PRODUCT OVERVIEW:

We are the Promoters for Wefaa Robotics a Singapore-headquartered Educational Technologies ecosystem company that provides innovative Smorphitrans for merrobots as its core products. It was founded in 2021 and the company licensed the technology from the Singapore University of Technology and Design. The company's product portfolio includes Smorphi reconfigurable robot hardware, Smorphi Imaginary virtual robot challenge platform and structured learning curricula benefitting students. The Smorphi line of products primarily addresses use cases spanning research, education, outreach and product development. Smorphi robots are also adopted as standard league platforms in various robotic competitions namely National Robotics Competition, RoboRoar Z Singapre and RoboRoarZ International. Wefaa Robotics also offer a full range of services spanning otargeted robotics lab setup, training programs for faculty & students, curated learning programmes and co-organizing competitions.

PRODUCT ECOSYSTEM

SMORPHI:

Smorphi is the atomic unit of there configurable robot. It comes as a single-block unit. Smorphi offers a lot of flexibility to the user in terms of using the robots individually or as a group of units joined together.

KIT INCLUDES:

- 1xChassis
- 1xBatteryandbatterycharger
- 1xESP32microcontroller-basedmasterboard
- 1xSlaveelectronicboard
- 4xDCencodermotors
- 1xToolkit
- E-manual, user documentation, sample exercises
- Smorphi's code packages and related libraries
- Android remote control application
- Robot Operating System(ROS) compatible
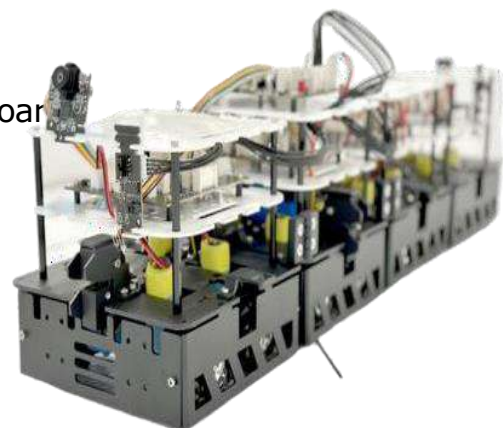- Compatible with Bluetooth and Wi-Fi

SMORPHI^2:

Smorphi^{2}is a four-block reconfigurable robot that can change its shape to7 different forms. With a strong emphasis on modularity and reconfigurability, the robot offers a lot of creative opportunities for the students to explore and address various challenging problem statements.
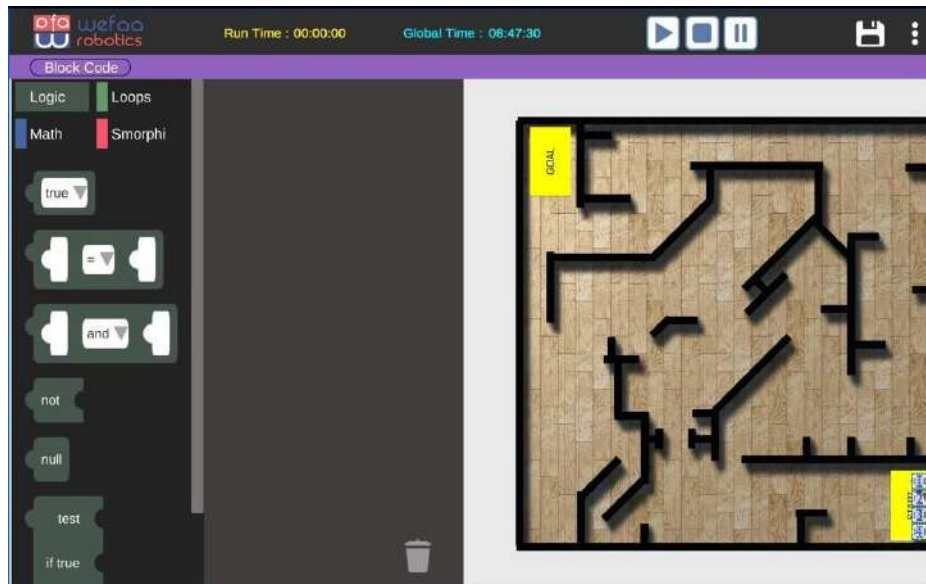
KIT INCLUDES:

- 1x Chassis
- 1x Battery and battery charger
- 1x ESP32 microcontroller-based master boar
- 4x Slave electronic boards
- 16x DC motors
- 1x Toolkit
- Sensors:
    - Infra red sensor
    - Sound sensor
    - Temperature sensor
    - AI-enabled camera
- Android remote control application
- e-manual, user documentation, sample exercises
- Smorphi^2's code packages and related libraries
- Robot Operating System(ROS)compatible
- Compatible with Bluetooth and Wi-Fi

SMORPHI IMAGINARY:

Smorphi Imaginary Challenge offers a powerful head start to one's coding journey in the fast-emerging fields of robotics and artificial intelligence. Particularly, this competition fosters logical reasoning, computational thinking ,iterative problem solving, and spatial awareness, highly essential skills for successful coders.

Students can take part in the Smorphi Imaginary Challenge as individual or teams (consisting of group 2to3 in each team). They will work to code a virtual Smorphi robot to solve a real-world challenge with in a set time of three hours. All participants will be using the Smorphi Imaginary simulation platform that allows for easy coding, quick visualization and testing of creative ideas in solving the given real-world challenge.

Salient Features:

- Suitable for students and educators coming from any educational background and no prior experience is needed.
- No software installation needed. Smorphi Imaginary is offered as a web-based application, and participants can easily access the challenge from a browser.

Wefaa Robotics will provide e-certificates for all the participants taking part in the challenge. Beyond that, Wefaa Robotics will also provide e-certificates for the winning teams/students under the Top Optimal Coders category.

WEFAA ROBOTICS ALSO OFFERS ANNUAL LEARNING PLAN WITH THE FOLLOWING SALIENT FEATURES:

The Smorphi Imaginary learning platform offers an engaging and structured approach to robotics education, fostering essential problem-solving and technical skills in a simulated environment. By subscribing to the annual license, learners and educators can systematically explore robotics applications, preparing them to take on challenges in automation and AI-driven technologies.

The Smorphi Imaginary learning platform provides access to:

• 10Thematic Modules, each focusing on different robotics application scenarios.

• 50 Structured Learning Levels.

• Comprehensive Video Tutorials, ensuring a guided and accessible learning experience.

• A Flexible Learning Schedule, allowing users to complete one level per week.

• Easy to implement within the time-tabled classes