# Mobile Development: Plan for week 09 [week 08](file:///D:\_2017F_Mobile_Spec\plans\M2017F_plan_Week08.pdf) - [week 10](M2017F_plan_Week10.pdf)

## Goal for the week

* You should have knowledge about more advanced elements of android
* You should have knowledge about how to use SQLite, Camera, Location and Maps in an app.
* You should be able to work with SQLite, Camera, Location and Maps ect. on your own and then implement it in your app, when needed.

## Preparation before Wednesday

* **Get a very briefly overview about the topics below and responsibly make a talk about the topic   
  You will find materials (links ect) in the Resource section (later)**
* Content provider (responsibly is Mads Marzec)
* Services and Notification (responsibly is Anders Tryk Lund Sørensen)
* Fragments (responsibly is Andreas Svarre Engedal)
* Use of simple graphic (responsibly is Pratheep Sinnappu)
* SQLite (responsibly is Lasse Work Bøg)
* Use of Camera (responsibly is Julie Sindhu Jørgensen)
* Locations and Maps (responsibly is Martin Alexander Lund)

## Teachers plan for Wednesday

* Follow up on the last weeks of study (adjusting plan for week together)
* Students presentation of their topic
* **Startup with some exercises**
  + make a small app using one or more of the above.:

**Resources**

* Contentprovider:
  + About contentprovider
    - <http://developer.android.com/reference/android/content/ContentProvider.html>
    - <http://docs.xamarin.com/guides/android/platform_features/intro_to_content_providers/>
    - <http://stackoverflow.com/questions/5386509/insert-data-into-content-provider-then-display-it-in-a-listview>
  + How to make your own contentprovider  
    Tutorials
    - <http://about-android.blogspot.com/2010/04/content-provider-example-1.html>
    - <http://www.vogella.de/articles/AndroidSQLite/article.html#todo_contentprovider>  
      Kode: [Source Code of Examples](http://www.vogella.de/code.html)  
      - [de.vogella.android.contentprovider](http://www.vogella.de/code/de.vogella.android.contentprovider/codestartpage.html)    
      - [de.vogella.android.sqlite.first](http://www.vogella.de/code/de.vogella.android.sqlite.first/codestartpage.html)
    - <http://thinkandroid.wordpress.com/2010/01/13/writing-your-own-contentprovider/>
  + Try also to seach google on "DiaryContentProvider.java + SQLiteOpenHelper.java"
* Services and Notification
  + Example on Service: [Android\_ServiceDemo.zip](http://bjoerks.net/klasser/Mobile_2014_Foraar/Materiale/Android_ServiceDemo.zip)
  + From TheNewBoston about notification.
    - [189 - Notifiying Status](https://www.youtube.com/watch?v=e74z0_Z5QWI&index=189&list=PL2F07DBCDCC01493Ahttp://thenewboston.org/watch.php?cat=6&number=191)[Bar](http://thenewboston.org/watch.php?cat=6&number=189)
    - [190 - Setting up a Notification](https://www.youtube.com/watch?v=Vj7HZROhWL4&index=190&list=PL2F07DBCDCC01493Ahttp://thenewboston.org/watch.php?cat=6&number=190)
    - [191 - Notification Manager Methods](https://www.youtube.com/watch?v=4vDHn4ZO6LY&index=191&list=PL2F07DBCDCC01493A)
  + I relation the folowing might also be relevant:   
    Broadcast reciever: <http://www.youtube.com/watch?v=qSk0yUlhjnc>
* About Fragments
  + <http://developer.android.com/guide/components/fragments.html>
  + <https://developer.android.com/training/basics/fragments/creating.html>
* Use of simple graphic – Tutorials
  + <http://www.tutorialforandroid.com/2009/06/drawing-with-canvas-in-android.html>
  + <https://developer.android.com/training/graphics/opengl/index.html>
  + TheNewBoston: [168 - Introduction to OpenGL ES](https://www.youtube.com/watch?v=JVr4eDNedbY&index=168&list=PL2F07DBCDCC01493A)
* SQLite:
  + View the video tutorial **49-54** from this playlist -  
    <http://www.youtube.com/playlist?list=PL6gx4Cwl9DGBsvRxJJOzG4r4k_zLKrnxl>
  + SQLite example: [Android\_SQLiteDemo.zip](http://bjoerks.net/klasser/Mobile_2014_Foraar/Materiale/Android_SQLiteDemo.zip) (eclipse format)
  + SQLite Manager :: extention to Firefox  
    <https://addons.mozilla.org/da/firefox/addon/sqlite-manager/>
  + Se evt. uddrag fra videoer (kun på dansk)   
    [Fra tidligere undervisning - om Contentprovider, SQLite og grafik](#_Fra_tidligere_undervisning)
  + example: [Android\_SQLiteDemo.zip](http://bjoerks.net/klasser/Mobile_2014_Foraar/Materiale/Android_SQLiteDemo.zip) (eclipse format)
  + More examples SQLite – this is using cursor
    - Small example with raw-sql & cursor  
      <http://stackoverflow.com/questions/5457699/cursor-adapter-and-sqlite-example>
    - Expanded example with all code using cursor  
      <http://www.mysamplecode.com/2012/07/android-listview-cursoradapter-sqlite.html>
    - Another small example with raw-sql & cursor  
      https://www.codeproject.com/Articles/783073/A-Simple-Android-SQLite-Example
  + More usefull links about cursor & listview:
    - <http://stackoverflow.com/questions/12077955/android-using-simplecursoradapter-to-get-data-from-database-to-listview>
    - <http://thinkandroid.wordpress.com/2010/01/09/simplecursoradapters-and-listviews/>
    - <http://stackoverflow.com/questions/13631075/listview-with-cursoradapter>
* About Camera
  + <http://developer.android.com/guide/topics/media/camera.html>
  + Nice explanation and schematic of Camera2-api.  
    <http://jylee-world.blogspot.dk/2014/12/a-tutorial-of-androidhardwarecamera2.html>
* Locations and Maps
  + <https://developer.android.com/training/building-location.html>
  + <https://developer.android.com/training/maps/index.html>
  + From TheNewBoston

