



IOT106 – 2-Day Programming Internet of Things (IoT) using Android Things

Internet of Things (IoT) has been the buzzword for the recent years and is set to explode in the year of 2015. 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.

Topics

- Introduction to Android Things
- Connect to the Raspberry Pi
- Connecting to WiFi
- Understanding the communication protocols:
 - I2C
 - SPI
 - UART
- Programming external devices using the GPIO
- Programming external devices using PWM
- Projects you will create:
 - Displaying information using a LCD display
 - Interfacing with sensors – temperature, motion, range, smoke, NFC, and more
 - Sending data to the Cloud using REST
 - Interfacing with cameras
 - Detecting beacons



Prerequisites

- Knowledge of basic programming concepts
- Basic knowledge of Android programming recommended

Hardware

- Windows / Mac computer

Software

- Android Studio



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

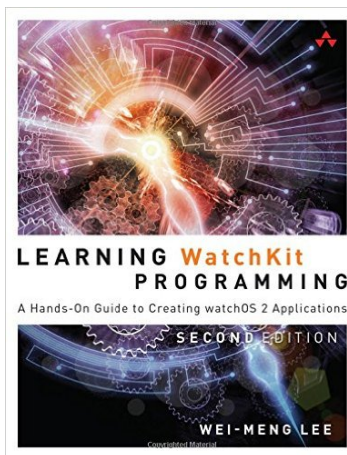
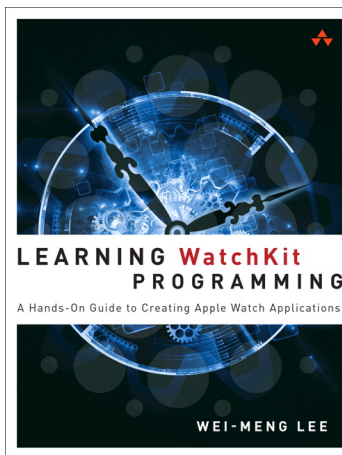
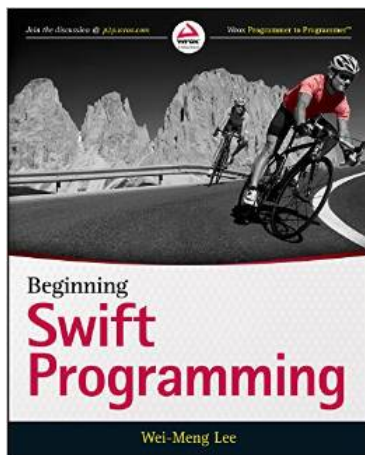
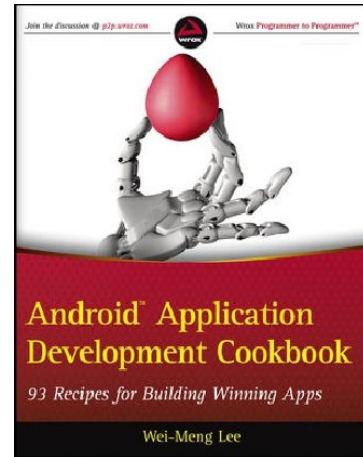
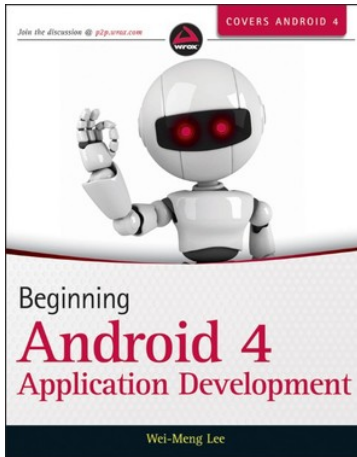
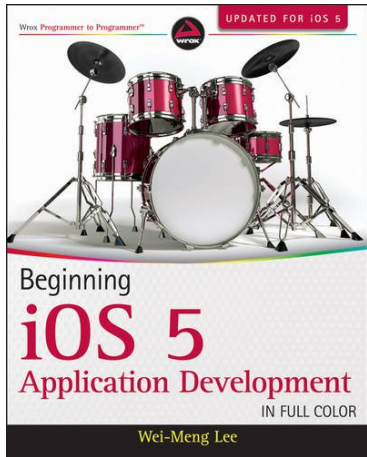
as DevX.com, MobiForge.com, and CoDe Magazine.

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Books by Wei-Meng Lee





Course Application Form

Please email a signed copy to weimenglee@learn2develop.net

Billing Information

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Name:	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