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 three parts:

- 1. A questionnaire about your background.
- 2. A short evaluation on the usefulness of a few (3 to 6) code examples showing the usage of one method of six APIs (i.e., six methods in total).
- 3. A short evaluation on the understandability of a few (2 to 4) code examples showing the usage of one method of six APIs (i.e., six methods in total).

The survey will take less than 30 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 lmcrenoc@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?

2. Do you have any industrial experience as software developer?	
○ Yes	
○ No	
For how many years?	
<u>1 ▼</u>	
B. 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	
How often do you use code examples found on the Internet to check how to use the API of a library?	_
,	
O 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	

[R] or g. a pache. common s. io. File Utils. byte Count To Display Size

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

```
Example 1
1  /**
2 * WAR file location.
3 */
4 private final transient File war;
5 // this.war.length() -> the number of bytes
6 FileUtils.byteCountToDisplaySize(this.war.length());
```

How useful is this code example in understanding the usage of the byteCountToDisplaySize method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2

```
01 /**
02 * Amazon S3 client.
03 */
04 private final transient AmazonS3 client;
05 /**
06 * S3 bucket name.
07 */
08 private final transient String bucket;
09 /**
10 * S3 key name.
11 */
12 private final transient String key;
13 if(this.keyExists())
14 {
15 final ObjectMetadata meta=this.client.getObjectMetadata(this.bucket,th
16 // meta.getContentLength() -> the number of bytes
17 FileUtils.byteCountToDisplaySize(meta.getContentLength());
18 }
```

How useful is this code example in understanding the usage of the byteCountToDisplaySize method?

- Not useful at all
 Slightly useful
- Useful
- Very us eful

```
Example 3
1 final long byteCount=getByteCount();
2 // byteCount -> the number of bytes
3 FileUtils.byteCountToDisplaySize(byteCount);
```

How useful is this code example in understanding the usage of the byteCountToDisplaySize method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4
1 private final long expectedByteCount;
2 // expectedByteCount -> the number of bytes
3 FileUtils.byteCountToDisplaySize(expectedByteCount);
```

How useful is this code example in understanding the usage of the byteCountToDisplaySize method?

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

```
1 /**
2 * New location of the trust store.
3 */
4 private final transient String store;
5 @NotNull final File file;
6 this.store=file.getAbsolutePath();
7 // this.store.length() -> the number of bytes
8 FileUtils.byteCountToDisplaySize(this.store.length());
```

How useful is this code example in understanding the usage of the byteCountToDisplaySize method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[R] org.apache.commons.io.FileUtils.copyFile

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

```
org.apache.commons.io.FileUtils.copyFile(java.io.File,java.io.File)
```

```
Example 1
1 @NotNull final File file;
2 final File prev=new File(String.format("%s/lib/security/cacerts",System
3 // prev -> an existing file to copy, must not be null
4 // file -> the new file, must not be null
5 FileUtils.copyFile(prev,file);
```

How useful is this code example in understanding the usage of the copyFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2

1 String sourcePath;
2 File source=new File(sourcePath);
3 File tempFile=new File(UUID.randomUUID().toString());
4 // source -> an existing file to copy, must not be null
5 // tempFile -> the new file, must not be null
6 FileUtils.copyFile(source,tempFile);
```

How useful is this code example in understanding the usage of the copyFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 3

```
01 /**
02 * Karma-junit-reporter results file. Setting this location will export
03 * reportsDirectory. For this to function, the karma-junit-reporter plu
04 * configuration file and the reportsDirectory must be available for wr
05 * outputFile property should also be configured in karma.conf.js to be
06 * this property, ensuring that the file is picked up.
07 */
08 @Parameter(property="junitReportFile",required=false) private File jun
09 /**
10 * Base directory where all Karma reports are written to. This occurs i
11 * file specified in the junitReportFile is copied to this directory.
12 */
13 @Parameter(defaultValue="${project.build.directory}/karma-reports",req
14 // junitReportFile -> an existing file to copy, must not be null
15 // newFile(reportsDirectory,junitReportFile.getName()) -> the new file
16 FileUtils.copyFile(junitReportFile,new File(reportsDirectory,junitRepo
```

How useful is this code example in understanding the usage of the copyFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4
1 final File toCopy;
2 final File newTempFile=LogWriter.createTempFile();
3 // toCopy -> an existing file to copy, must not be null
4 // newTempFile -> the new file, must not be null
5 FileUtils.copyFile(toCopy,newTempFile);
```

How useful is this code example in understanding the usage of the copyFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
01 private Set<File> files=new HashSet<File>();
02 private Map<String, AntPathMatcherFilter> content=new HashMap<String, An
03 File to;
04 for(File file : files)
05 {
06 String ext=FilenameUtils.getExtension(file.getName()).toUpperCase();
07 if(!"ZIP".equals(ext))
08 {
09 for(Map.Entry<String,AntPathMatcherFilter> filterEntry : content.entry
11 AntPathMatcherFilter filter=filterEntry.getValue();
12 if(filter.accept(file.getName()))
14 File target=FileUtils.getFile(to,ArchiveUtils.rewritePath(file.getName
15 // file -> an existing file to copy, must not be null
16 // target -> the new file, must not be null
17 FileUtils.copyFile(file,target);
18 }
19 }
20 }
21 }
```

How useful is this code example in understanding the usage of the copyFile method?

Not useful at all
Slightly useful

Useful

Very useful

```
Example 6
01  /**
02 * Temp dir.
03 * @checkstyle VisibilityModifier (3 lines)
04 */
05 public final transient TemporaryFolder temp=new TemporaryFolder();
06 final File classes=this.temp.newFolder();
07 final File javas=this.temp.newFolder();
08 final String name="sample/Foo.class";
09 final File binary=new File(classes,name);
10 // newFile(javas,name) -> an existing file to copy, must not be null
11 // binary -> the new file, must not be null
12 FileUtils.copyFile(new File(javas,name),binary);
```

How useful is this code example in understanding the usage of the copyFile method?

