RANCHO LABS

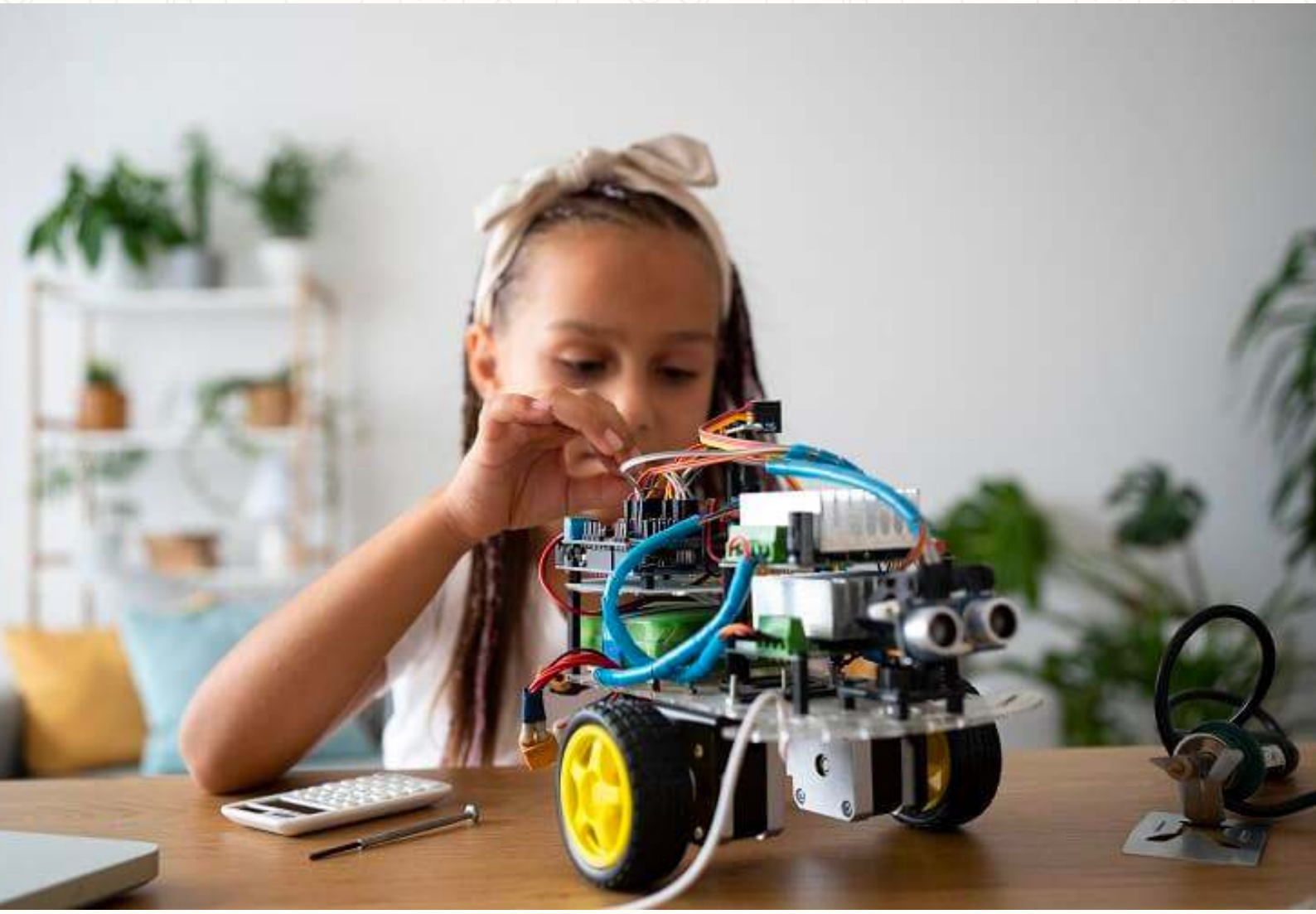
Backed and Funded by

Technology Innovation Hub of IIT Delhi, IHFC

YOUNG EXPLORERS PROGRAM

For Grade 2 Onwards

Start your child's journey towards the world of Coding, Robotics and AI with Rancho Labs



OUR STORY

We are a group of passionate individuals committed to offer a memorable and impactful learning experience to enhance the interest of students in the field of technology. Started by **IIT Delhi alumni and professors** in 2019, we are a company that aims to ignite curious minds and shed light on flourishing career paths in Artificial Intelligence, Coding, and Robotics through experiential learning.

