



FIRST EDITION – CHAPTER 1 REV 2

Kevin Thomas & Katie Henry
Copyright © 2021 My Techno Talent, LLC

Forward

Over the next decade we will personally witness the full Cyber and Automation revolution in a way even twenty years ago would never have been thought possible.

The future careers will be focused primarily on Computer Engineering. It is fundamental that YOU as a parent have a full appreciation and understanding of this reality and the fact that YOUR child MUST start early in their Engineering development if they are going to thrive in the coming years.

Python For Kids is a bite-sized, step-by-step FREE book and video series designed for EVERYONE. As a parent YOU can on-demand work through these projects together and give them a gift that you would otherwise never be able to provide which is providing them the foundational knowledge to get started in the world of microcontrollers.

I want to thank Katie Henry who is the Head Of Partnerships For North America at the Microbit Educational Foundation for her brilliant contribution and video series for this book.

Katie is also a Former Classroom Teacher and has the experience and vision necessary to help teach and inspire the next generation of Engineers!

If you have questions you can also contact us on our subreddit **r/micropython** as well.

Table Of Contents

Chapter 1: Goals

Chapter 2: "Hello World"

Chapter 3: FUN With Images

Chapter 4: FUN With Numbers

Chapter 5: FUN With Words

Chapter 6: FUN With Word Lists

Chapter 7: FUN With Music

Chapter 8: FUN With Talking Robots

Chapter 9: Basic I/O

Chapter 10: DataTypes & Numbers

Chapter 11: Conditional Logic

Chapter 12: Lists, Tuples, Dictionaries & Loops

Chapter 13: Functions

Chapter 14: Classes

Chapter 15: Unittest

Chapter 1: Goals

Welcome to a brand-new series for kids who want to learn the FUN way to program in Python.

This tutorial will be a step-by-step instruction series where parents can learn to code with their kids and non-technical educators with their students and enrich their lives and prepare them for the next generation of work when they mature into adults.

Our goal is to teach kids to have FUN building simple projects and getting familiar with Python in a way that opens their mind toward technical creativity in ways they would never have experienced before! If you are parent this is a great opportunity for you to help set your child into the drivers seat as over the next decade we will continue to transition to a world which is significantly more automated to which future generations (YOUR KIDS) will need to have an upper hand when understanding and interacting with technology in ways you or I never had to imagine if they are to sustain in the coming years.

There will be three things you need to partake in this series. The first is an coding tool we will use to write our simple programs which is FREE provided by the micro:bit Educational Foundation to which we will access via the web.

STEP 1 - Purchase micro:bit V2

Please make sure you select the micro:bit v2 microcontroller from the link below and make sure to check if the USB cable is included in the purchase as that may be sold separately. You can select from any of the official micro:bit retailers.

<https://microbit.org/buy>

These are the only tools you will need to embark on this incredible journey to get your child prepared for the next IoT generation and solidify their role as a leader in technology!

In our next lesson we will work step-by-step on working with the FREE online micro:bit MicroPython Web Editor to begin programming!