Not useful at all

Slightly useful

Useful

Very us eful

[R] org.apache.commons.io.FileUtils.writeStringToFile

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

org.apache.commons.io.FileUtils.writeStringToFile(java.io.File,java.lan

final FileInfo template; 02 final FileInfo filter; 03 final String outputBasePath; 04 final String outputDirectory=createOutputDirectory(template, filter, out 05 final String templateFilename=template.getFile().getName(); 06 final String outputFilename=FilenameUtils.separatorsToSystem(outputDir 07 final String rawTemplate=FileUtils.readFileToString(template.getFile()) 08 final Properties properties=readFilterIntoProperties(filter); 09 final String processedTemplate=StrSubstitutor.replace(rawTemplate,prop) 10 // newFile(outputFilename) -> the file to write 11 // processedTemplate -> the content to write to the file 12 FileUtils.writeStringToFile(new File(outputFilename),processedTemplate

How useful is this code example in understanding the usage of the writeStringToFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
01 @SuppressWarnings("serial") private final LogPosition nullPosition=new
02 }
03 ;
04 String destination;
05 File dataFile;
06 LogPosition position=positions.get(destination);
07 if(position != null && position != nullPosition)
08 {
09 String json=JsonUtils.marshalToString(position);
10 // dataFile -> the file to write
11 // json -> the content to write to the file
12 FileUtils.writeStringToFile(dataFile,json);
13 }
```

How useful is this code example in understanding the usage of the writeStringToFile method?

- Not us eful at all
- Slightly useful
- Useful

```
Example 3
1   /**
2 * Temporary folder.
3 * @checkstyle VisibilityModifier (3 lines)
4 */
5 @Rule public transient TemporaryFolder temp=new TemporaryFolder();
6 final File key=this.temp.newFile();
7   // key -> the file to write
8   // "" -> the content to write to the file
9 FileUtils.writeStringToFile(key,"");
```

How useful is this code example in understanding the usage of the writeStringToFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4

1   /**
2 * Temporary folder.
3 * @checkstyle VisibilityModifier (3 lines)
4 */
5 @Rule public transient TemporaryFolder temp=new TemporaryFolder();
6 final File war=this.temp.newFile("temp.war");
7   // war -> the file to write
8   // "brokenJARfilecontent" -> the content to write to the file
9 FileUtils.writeStringToFile(war, "broken JAR file content");
```

How useful is this code example in understanding the usage of the writeStringToFile method?

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

Example 5 1 /** 2 * Temporary folder. 3 * @checkstyle VisibilityModifier (3 lines) 4 */ 5 @Rule public transient TemporaryFolder temp=new TemporaryFolder(); 6 final File key=this.temp.newFile(); 7 // key -> the file to write 8 // IOUtils.toString(this.getClass().getResource("test-key.pem")) -> the 9 FileUtils.writeStringToFile(key,IOUtils.toString(this.getClass().getRes

How useful is this code example in understanding the usage of the writeStringToFile method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 6

01 public JobManagerConfiguration jobManagerConfiguration;
02 StringWriter results=new StringWriter();
03 File tempPBSFile=null;
04 String scriptContent=results.toString().replaceAll("^[ |\t]*\n$","");
05 if(scriptContent.startsWith("\n"))
06 {
07 scriptContent=scriptContent.substring(1);
08 }
09 int number=new SecureRandom().nextInt();
10 number=(number < 0 ? -number : number);
11 tempPBSFile=new File(Integer.toString(number) + jobManagerConfiguratio
12 // tempPBSFile -> the file to write
13 // scriptContent -> the content to write to the file
14 FileUtils.writeStringToFile(tempPBSFile,scriptContent);
```

How useful is this code example in understanding the usage of the writeStringToFile method?

- Not useful at all
- Slightly useful
- Useful

[C] org.apache.commons.io.FileUtils.byteCountToDisplaySize

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

org.apache.commons.io.FileUtils.byteCountToDisplaySize(long)

Example 1 1 private final long expectedByteCount; 2 // expectedByteCount -> the number of bytes 3 FileUtils.byteCountToDisplaySize(expectedByteCount);

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
01 private long snapshotBytes;
02 private long snapshotStart=System.currentTimeMillis();
03 private long bytesPerSecond;
04 final int bytesWritten;
05 snapshotBytes+=bytesWritten;
06 if(System.currentTimeMillis() - snapshotStart >= 1000)
07 {
08 bytesPerSecond=snapshotBytes;
09 }
10 // bytesPerSecond -> the number of bytes
11 FileUtils.byteCountToDisplaySize(bytesPerSecond);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 3

1  /**
2 * WAR file location.
3 */
4 private final transient File war;
5 // this.war.length() -> the number of bytes
6 FileUtils.byteCountToDisplaySize(this.war.length());
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.commons.io.FileUtils.copyFile

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

```
org.apache.commons.io.FileUtils.copyFile(java.io.File,java.io.File)
```

```
Example 1
1 String sourcePath;
2 File source=new File(sourcePath);
3 File tempFile=new File(UUID.randomUUID().toString());
4 // source -> an existing file to copy, must not be null
```

```
5 // tempFile -> the new file, must not be null 6 FileUtils.copyFile(source,tempFile);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
01 private Set<File> files=new HashSet<File>();
02 private Map<String, AntPathMatcherFilter> content=new HashMap<String, An
03 File to:
04 for(File file : files)
06 String ext=FilenameUtils.getExtension(file.getName()).toUpperCase();
07 if(!"ZIP".equals(ext))
09 for (Map.Entry<String, AntPathMatcherFilter> filterEntry : content.entry
10 {
11 AntPathMatcherFilter filter=filterEntry.getValue();
12 if(filter.accept(file.getName()))
14 File target=FileUtils.getFile(to,ArchiveUtils.rewritePath(file.getName
15 // file -> an existing file to copy, must not be null
16 // target -> the new file, must not be null
17 FileUtils.copyFile(file,target);
18 }
19 }
20 }
21 }
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Code Examples for Apache Commons IO

The next code snippets exemplify the usage of the method:

```
org.apache.commons.io.FileUtils.writeStringToFile(java.io.File,java.lan
```

```
Example 1
01  /**
02 * Location of repository.
03 */
04 private final transient String path;
05 @NotNull final String name;
06 @NotNull final String content;
07 final File dir=new File(this.path);
08 final File file=new File(dir,name);
09 // file -> the file to write
10 // content -> the content to write to the file
11 FileUtils.writeStringToFile(file,content);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 2

```
01 @Rule public TemporaryFolder folder=new TemporaryFolder();
02 public static final String REALM="EXAMPLE.COM";
03 public static final String HOSTNAME=KerberosTestUtils.getHostName();
04 EncryptionType encryptionType;
05 ChecksumType checksumType;
06 boolean isTcp;
07 File file=folder.newFile("krb5.conf");
08 String data="";
09 data+="[libdefaults]" + SystemUtils.LINE_SEPARATOR;
10 data+="default_realm = " + REALM + SystemUtils.LINE_SEPARATOR;
11 data+="default_tkt_enctypes = " + encryptionType.getName() + SystemUtils
```

```
12 data+="default tgs enctypes = " + encryptionType.getName() + SystemUti
13 data+="permitted enctypes = " + encryptionType.getName() + SystemUtils
14 data+="default-checksum type = " + checksumType.getName() + SystemUtil
15 if(isTcp)
16 {
17 data+="udp preference limit = 1" + SystemUtils.LINE SEPARATOR;
19 data+="[realms]" + SystemUtils.LINE SEPARATOR;
20 data+=REALM + " = {" + SystemUtils.LINE SEPARATOR;
21 data+="kdc = " + HOSTNAME + ":"+ kdcServer.getTransports()[0].getPort(
22 data+="}" + SystemUtils.LINE SEPARATOR;
23 data+="[domain realm]" + SystemUtils.LINE SEPARATOR;
24 data+="." + Strings.toLowerCase(REALM) + " = "+ REALM+ SystemUtils.LIN
25 data+=Strings.toLowerCase(REALM) + " = " + REALM+ SystemUtils.LINE SEP
26 // file -> the file to write
27 // data -> the content to write to the file
28 FileUtils.writeStringToFile(file,data);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[R] org.apache.commons.lang3.StringUtils.deleteWhitespace

