

CURRICULUM IN CHRONOLOGICAL ORDER

Promo video for advertisement

Section 1 - Getting started with Raspberry Pi Zero Wireless

Lecture 1 - Learning Agenda

Lecture 2 - Introduction to Raspberry Pi Zero Wireless

Lecture 3 - Raspberry Pi 3 vs Raspberry Pi Zero Wireless

Section 2 - Installation & configuration

Lecture 4 - Writing Operating System image

Lecture 5 - Setting WIFI & SSH without monitor

Lecture 6 - IP Scanner

Lecture 7 - Auto scanning the IP

Lecture 8 - Setting static IP address for Raspberry Pi Zero W

Lecture 9 - Accessing the graphical user interface of the Pi

Section 3 - Testing GPS module

Lecture 10 - Project concept

Lecture 11 - Hardware requirements

Lecture 12 - Hardware requirements list

Lecture 13 - GPS working principle

Lecture 14 - Testing the GPS module

Lecture 15 - Circuit diagram - Testing the GPS module

Section 4 - Linux tool automation & GPSD Installation

Lecture 16 - Testing GPS module using Raspberry Pi

Lecture 17 - Circuit diagram - Testing the GPS module using Raspberry Pi

Lecture 18 - Understanding GPSD

Lecture 19 - GPSD Installation & Configuration

Lecture 20 - XGPS

Lecture 21 - Starting GPSD on boot

Section 5 - Coding the GPS in Python

Lecture 22 - Fetching raw data using Python

Lecture 23 - Real-time demo

Lecture 24 - Source code - Raw GPS data using Python

Lecture 25 - Fetching the required data from GPS

Lecture 26 - Real time demo

Lecture 27 - Source code - Extracting required GPS data

Section 6 - Building the IOT Dashboard

Lecture 28 - Understanding IoT and data analytics

Lecture 29 - IoT dashboard installation and configuration

Lecture 30 - Source code - Random number generation

Lecture 31 - Final circuit Diagram

Lecture 32 - Sending GPS data to web server

Lecture 33 - Automate Ubigps to start on boot

Lecture 34 - Real-time demonstration

Lecture 35 - Source code - Sending GPS data to Web Server

Section 7 - Advanced GPS Data visualization

Lecture 36 - Understanding alternate IoT dashboard

Lecture 37 - Account creation & setup

Lecture 38 - Understanding the Advanced IoT dashboard program 1

Lecture 39 - Understanding the Advanced IoT dashboard program 2

Lecture 40 - Required Library installation and program automation

Lecture 41 - Real-time demonstration

Lecture 42 - Source code

Lecture 43 - Quizzes

Lecture 44 - Conclusion