

Intro

Survey on Code Examples

Dear participant,

Our research group is investigating the usefulness of code examples in understanding the usage of APIs.

We would be grateful if you could spend a few minutes of your time to answer the following survey, which consist of two parts:

1. A questionnaire about your background.
2. A short evaluation of ten code examples showing the usage of ten methods of an API (i.e., one code example per method).

The survey will take less than 10 minutes to complete, and your participation is anonymous and voluntary. If you have any question, do not hesitate to contact Laura Moreno via email at lmorenoc@utdallas.edu.

Thanks for your help.

Background Information

Background Information

Please, answer the following questions according to your experience in software development.

1. For how many years have you developed software?

1 ▼

2. Do you have any industrial experience as software developer?

- ☐ Yes
- ☐ No

For how many years?

 ▼

3. How often do you make use of third party libraries in your software projects?

- ☐ Never
- ☐ Rarely - I use third party libraries in less than 33% of my projects
- ☐ Occasionally - I use third party libraries in more than 33% but less than 66% of my projects
- ☐ Frequently - I use third party libraries in more than 66% of my projects

4. How often do you use code examples found on the Internet to check how to use the API of a library?

- ☐ Never
- ☐ Rarely - I use code examples for less than 33% of the APIs I use
- ☐ Occasionally - I use code examples for more than 33% but less than 66% of the APIs I use
- ☐ Frequently - I use code examples for more than 66% of the APIs I use

Code Examples for Apache Tika

Code Examples for Apache Tika

The next questions refer to code examples showing the usage of some methods of the [Apache Tika](#) API.

1. Have you contributed to the implementation of the [Apache Tika](#) project?

- ☐ Yes
- ☐ No

Code Examples for Apache Tika

2. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.io.IOUtils.copy(java.io.InputStream, java.io.OutputStream)
```

Example

```
1 InputStream stream;
2 TemporaryResources tmp=new TemporaryResources();
3 File file=tmp.createTemporaryFile();
4 OutputStream out=new FileOutputStream(file);
5 // stream -> the <code>InputStream</code> to read from
6 // out -> the <code>OutputStream</code> to write to
7 IOUtils.copy(stream, out);
```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

3. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.mime.MimeTypes.forName(java.lang.String)
```

Example

```
1 private static MimeTypes types;
2 final Metadata metadata;
3 final String contentType=metadata.get(Metadata.CONTENT_TYPE);
4 // contentType -> media type name (case-insensitive)
5 types.forName(contentType);
```

- ☐ Not useful at all
- ☐ Slightly useful
- ☐ Useful
- ☐ Very useful

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

4. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.io.TikaInputStream.get(byte[],org.apache.tika.metadata..
```

Example

```
1 Metadata md=new Metadata();
2 // payload -> input data
3 // md -> metadata instance
4 TikaInputStream.get(payload,md);
```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

5. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.parser.PasswordProvider.getPassword(org.apache.tika.met
```

Example

```
01 InputStream stream;
02 ParseContext context;
03 Metadata metadata;
04 PDDocument pdfDocument=null;
05 TemporaryResources tmp=new TemporaryResources();
06 try
07 {
08     TikaInputStream tstream=TikaInputStream.cast(stream);
09     if(tstream != null && tstream.hasFile())
10     {
11         RandomAccess scratchFile=new RandomAccessFile(tmp.createTemporaryFile(
12             pdfDocument=PDDocument.load(new CloseShieldInputStream(stream),scratch
```

```

13 }
14 }
15 pdfDocument=PDDocument.load(new CloseShieldInputStream(stream),true);
16 if(pdfDocument.isEncrypted())
17 {
18 PasswordProvider passwordProvider=context.get(PasswordProvider.class);
19 // metadata -> document metadata
20 passwordProvider.getPassword(metadata);
21 }

```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

6. The next code snippet exemplifies the usage of the method:

```

org.apache.tika.extractor.EmbeddedDocumentExtractor.parseEmbedded(java.
    org.xml.sax.ContentHandler,org.apache.tika.metadata.Metadata,bo

