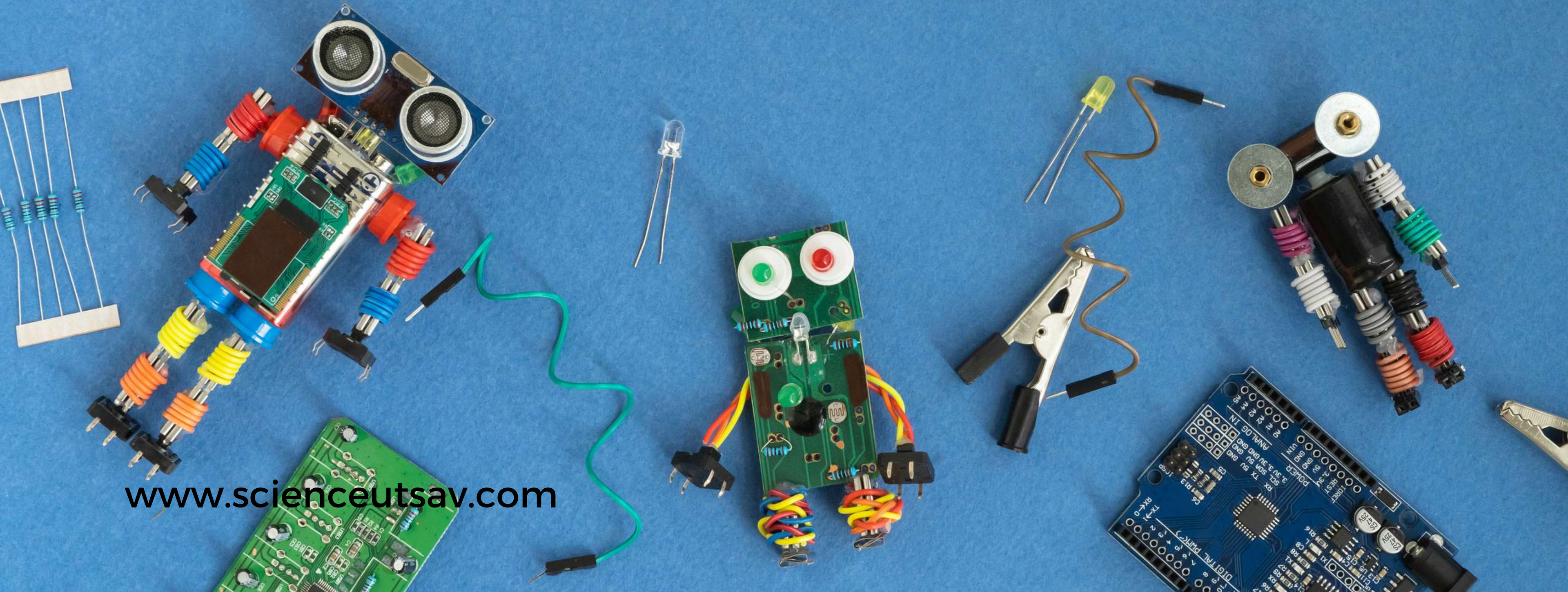


New Age STEM Lab

Makerspace and Tinkering Lab
to create new age leadership



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