Code Examples for Apache Commons Lang

The next code snippets exemplify the usage of the method:

org.apache.commons.lang3.StringUtils.deleteWhitespace(java.lang.String)

```
Example 1
```

```
1 String expected="<html><head>" + "</head><body>" + "<img src=\"/img1.pn
2 // expected -> the String to delete whitespace from, may be null
3 StringUtils.deleteWhitespace(expected);
```

How useful is this code example in understanding the usage of the deletewhitespace method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2
1 CajaHtmlParser parser;
2 String content="<html><head>" + "</head><body>" + "<img src='/img1.png'
3 HttpResponse resp=new HttpResponseBuilder().setHttpStatusCode(200).setH
4 setResponse(content.getBytes()).create();
5 HttpResponseBuilder builder=new HttpResponseBuilder(parser,resp);
6 // builder.getContent() -> the String to delete whitespace from, may be

How useful is this code example in understanding the usage of the deletewhitespace method?

7 StringUtils.deleteWhitespace(builder.getContent());

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 String content=IOUtils.toString(this.getClass().getClass
```

How useful is this code example in understanding the usage of the deleteWhitespace method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

```
private BeanXStreamConverter beanXmlConverter;
List<String> empty=Lists.newArrayList();
String xml=beanXmlConverter.convertToString(empty);
// xml -> the String to delete whitespace from, may be null
StringUtils.deleteWhitespace(xml);
```

How useful is this code example in understanding the usage of the deletewhitespace method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 5

```
1 StringWriter sw=new StringWriter();
2 // sw.toString() -> the String to delete whitespace from, may be null
3 StringUtils.deleteWhitespace(sw.toString());
```

How useful is this code example in understanding the usage of the deletewhitespace method?

- Not us eful at all
- Slightly useful
- Useful
- Very us eful

Example 6

```
1 String expected=IOUtils.toString(this.getClass().getClassLoader().getRe
2 "org/apache/shindig/gadgets/rewrite/rewritebasic-expected.css"
3 expected=expected.replace("refresh=3600","refresh=86400");
4 // expected -> the String to delete whitespace from, may be null
5 StringUtils.deleteWhitespace(expected);
```

How useful is this code example in understanding the usage of the deleteWhitespace method? Not us eful at all Slightly useful Useful Very useful [R] org.apache.commons.lang3.StringEscapeUtils.escapeEcmaScript **Code Examples for Apache Commons Lang** The next code snippets exemplify the usage of the method: org.apache.commons.lang3.StringEscapeUtils.escapeEcmaScript(java.lang.S **Example 1** 1 String function; 2 // function -> String to escape values in, may be null 3 StringEscapeUtils.escapeEcmaScript(function); How useful is this code example in understanding the usage of the escapeEcmaScript method? Not useful at all Slightly useful Useful Very us eful

```
Example 2
1 for(String bundle : bundles)
2 {
3 // bundle -> String to escape values in, may be null
```

```
4 StringEscapeUtils.escapeEcmaScript(bundle);
5 }
```

How useful is this code example in understanding the usage of the escapeEcmaScript method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 3

```
1 private final Map<String,String> unparseableCruftMsgs;
2 HttpServletRequest request;
3 HttpRequest rcr=buildHttpRequest(request);
4 String container=rcr.getContainer();
5 // this.unparseableCruftMsgs.get(container) -> String to escape values
6 StringEscapeUtils.escapeEcmaScript(this.unparseableCruftMsgs.get(container))
```

How useful is this code example in understanding the usage of the escapeEcmaScript method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

How useful is this code example in understanding the usage of the escapeEcmaScript method? Not useful at all Slightly useful Useful Very useful Example 5 1 private static final Uri RESOURCE 1=Uri.parse("http:// example.com/one. 2 // RESOURCE 1.toString() -> String to escape values in, may be null 3 StringEscapeUtils.escapeEcmaScript(RESOURCE 1.toString()); How useful is this code example in understanding the usage of the escapeEcmaScript method? Not useful at all Slightly useful Useful Very us eful Example 6 1 Uri resource; 2 // resource.toString() -> String to escape values in, may be null 3 StringEscapeUtils.escapeEcmaScript(resource.toString()); How useful is this code example in understanding the usage of the escapeEcmaScript method? Not useful at all Slightly useful Useful Very useful

[R] org.apache.commons.lang3.StringUtils.split

Code Examples for Apache Commons Lang

The next code snippets exemplify the usage of the method:

```
org.apache.commons.lang3.StringUtils.split(java.lang.String,char)
```

```
Example 1
1 String basicHttpFetcherProxy;
2 // basicHttpFetcherProxy -> the String to parse, may be null
3 // ':' -> the character used as the delimiter
4 StringUtils.split(basicHttpFetcherProxy,':');
```

How useful is this code example in understanding the usage of the split method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
01 String content;
02 // content -> the String to parse, may be null
03 // ';' -> the character used as the delimiter
04 String[] parts=StringUtils.split(content,';');
05 if(parts.length >= 2)
06 {
07 for(int i=1; i < parts.length; i++)
08 {
09 String parameterAndValue=parts[i].trim().toLowerCase();
10 StringUtils.split(parameterAndValue,'=');
11 }
12 }</pre>
```

How useful is this code example in understanding the usage of the split method?

Not us eful at all

Slightlyuseful

- Useful
- Very us eful

```
Example 3
1 public static final String HEADERS_PARAM="headers";
2 HttpServletRequest request;
3 String headerData=getParameter(request, HEADERS_PARAM,"");
4 // headerData -> the String to parse, may be null
5 // '&' -> the character used as the delimiter
6 StringUtils.split(headerData,'&');
```

How useful is this code example in understanding the usage of the split method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4

1 Collection<String> values=headers.get(HttpHeaders.CONTENT_TYPE);
2 if(!values.isEmpty())
3 {
4 String contentType=values.iterator().next();
5 // contentType -> the String to parse, may be null
6 // ';' -> the character used as the delimiter
7 StringUtils.split(contentType, ';');
8 }
```

How useful is this code example in understanding the usage of the split method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
1 String path;
2 // path.substring(1) -> the String to parse, may be null
3 // '/' -> the character used as the delimiter
4 StringUtils.split(path.substring(1),'/');
```

How useful is this code example in understanding the usage of the split method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 6
1 String cacheControl=getHeader(HttpHeaders.CACHE_CONTROL);>
2 // cacheControl -> the String to parse, may be null
3 // ',' -> the character used as the delimiter
4 StringUtils.split(cacheControl,',');
```

How useful is this code example in understanding the usage of the split method?

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

[C] org.apache.commons.lang3.StringUtils.deleteWhitespace

Code Examples for Apache Commons Lang

The next code snippets exemplify the usage of the method:

org.apache.commons.lang3.StringUtils.deleteWhitespace(java.lang.String)

Example 1

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 2

