EDUXLABS
edu's Xpert (Esoir Solution)

Two Days
National Level Workshop Series on
Internet of Things(IoT) & its Applications

Workshop Features:

- practical based learning during workshop
- workshop will be delivered by Professional Expert
- Workshop Certificate of completion to each participant

About IoT workshop

The training introduces basic & advanced concepts and methodologies of IoT to design, build and deploy IoT solutions. It also discusses various technologies and protocols used for communication including new generation IoT-friendly applications and physical layer protocols.

Participants will be able to get a thorough understanding of widely accepted IoT frameworks and standards.

The training covers popular, service-rich cloud platforms and focuses on how to build and deploy IoT solutions.

Practical use cases and case studies are included to ensure that the candidate develops an ability to work through practical real-life scenarios.

- The basic usage of the Arduino environment for creating projects.
- Interfacing Sensor With Arduino & Reading From Sensors.
- How open platforms allow you to store your sensor data in the Cloud.
- How to connect your Arduino with your Android phone.
- How to send data to the Internet and talk to the Cloud.
- How to update sensor readings on Twitter (Social Networking Sites).
- Control a Relay Switch by texting from your Phone.
- Program arduino to read and update sensor data over cloud

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2-Days IoT Workshop Curriculum

Day1	**Introduction to IOT** • What is IOT? • Basics of IOT • IOT in home automation • IOT Industrial Applications • How large is the IOT Market • Latest updates in the IOT industry. • Available IOT alliances details and the standards that are getting evolved • Multiple IOT applications and solutions available in market • Multiple IOT platform (hardware) example Ras-pi, Arduino,etc., comparison and usage
	Introduction to Arduino • What is ARDUINO? • What is Open Source Microcontroller Platform? • Arduino GPIO Pins • Basics of Electronics. • Sensors and Actuators. **Hands-on with Arduino** • Fundamentals of C programming • About Arduino IDE (Your First Arduino Sketch) • Digital Output as LED glow • Digital Input Using Switch • Control Output using Digital Input

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2-Days IoT workshop Curriculum

Day1	**Sensors Interfacing** • Serial Input & Serial Output • Analog Input & Analog Output • What is Sensor & Actuator? • Sensor Feature Types of sensors • Interfacing Sensor With Arduino • Reading From Sensors
Day2	**Wifi Module** • Introduction to Esp8266 • Interfacing of Arduino with ESP8266 • Introduction to Attention Commands for internet access • Connect with WiFi network • Access the IP address assigned to ESP8266 and Arduino **Thingspeak apps** • Connect temperature and humidity sensor • Continuously monitor sensor reading through internet • Link your Twitter account with Cloud Server • Generate API and program arduino • How to tweet using Arduino • Get sensor data over twitter **Review and Recap of whole session** • Doubt Clearing • Question Hour • Project suggestions

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Workshop Charges

Training Duration	Training Charges(Excluding GST)
Two Days Training Charges	Rs. 1800/-per attendee

Requirements for workshop program

- Seminar hall/classroom having the enough capacity to conduct hands-on-session for all.
- Good Quality public address system ideally two cordless mic will be required.
- Projector/ Screen along with black/white board for teaching and presentation purposes.
- Training center can only be arranged for a minimum of 60 Attendees.
- Hospitality to one training expert.

Participants Eligibility

The program is open to the Faculty/ Research Scholars/ Students of science & Engineering institutes and other working professionals are also, eligible.

THANK YOU

Team EduxLabs

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