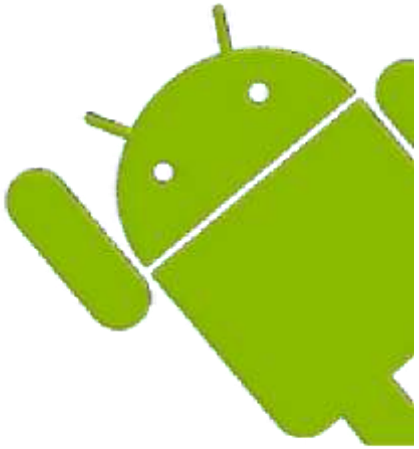


WELCOME

Der er 33.000 app-udvikler jobs i Danmark

Rapport fra amerikansk tænketank viser, at 1,2 pct. af alle danske jobs er indenfor udvikling af apps til iOS og Android

Thomas Berger | Torsdag, 21. januar 2016 - 14:20 3

http://www.version2.dk/artikel/der-er-33000-app-udvikler-jobs-i-danmark-563578

© Jørgen Staunstrup – S2016

Why take this course?

- What this course IS
  - Very technical
  - Very practical
  - Android-focused

- What this course is NOT
  - An iPhone course
  - A graphic design course
  - A marketing course
  - A Java course

By May you will be able to develop Android apps

© Jørgen Staunstrup – S2016

WHO ARE YOU?

MSc Software Development

MSc other study lines

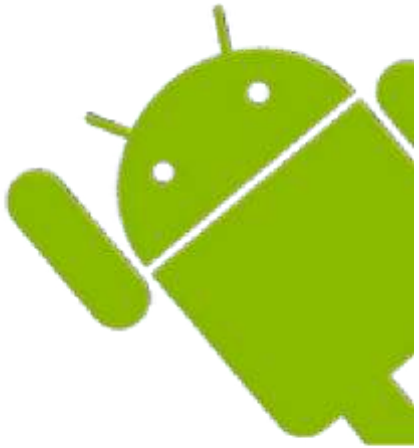
Bachelor students

Part-time/external

Very experienced in Java

Has taken ”Practical Concurrent and Parallel Programming”

© Jørgen Staunstrup – S2016



WHO ARE WE?

Abdulrashid Mas'ab Mohammed, TA

Radoslav Todorov, TA (Skype ID: radoslav.h.todorov
e-mail: rahr@itu.dk)

Jørgen Staunstrup, External Lecturer

© Jørgen Staunstrup – S2016

The weekly routine

- Study section of book for week x+1 (try to redo the program explained in the text)
- Prepare questions for lecture on week x+1
- Do the exercises for Wednesday week x+1
- Use the forums in learnIT
- Look at links to supplementary material (learnIT)