```
1 private BeanXStreamConverter beanXmlConverter;
2 List<String> empty=Lists.newArrayList();
3 String xml=beanXmlConverter.convertToString(empty);
4 // xml -> the String to delete whitespace from, may be null
5 StringUtils.deleteWhitespace(xml);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 3

```
1 StringWriter sw=new StringWriter();
2 // sw.toString() -> the String to delete whitespace from, may be null
3 StringUtils.deleteWhitespace(sw.toString());
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 4

- 1 String expected="<html><head>" + "</head><body>" + "<img src=\"/img1.pn
- 2 // expected -> the String to delete whitespace from, may be null
- 3 StringUtils.deleteWhitespace(expected);

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.commons.lang3.StringEscapeUtils.escapeEcmaScript

Code Examples for Apache Commons Lang

The next code snippets exemplify the usage of the method:

org.apache.commons.lang3.StringEscapeUtils.escapeEcmaScript(java.lang.S

Example 1

- 1 String function;
- 2 // function -> String to escape values in, may be null
- 3 StringEscapeUtils.escapeEcmaScript(function);

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 for(String bundle : bundles)
2 {
3 // bundle -> String to escape values in, may be null
4 StringEscapeUtils.escapeEcmaScript(bundle);
5 }
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 3
01 private final FeatureRegistryProvider featureRegistryProvider;
02 JsUri jsUri;
03 FeatureRegistry registry=null;
04 String repository=jsUri.getRepository();
05 try
06 {
07 registry=featureRegistryProvider.get(repository);
08 }
09 if(registry != null)
10 {
11 List<String> features=registry.getFeatures(jsUri.getLibs());
12 for(String feature : features)
13 {
14 // feature -> String to escape values in, may be null
15 StringEscapeUtils.escapeEcmaScript(feature);
16 }
17 }
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.commons.lang3.StringUtils.split

Code Examples for Apache Commons Lang

The next code snippets exemplify the usage of the method:

```
org.apache.commons.lang3.StringUtils.split(java.lang.String,char)
```

```
Example 1

1 String cacheControl=getHeader(HttpHeaders.CACHE_CONTROL);
2 // chacheControl -> the String to parse, may be null
3 // ',' -> the character used as the delimiter
4 StringUtils.split(cacheControl,',');
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 String str;
2 // str -> the String to parse, may be null
3 // '.' -> the character used as the delimiter
4 StringUtils.split(str,'.');
```

Not understandable at all

- Slightly understandable
- Understandable
- Very understandable

```
Example 3
1 String browserKey;
2 String[] entries=StringUtils.split(browserKey,',');
3 for(String entry : entries)
4 {
5 entry=entry.trim();
6 // entry -> the String to parse, may be null
7 // '-' -> the character used as the delimiter
8 StringUtils.split(entry,'-');
9 }
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[R] org.apache.http.client.HttpClient.execute

Code Examples for Apache HttpClient

The next code snippets exemplify the usage of the method:

```
org.apache.http.client.HttpClient.execute(org.apache.http.client.method
```

```
Example 1
1 private HttpClient client;
2 private HttpPost post;
3 // post -> the request to execute
```

```
4 client.execute(post);
```

How useful is this code example in understanding the usage of the execute method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
1 private URI serviceRoot;
2 final HttpPost post=new HttpPost(serviceRoot);
3 HttpClient client=new DefaultHttpClient();
4 // post -> the request to execute
5 client.execute(post);
```

How useful is this code example in understanding the usage of the execute method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 HttpClient client=new DefaultHttpClient();
2 HttpPost post=new HttpPost("http:// localhost:9998/controller/router");
3 // post -> the request to execute
4 client.execute(post);
```

How useful is this code example in understanding the usage of the execute method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4
1 private final org.apache.http.client.HttpClient backend;
2 HttpUriRequest request;
3 // request -> the request to execute
4 backend.execute(request);
```

How useful is this code example in understanding the usage of the execute method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
1 protected String endpoint;
2 HttpClient httpClient=new DefaultHttpClient();
3 HttpPost method=new HttpPost(endpoint + "/oauth/token");
4 // method -> the request to execute
5 httpClient.execute(method);
```

How useful is this code example in understanding the usage of the execute method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 6
1 HttpClient client;
2 HttpPost post=new HttpPost("http:// localhost:9998/controller/router");
3 // post -> the request to execute
4 client.execute(post);
```

Not us eful at all	
Slightly useful	
○ Useful	
Very us eful	
[R] org.apache.http.client.methods.HttpRequestBase.getURI	
Code Examples for Apache HttpClient	
The next code snippets exemplify the usage of the method:	
org.apache.http.client.methods.HttpRequestBase.getURI()	
Example 1	
1 HttpUriRequest request;	
2 request.getURI();	
How useful is this code example in understanding the usage of the geturi method?	
Not useful at all	
Slightly useful	
○ Useful	
Very useful	
Example 2	
1 private HttpUriRequest uriRequest;	
<pre>2 uriRequest=mock(HttpUriRequest.class);</pre>	

How useful is this code example in understanding the usage of the execute method?

How useful is this code example in understanding the usage of the geturi method?

3 uriRequest.getURI();

- Not useful at all Slightly useful
- Useful
- Very us eful

```
Example 3
1 String path;
2 String method;
3 HttpUriRequest request=setupRequest(path,method,vars);
4 request.getURI();
```

How useful is this code example in understanding the usage of the geturi method?

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

[R] org.apache.http.client.methods.HttpEntityEnclosingRequestBase.setEntity

Code Examples for Apache HttpClient

The next code snippets exemplify the usage of the method:

org.apache.http.client.methods.HttpEntityEnclosingRequestBase.setEntity org.apache.http.HttpEntity)

```
Example 1
```

```
1 private HttpPost post;
2 List<NameValuePair> formparams=new ArrayList<NameValuePair>();
3 UrlEncodedFormEntity postEntity=new UrlEncodedFormEntity(formparams,"UT
4 post.setEntity(postEntity);
```

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2
1 InputStream data;
2 long contentLength;
3 String uri;
4 InputStreamEntity e=new InputStreamEntity(data, contentLength);
5 HttpPut hp=new HttpPut(uri);
6 hp.setEntity(e);

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 InputStream content;
2 String uri;
3 InputStreamEntity e=new InputStreamEntity(content,-1);
4 HttpPost post=new HttpPost(uri);
5 post.setEntity(e);
```

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 4
1 String content;
2 HttpEntityEnclosingRequestBase request;
3 StringEntity e=new StringEntity(content,"UTF-8");
4 request.setEntity(e);
```

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
1 private String url="https:// rest.interfax.net/outbound/faxes?faxNumber
2 private String to;
3 private URI content;
4 HttpPost post=new HttpPost(url + to);
5 File file=new File(content);
6 FileEntity fileEntity=new FileEntity(file,URLConnection.guessContentTyp
7 post.setEntity(fileEntity);
```

