## loT Operating System

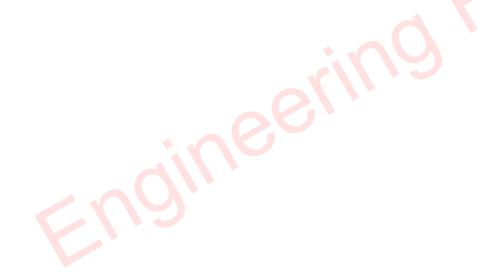
**Basics of IoT Operating Systems** 

**Types of IoT Operating Systems** 

**Comparison of IoT Operating Systems** 

## Basics of IoT Operating Systems

- IoT OS runs on IoT devices.
- IoT OS connects IoT devices to a Network or Application.
- IoT OS does the management of the software in IoT devices.



## Types of IoT Operating Systems

- There are many IoT Operating Systems few of them are listed below:
  - Lite OS
  - Tiny OS
  - **ORIOT OS**
  - Free RTOS
  - Contiki OS
  - Ubuntu Core
  - Windows 10 IoT
  - o and many more

## Comparison of IoT Operating Systems

Parameters	Contiki OS	RIOT OS	Free RTOS	Tiny OS
<b>Architecture in Kernel</b>	Monolithic	Micro Kernel RTOS	Micro Kernel RTOS	Monolithic
Scheduler	Cooperative	Preemptive, Tickless	Preemptive, Optional Tickless	Cooperative
Programming Model	Event-Driven, Protothreads	Multi-threading	Multi-threading	Event-Driven
<b>Targeted Devices</b>	Class 0, 1	Class 1, 2	Class 1, 2	Class 0
Supported MCU Families	AVR, MSP430, ARM, PIC32, 6502.	AVR, MSP430, ARM, x86.	AVR, MSP430, ARM, 8052, Renesas.	AVR, MSP430, px27ax.
Programming Languages	C	C, C++	С	nesC
License	Open Source	Open Source	Open Source	Open Source
RAM/ROM	< 2KB/ <30KB	< 2KB/ <5KB	< 2KB/ <5KB	< 1KB/ <4KB