© Jørgen Staunstrup – S2016

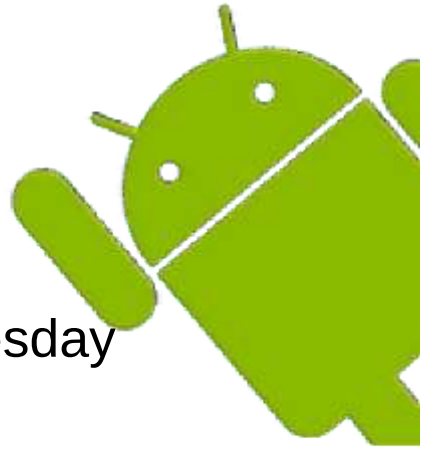
Mobile App Development - Main Example

© Jørgen Staunstrup – S2016

Tingle – the first versions

© Jørgen Staunstrup – S2016

The weekly routine



Wednesday
Feb 3

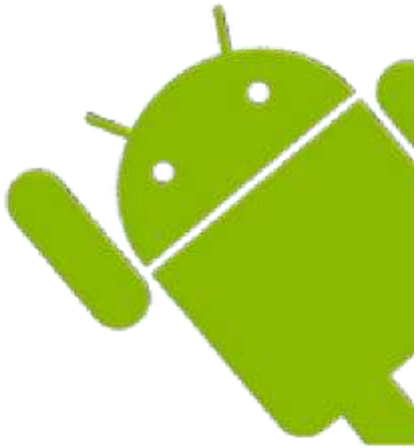
Wednesday
Feb 10

Workplan week 2

uploaded after lecture

© Jørgen Staunstrup – S2016

Mandatory assignments



Two mandatory assignments

These are, unlike weekly exercises, *mandatory* and must be handed in (via learnIT)

Both need to be passed in order to attend the exam

Deadlines: March 2 April 27

© Jørgen Staunstrup – S2016

Examination

- Oral exam, 30 minutes, standard 7-scale

- We might ask you about anything from the curriculum or the assignments/exercises

- Exams are: June 22 -28 (not Saturday and Sunday)

