jon simon

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Unzipping Files with Android (Programmatically)

I wrote an article a few months ago, which walked you through the process of zipping files programmatically with Java - in an Android environment. Due to popular demand, I've decided to write up another article on how to unzip files.

The process is pretty similar, and you could probably combine them both in a single class, but for this example, I made a class called **Decompress**.

```
import android.util.Lo
g;
import java.io.File;
import java.io.FileInp
utStream;
import java.io.FileOut
putStream;
```

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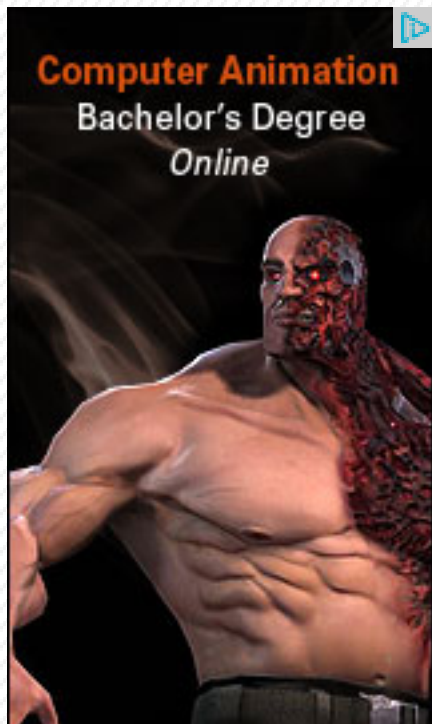
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I'm available for remote short term contracting or consultancy work. Please check out my LinkedIn profile for more details on my experience.
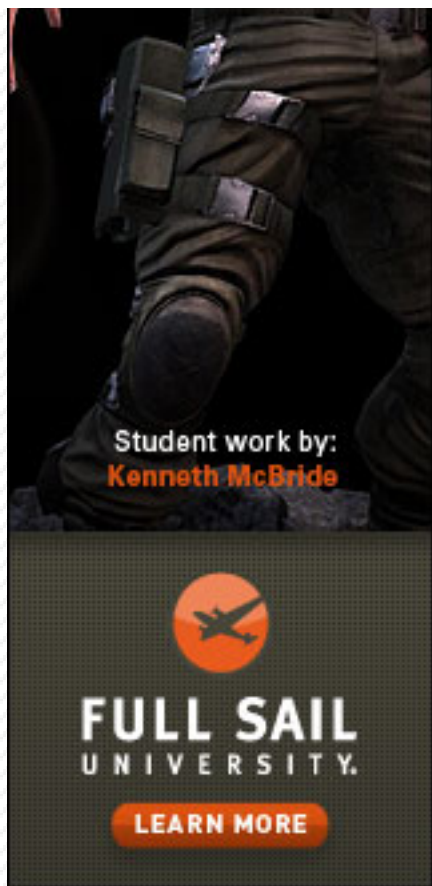
Please feel free to use the form below to contact me.

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```java
import java.util.zip.Z
ipEntry;
import java.util.zip.Z
ipInputStream;

/**
 *
 * @author jon
 */
public class Decompres
s {
  private String _zipF
ile;
  private String _loca
tion;

  public Decompress(St
ring zipFile, String l
ocation) {
    _zipFile = zipFile
;
    _location = locati
on;

    _dirChecker("");
  }

  public void unzip()
{
    try {
      FileInputStream
fin = new FileInputStr
eam(_zipFile);
```

```java
        ZipInputStream z
in = new ZipInputStrea
m(fin);
        ZipEntry ze = nu
ll;
        while ((ze = zin
.getNextEntry()) != nu
ll) {
            Log.v("Decompr
ess", "Unzipping " + z
e.getName());

            if(ze.isDirect
ory()) {
                _dirChecker(
ze.getName());
            } else {
                FileOutputSt
ream fout = new FileOu
tputStream(_location +
 ze.getName());
                for (int c =
 zin.read(); c != -1;
c = zin.read()) {
                    fout.write
(c);
                }

                zin.closeEnt
ry();
                fout.close()
;
            }
```

```java
        }
        zin.close();
    } catch(Exception
e) {
        Log.e("Decompres
s", "unzip", e);
    }

  }

  private void _dirChe
cker(String dir) {
    File f = new File(
_location + dir);

    if(!f.isDirectory(
)) {
        f.mkdirs();
    }
  }
}
```

Well, that's the class - tested on my
Nexus One and works!

Here's an example of how to use it:

```java
String zipFile = Envir
onment.getExternalStor
ageDirectory() + "/fil
```

```
es.zip";
String unzipLocation =
 Environment.getExtern
alStorageDirectory() +
 "/unzipped/";