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 6
1 protected final List<NameValuePair> params=new ArrayList<NameValuePair>
2 final HttpPost post=new HttpPost(uri);
3 post.setEntity(new UrlEncodedFormEntity(params));
```

How useful is this code example in understanding the usage of the setEntity method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[C] org.apache.http.client.HttpClient.execute

Code Examples for Apache HttpClient

The next code snippets exemplify the usage of the method:

org.apache.http.client.HttpClient.execute(org.apache.http.client.method

Example 1

```
private final HaxelibRepositoryLayout layout;
private final HttpClient httpClient;
for(ArtifactDownload artifactDownload: haxelibArtifacts)
{
  Artifact artifact=artifactDownload.getArtifact();
  String uri="http:// lib.haxe.org/" + layout.getPath(artifact.getArtifact // newHttpGet(uri) -> the request to execute
  httpClient.execute(new HttpGet(uri));
}
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
1 String redirectUri;
2 String sessionState;
3 HttpClient client=new DefaultHttpClient();
4 HttpGet get=new HttpGet(getLogoutUrl(redirectUri,sessionState));
5 // get -> the request to execute
6 client.execute(get);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 3

```
01 private URI serviceRoot;
02 List<NameValuePair> qparams=new ArrayList<NameValuePair>();
03 try
04 {
05 URI uri=URIUtils.createURI(serviceRoot.getScheme(),serviceRoot.getHost
06 serviceRoot.getPath(),URLEncodedUtils.format(qparams,"UTF-8"),null);
07 new HttpGet(uri);
08 HttpClient client=new DefaultHttpClient();
09 // httpget -> the request to execute
10 client.execute(httpget);
11 }
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.http.client.methods.HttpRequestBase.getURI

Code Examples for Apache HttpClient

The next code snippets exemplify the usage of the method:

```
org.apache.http.client.methods.HttpRequestBase.getURI()
```

```
Example 1
1 HttpUriRequest request;
2 request.getURI();
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 private HttpUriRequest uriRequest;
2 uriRequest=mock(HttpUriRequest.class);
3 uriRequest.getURI();
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.http.client.methods.HttpEntityEnclosingRequestBase.setEntity

Code Examples for Apache HttpClient

The next code snippets exemplify the usage of the method:

org.apache.http.client.methods.HttpEntityEnclosingRequestBase.setEntity

Example 1

- 1 private HttpPost post;
- 2 List<NameValuePair> formparams=new ArrayList<NameValuePair>();
- 3 UrlEncodedFormEntity postEntity=new UrlEncodedFormEntity(formparams,"UT
- 4 post.setEntity(postEntity);

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 2

```
1 InputStream content;
2 String uri;
3 InputStreamEntity e=new InputStreamEntity(content,-1);
4 HttpPost post=new HttpPost(uri);
5 post.setEntity(e);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

- 1 protected String endpoint;
- 2 String uri;

```
3 String fullUri=endpoint + "/api/rest/v1/" + uri;
4 HttpPost method=new HttpPost(fullUri);
5 method.setEntity(mapToFormEntity(params));
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 4

```
private String account;
String to;
String body;
try

{
   HttpPost post=new HttpPost("https://api.esendex.com/v1.0/messagedispat
   StringEntity stringEntity=new StringEntity(createXML(to,body,account));
   post.setEntity(stringEntity);
}
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[R] org.apache.poi.ss.usermodel.Row.createCell

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

```
org.apache.poi.ss.usermodel.Row.createCell(int)
```

```
Example 1
01 final Object[] values=getValues();
02 final Row row=getUpdateCallback().createRow(getTable().getName());
03 final Column[] columns=getColumns();
04 for(int i=0; i < columns.length; i++)
05 {
06 Object value=values[i];
07 if(value != null)
08 {
09 int columnNumber=columns[i].getColumnNumber();
10 // columnNumber -> - the column number this cell represents
11 row.createCell(columnNumber);
12 }
13 }
```

How useful is this code example in understanding the usage of the createCell method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
01 private final SpecificationLoader specificationLoader;
02 private final AdapterManager adapterManager;
03 @SuppressWarnings({"unchecked","deprecation"}) private static final Fi
04
           VISIBLE PROPERTIES=Filters.and(ObjectAssociation.Filters.PROPE
0.5
           ObjectAssociation.Filters.staticallyVisible(Where.STANDALONE T
06 final ObjectSpecification objectSpec=specificationLoader.loadSpecifica
07 final List<ObjectAdapter> adapters=Lists.transform(domainObjects,
08 ObjectAdapter.Functions.adapterForUsing(adapterManager));
09 @SuppressWarnings("deprecation") final List<? extends ObjectAssociatio
10
           objectSpec.getAssociations(VISIBLE PROPERTIES);
11 final Workbook wb=new XSSFWorkbook();
12 final String sheetName=cls.getSimpleName();
13 final Sheet sheet=wb.createSheet(sheetName);
14 final ExcelConverter.RowFactory rowFactory=new RowFactory(sheet);
15 final Row headerRow=rowFactory.newRow();
16 int i=0;
17 for(ObjectAssociation property : propertyList)
18 {
19 // (short)i++ -> - the column number this cell represents
20 final Cell cell=headerRow.createCell((short)i++);
21 }
```

How useful is this code example in understanding the usage of the createCell method?

- Not us eful at all
- Slightly useful
- Useful
- Very us eful

Example 3

```
1 Row row;
2 CellDescriptor cellDescriptor;
3 // cellDescriptor.getColumnNumber() -> - the column number this cell re
4 row.createCell(cellDescriptor.getColumnNumber());
```

How useful is this code example in understanding the usage of the createCell method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

How useful is this code example in understanding the usage of the createCell method?

- Not us eful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
01 int i=0;
02 for(Collection<Object> row : data)
03 {
04 Row excelRow=sheet.getNativeSheet().createRow(i);
05 int j=0;
06 for(Object column : row)
07 {
08 // j -> - the column number this cell represents
09 excelRow.createCell(j);
10 }
11 }
```

How useful is this code example in understanding the usage of the createCell method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[R] org.apache.poi.hssf.usermodel.HSSFWorkbook.createSheet

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

org.apache.poi.hssf.usermodel.HSSFWorkbook.createSheet(java.lang.String

```
Example 1
1 HSSFWorkbook wb=new HSSFWorkbook();
2 // "Sheet" -> sheetname to set for the sheet.
3 wb.createSheet("Sheet");
```

How useful is this code example in understanding the usage of the createSheet method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
1 HSSFWorkbook wb;
2 String sheetName;
3 // sheetName -> sheetname to set for the sheet.
4 wb.createSheet(sheetName);
```

How useful is this code example in understanding the usage of the createSheet method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 protected HSSFWorkbook workbook=new HSSFWorkbook();
2 String titleName;
3 // titleName -> sheetname to set for the sheet.
4 workbook.createSheet(titleName);
```

How useful is this code example in understanding the usage of the createSheet method?

Not useful at all

- Slightly useful
- Useful
- Very us eful

