



# Programmazione di sistemi mobili e tablet

## Android Development

Carlo Menapace – carlo.menapace@factorymind.com  
Jonny Fox

# ASYNC TASK

An **AsyncTask** is used to do some **SMALL** background computation and publish the result to the UI thread (with optional progress updates).

AsyncTask enables proper and easy use of the UI thread.

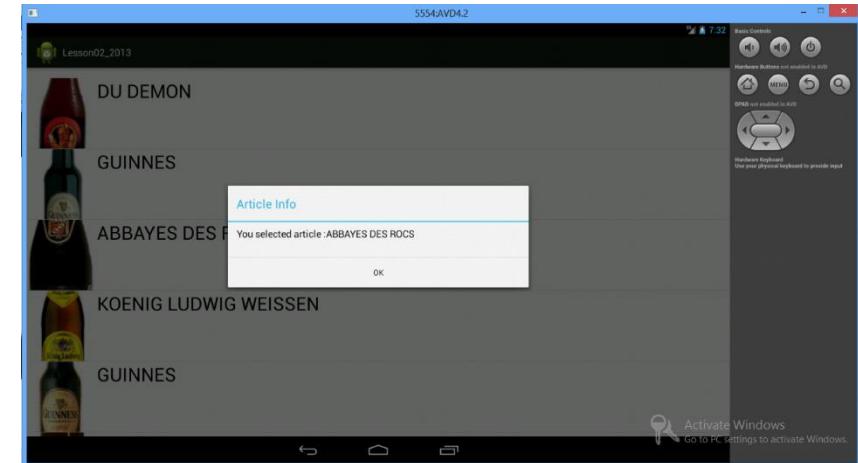
An AsyncTask is started via the **execute()** method.

1. **onPreExecute:** Called on the UI thread before thread starts
2. **doInBackground:** this is the method that runs on the background thread
3. **onProgressUpdate:** called when you invoke publishProgress
4. **onPostExecute:** Called after the thread finished

# ASYNTASK EXAMPLE

Create an Android Application with a button that:

- On click event download an image from the internet



# INTENT SERVICE

The IntentService class provides a straightforward structure for running an operation on a single background thread.

This allows it to handle long-running operations without affecting your user interface's responsiveness. Also, an IntentService isn't affected by most user interface lifecycle events, so it continues to run in circumstances that would shut down an AsyncTask

# INTENT SERVICE



Create a simple app that allows you to download an image from an URL and returns a result to the UI.