

GearUp Robotics Training Report

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DAY 1: Introduction to Robotics

The first day of robotics training provided an introduction to the field of robotics, covering its origins, various types, and applications in the real world.

Robots are used in various sectors:

- Manufacturing
- Healthcare
- Agriculture
- Military
- Education
- Entertainment
- Logistics and Delivery

The session aimed to build a foundational understanding of how robots work and where they are used.

DAY 2: Introduction to Arduino UNO and LED Programming

On the second day of our robotics training, we were introduced to the **Arduino UNO** microcontroller board. We learned about its key components such as:

- Digital and analog pins
- USB interface
- Power supply connections

As our first hands-on task, we wrote a simple Arduino sketch to light up an LED using a digital output pin. This basic exercise helped us understand:

- How to write, upload, and execute code using the Arduino IDE
- How to control output devices like LEDs through programming