Decompress d = new Dec
ompress(zipFile, unzip
Location);
d.unzip();
```

That should unzip **files.zip** and put
the contents into
/sdcard/unzipped/, as was
specified.

Check out my other article, if you
want to find out how to zip files -
Zipping Files with Android
(Programmatically)

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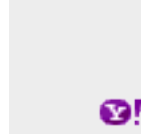ManageEngine.com/EventLogAnalyzer

jon | October 27, 2010 | Comments (22)

Tags: android, zip, unzip, files, zipping, unzipping, programming,
development, code

Comments

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bhupathi.ramakrishna (signed in using yahoo)

I am unable to unzip the zip file (zip 64) using Decompress.

Reply · Like · October 4 at 6:33am

Randy RameshWaran · Android Application Developer at Berazee T

how to capture the default video store in mobile.

Reply · Like · September 26 at 4:17am

Randy RameshWaran · Android Application Developer at Berazee T

I want to edit and capture the video file in android.

Reply · Like · September 26 at 4:18am

Facebook social plugin

(sorry! Typo in my email) Hey, I have a question. when you unzip a file normally, where do the files go to? What map? Because Ive downloaded this emulator which needed a bios file to make it run, I downloaded it but I cant find it anywhere on my phone.. Ive got the samsung galaxy S2.

Comment by **rick** - May 24, 2012 @ 6:46 am

Hey, I have a question. when you unzip a file normally,

where do the files go to? What map? Because Ive
downloaded this emulator which needed a bios file to
make it run, I downloaded it but I cant find it anywhere
on my phone.. Ive got the samsung galaxy S2.

Comment by **rick** - May 24, 2012 @ 6:45 am

is it possible to implement password field for
extracting the zip file?

Comment by **Fahid** - May 07, 2012 @ 5:26 am

If its too slow, consider optimizing by buffering output -
- like this:

http://stackoverflow.com/questions/3975847/extrakting-
zip-to-sd-card-is-very-slow-how-can-i-optimize-
performance/10312761#10312761

Comment by **Andre** - April 25, 2012 @ 5:26 am

This works great when using the buffer Andy
suggested. I would like it to display a Toast / Alert
Dialog when the operation is done. How can I achieve
that? Anyone can help?

Comment by **Mircea M** - April 05, 2012 @ 5:23 am

Highly recommend using a byte buffer like Andy
mentioned, regardless of what type of device you use.
For me this change was the difference between
15minutes to unzip and

Comment by **AndDev** - March 08, 2012 @ 3:21 pm

i am going to give this a try later.

Comment by **chris franko** - September 01, 2011 @ 8:31 am

How do I notify the MainActivity is done unzipping?

Comment by **bong** - June 15, 2011 @ 2:40 pm

Hello,

just wanted to tell you how happy I'm that I found your tutorial about unzipping files. It helped me alot! Thanks and have a great day. With your help it got clear how to tackle the problem!

Comment by **Thomas** - June 10, 2011 @ 6:42 am

Any solution for folders that contain a "SPACE" ??
Other then that it works great thanks

Comment by **mxride** - May 16, 2011 @ 1:04 pm

Help appreciated.

I have a foler on SD Card containing a ZIP archive, Have created a test project with the above Class as MAIN, However I cant seem to figure out where to implement

String zipFile =
Environment.getExternalStorageDirectory() +

```
"/files.zip";
String unzipLocation =
Environment.getExternalStorageDirectory() +
"/unzipped/";

Decompress d = new Decompress(zipFile,
unzipLocation);
d.unzip()
```

Any help is much appreciated..

Comment by **mxride** - May 12, 2011 @ 11:44 am

Thanks, Jon. Well done.

Comment by **matt** - February 28, 2011 @ 4:39 pm

This code works fine to me only when i create all
destination folder before unzipping.
For ex:if files.zip contains[
folder_image -> a.png & b.png
folder_css ->x.css
file.txt]
Iam getting Err like:" File Not found exception .../a.png
" what is the problem?

Comment by **vnshetty** - February 26, 2011 @ 7:09
am

Really awesome code. I too experienced the nasty
speed issues. I used Andy's snippet from the earlier
comment and it runs at lightning speed now. You
should glue that into an update to this code.

Comment by **Ray Dios Haque** - February 22, 2011

Hi,

I have a problem. When I unzip a file and if it contains any folder which has white spaces in its name then unziping stops there and does not go ahead.How to deal if we have any folder having white space in it? Please help.

Thanks
Parvendra

Comment by **Parvendra** - February 16, 2011 @ 1:09 am

@Andy That's a good point! Thanks for the heads up :)

Comment by **xil3** - January 18, 2011 @ 8:38 am

Hey, thanks for the tutorial, it's very informative.

Regarding the slow performance in the emulator, I've found that it goes much faster (a few seconds as opposed to a minute in the emulator) if you copy the bytes into a buffer instead of individually:

```
byte[] buffer = new byte[1024];
int length;
...
// replace for loop with:
while ((length = zin.read(buffer))>0) {
fout.write(buffer, 0, length);
```

}

Comment by **Andy** - January 14, 2011 @ 7:13 pm

Really helpful,,
Good Tutorial

Comment by **Farhan** - January 11, 2011 @ 6:10 am

The emulator will be a lot slower than any of the phones that you run it on - test it on a phone and see the difference. It's also dependant on your computer - I've seen the emulator be extremely slow on some.

I tested a 10mb file on mine and it went quick.

Comment by **xil3** - December 25, 2010 @ 11:46 am

I am using the emulator to test. It is actually slow in the looping.
for (int c = zin.read(); c != -1; c = zin.read()){
Log.v("Decompress", "For Looping "+ ze.getName());
fout.write(c);
}

Comment by **Chan Yao Kang** - December 21, 2010 @ 1:27 am

What kind of phone are you testing it on?

Might be worth logging the process, to see where it's slowing down (Log.v("", "")).

Comment by **xil3** - December 18, 2010 @ 3:56 pm

I have tested the class, I found that the unzip function is very slow performance. Is there anyway to improve it? Its takes few min to unzip 1 MB file.

Comment by **Chan Yao Kang** - December 17, 2010 @ 1:20 am