© Jørgen Staunstrup – S2016

Workplan week 1

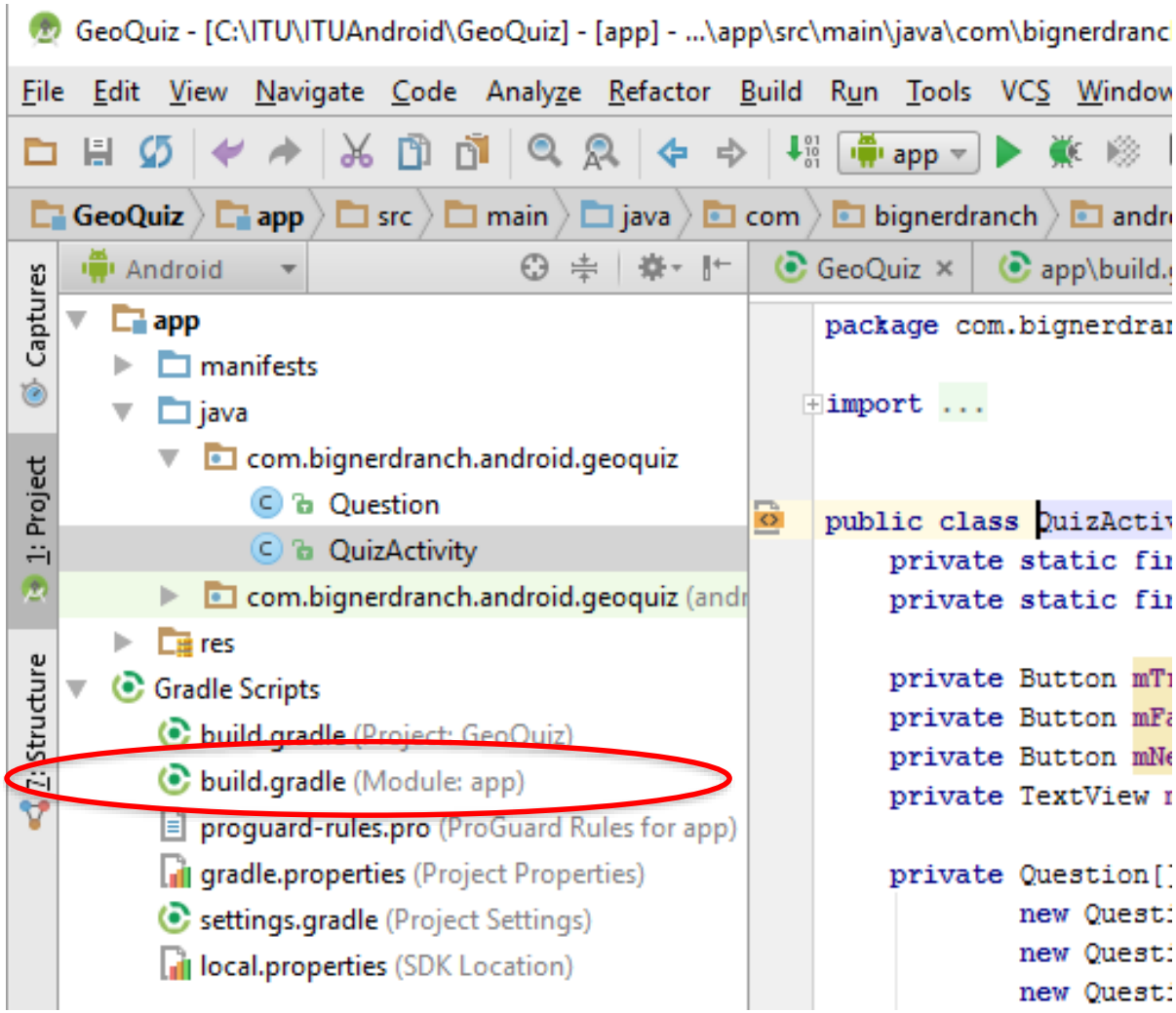
Installation

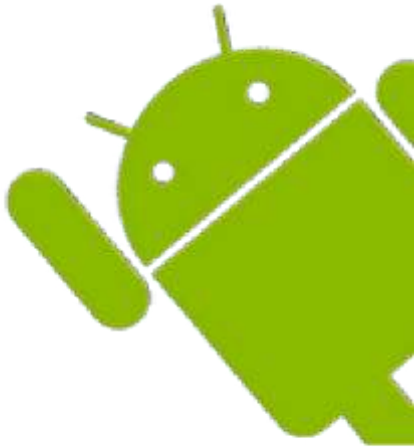
Emulator/Android phone

Your first app

© Jørgen Staunstrup – S2016

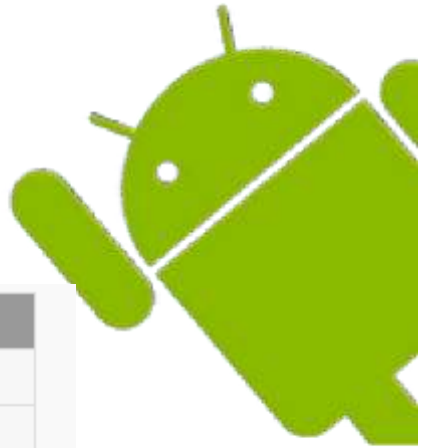
SDK versions etc.