```
Example 4
1 private String sheetName="new sheet";
2 HSSFWorkbook wb=new HSSFWorkbook();
3 // sheetName -> sheetname to set for the sheet.
4 wb.createSheet(sheetName);
```

How useful is this code example in understanding the usage of the createSheet method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5

01  /**
02 * the xls workbook
03 */
04 private HSSFWorkbook workBook;
05  /**
06 * the name of the sheet that holds the report
07 */
08 private String sheetName="Report";
09 workBook=new HSSFWorkbook();
10 // sheetName -> sheetname to set for the sheet.
11 workBook.createSheet(sheetName);
```

How useful is this code example in understanding the usage of the createSheet method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

```
org.apache.poi.ss.usermodel.Workbook.write(java.io.OutputStream)
```

```
Example 1
01 private File saveFile=null;
02 private Boolean writeRequired=false;
03 private Workbook workbook=null;
04 if(saveFile != null && writeRequired)
05 {
06 FileOutputStream fileOut;
07 try
08 {
09 File newFile=File.createTempFile("xlsdriver","xlsx");
10 fileOut=new FileOutputStream(newFile);
11 // fileOut -> - the java OutputStream you wish to write to
12 workbook.write(fileOut);
13 }
14 }
```

How useful is this code example in understanding the usage of the write method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
1 File file;
2 Workbook workbook;
3 FileOutputStream fileOut=null;
4 fileOut=new FileOutputStream(file);
5 // fileOut -> - the java OutputStream you wish to write to workbook.write(fileOut);
```

How useful is this code example in understanding the usage of the write method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 private final Workbook workbook;
2 ByteArrayOutputStream baos=new ByteArrayOutputStream();
3 // baos -> - the java OutputStream you wish to write to
4 workbook.write(baos);
```

How useful is this code example in understanding the usage of the write method?

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

```
Example 4
01 private String templetFile;
02 private Map<String,Object> beans=Maps.newHashMap();
03 try
04 {
05 OutputStream out=response.getOutputStream();
06 InputStream is=new BufferedInputStream(new FileInputStream(templetFile
07 XLSTransformer transformer=new XLSTransformer();
08 Workbook workBook=transformer.transformXLS(is,beans);
09 // out -> - the java OutputStream you wish to write to
10 workBook.write(out);
```

How useful is this code example in understanding the usage of the write method?

Not useful at all

11 }

Slightly useful

- Useful
- Very us eful

```
Example 5
```

```
1 protected Workbook workbook;
2 protected OutputStream outputStream;
3 // outputStream -> - the java OutputStream you wish to write to
4 workbook.write(outputStream);
```

How useful is this code example in understanding the usage of the write method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 6

```
1 private final OutputStream outputStream;
2 // outputStream -> - the java OutputStream you wish to write to
3 getWorkbook().write(outputStream);
```

How useful is this code example in understanding the usage of the write method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[C] org.apache.poi.ss.usermodel.Row.createCell

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

Example 1 01 private static final String XLS="odatajclient-perf.xls"; 02 **final** Map<String,Map<String,Double>> testData=**new** TreeMap<String,Map<S 03 final HSSFWorkbook workbook=new HSSFWorkbook(new FileInputStream(args[04 File.separator+ "test"+ File.separator+ "resources"+ File.sepa 05 for(Map.Entry<String,Map<String,Double>> entry : testData.entrySet()) 06 { 07 **final** Sheet sheet=workbook.getSheet(entry.getKey()); 08 **int** rows=0; 09 for (Map.Entry < String, Double > subentry : entry.getValue().entrySet()) 10 { 11 final Row row=sheet.createRow(rows++); $12 // 0 \rightarrow$ - the column number this cell represents 13 row.createCell(0); 14 } 15 }

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
01 int i=0;
02 for(Collection<Object> row : data)
03 {
04 Row excelRow=sheet.getNativeSheet().createRow(i);
05 int j=0;
06 for(Object column : row)
07 {
08 // j -> - the column number this cell represents
09 excelRow.createCell(j);
10 }
11 }
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.poi.hssf.usermodel.HSSFWorkbook.createSheet

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

org.apache.poi.hssf.usermodel.HSSFWorkbook.createSheet(java.lang.String

```
Example 1
1 private String sheetName="new sheet";
2 HSSFWorkbook wb=new HSSFWorkbook();
3 // sheetName -> sheetname to set for the sheet.
4 wb.createSheet(sheetName);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 HSSFWorkbook wb;
2 String sheetName;
3 // sheetName -> sheetname to set for the sheet.
4 wb.createSheet(sheetName);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.poi.ss.usermodel.Workbook.write

Code Examples for Apache POI

The next code snippets exemplify the usage of the method:

```
org.apache.poi.ss.usermodel.Workbook.write(java.io.OutputStream)
```

Example 1 1 private final Workbook workbook; 2 ByteArrayOutputStream baos=new ByteArrayOutputStream(); 3 // baos -> - the java OutputStream you wish to write to 4 workbook.write(baos);

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
01 private String templetFile;
02 private Map<String,Object> beans=Maps.newHashMap();
03 try
04 {
05 OutputStream out=response.getOutputStream();
```

```
06 InputStream is=new BufferedInputStream(new FileInputStream(templetFile
07 XLSTransformer transformer=new XLSTransformer();
08 Workbook workBook=transformer.transformXLS(is,beans);
09 // out -> - the java OutputStream you wish to write to
10 workBook.write(out);
11 }
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 3
1 private final OutputStream outputStream;
2 // outputStream -> - the java OutputStream you wish to write to
3 getWorkbook().write(outputStream);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[R] org.apache.tika.sax.XHTMLContentHandler.characters

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

```
org.apache.tika.sax.XHTMLContentHandler.characters(java.lang.String)
```

Example 1

```
01 private final boolean extractAnnotationText;
02 private final XHTMLContentHandler handler;
03 PDPage page;
04 try
05 {
06 if(extractAnnotationText)
08 for (Object o : page.getAnnotations())
09 {
10 if((o instanceof PDAnnotation) && PDAnnotationMarkup.SUB TYPE FREETEXT
11
           (PDAnnotation)o).getSubtype()))
12 {
13 PDAnnotationMarkup annot=(PDAnnotationMarkup)o;
14 String subject=annot.getTitlePopup();
15 handler.characters(subject);
16 }
17 }
18 }
19 }
```

How useful is this code example in understanding the usage of the characters method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2

```
1 private final XHTMLContentHandler handler;
2 String text;
3 handler.characters(text);
```

How useful is this code example in understanding the usage of the characters method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 3
1 private final XHTMLContentHandler handler;
2 handler.characters(getWordSeparator());
```

How useful is this code example in understanding the usage of the characters method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

- 1 InputStream stream;
- 2 ContentHandler handler;
- 3 Metadata metadata;
- 4 PdfReader reader=new PdfReader(stream);
- 5 XHTMLContentHandler xhtml=new XHTMLContentHandler(handler, metadata);
- 6 xhtml.characters(new String(PDFParser.extractText(reader).getBytes("UTF

How useful is this code example in understanding the usage of the characters method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 5

- 1 private final XHTMLContentHandler handler;
- 2 TextPosition text;
- 3 handler.characters(text.getCharacter());

How useful is this code example in understanding the usage of the characters method?