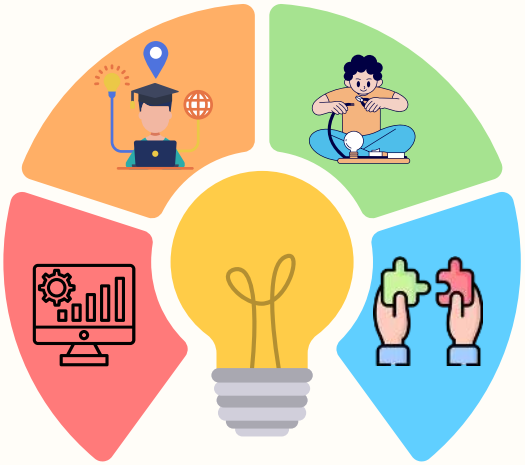
Supported by the Technology Innovation Hub of the Indian Institute of Technology Delhi, Rancho Labs has built a reputation for being reliable and is trusted by 10,000+ parents and innovators worldwide.

Our Journey

Why this Program?

01 Need of the Era

Practical education enhances understanding and application. It develops 21st-century skills, prepares for tech-driven future



02 Idea to Explore a Skill for Life!

Robotics enhances cognitive development by teaching problem-solving, creativity, critical thinking and preparing kids for STEM success.

03 Practical Learning- Real Life Implementation

Robotics and coding by Rancho Labs boost personal/professional development in a fun and engaging manner, robotics can prepare them for future careers in technology, innovations and success in the 21st century

04 Competition Focused Approach

Competition Focused learning Robotics, Coding, AI can provide kids with a dynamic and engaging learning experience that prepares them for success

> **We can only see a short distance ahead, but we can see plenty there that needs to be done.**
> **- Alan Turing (Inventor of AI)**

What is this Program?

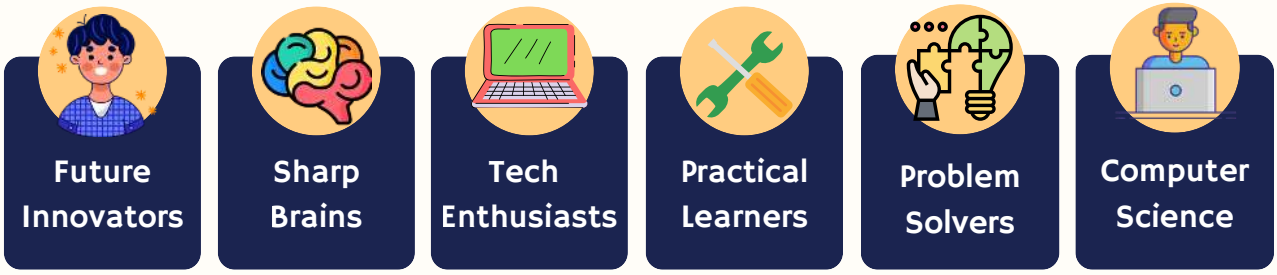
Young Explorer Program is a 1 Year experiential program conducted by expert mentors for grades 2nd to 5th, focusing on technology and innovation with a unique methodology of Learn, Build, and Innovate.

We provide a well-curated and tested curriculum with the right balance between concept-based learning and hands-on activity making sure students are empowered and develop a problem-solving mindset with confidence.

These programs range from simple codes that control basic movements and sensor input to complex systems that involve machine learning, coding, mechanical design and artificial intelligence.

Who is this Program for?