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| [135 - Compass and Map Controller](https://www.youtube.com/watch?v=14SiJfIYrvs&list=PL2F07DBCDCC01493A&index=135) |
| [136 - Geocoder and GeoPoint](https://www.youtube.com/watch?v=D_3zkEe71ZM&list=PL2F07DBCDCC01493A&index=136) |
| [137 - Geocoding a Location for an Address](https://www.youtube.com/watch?v=HjwgRIZSjFg&list=PL2F07DBCDCC01493A&index=137) |
| [138 - Toggling Street and Satellite views](https://www.youtube.com/watch?v=7zv6QPbkUIs&list=PL2F07DBCDCC01493A&index=138) |
| [139 - ItemizedOverlay to draw on our Map](https://www.youtube.com/watch?v=soxX_3QYUVc&list=PL2F07DBCDCC01493A&index=139) |
| [140 - Creating a Custom pinpoint](https://www.youtube.com/watch?v=i7EaMbukAl8&list=PL2F07DBCDCC01493A&index=140) |
| [141 - Placing a Pinpoint on a MapView](https://www.youtube.com/watch?v=pLM8ZubmMmY&list=PL2F07DBCDCC01493A&index=141) |
| [142 - LocationManager and Location Permissions](https://www.youtube.com/watch?v=Q5U2cbJNBM8&list=PL2F07DBCDCC01493A&index=142) |
| [143 - Criteria and getting Location](https://www.youtube.com/watch?v=doVEch9WNG8&list=PL2F07DBCDCC01493A&index=143) |
| [144 - Updating with OnLocationChanged method](https://www.youtube.com/watch?v=IJn8va9Z0cM&list=PL2F07DBCDCC01493A&index=144) |

* Observer might be interesting in addition to one model
  + <http://www.javaworld.com/article/2077258/learn-java/observer-and-observable.html>
  + <http://www.vogella.com/tutorials/DesignPatternObserver/article.html>
* Global data (singleton) using the Application class - briefly read
  + <http://stackoverflow.com/questions/4208886/using-the-android-application-class-to-persist-data>
  + <http://androidexample.com/Global_Variable_Or_Application_Context_Variable_-_Android_Example/index.php?view=article_discription&aid=114&aaid=136>
  + <http://www.developerphil.com/dont-store-data-in-the-application-object/>
* Getting your app on google play marked - WEEK ??????
  + From TheNewBoston - about google play - app on marked.
    - [145 - Exporting apk and signing keystore](https://www.youtube.com/watch?v=IYhJp-jqJyM&index=145&list=PL2F07DBCDCC01493A)
    - [146 - Obtaining Key for a specific Project](https://www.youtube.com/watch?v=95y8wsjvnHE&index=146&list=PL2F07DBCDCC01493A)
    - [199 - Putting an App on the Market](https://www.youtube.com/watch?v=1j4prh3NAZE&index=199&list=PL2F07DBCDCC01493A)
    - [200 - Updating Application](https://www.youtube.com/watch?v=s9ryE6GwhmA&index=200&list=PL2F07DBCDCC01493A)
  + <https://romannurik.github.io/AndroidAssetStudio/> to make icons

## Fra tidligere undervisning - om Contentprovider, SQLite og grafik

* + **29:30**Se senere
  + [Mob12F Mobile uge11 part2 - Android](https://www.youtube.com/watch?v=CbmKbjQAGLM&list=PLWg7ytE2Y07KKBCkoGw6ZR-vxs-FotSjZ&index=9)
  + **48:23**Se senere
  + [Mob12F Mobile uge11 part3 - Android](https://www.youtube.com/watch?v=mTWsgbWimtk&list=PLWg7ytE2Y07KKBCkoGw6ZR-vxs-FotSjZ&index=10)

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