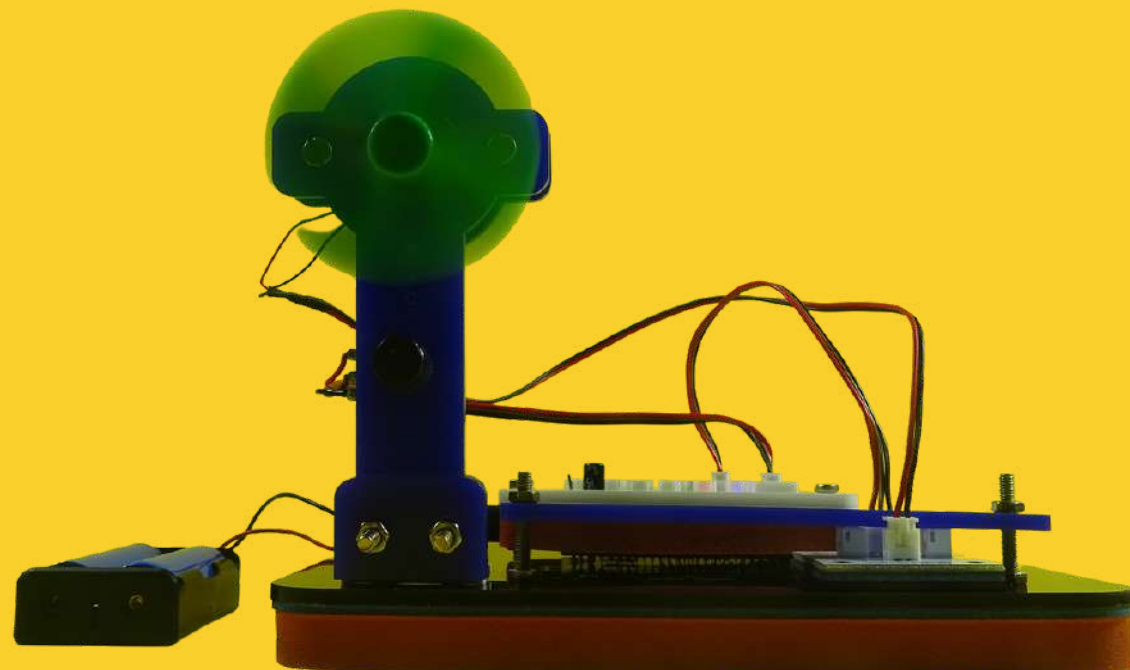
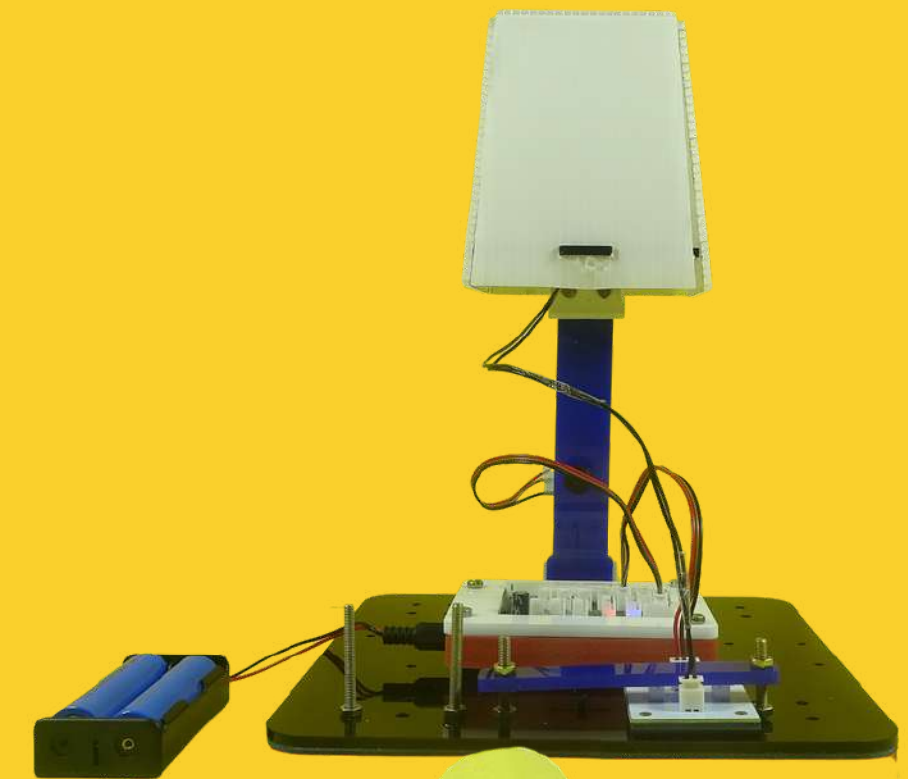
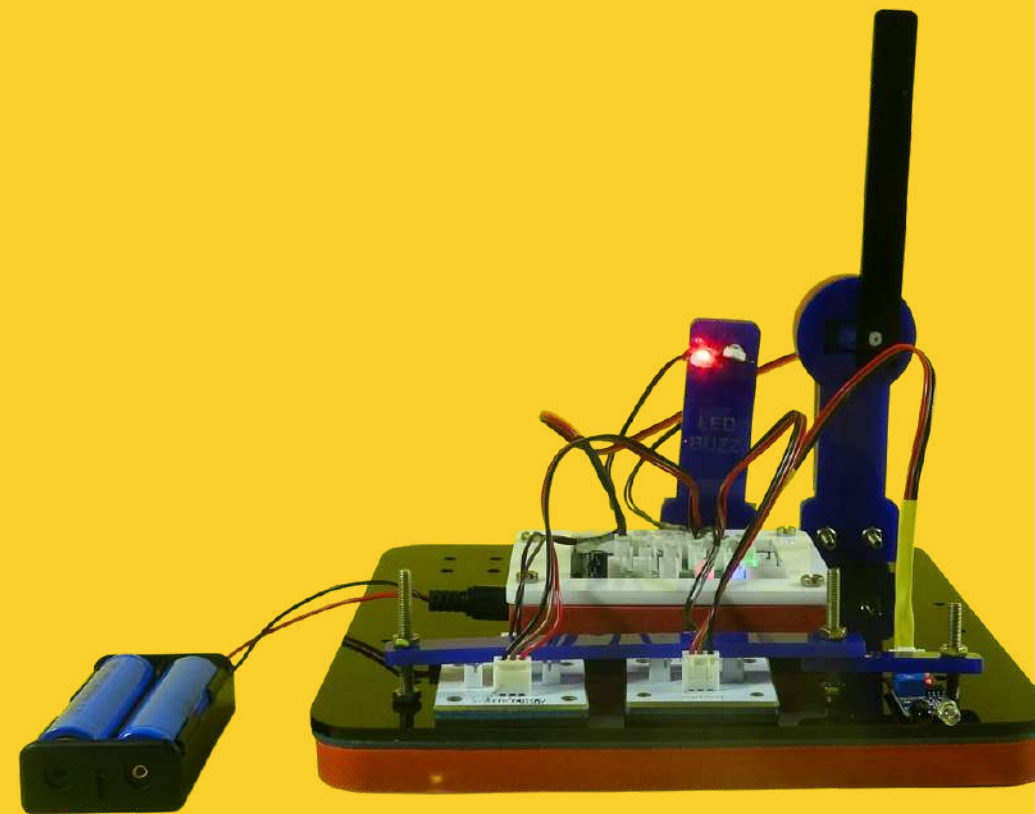
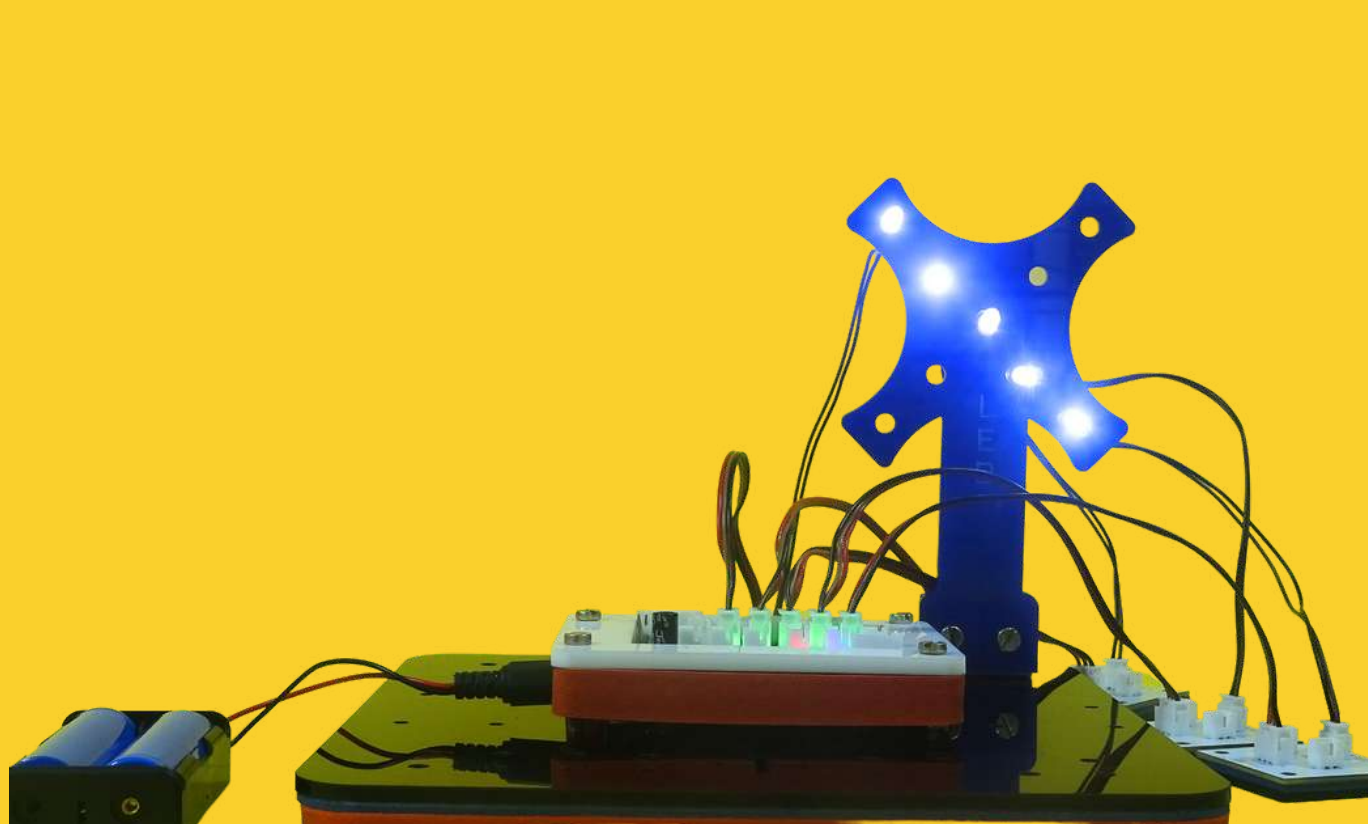
1. Arduino powered Electronic Kit