Whether you want your child to discover his/her interests in technology from scratch or hone the already existing techie within them, the Young Explorer Program opens doors to all inquisitive minds that are on the lookout to become technically sound. The program is for:



Program Details

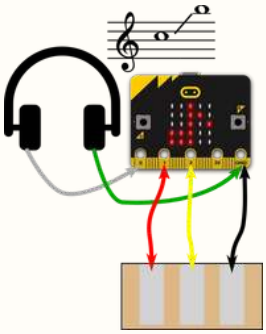
- Weekend Sessions(Sat/Sun)
- 48 Sessions
- 2 hours per week
- Real-life Problem Solving
- 24+ Projects
- PTM Every 6 Weeks
- Project Based Learning
- Revision Sessions

Our Methodology

STEP 01

Concept Delivery & Logic Building

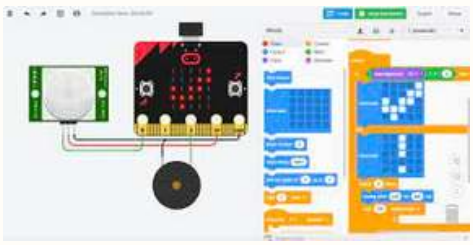
Science and technology concept delivery with logic building by the instructor



STEP 02

Circuit Design & Programming

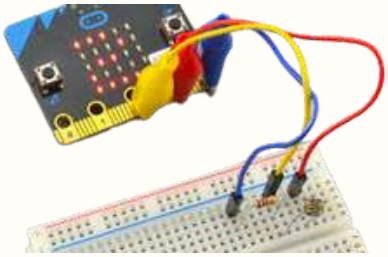
Circuit designing and programming on digital platform



STEP 03

Hardware Activity

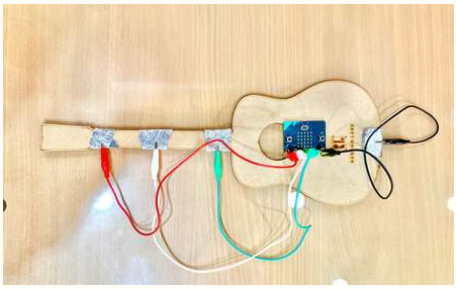
Hardware interfacing of the project using real components



