

Internet of Things

Overview

“The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Understanding Internet of Things is the next big things and KARD INDIA being the provider of all latest and new technology which industry demands provides you the updated IOT with all you require to get aware WHAT THE HACK THIS INTERNET OF THINGS IS? ”

IOT Course Content

INTRODUCTION TO IOT:

- What is Internet of Things ?
- Getting started with IoT
- Introduction to Internet of Things (IoT)
- Why as IOT?
- How IOT became 21st Century Hottest Topic
- How Internet of Things works
- How Things Talk to Internet

IOT ARCHITECTURE

ARDUINO UNO: Hardware Introduction

- ☐ What is Arduino UNO
- ☐ Hardware Knowledge
- ☐ Hand Shake with Software
- ☐ Developing the Environment
- ☐ Overview about the board
- ☐ Popularity & Scope

PIN DIAGRAM:

- ☐ Introduction to PIN Diagram
- ☐ PIN Outputs and PIN Inputs
- ☐ Feature that makes it different
- ☐ Analog and Digital Pinout

SETTING UP THE IDLE

CONTROLLING THE DIGITAL OUTPUT ENVIRONMENT

- ☐ Working: Going its details
- ☐ Types
- ☐ Programming LEDS
- ☐ Making Circuits on Breadboard & Glowing Patterns

Sensor

- ☐ What is Sensor?
- ☐ How Sensors works?
- ☐ Knowing your sensors
- ☐ Interfacing Elements : PINS & Values

INTERFACING various SENSORS: DHT11, Node MCU, SC-05

CREATING WEBAPP for IOT

IOT Based HOME AUTOMATION

- ☐ Creating Webpage Button
- ☐ Adding up required WEB PAGE Elements
- ☐ Controlling Devices

CLOUD COMPUTING

- ☐ What is Cloud Computing
- ☐ Cloud Architecture
- ☐ Popular Cloud Computing Services for Sensor Management.
- ☐ Connecting Arduino to Cloud

PRACTICALS & PROJECTS:

- ☐ Setting up the IDLE
- ☐ LED Interfacing using GPIO
- ☐ Integrating Sensors & Reading Environmental Physical Values.

Sensor Interfacing:

- ☐ Creating WebApp for IOT
- ☐ Sensor Controlled Home Automation
- ☐ Live Temperature Feed on Webserver

Data from Environmental Sensors to Cloud Server.

Controlling Home Appliances From any part of the World

KIT CONTENT:

- ☐ Arduino UNO
- ☐ Micro USB
- ☐ LED
- ☐ Buzzer
- ☐ DHT11 Sensor
- ☐ Node MCU
- ☐ Relay Module
- ☐ Breadboard
- ☐ Male to Male Wire