```

Example

```

01 private final ContentHandler handler;
02 private final Metadata metadata;
03 private final EmbeddedDocumentExtractor extractor;
04 InputStream stream;
05 XHTMLContentHandler xhtml=new XHTMLContentHandler(handler,metadata);
06 TemporaryResources tmp=new TemporaryResources();
07 File file=tmp.createTemporaryFile();
08 ISO9660FS iso=new ISO9660FS(file,true);

```

```

09 if(iso != null)
10 {
11 try
12 {
13 Enumeration<ISO9660FileEntry> en=iso.getEntries();
14 while(en.hasMoreElements())
15 {
16 ISO9660FileEntry entry=en.nextElement();
17 if(entry.isDirectory())
18 {
19 }
20 }
21 }
22 }
23 Metadata entrydata=new Metadata();
24 // stream -> The embedded resource
25 // xhtml -> The handler to use
26 // entrydata -> The metadata for the embedded resource
27 // true -> Should we output HTML for this resource, or has the parser
28 extractor.parseEmbedded(stream,xhtml,entrydata,true);

```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

7. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.Tika.parseToString(java.io.InputStream,org.apache.tika..
```

Example

```
1 File driveFile;
2 byte[] fileContent=drive.getContent(driveFile);
3 // newByteArrayInputStream(fileContent,false) -> the document to be parsed
4 // newMetadata() -> document metadata
5 TikaHolder.tika().parseToString(new ByteArrayInputStream(fileContent,false))
```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

8. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.Tika.parseToString(java.io.InputStream,
    org.apache.tika.metadata.Metadata,int)
```

Example

```
01 InputStream fileReader;
02 byte[] buffer=new byte[1024];
03 ByteArrayOutputStream bos=new ByteArrayOutputStream();
04 int i;
05 while(-1 != (i=fileReader.read(buffer)))
06 {
07     bos.write(buffer,0,i);
08 }
09 byte[] data=bos.toByteArray();
10 if(fsDefinition.isJsonSupport())
11 {
```



```

12 }
13 int indexedChars=100000;
14 if(fsDefinition.getIndexedChars() > 0)
15 {
16 indexedChars=(int)Math.round(data.length * fsDefinition.getIndexedChar
17 }
18 Metadata metadata=new Metadata();
19 // newBytesStreamInput(data,false) -> the document to be parsed
20 // metadata -> document metadata
21 // indexedChars -> maximum length of the returned string
22 tika().parseToString(new BytesStreamInput(data,false),metadata,indexed

```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Please, justify your answers.

Code Examples for Apache Tika

9. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.metadata.Metadata.set(org.apache.tika.metadata.Property
```

Example

```

1 Metadata metadata;
2 Property property;
3 Calendar value;
4 // property -> simple integer property definition
5 // value.getTime() -> property value
6 metadata.set(property,value.getTime());

```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

10. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.metadata.Metadata.set(java.lang.String,java.lang.String
```

Example

```
1 Metadata metadata;  
2 PdfReader reader;  
3 // "pdf:openedWithFullPermissions" -> the metadata name.  
4 // ""+reader.isOpenedWithFullPermissions() -> the metadata value, or <c  
5 metadata.set("pdf:openedWithFullPermissions","", reader.isOpenedWithFu
```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Code Examples for Apache Tika

11. The next code snippet exemplifies the usage of the method:

```
org.apache.tika.Tika.Tika(org.apache.tika.config.TikaConfig)
```

Example 1

```
1 private static TikaConfig config=null;
2 InputStream is=getResourceAsStream();
3 if(config == null)
4 {
5     config=new TikaConfig(is);
6 }
7 // config -> Tika configuration
8 new Tika(config);
```

Considering this code example, answer the following questions:

	Not useful at all	Slightly useful	Useful	Very useful
How useful is the code example (including the comments) in understanding the usage of the aforementioned method?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please, justify your answers.

Comments

Comments

1. Do you have any further comments on the code examples presented in this survey?

-
2. Your opinion is important to us. Please, share your email address if we can contact you to follow up on any of your responses.