© Jørgen Staunstrup – S2016

Build.gradle

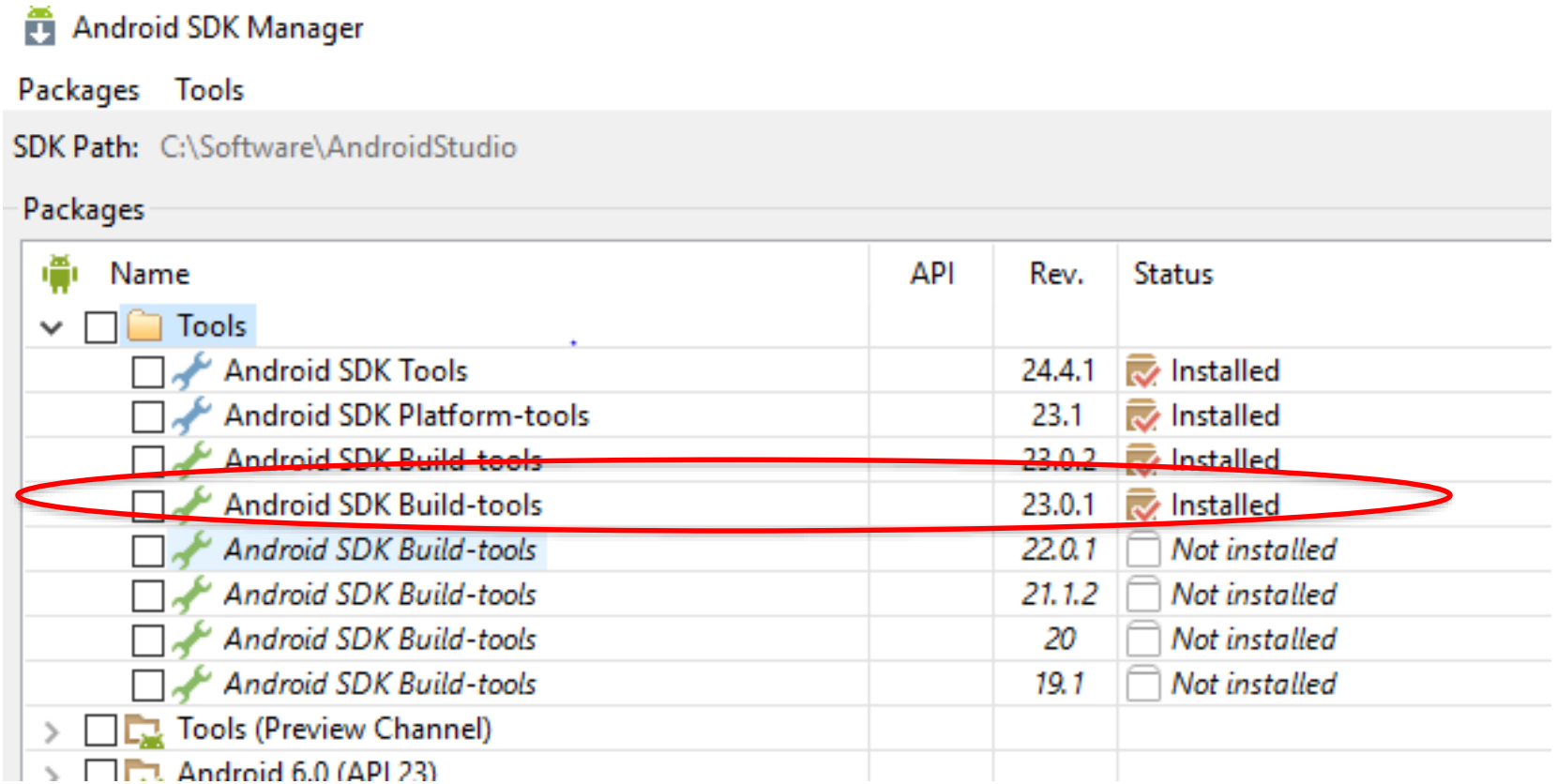


```
android {
    compileSdkVersion 23
}
```

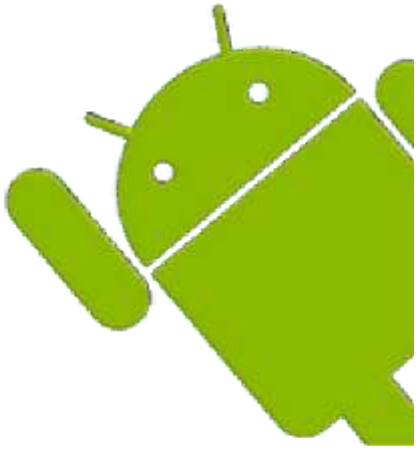
Code name	Version	API level
Marshmallow	6.0	API level 23
Lollipop	5.1	API level 22
Lollipop	5.0	API level 21
KitKat	4.4 - 4.4.4	API level 19
Jelly Bean	4.3.x	API level 18
Jelly Bean	4.2.x	API level 17
Jelly Bean	4.1.x	API level 16
Ice Cream Sandwich	4.0.3 - 4.0.4	API level 15, NDK 8
Ice Cream Sandwich	4.0.1 - 4.0.2	API level 14, NDK 7
Honeycomb	3.2.x	API level 13
Honeycomb	3.1	API level 12, NDK 6
Honeycomb	3.0	API level 11
Gingerbread	2.3.3 - 2.3.7	API level 10
Gingerbread	2.3 - 2.3.2	API level 9, NDK 5
Froyo	2.2.x	API level 8, NDK 4