Not useful at all

- Slightly useful
 Useful
- Very us eful

[R] org.apache.tika.mime.MediaType.parse

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

```
org.apache.tika.mime.MediaType.parse(java.lang.String)
```

Example 1

- 1 String contentType;
- 2 // contentType -> media type string to be parsed
- 3 MediaType.parse(contentType);

How useful is this code example in understanding the usage of the parse method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2

```
1 // "application/x-internet-archive" -> media type string to be parsed
2 MediaType.parse("application/x-internet-archive");
```

How useful is this code example in understanding the usage of the parse method?

- Not us eful at all
- Slightly useful
- Useful

```
Example 3
01 IdentificationResult r=results.get(0);
02 String mimeType=null;
03 String mimeTypeString=r.getMimeType();
04 if(mimeTypeString!= null &&!"".equals(mimeTypeString.trim()))
05 {
06 String[] mimeTypeList=mimeTypeString.split(", ");
07 mimeType=mimeTypeList[0];
08 if(mimeType.indexOf('/') == -1)
09 {
10 mimeType="application/" + mimeType;
11 }
12 }
13 // mimeType -> media type string to be parsed
14 MediaType.parse(mimeType);
```

How useful is this code example in understanding the usage of the parse method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

```
1 Metadata metadata;
```

```
2 // metadata.get(Metadata.CONTENT_TYPE) -> media type string to be parse
```

3 MediaType.parse(metadata.get(Metadata.CONTENT_TYPE));

How useful is this code example in understanding the usage of the parse method?

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

Example 5 1 Metadata metadata; 2 String providedType=metadata.get(Metadata.CONTENT_TYPE); 3 // providedType -> media type string to be parsed 4 MediaType.parse(providedType);

How useful is this code example in understanding the usage of the parse method?

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

[R] org.apache.tika.metadata.Metadata.set

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

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

```
Example 1
```

```
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</pre>
```

How useful is this code example in understanding the usage of the set method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
1 private final Metadata metadata;
2 TemporaryResources tmp=new TemporaryResources();
3 File file=tmp.createTemporaryFile();
4 ISO9660FS iso=new ISO9660FS(file,true);
5 ISO9660VolumeDescriptorSet vds=iso.getVolumeDescriptorSet();
6 // "iso:encoding" -> the metadata name.
7 // vds.getEncoding() -> the metadata value, or <code>null</code>
8 metadata.set("iso:encoding",vds.getEncoding());
```

How useful is this code example in understanding the usage of the set method?

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

```
Example 3
1 String fileName;
2 final Metadata meta=new Metadata();
3 // Metadata.RESOURCE_NAME_KEY -> the metadata name.
4 // fileName -> the metadata value, or <code>null</code>
5 meta.set(Metadata.RESOURCE_NAME_KEY, fileName);
```

How useful is this code example in understanding the usage of the set method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

```
01 public static final String EXT_MIME_TYPE="Extended-MIME-Type";
```

02 Metadata metadata;

```
03 String providedType=metadata.get(Metadata.CONTENT TYPE);
04 MediaType tikaType=null;
05 if(providedType == null)
07 tikaType=MediaType.parse(metadata.get(Metadata.CONTENT TYPE));
08 }
09 tikaType=MediaType.parse(providedType);
10 HashMap<String, String> hm=new HashMap<String, String>();
11 String software=null;
12 if(metadata.get(Metadata.APPLICATION NAME) != null)
14 software=metadata.get(Metadata.APPLICATION NAME);
15 }
16 if(metadata.get(Metadata.APPLICATION VERSION) != null)
18 software+=" " + metadata.get(Metadata.APPLICATION VERSION);
19 }
20 if(metadata.get("pdf:producer") != null)
22 software=metadata.get("pdf:producer");
23 }
24 if(metadata.get("Software") != null)
26 software=metadata.get("Software");
27 }
28 if(metadata.get(Metadata.SOFTWARE) != null)
29 {
30 software=metadata.get(Metadata.SOFTWARE);
31 }
32 if(metadata.get("generator") != null)
33 {
34 software=metadata.get("generator");
35 }
36 String png textentry=metadata.get("tEXt tEXtEntry");
37 if(png textentry != null && png textentry.contains("keyword=Software,
38 {
39 software=png textentry.replace("keyword=Software, value=","");
40 }
41 if(software != null)
43 hm.put("software", software);
44 }
45 if(metadata.get("pdf:creator") != null)
47 hm.put("source", metadata.get("pdf:creator"));
48 }
49 if(metadata.get("pdf:version") != null)
50 {
51 hm.put("version", metadata.get("pdf:version"));
52 }
53 tikaType=new MediaType(tikaType,hm);
54 // EXT MIME TYPE -> the metadata name.
55 // tikaType.toString() -> the metadata value, or <code>null</code>
56 metadata.set(EXT MIME TYPE, tikaType.toString());
```

How useful is this code example in understanding the usage of the set method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 5
01 PdfReader reader;
02 Metadata metadata;
03 try
04 {
05 byte[] xmpmd=reader.getMetadata();
06 if(xmpmd != null)
07 {
08 XMPMetadata xmp=XMPMetadata.load(new ByteArrayInputStream(xmpmd));
09 XMPSchemaPDFA pdfaxmp=(XMPSchemaPDFA) xmp.getSchemaByClass(XMPSchemaPDF
10 // "pdfaid:part" -> the metadata name.
11 // pdfaxmp.getPart() -> the metadata value, or <code>null</code>
12 metadata.set("pdfaid:part",pdfaxmp.getPart());
13 }
14 }
```

How useful is this code example in understanding the usage of the set method?

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

```
01 PdfReader reader;
02 Metadata metadata;
03 try
04 {
05 byte[] xmpmd=reader.getMetadata();
06 if(xmpmd != null)
```

```
07 {
08 XMPMetadata xmp=XMPMetadata.load(new ByteArrayInputStream(xmpmd));
09 XMPSchemaPDFA pdfaxmp=(XMPSchemaPDFA)xmp.getSchemaByClass(XMPSchemaPDF
10 if(pdfaxmp != null)
11 {
12 String version="A-" + pdfaxmp.getPart() + pdfaxmp.getConformance().toL
13 // "pdf:version" -> the metadata name.
14 // version -> the metadata value, or <code>null</code>
15 metadata.set("pdf:version", version);
16 }
17 }
18 }
```

How useful is this code example in understanding the usage of the set method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[C] org.apache.tika.sax.XHTMLContentHandler.characters

