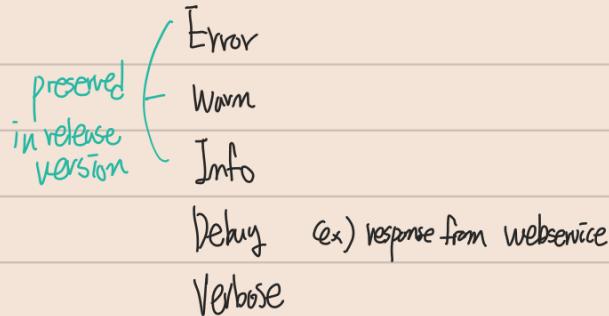


Log

WTF: What a Terrible Failure. Do not use!



Log.X (String TAG, String message)

Commonly class name

Resources

- res directory: Contains images, strings, and layouts ...

Resource types

- values: XML files that contain simple values, such as string or integers.
- drawable: A bunch of visual files, including Bitmap file types and shapes.
- layouts: XML layouts for app
- animator: XML files for property animations
- anim: XML files for tween animations
- color: XML files that define state list colors
- mipmap: Drawable files for launcher icons
- menu: XML files that define application menus
- raw: Resource file for arbitrary files saved in their raw form.
Ex) audio file
- xml: Arbitrary XML. Ex) XML configuration files.

- 유지보수를 위해 따로 둠

- Android Framework는 언어나 screen size 등에 따라 alternative resources를 제공

- getString(R.string.~)를 통해 res → values → strings.xml의 값은 가져올 수 있음

<TextView text = "@string/today" />
(e XMLoth String임)

Android menu

<menu ~

<item ~

android:orderInCategory = "1"

↳ Indicates the order that the menu item will appear in relative to other items.

Action Bar

= Action Bar :

Sits at top of the activity. Provide place for overflow menu

@Override To create menu

```
public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}
```

5

- handle menu item selection.

```
@Override
public boolean onOptionsItemSelected(MenuItem item) {
    int itemId = item.getItemId();
    if (itemId == R.id.action_search) {
        Context context = MainActivity.this;
        String textToShow = "Search clicked";
        Toast.makeText(context, textToShow, Toast.LENGTH_SHORT).show();
        return true;
    }
    return super.onOptionsItemSelected(item);
}
```

Uri

Uri.Builder

```
Uri builtUri =
Uri.parse(GITHUB_BASE_URL).buildUpon()
.appendQueryParameter(PARAM_QUERY, githubSearchQuery)
.appendQueryParameter(PARAM_SORT, sortBy)
.build();
```

원래!

- query, http://, ?, ?

- encoding Invalid character %{{character-code}}

- URL은 Uri의 special class.

Android Uri

```
URL url = null; Java
try {
    url = new URL(builtUri.toString());
} catch (MalformedURLException e) {
    e.printStackTrace();
}
```

could set request method, add header fields, ...

Fetching an
HTTP Request

```
public static String getResponseFromHttpUrl(URL url) throws IOException {
    HttpURLConnection urlConnection = (HttpURLConnection) url.openConnection();
    try {
        InputStream in = urlConnection.getInputStream();
        Used to tokenize string.
        Scanner scanner = new Scanner(in);
        scanner.useDelimiter("\n");
        for scanner to read entire contents of the stream into the next token stream
        boolean hasInput = scanner.hasNext();
        if (hasInput) {
            return scanner.next();
        } else {
            return null;
        }
    } finally {
        urlConnection.disconnect();
    }
}
```

① Allocates and deallocates the buffers as needed.
주의 Data size 오류!

② Handles character encoding
UTF-8 → UTF-16
JSON Android
JavaScript

Permission

- When each APK installed, it's given its own unique Linux user ID.
- Each app runs within its own instance of Android runtime.
=> Completely **sandboxed**. Its files, processes, resources are inaccessible to other apps.
No app can access sensitive data

Thread Basics

- Single User Interface Thread. *main thread is the only working thread*
- Go first thing Single Computation $\approx 17 \text{ milliseconds}$

AsyncTask

umps this behavior

- Allows you to run a task on a background thread, while publishing results to the UI thread.
- UI thread has a message queue and a handler that allows you to send a process objects and messages, often from other threads.



- AsyncTask is a generic class : takes parameterized types in its constructor.
Java variable ... are passed as an array

Three types

*클래스 설계
Generic Parameters
동작*

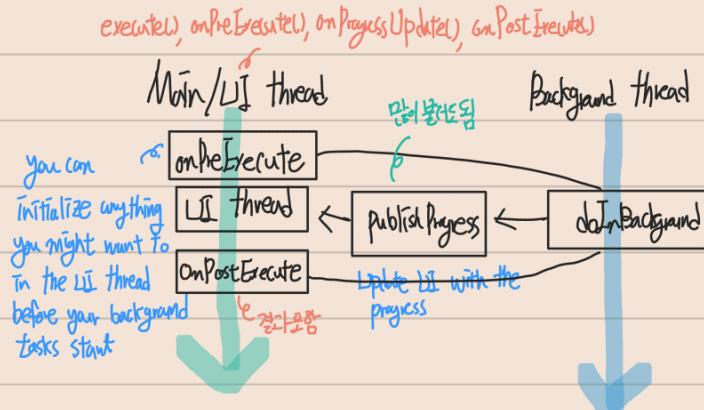
- Params : Parameter type sent to the task upon execution.
- Progress : Type published to update progress during the background computation.
- Result : The type of the result of the background computation.

Functions

doInBackground
onProgressUpdate
onPostExecute
onPreExecute

어느 Super.onPreExecute()

호출



JSON

How it's actually getting data from the Internet?

- Java Script Object Notation
- Primary method for data exchange on the web.

장점

- Human readable
- More Compact
- Easier to write
- Allows for declaration of arrays

Refresh Back! Good app gives you what you want before you even have to ask for it.

· Debugging 용도로 사용은 관찰을

→ AsyncTask는 별도인듯! 더 나은 방법 배울것임