Introduction to Device Programming

Modality: On Demand

Duration: 10 Hours

About this course:

We as a whole realize that shrewd gadgets improve our lives each day. What's more, there are coders behind all of those gadgets. In case you're prepared to change the world by taking simple information into the computerized domain, bring your fundamental experience of coding and step toward programming for the Internet of Things. Figure out how to program gadgets (blinking LEDs, sensors, temperature displays, and the sky is the limit from there) with Raspberry Pi—a requirement know for anybody in this space. Perceive how to compose the software that controls the equipment, and begin making a distinction with procedural programming.

Begin with an intro to installed programming, investigate inserted gadgets, and investigate actuators, sensors, and yields. At that point work with the software/hardware interface, find a good pace C Programming language and its highlights, and find out about essential data management. From that point, jump into installed arrangements. Assemble your first circuit, and get hands-on with loads of mini labs. Wrap up with a glance at gadget application improvement, as you associate your gadget to the cloud.

Plan to go through two to four hours of the week for five weeks on the course, which includes text, videos, labs, and non-reviewed appraisals. At that point flaunt your new abilities and information with an amazing final task.

Course Objective:

- The most effective method to actualize implanted situations using the C programming language
- Introduction Embedded Devices
- Programming Device Basics
- Step by step instructions to program implanted gadgets, for example, the Raspberry Pi
- The C Programming Language
- Programming Device Pins
- Managing Memory in C
- Step by step instructions to plan and assess essential circuits on breadboards
- Step by step instructions to utilize advanced and simple sensors to gather continuous information

Audience:

Programmers

Prerequisite:

No prerequisites required for this course

Course Outline:

Introduction Embedded Programming

- Introduction Module 1
- Introduction Embedded Devices
- Programming Device Basics
- Module 1 Project
- Module 1 Assessment

The Hardware Software Interface

- Introduction Module 2
- The C Programming Language
- Programming Device Pins
- Managing Memory in C
- Project
- Module 2 Assessment

Building Embedded Solutions

- Introduction Module 3
- Circuit Building Blocks
- Sensors
- Project
- Module 3 Assessment