**Tugas 1: minggu 9, 10, 11 🡪 3/4 topik per pertemuan 🡪 per 2 orang**

1. Membahas topik 1-14 (What, Why, How dll)
2. Menunjukkan/mendemokan contoh aplikasi (tidak harus membuat sendiri) yang menggunakan teknologi sesuai topik yang dibahas.
3. Menjelaskan cara kerja point b.
4. Presentasi dilakukan urut topik 1,2,3 dst. +-4 topik / pertemuan
5. Content Provider
6. Android-Chapter22-Services
7. Android-Chapter23-Notifications dan Text To Speech, Speech To Text
8. Android-Chapter11-MultiThreading
9. Android-Chapter14-Reading-XML-Data
10. Android-Chapter15-RSS-Feeds
11. Android-Chapter16-Web-Services
12. Android-Chapter24-LocationServices & Android-Chapter25-GoogleMaps
13. Android Sensor
14. Android NFC
15. Android Augmented Reality

**Tugas 2: minggu 12, 13, 14 🡪 3/4 topik per pertemuan 🡪 per orang**

Menentukan paper / jurnal 5 tahun terakhir dgn tema mobile computing, contoh topik:

Keyword : pdf, android,

1. Image prossesing
2. Augmented Reality
3. Virtual Reality
4. Machine Learning
5. Prediksi penyakit -> decision tree, klasifikasi, asosiasi
6. Dll

**Tugas 3: minggu 15, 16 🡪 per orang**

Membuat project aplikasi android yang menggunakan teknologi sesuai topik yang dibahas. Boleh menggabungkan berbagai topik yang ada. Demo setelah UAS (tanggal dan tempat menyusul)

**Beginning Android 2: Mark Murphy**

1. **Notifications**

Working with Notifications

Applications often need to communicate with the user even when the application isn’t

actively **running**. Applications can alert users with text notifications, vibration, blinking

lights, and even audio. In this chapter, you learn how to build different kinds of notifications into your Android applications: android\_wireless\_application\_development\_2nd\_edition.pdf

**Wei Meng Lee**

1. **Android Fragments**
2. **Content Providers**

Sharing Data Between Applications with Content Providers : android\_wireless\_application\_development\_2nd\_edition.pdf

1. **Telephony and SMS**

Using Android Telephony APIs () (Working with Phone Numbers, Using SMS: send and receive, Making and Receiving Phone Calls) :

android\_wireless\_application\_development\_2nd\_edition.pdf

1. **Location-Based Services + Google Maps API (Tracking Device Movement via GPS)**
2. **Developing Android Services**

Working with Services : android\_wireless\_application\_development\_2nd\_edition.pdf

**Pro Android 4**

1. **Using Sensors chapter 29**

Using Android’s Optional Hardware APIs

In addition to the camera, Android devices might have a number of other sensors and hardware. Some popular device sensors include the magnetic and orientation sensors, light and temperature sensors, as well as hardware support for Wi-Fi and Bluetooth radios. Applications can also access battery state information : android\_wireless\_application\_development\_2nd\_edition.pdf

Android Programming Tutorials: Mark Lawrence Murphy

**Android Programming Tutorials: Mark Lawrence Murphy**

1. **Media: Audio, Video, Camera, Text To Speech**

Using Android Multimedia APIs (camera: image, video, microphone: audio, ringtones, MediaStore content provider): android\_wireless\_application\_development\_2nd\_edition.pdf

**Professional Android 2 Application Development**

1. **Using Android Networking APIs** : **Bluetooth, Networks and Wi-Fi**

Using Android’s Optional Hardware APIs : In addition to the camera, Android devices might have a number of other sensors and hardware. Some popular device sensors include the magnetic and orientation sensors, light and temperature sensors, as well as hardware support for Wi-Fi and Bluetooth radios. Applications can also access battery state information

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1. **Web service :** HTTP, REST, JSON, and XML
2. **Android – Animation : Adobe Flash or Ren’Py**
3. **Android – Augmented Reality**
4. **Android – Open GL**

Using Android 3D Graphics with OpenGL ES :

How to perform a variety of common tasks with OpenGL ES on Android devices. Configuring EGL (Embedded-System Graphics Library) and GL (Graphics Libraries), drawing objects, animating objects and scenes, lighting a scene, and texturing objects)

android\_wireless\_application\_development\_2nd\_edition.pdf

1. **NFC (NEAR FIELD COMMUNICATION): Professional android sensor programming dan Android Pro 4**