TINKERING | ROBOTICS | AUTOMATION KITS



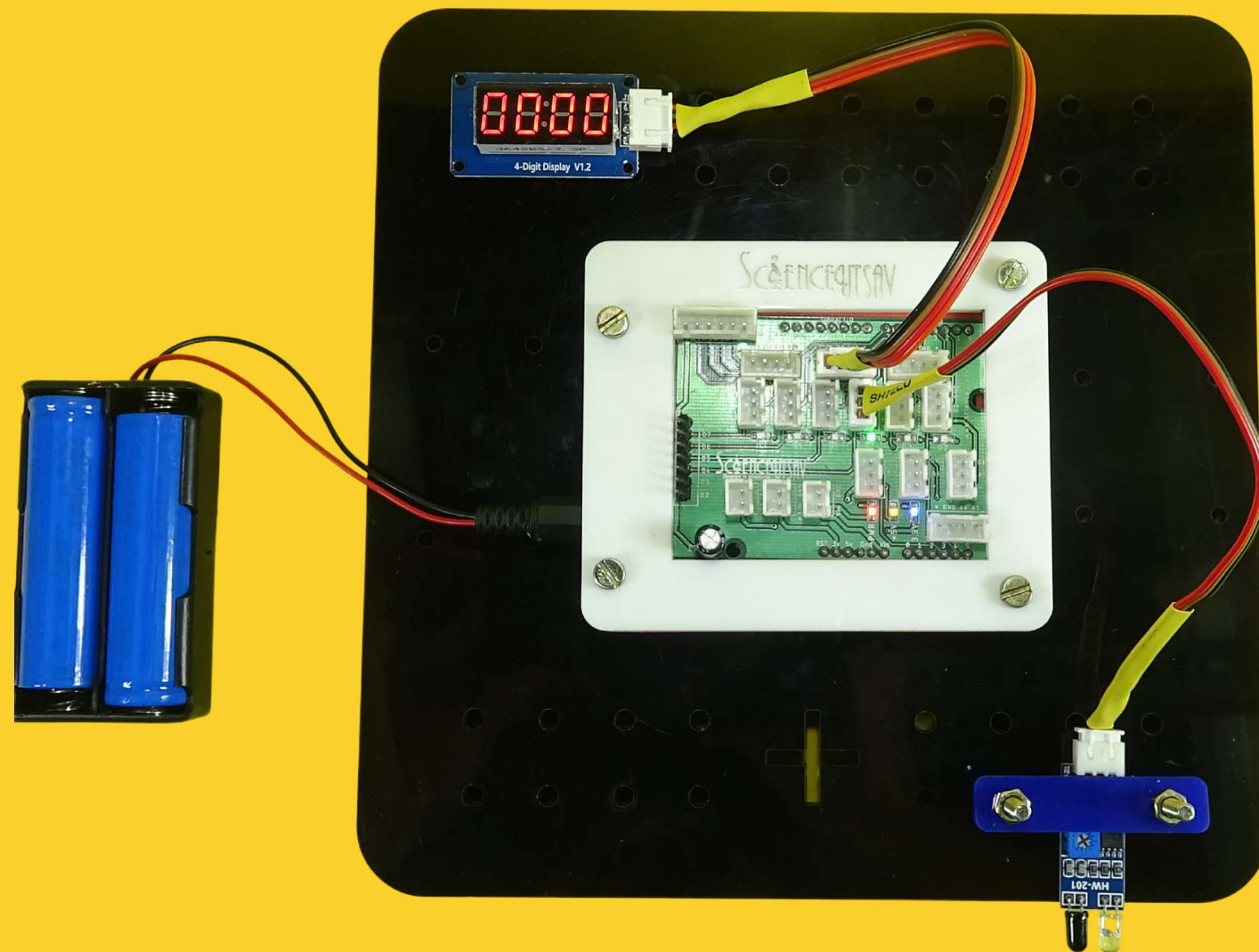
1. Arduino powered Electronic Kit

Capable of solving Realtime Engineering Problem



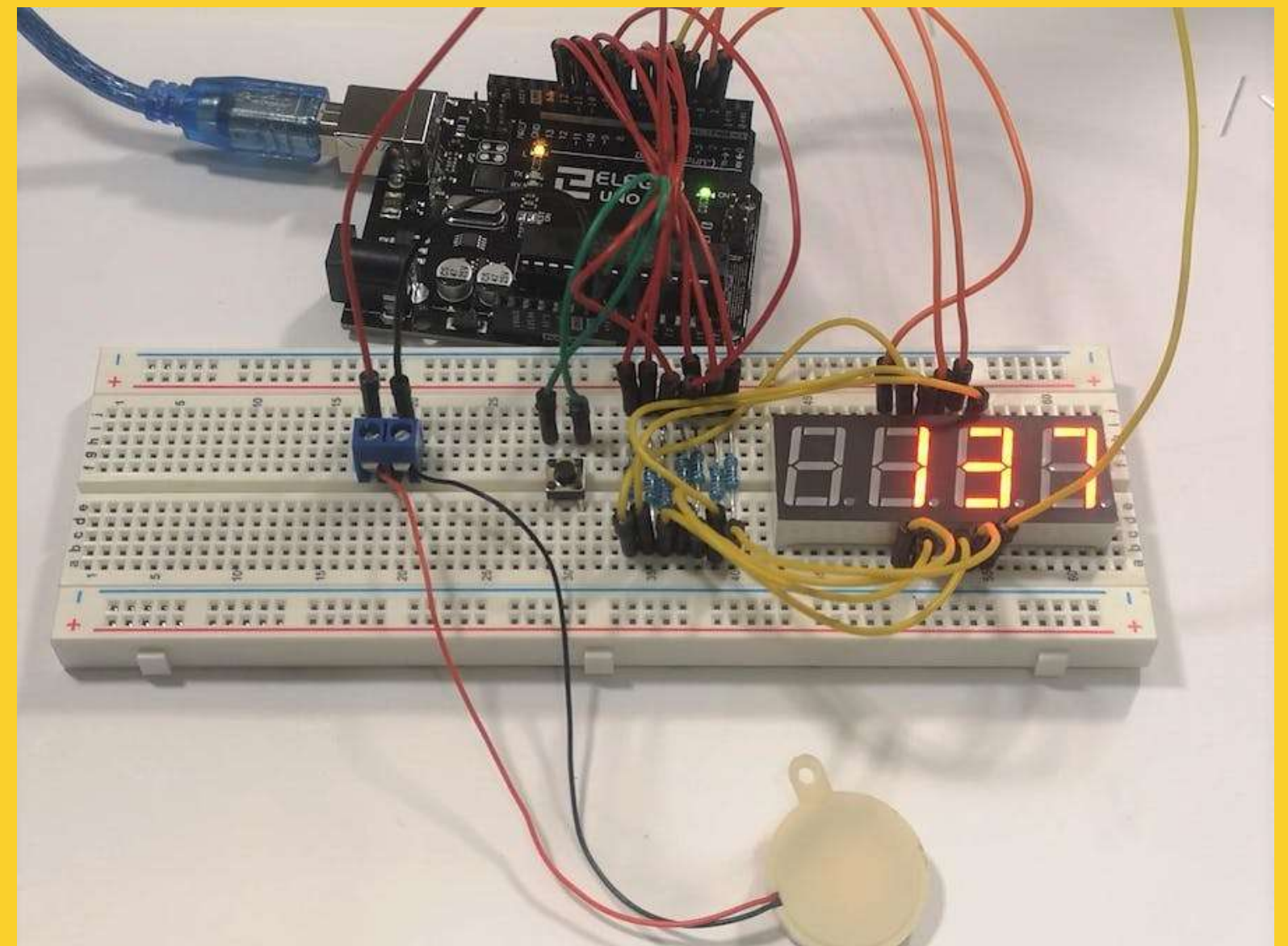
1. Arduino powered Electronic Kit

Shield on the Arduino Uno Board which reduces the wiring and complexing
Facility to connect Sensors and Output devices without Bread Board



