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# Mobile: Plan for BJBU (Wednesday week 38-Monday week 39)

# Preliminary plan

## Goal for the week (Wednesday to Tuesday)

* You have some knowledge about setting up WCF service for exchanging json and pure xml format (REST) for better access to mobile apps (same for javascript)
* You have knowledge how to keep a state for an application
* You have some knowledge about using SQLite for keeping data local persistent.

## Teachers plan for Wednesday 16/9 in Odense & Vejle – conference room (bjbu from Odense)

* Follow up on the weeks of study
* Shortly how to set up webservice (WCF) for access with (REST) JSON, XML, and SOAP format
  + Example: focus on service contract (small adjustment) and web.config (it is here mostly is to be done) <http://bjoerks.net/klasser/Mobile_2014_Foraar/Materiale/WcfSolutionSmallExampleSoapAndRest_201403062149.zip>   
    - Greater example with source can be downloaded from <http://webservicedemo.datamatiker-skolen.dk> (most focus on the web.config file)
* Global data (singleton) using the Application class
* Local persistent using SQLite   
  Briefly about Content provider

## Prepare yourself by before and after lecture

* **“Globale” data – singleton using Application class – briefly read  
    
  -** [**http://stackoverflow.com/questions/4208886/using-the-android-application-class-to-persist-data**](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://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/**](http://www.developerphil.com/dont-store-data-in-the-application-object/)
* 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)

## Extra useful tools for making interacting with webservices:

* **With WCF services (and ASMX) you can get the necessary data for SOAP call with WcfTestClient.exe you probably will find here "C: \ Program Files (x86) \ Microsoft Visual Studio ….. \ …… \ IDE \ WcfTestClient.exe"**
* **Fidler is a usefull tool to show all what is sent and received on the http protocol:** [**http://www.telerik.com/download/fiddler**](http://www.telerik.com/download/fiddler) **You can use this tool for discover how to interact with a webservice, by using the service from other applications.**

## Ideas for small exercises:

* **Make an app using SQLite database for storing and showing a ToDo list**
* **Make an app showing a list of contacts from your phone book**

## More links extending to the weekly content

* **Observer might be interesting in addition to one model**
  + [**http://www.javaworld.com/article/2077258/learn-java/observer-and-observable.html**](http://www.javaworld.com/article/2077258/learn-java/observer-and-observable.html)
  + [**http://www.vogella.com/tutorials/DesignPatternObserver/article.html**](http://www.vogella.com/tutorials/DesignPatternObserver/article.html)
* **Another example using cursor from phone book retrieved by contentprovider**[**http://stackoverflow.com/questions/9477335/how-to-access-contacts-data-through-content-provider**](http://stackoverflow.com/questions/9477335/how-to-access-contacts-data-through-content-provider)
* **SQLite 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**](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**](http://www.mysamplecode.com/2012/07/android-listview-cursoradapter-sqlite.html)
  + **Another small example with raw-sql & cursor**[**http://andromeda709.blogspot.dk/2012/02/sqlite-simple-example.html**](http://andromeda709.blogspot.dk/2012/02/sqlite-simple-example.html)
* **More usefull links about cursor & listview:**
  + [**http://stackoverflow.com/questions/12077955/android-using-simplecursoradapter-to-get-data-from-database-to-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://thinkandroid.wordpress.com/2010/01/09/simplecursoradapters-and-listviews/)
  + [**http://www.mysamplecode.com/2012/07/android-listview-cursoradapter-sqlite.html**](http://www.mysamplecode.com/2012/07/android-listview-cursoradapter-sqlite.html)
  + [**http://stackoverflow.com/questions/13631075/listview-with-cursoradapter**](http://stackoverflow.com/questions/13631075/listview-with-cursoradapter)

## Monday – only Odense (bjbu available 8:30-11:50):

* Follow up on lectures from Wednesday
* Solving problem according to the goal for the week

## Torsdag– kun Vejle (jawe available 9:15-13:15):

* Follow up on lectures from Wednesday
* Solving problem according to the goal for the week