STEP 04

Real-life Project Building

Real-life project building like smart dustbin using the concept learned



LOGIC BUILDING

BLOCK PROGRAMMING

MECHANICAL DESIGN

ELECTRICAL COMPONENTS

ARTIFICIAL INTELLIGENCE

LEARNING ROADMAP

YEP Level 1

Month 1 to 3

Guitar

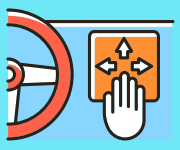
Street light

Reaction game

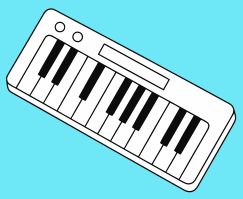
Clap lamp

YEP Level 2

Month 4 to 6

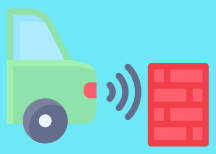


Dpdt car



Paper piano

Gesture control car

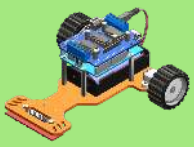


Obstacle avoiding car

YEP Level 3

Month 7 to 12

Evm



Line following car

Step counter

Radio controlled plant watering system

House Automation

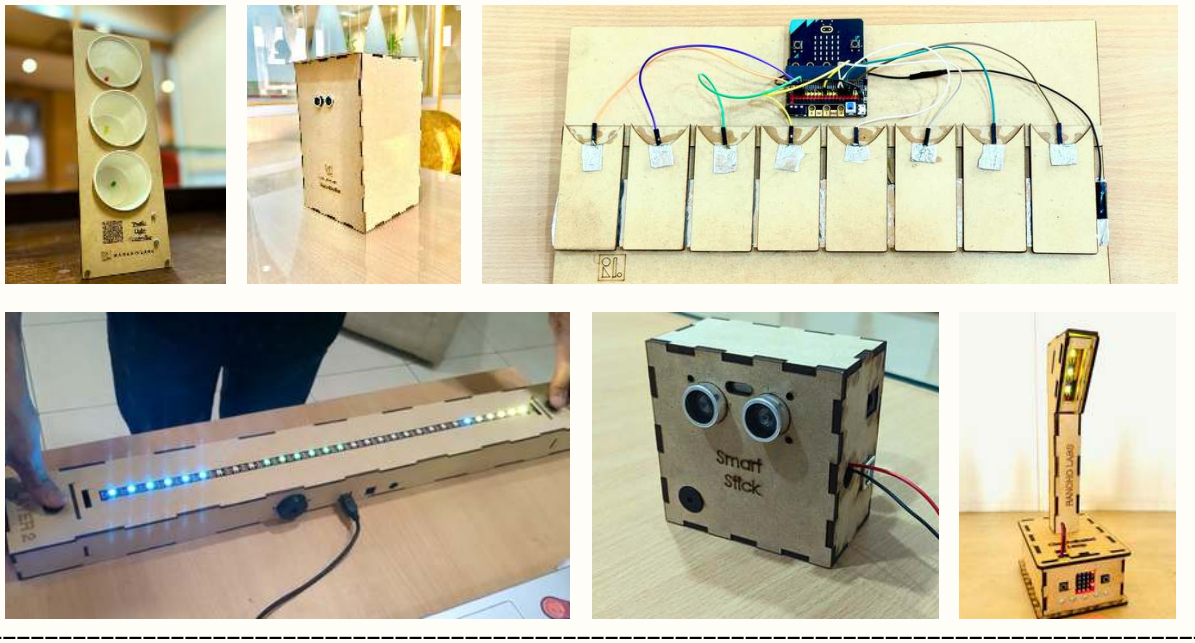
Automatic Rain viper

Automated Greenhouse Environment controller

Micro-weather station

Projects

Throughout the course, students will develop 24+ hands on projects with real-life applications.



Kit

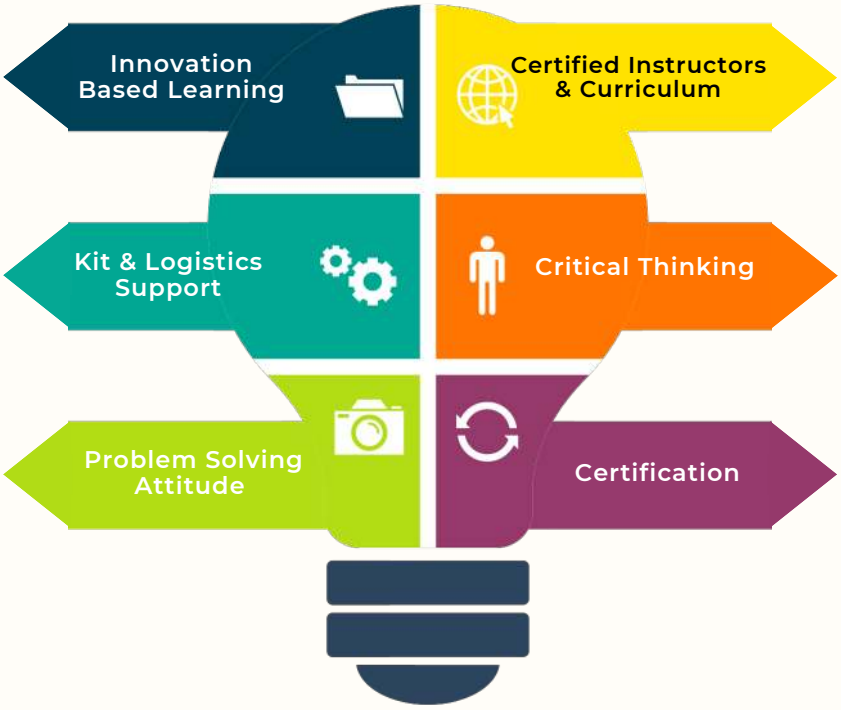
A well curated and tested electronics kit will be provided to the students with 30+ electrical components, 3 structured kits with Manuals worth **Rs. 8,000 Per Level**

Discover the Key Features of Our Coding & Robotics Program

Promoting innovation leading to higher confidence and self-esteem.

Open source kit: doesn't limit the child to the classroom content

Fostering risk-taking problem solving attitude for improved accuracy and adaptability.



One-to-one instruction and concept based learning & application based learning

Encouraging environment for curiosity and creativity.

Industry Recognised Certificate for Coding, Robotics and Innovation Project

A little more than what you'd expect

Community Access

Participate in Rancho Community and experience life outside the classroom

Missed A Class?