© Jørgen Staunstrup – S2016

SDK Manager



© Jørgen Staunstrup – S2016

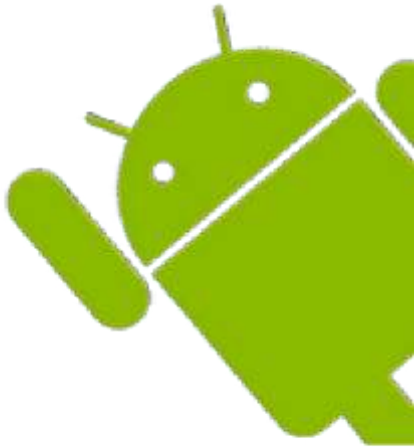


inner class

anonymous inner class

© Jørgen Staunstrup – S2016

Example inner class



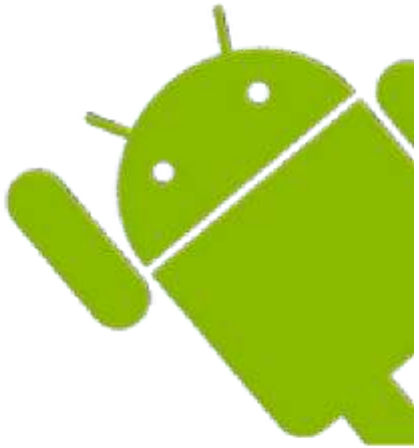
```
class OuterDemo {
  private class InnerDemo{
    public void print() {
      System.out.println("This is an inner class");
     }
  }

  void displayInner(){
    InnerDemo inner = new InnerDemo();
    inner.print();
  }
}
```

an **inner class** or **nested class** is a class declared entirely within the body of another class

© Jørgen Staunstrup – S2016

Anonymous inner class

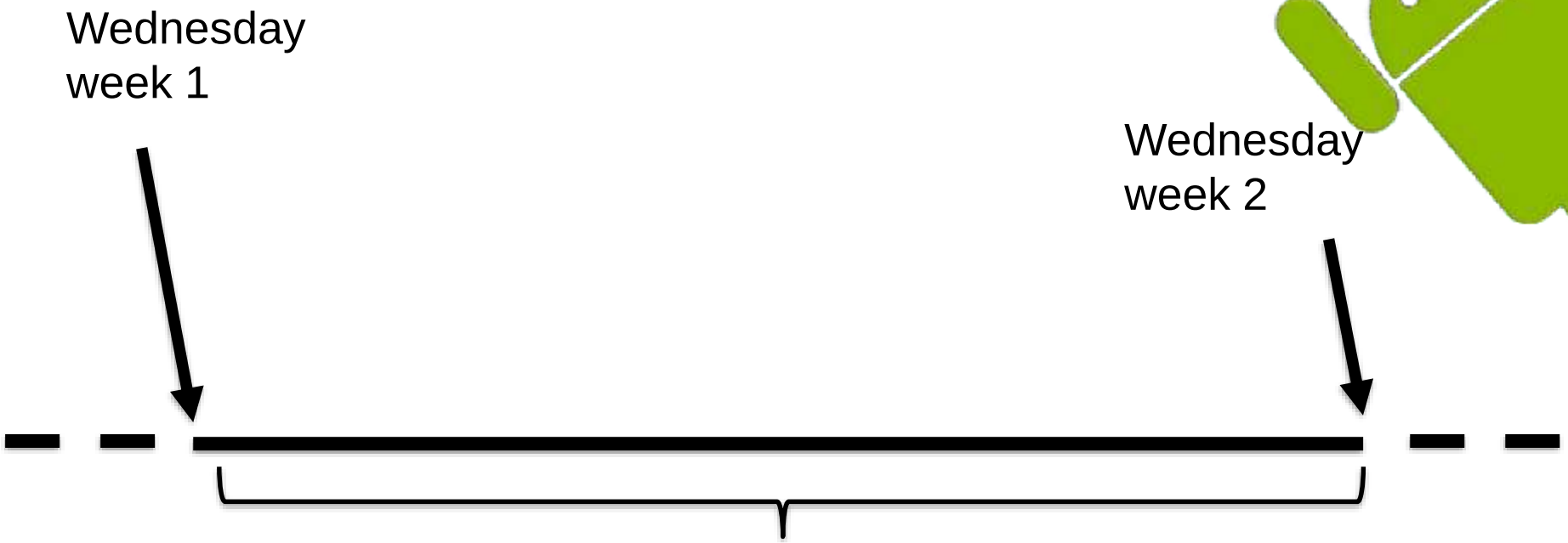


```
AnonymousInner anInner= new AnonymousInner() {
  public void my_method(){
  ........
  ........
  }
};
```

