Agenda 455/555 2.27.17 Mon.

*  [News](https://www.bleepingcomputer.com/news/security/javascript-attack-breaks-aslr-on-22-cpu-architectures/) (see also Weblinks on BB)
* Lab 4 discussion

Check out your file that will be parsed/processed

<http://www.papademas.net/cd_catalog3.xml>

-Login Activity Screen

-MainActivity

-XML Getters & Setters

-[XML Handler](http://www.saxproject.org/apidoc/org/xml/sax/helpers/DefaultHandler.html#endElement(java.lang.String,%20java.lang.String,%20java.lang.String))

-[Async task processing](https://developer.android.com/reference/android/os/AsyncTask.html) - **The 4 steps**

When an asynchronous task is executed, the task goes through 4 distinct steps:

**onPreExecute() -** invoked on the UI thread before a task is executed. This normally used to setup the task, ex. by showing a progress bar in the user interface.

**doInBackground(Params...)** - invoked on the background thread immediately after **onPreExecute()** finishes executing. This performs background computations that can take a long time, ex. file processing. The parameters of the asynchronous task are passed to this step. The result of the computation must be returned by this step and will be passed back to the last step. This step can also use publishProgress(Progress...) to publish one or more units of progress. These values are published on the UI thread, in the onProgressUpdate(Progress...) step.

**onProgressUpdate(Progress...) -** invoked on the UI thread after a call to publishProgress(Progress...). The timing of the execution is undefined. This method is used to display any form of progress in the user interface while the background computation is still executing. For instance, it can be used to animate a progress bar or show logs in a text field, etc.

**onPostExecute(Result) -** invoked on the UI thread after the background computation finishes. The result of the background computation is passed to this step as a parameter.

-Use of timers / Progress Dialog boxes

* Timer delay for intro login screen activity
* Timer delay for progress dialog for main activity

Example [Progress Dialog](https://developer.android.com/reference/android/app/ProgressDialog.html) Messaging

@Override

protected void onPreExecute()

{

try {

if (progressDialog != null)

progressDialog.cancel();

}

catch (Exception e) { }

progressDialog = ProgressDialog.show(MainActivity.this, "", "Please wait...", true, true);

progressDialog.setCancelable(false);

progressDialog.show();

}

* LINKS!!

Online parsers: XML->JSON, JSON->XML?

<http://www.utilities-online.info/xmltojson/#.WLMb4HeZPko>

<https://developer.android.com/reference/android/R.attr.html>