MicroPython and Microcontrollers

NetApp YWIT

May 1, 2020

Contents

Chapter 1

Introduction

This workshop will introduce the student to Python coding, electronics, and project design. We will building several projects ranging from simple to complicated. These projects are based on the ESP8266 microcontroller which is running MicroPython and they depend on some other electronics components such as LEDs, buttons, and more.

Chapter 2

Project 1: Blink

Chapter 3

Project 2: Button

Chapter 4

Project 3: LED Party

Chapter 5

Project 4: Sensor

Chapter 6

Project 5: Game

Chapter 7

Project 6: Chat

Appendix A

Electronics Essentials

Appendix B

Python Primer

```
1  def foo():
2      """This function prints Hello World"""
3
4      # do the print
5      print("Hello World")
6
7  if __name__ == "__main__":
8      foo()
```