**Arduino based
ScienceUtsav Kit**

VS

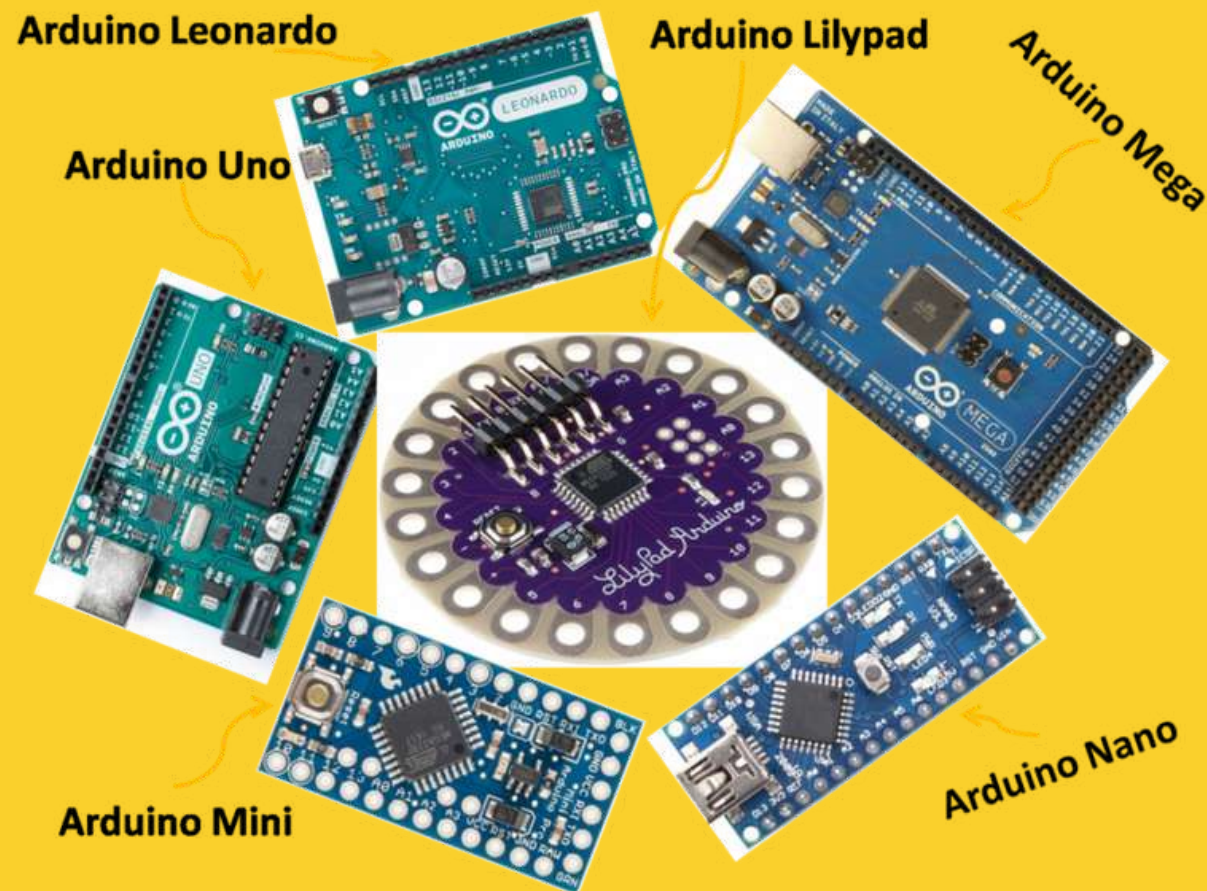


Classical Way

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 Shields and Add on PCBs which helps us to captures children's dreams eaily



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 Thrust 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