An inner class declared without a class name is known as an **anonymous inner class**. In case of anonymous inner classes, we declare and instantiate them at the same time.

© Jørgen Staunstrup – S2016

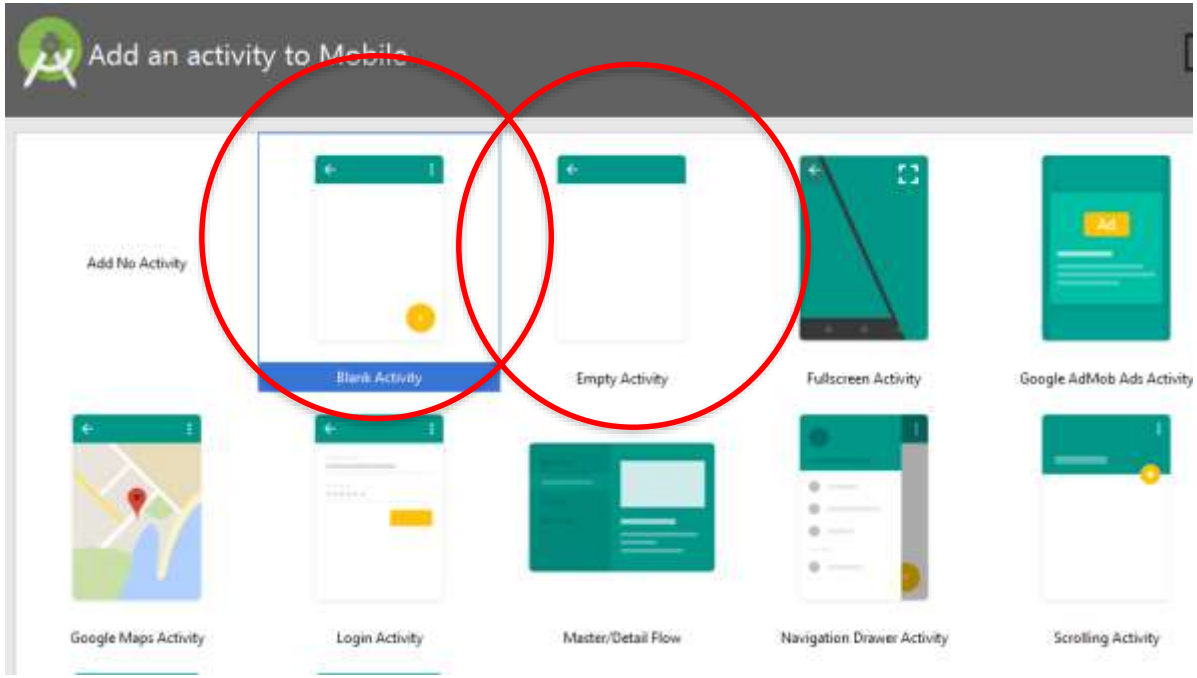
Workplan week 2



Workplan week 2

© Jørgen Staunstrup – S2016