Don't worry, Rancho Labs will provide a backup class!

Worried if you'll remember it all?

Students receive lifetime access to resources with the help of our E-learning platform

Have a Doubt?

Doubt Class/ Remedial class once every 2 weeks!

Be Up-To Date

Regular PTM for assessment and feedback

Mentorship

Mentorship for Robotics Competitions and more!!

Pradhan Mantri Rashtriya Bal Puraskar 2020 award to Siddharth

(also featured in Hindustan Times)

SIDDHARTH KUMAR GOPAL,
class VII; St Thomas Residential School, Thiruvananthapuram

Project: Boat-o-Bed

THE PROJECT: A prototype of a smart bed; 'Boat-o-Bed' is aimed at making bedridden people atmanirbhar in the event of a flood. The bed is equipped with a GPS/GSM unit. Using a moisture sensor and servo motors, the smart bed will automatically tilt down, and the patient along with the bedding will start floating. Simultaneously, an alert will be sent to pre-configured telephone numbers, which will help the rescue workers to reach the person in need faster.

"The idea came up, when I saw the difficulties faced by the rescue workers to rescue bedridden people stranded during Kerala floods. They were lifted along with their beds on the

The program by Rancho Labs has been a great learning experience for Siddharth. The classes were well planned and executed and the instructors were available round the clock to clarify doubts. Hands-on projects in stimulated environments helped students to reinforce concepts learned every day. I am happy to have enrolled my son in this course, as it has given him a solid foundation to 'futureproof' his skill sets.

~ Vandhana - Siddharth's Mother

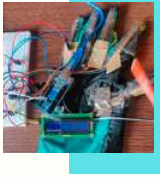
Innovation Projects from Students

ATREYI KAUL
CLASS 6TH

SCAN QR TO VIEW THE PROJECT

AUTOMATIC HAND SANITIZER

Integration of different domains of technology with Al. Rancho Labs provides best in class teaching resources for teachers and students



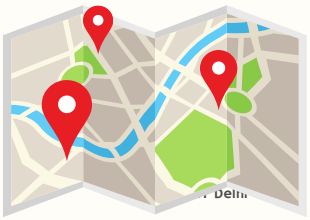
SMART GLOVE

The project helps deaf people to communicate directly with non-signers without needing someone else. The system includes a pair of gloves with sensors that turn finger movements into electrical signals, and a text message is displayed on the LCD output.

VIBHAV AGRAWAL
CLASS IITH

SCAN QR TO VIEW THE PROJECT

Our Learning Centers



Head Office:
Rancho Labs, 1st Floor, Vishwakarma Bhawan, IIT Delhi, New Delhi - 110016

DLF Phase 1, Gurugram

Certification

- Participants will be awarded thecertifications after completing the milestones.
- Participant needs to pass the evaluation after every milestone to receive the certificate.


RANCHO LABS

IHFC
TECHNOLOGY INNOVATION HUB OF IIT DELHI

Certificate of Completion

IS AWARDED TO

Misha Abrol

on successful completion in

YOUNG EXPLORERS PROGRAM LEVEL 1

Held from 10th Oct 2022 to 10th Jan 2023 by Rancho Labs backed by Technology Innovation Hub of IIT Delhi (IHFC)

Misha has developed a Smart Agriculture Project. The project is a model that helps to modernize farming for example it checks the soil moisture level, the temperature, humidity and has many more implications.

ANSHUL AGRAWAL
Co-Founder, Rancho Labs

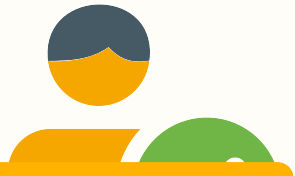
AMAN KUMAR
Co-Founder, Rancho Labs

Eligibility

- Program is open for **Grade 2nd to Grade 5th** students.

Pre-requisites:

- There are no pre-requisites to attend the program. The program starts from the basics.



Have A Query?

Contact our Sales Executives

Gurugram: +91 8287109806, IIT Delhi: +91 9205160865

"The best way to predict the future is to invent it." - Alan Kay

GREAT MINDS

START YOUNG!

Contact Us

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