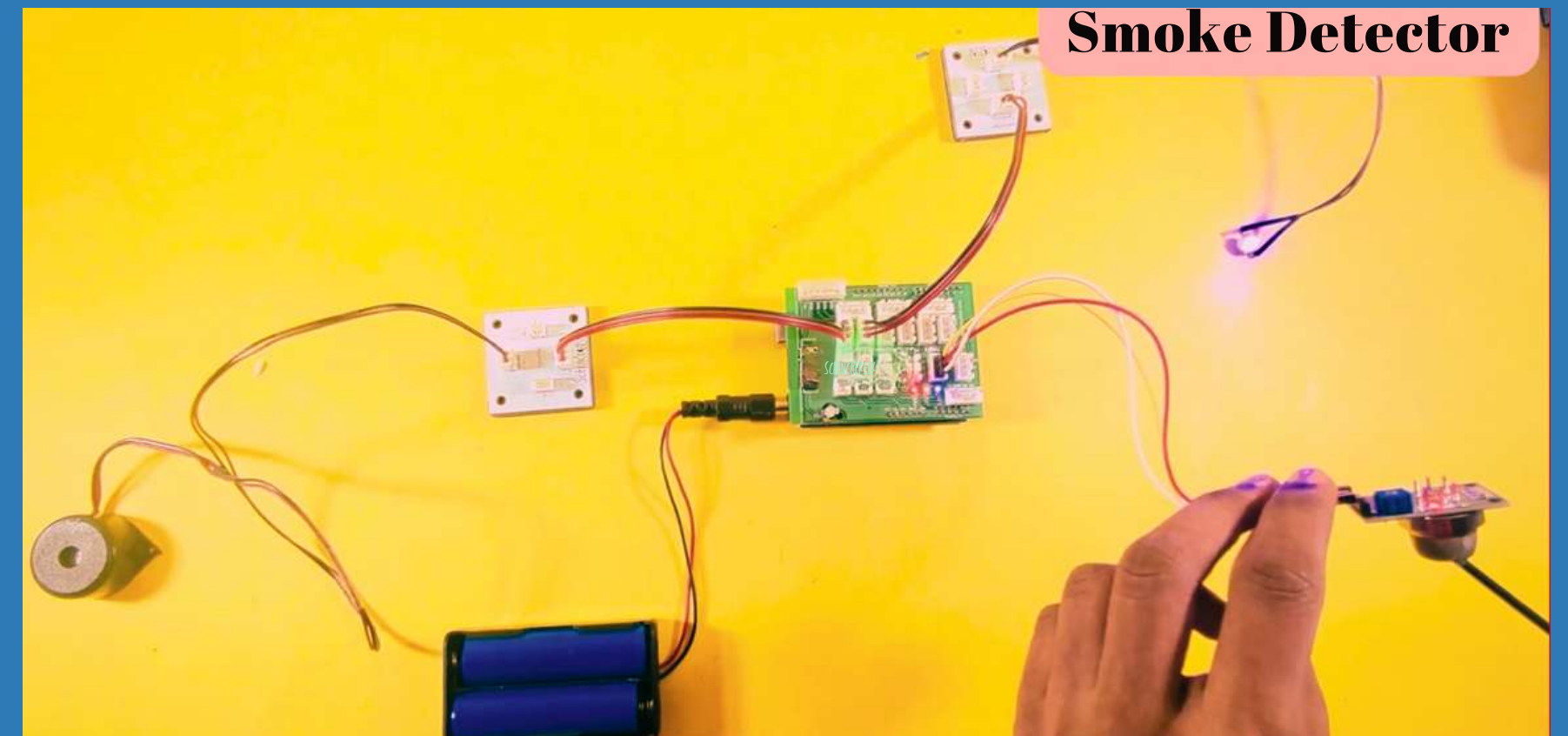
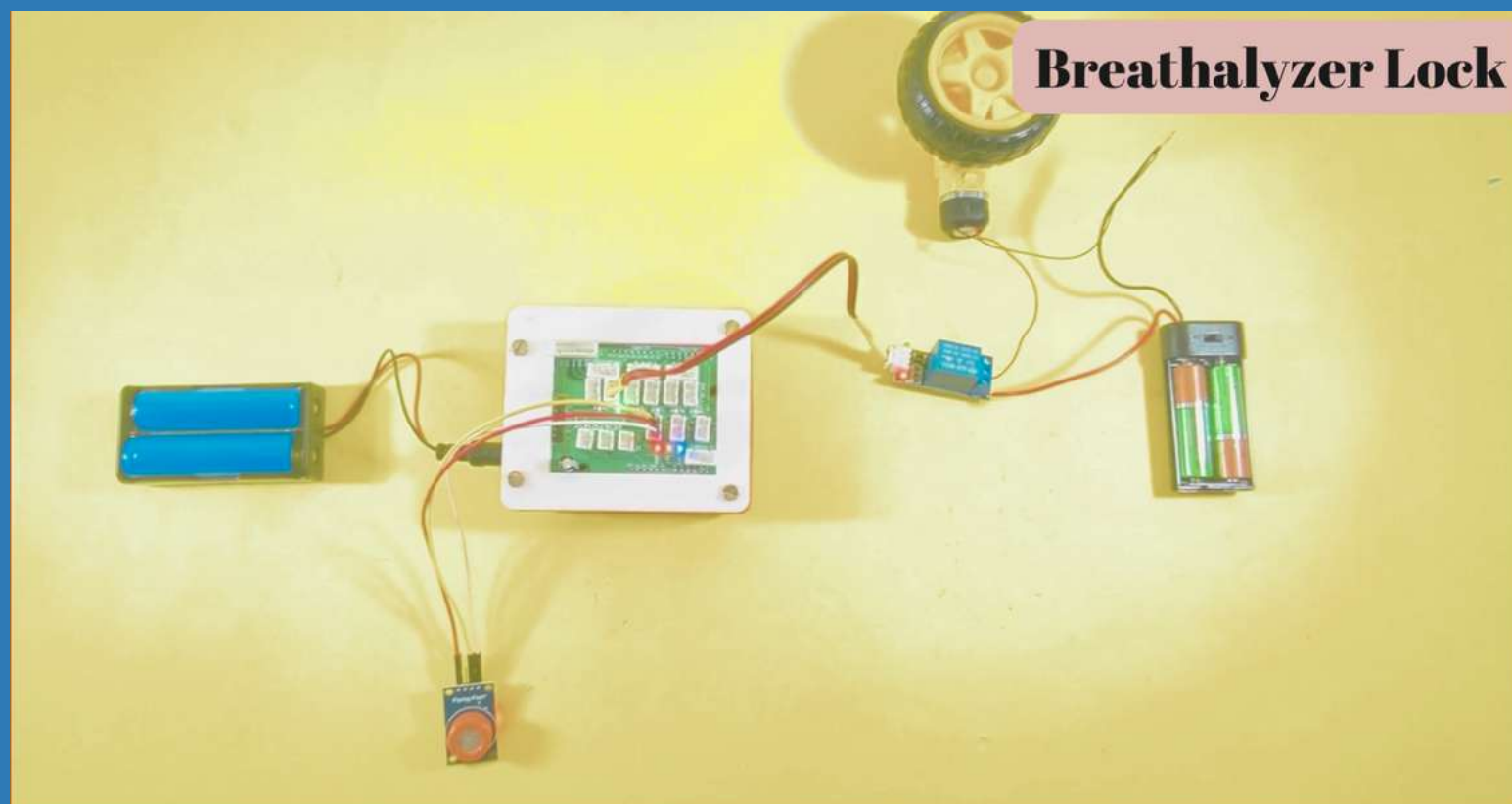