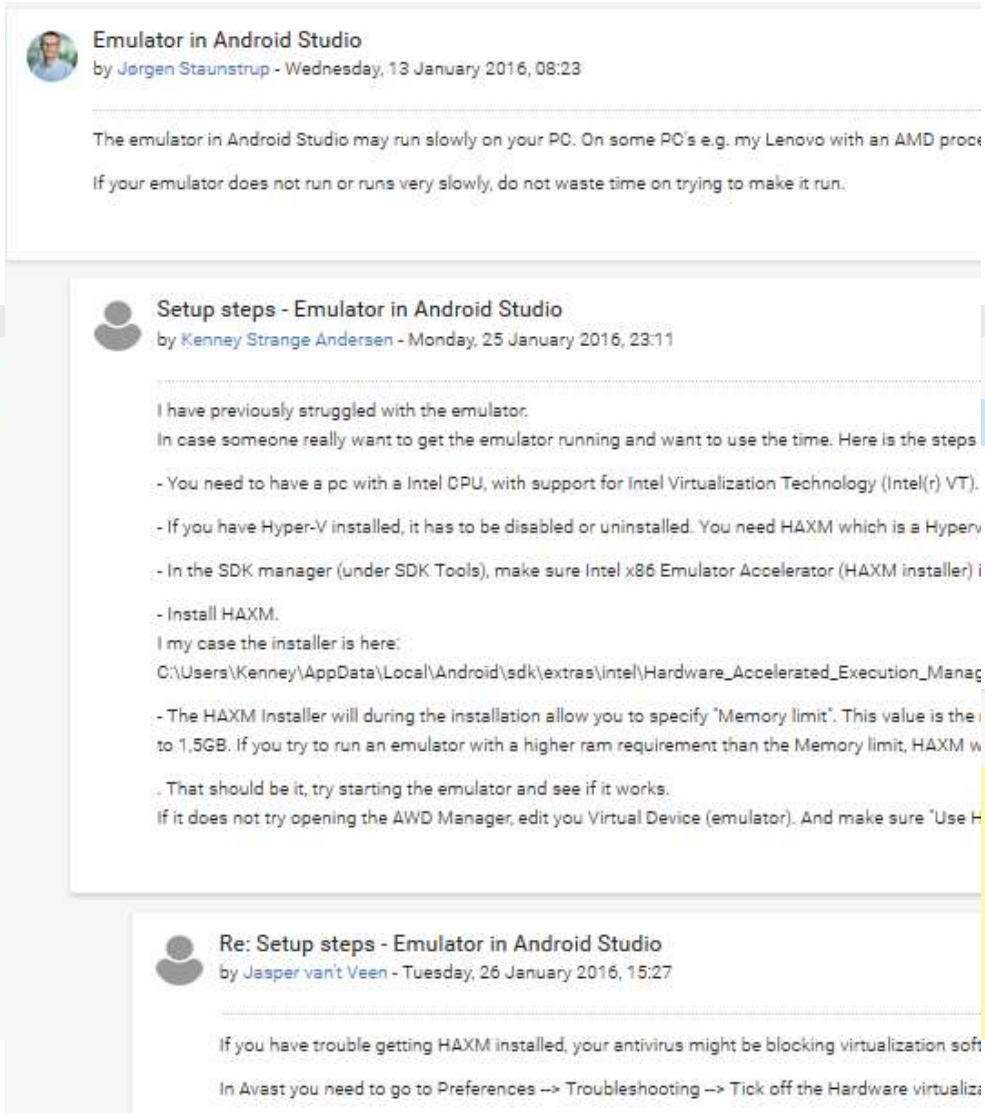
Warning – p.6. in the book



See errata sheet for the textbook:
http://forums.bignerdranch.com/viewtopic.php?f=549&t=10305&sid=af878169c20d10b9c24bd50481fe6f20

© Jørgen Staunstrup – S2016

Introduction to learnIT



© Jørgen Staunstrup – S2016