

IOT107 – 1-Day Programming the micro:bit



Internet of Things (IoT) has been the buzzword in recent years. IoT is a network of objects or “things” that are interconnected by exchanging data with one another. These “things” are typically sensors or devices that have their own dedicated uses – for example, motion sensors, gas sensors, beacons, barometers, etc. The real value of IoT is in the use of the data collected – analysis can be made on the data collected to analyze trends/shifts in atmospheric pressure, temperature, humidity, etc.

In this course, you will learn how to program the micro:bit using MicroPython. You will also learn how to connect the micro:bit to the various sensors and accessories.

Topics

- Introduction to MicroPython
- Connecting the micro:bit to external devices
 - Connecting to a 7-segment display
 - Connecting to a LED Matrix display
 - Connecting to a motion sensor
 - Connecting to LEDs
 - Connecting to a push button
 - Connecting to a servo
 - Connecting to an ultrasound sensor
 - Connect to a rain sensor
 - Using the micro:bit as a beacon
- Communicating between micro:bits



Prerequisites

- Knowledge of basic programming concepts

Hardware

- Windows / Mac computer

Software

- Mu Editor

This course comes with the IoT Kit containing a micro:bit and several sensors and accessories.



About the Trainer



Wei-Meng Lee is a technologist and founder of Developer Learning Solutions (<http://www.learn2develop.net>), a technology company specializing in hands-on training on the latest mobile technologies. Wei-Meng has many years of training experiences and his training courses place special emphasis on the learning-by-doing approach. His hands-on approach to learning programming makes understanding the subject much easier than reading books, tutorials, and documentations. His name regularly appears in online and print publications such

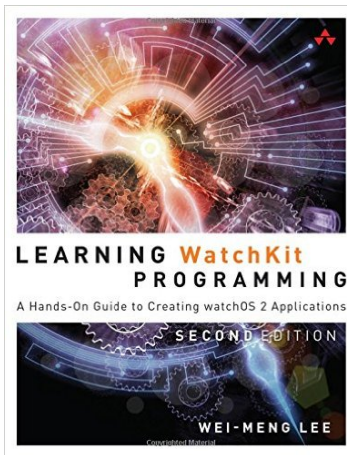
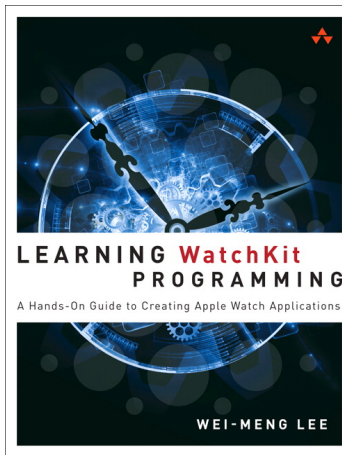
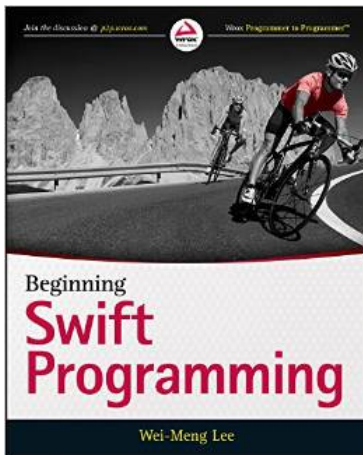
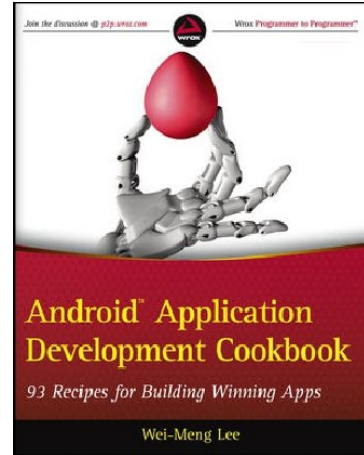
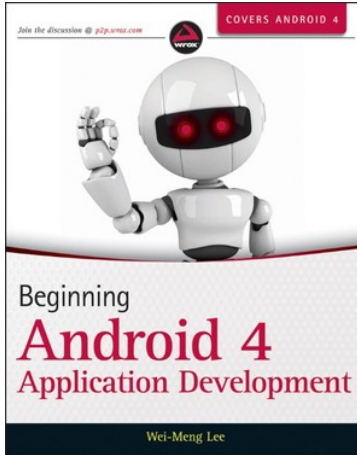
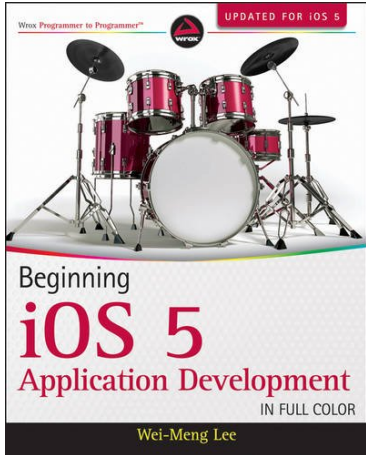
as DevX.com, MobiForge.com, and CoDe Magazine.

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Books by Wei-Meng Lee





Course Application Form

Please email a signed copy to weimenglee@learn2develop.net

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Course Title: _____ Date: _____

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Name: Email:	S\$
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Important Note

- Developer Learning Solutions reserves the right to cancel or reschedule the course.
- You can withdraw from the course provided you inform us **one (1) month** in advance before the commencement of the class. There will be no refund after this period and the full course fee will be billed.
- **No-show policy: If a participant did not turn up for the course he signed up for, he will be billed 100% of the course fee. In the event of medical leave, a substitution would be allowed**

I understand that participants have to bring their notebook computer for the course (for iOS related courses, the notebook must be a Mac).

Authorized Signature & Company Stamp

Name & Designation

Date