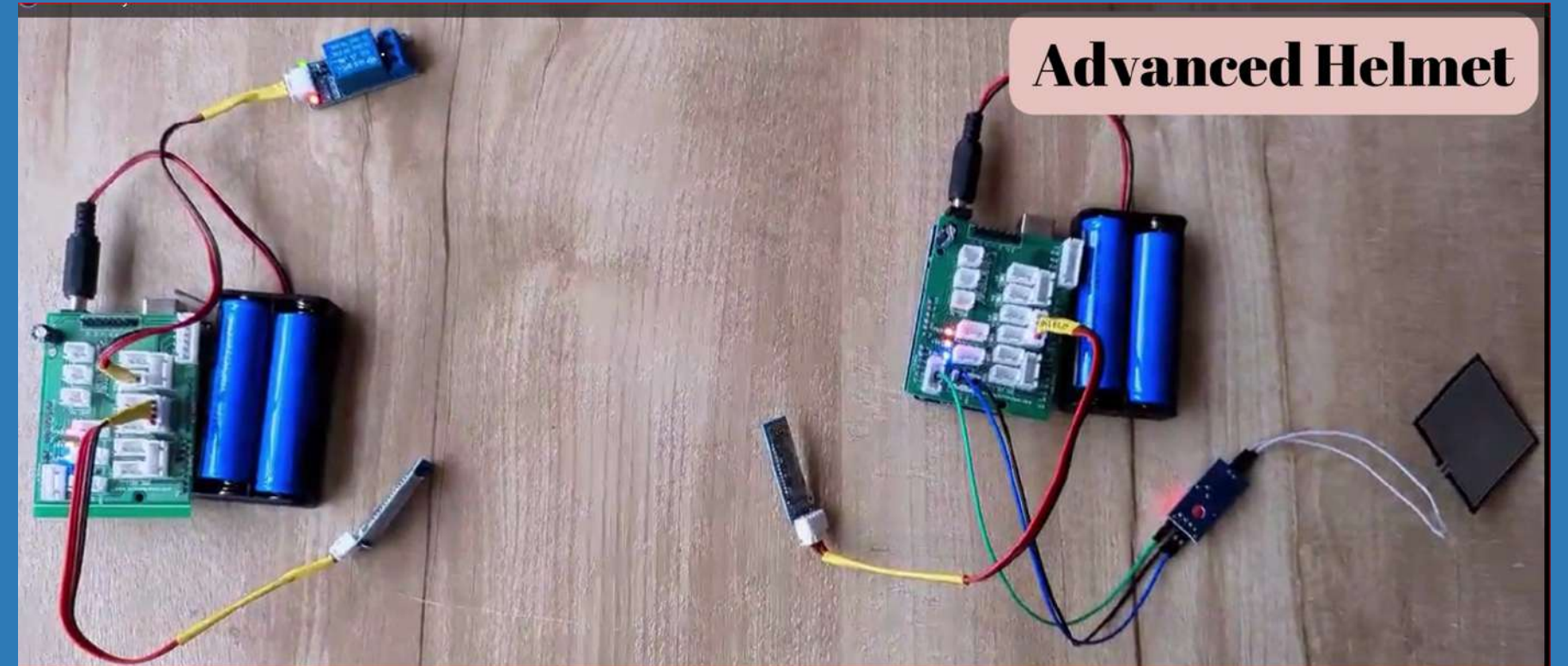
Prototype: Prototype different types of propellers

Create: DDesign a Newton's Super Hero

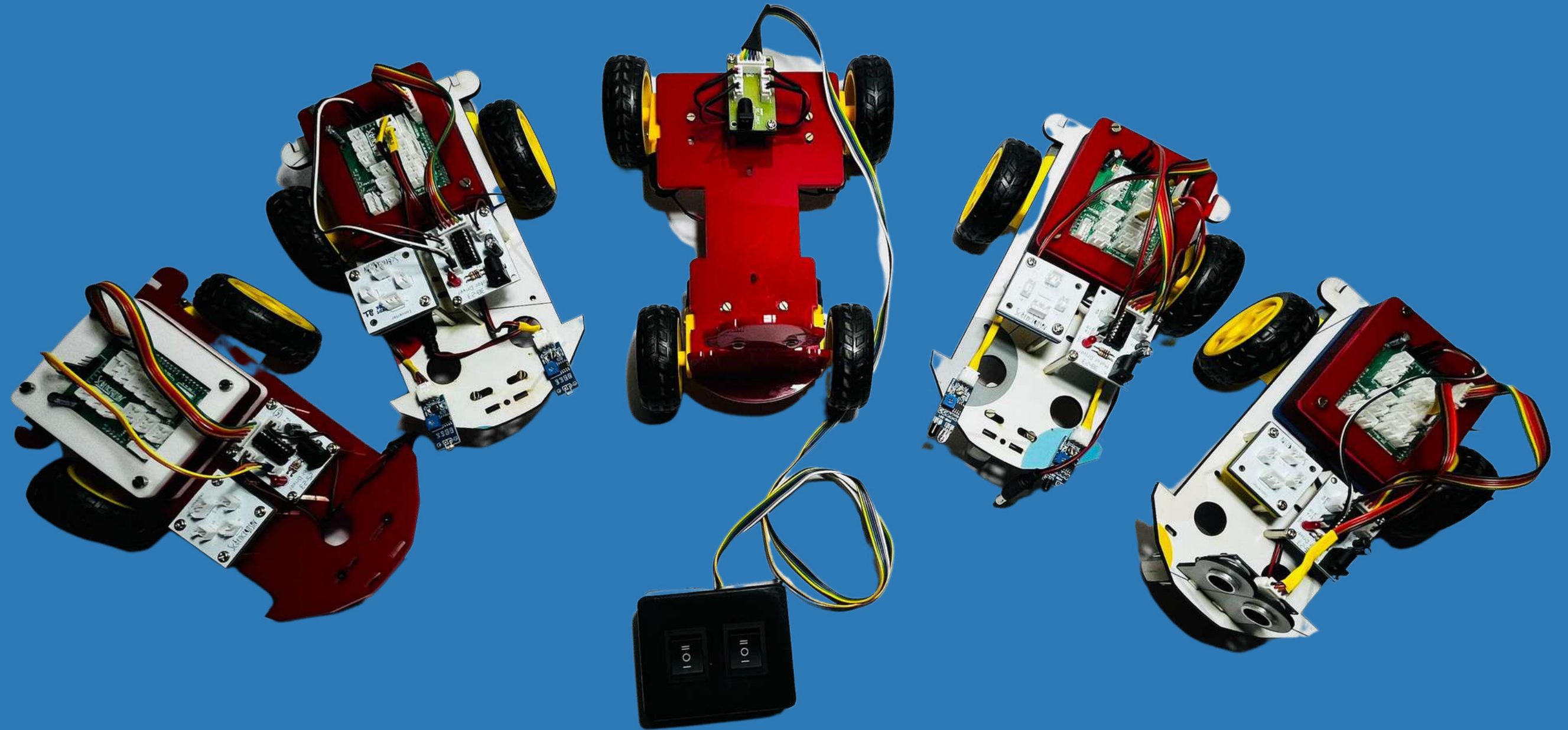
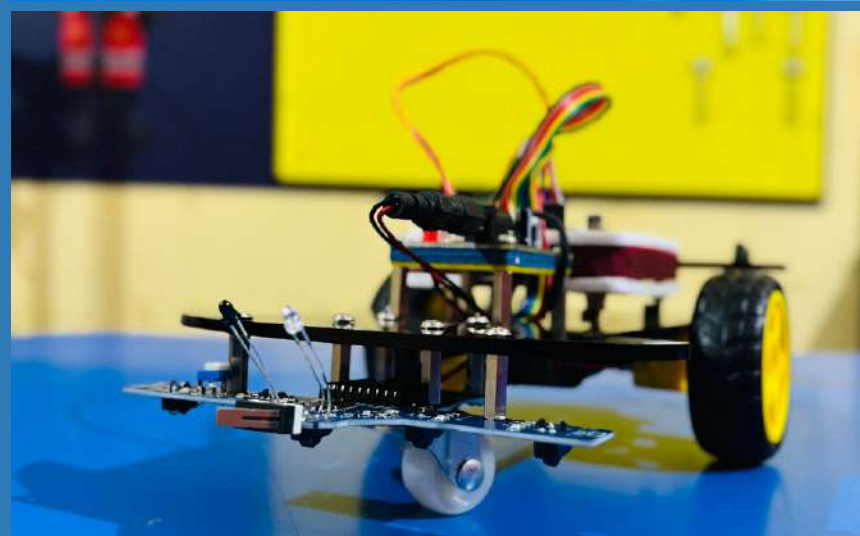
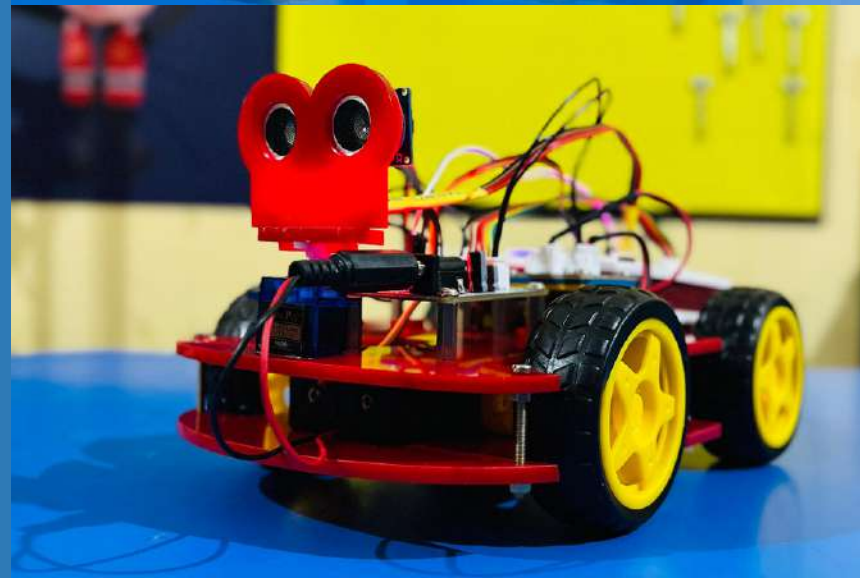
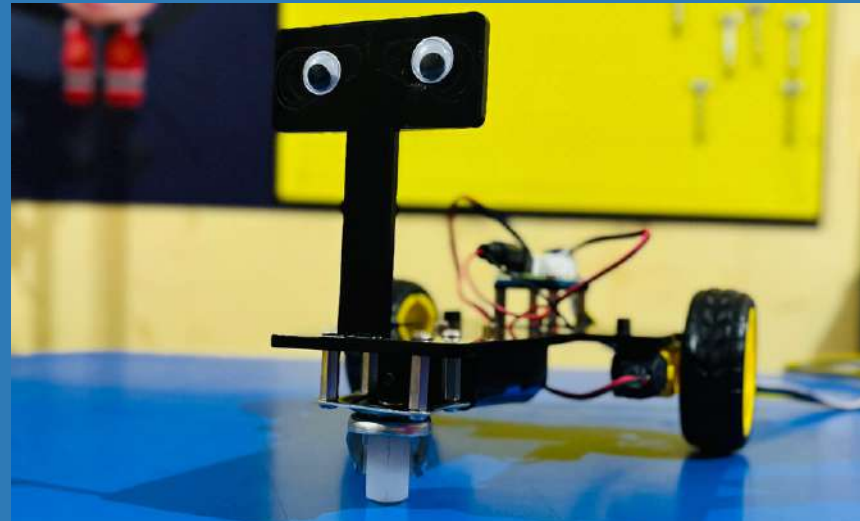
Ideate: Ideate your own Wind gadget

Design Thinking Projects – Add On

Realtime projects -Case Study



Easy to build multipurpose robots





Tinkering Lab & MakerSpace set up



Before



After



Installations



Installations





Before



After



Before



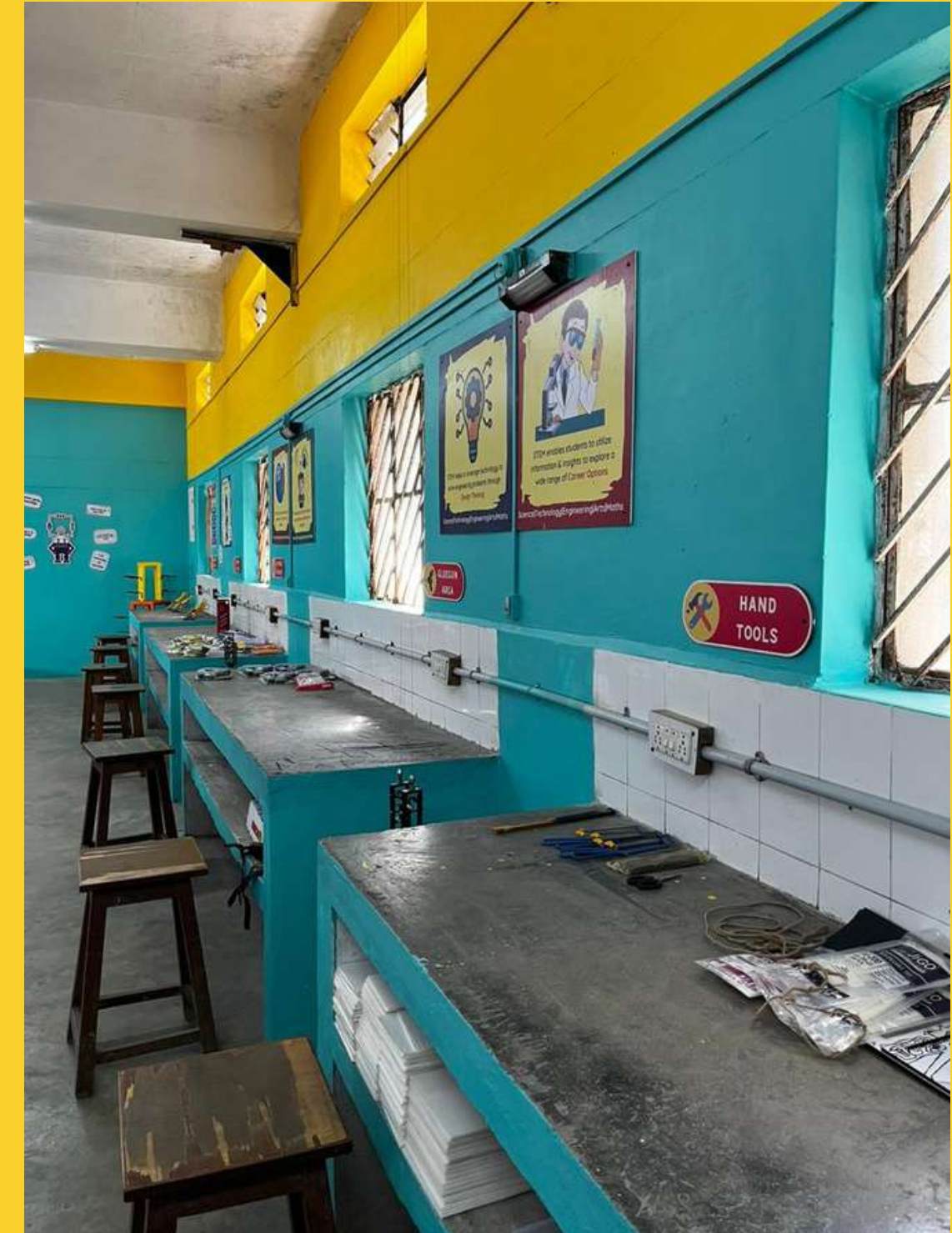
After



Before



After



Before



After



Before



After





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



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

Welcome to New Instance School's Online Portal.
Please login for the latest announcements.

Username
Password

Remember me

LOGIN [Forgot Username/Password ?](#)

ANDROID APP ON Google play
Available on the App Store

To download mobile application [click here](#)

Home

Courses

- SUR-1.1 | Introduction to Basic Electronics
- SUR-2.1 | Introduction to Arduino
- SUR-3.1 | Introduction to Motor Driver
- SUR-4.1 | LED patterns using Arduino
- SUR-5.1 | Challenges using

SUR-9.1 | Introduction to Servo Motor and Pump Motor

SUR-9.1-L1 | Understanding Servo Motor And Pump Motor

- SUR-9.1-L1.1 | Objectives
- SUR-9.1-L1.2 | Engage
- SUR-9.1-L1.1 | Explore
- SUR-9.1-L1.1 | Explain
- SUR-9.1-L1.1 | Elaborate
- SUR-9.1-L1.1 | Evaluate

SUR-9.1-L1.1 | Elaborate

SCIENCE QTSAV
Science is awesome

INTRODUCTION TO ARDUINO

ARDUINO

Quiz Winners - Nov-Dec 2022

Upasna Sahu

Lakshita Pandey

B. Dhali Bhargavi

Muskan

Vedantika A. Gaikwad

Chemical Reactions_Snapshots

Curriculum based STEM (C-STEM) | Che...

Watch later | Share

SCIENCE IS

Watch on YouTube

SUR-9.1 | Introduction to Servo Motor and Pump Motor

SUR-9.1-L1 | Understanding Servo Motor And Pump Motor

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- SUR-9.1-L1.1 | Evaluate

SUR-9.1-L1.1 | Evaluate

Question 1 of 10

1. Which of the following statements about servo motors is true?

- Servo motors are only used in industrial robots.
- Servo motors can rotate continuously like regular DC motors.
- Servo motors are typically controlled by open-loop systems.
- Servo motors are used for precise control of angular position.

[Click here to appear for the quiz](#)

QUIZ TIME

BEST PERFORMING SCHOOLS

NOV-DEC 2022

BHOPAL

CHANDIGARH

HYDERABAD

JAIPUR

LUCKNOW

PATNA

PUNE

SHILLONG

IDRAPUR

Certificate of Completion

SCIENCEQTSAV
Science is awesome

CERTIFICATE OF COMPLETION

This certifies that

K. Abhinava Karthikeya

has successfully completed
I am a Maker - STEM based Design Thinking Program

I AM A MAKER
Invent. Discover. Explore

STEM ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
DIRECTOR TECHNOLOGY

SHASHANK KARNAM
DIRECTOR STEM

STEM ACCREDITED
EDUCATIONAL EXPERIENCE

CERTIFICATE OF PARTICIPATION

This is presented to

Arbab Duttani

for attending Introduction course on
I am a Smart coder - Block Based Coding Program

I am a Smart CODER

STEM ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
Director Technology

SHASHANK KARNAM
Director STEM

SCIENCEQTSAV
Science is awesome

CERTIFICATE OF PARTICIPATION

This is presented to

Rakshit Taneja

for successfully completing I am a Robo-Scientist, Arduino based STEM Program.

ROBO SCIENTIST

STEM ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
DIRECTOR TECHNOLOGY

SHASHANK KARNAM
DIRECTOR STEM

CERTIFICATE OF COMPLETION

This is to certify

Rakshit Taneja

for completing **Young Entrepreneur - A new age communication program.**

SCIENCEQTSAV **Be a Young Entrepreneur** **STEM** ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
Director Technology

SHASHANK KARNAM
Director STEM

CERTIFICATE OF PARTICIPATION

This is to certify

Rakshit Taneja

has attended an Introductory session on
App Inventor - Application Development program.

MIT APP INVENTOR **STEM** ACCREDITED
EDUCATIONAL EXPERIENCE

SCIENCEQTSAV **STEM** ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
Director Technology

SHASHANK KARNAM
Director STEM

STEM ACCREDITED
EDUCATIONAL EXPERIENCE

CERTIFICATE OF COMPLETION

This is to certify

Shlok K Kandala

for successfully completing
I am a Smart coder - Logical Coding Program

I am a Smart CODER

SCIENCEQTSAV **STEM** ACCREDITED
EDUCATIONAL EXPERIENCE

HARSHA ATRI
Director Technology

SHASHANK KARNAM
Director STEM

Thank you