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

```
org.apache.tika.sax.XHTMLContentHandler.characters(java.lang.String)
```

```
Example 1
1 private final XHTMLContentHandler handler;
2 String text;
3 handler.characters(text);
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable

Example 2

- 1 private final XHTMLContentHandler handler;
- 2 handler.characters(getWordSeparator());

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 3

- 1 InputStream stream;
- 2 ContentHandler handler;
- 3 Metadata metadata;
- 4 PdfReader reader=new PdfReader(stream);
- 5 XHTMLContentHandler xhtml=new XHTMLContentHandler(handler, metadata);
- 6 xhtml.characters(new String(PDFParser.extractText(reader).getBytes("UTF

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.tika.mime.MediaType.parse

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

```
Example 1
01 IdentificationResult r=results.get(0);
02 String mimeType=null;
03 String mimeTypeString=r.getMimeType();
04 if(mimeTypeString != null && !"".equals(mimeTypeString.trim()))
05 {
06 String[] mimeTypeList=mimeTypeString.split(", ");
07 mimeType=mimeTypeList[0];
08 if (mimeType.indexOf('/') == -1)
10 mimeType="application/" + mimeType;
11 }
12 }
13 if(mimeType != null && !"".equals(mimeType))
14 {
15 }
16 String id="puid-" + r.getPuid().replace("/","-");
17 // "application/x-"+id \rightarrow media type string to be parsed
18 MediaType.parse("application/x-" + id);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 String expected;
2 // expected -> media type string to be parsed
3 MediaType.parse(expected);
```

- Not understandable at all
- Slightly understandable
- Understandable

```
Very understandable
```

```
Example 3
1 // "application/pdf" -> media type string to be parsed
2 MediaType.parse("application/pdf");
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 4

1 // "application/x-iso9660-image" -> media type string to be parsed
2 MediaType.parse("application/x-iso9660-image");

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.tika.metadata.Metadata.set

Code Examples for Apache Tika

The next code snippets exemplify the usage of the method:

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

4

Example 1 1 Metadata metadata; 2 PdfReader reader; 3 // "pdf:tampered" -> the metadata name. 4 // ""+reader.isTampered() -> the metadata value, or <code>null</code> 5 metadata.set("pdf:tampered","" + reader.isTampered());

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
```

```
01 PdfReader reader;
02 Metadata metadata;
03 try
04 {
05 byte[] xmpmd=reader.getMetadata();
06 if(xmpmd != null)
07 {
08 XMPMetadata xmp=XMPMetadata.load(new ByteArrayInputStream(xmpmd));
09 XMPSchemaPDFA pdfaxmp=(XMPSchemaPDFA)xmp.getSchemaByClass(XMPSchemaPDF
10 // "pdfaid:conformance" -> the metadata name.
11 // pdfaxmp.getConformance() -> the metadata value, or <code>null</code
12 metadata.set("pdfaid:conformance",pdfaxmp.getConformance());
13 }
14 }</pre>
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

\[\(\)

Example 3

```
private static PreservationParser pika=new PreservationParser();
String tikaType=MediaType.OCTET_STREAM.toString();
Metadata md=new Metadata();
tikaType=pika.getDetector().detect(TikaInputStream.get(payload,md),md).
// Metadata.CONTENT_TYPE -> the metadata name.
// tikaType.toString() -> the metadata value, or <code>null</code>
md.set(Metadata.CONTENT_TYPE, tikaType.toString());
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[R] org.apache.xerces.dom.Nodelmpl.appendChild

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

```
org.apache.xerces.dom.NodeImpl.appendChild(org.w3c.dom.Node)
```

Example 1

```
1 CoreDocumentImpl document;
2 ElementImpl element=new ElementImpl(document, "jeeapplicationserver");
```

3 ElementImpl jmsconnectionfactories=new ElementImpl(document,"jmsconnect

4 element.appendChild(jmsconnectionfactories);

How useful is this code example in understanding the usage of the appendChild method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

```
Example 2
1 CoreDocumentImpl document;
2 ElementImpl groups=new ElementImpl(document, "groups");
3 for(Iterator groupIterator=this.getGroups().iterator(); groupIterator.h
4 {
5 Group group=(Group)groupIterator.next();
6 groups.appendChild(group.toDOMElement(document));
7 }
```

How useful is this code example in understanding the usage of the appendChild method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 3

```
1 CoreDocumentImpl document;
```

- 2 ElementImpl shutdowncommand=new ElementImpl(document, "shutdowncommand")
- 3 CDATASectionImpl shutdowncommandContent=new CDATASectionImpl(document,t
- 4 shutdowncommand.appendChild(shutdowncommandContent);

How useful is this code example in understanding the usage of the appendChild method?

- Not us eful at all
- Slightly useful
- Useful
- Very us eful

Example 4

1 CoreDocumentImpl document;

```
2 ElementImpl element=new ElementImpl(document,"environment");
3 element.appendChild(this.getJEEApplicationServers().toDOMElement(document);
```

How useful is this code example in understanding the usage of the appendChild method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 5

```
1 CoreDocumentImpl document;
2 ElementImpl updateplan=new ElementImpl(document, "updateplan");
3 for(Iterator updatePlanIterator=this.getUpdatePlan().iterator(); update
4 {
5 Object item=updatePlanIterator.next();
6 updateplan.appendChild(((Location)item).toDOMElement(document));
7 }
```

How useful is this code example in understanding the usage of the appendChild method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[R] org.apache.xerces.parsers.AbstractSAXParser.setFeature

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

org.apache.xerces.parsers.AbstractSAXParser.setFeature(java.lang.String

Example 1

How useful is this code example in understanding the usage of the setFeature method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2

```
final DomNode parent;
final HtmlPage page=(HtmlPage)parent.getPage();
final URL url=page.getWebResponse().getRequestSettings().getUrl();
final HtmlUnitDOMBuilder domBuilder=new HtmlUnitDOMBuilder(parent,url);
// "http://cyberneko.org/html/features/balance-tags/document-fragment"
// true -> The requested state of the feature (true or false).
domBuilder.setFeature("http://cyberneko.org/html/features/balance-tags/
```

How useful is this code example in understanding the usage of the setFeature method?

- Not us eful at all
- Slightly useful
- Useful
- Very us eful

```
1 private static final String FEATURE_AUGMENTATIONS="http:// cyberneko.or
2 // FEATURE_AUGMENTATIONS -> The unique identifier (URI) of the feature.
3 // true -> The requested state of the feature (true or false).
4 setFeature(FEATURE_AUGMENTATIONS, true);
```

How useful is this code example in understanding the usage of the setFeature method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 4

```
1 // "http://cyberneko.org/html/features/balance-tags/ignore-outside-cont
2 // of the feature.
```

3 // IgnoreOutsideContent_ -> The requested state of the feature (true or 4 setFeature("http://cyberneko.org/html/features/balance-tags/ignore-outs

How useful is this code example in understanding the usage of the setFeature method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[R] org.apache.xml.serialize.XMLSerializer.XMLSerializer

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

```
Example 1
1 final File fileName;
2 File projectFile=new File(fileName + ".cbx");
3 OutputStream outStream=new FileOutputStream(projectFile);
4 OutputFormat format=new OutputFormat("xml","UTF-8",true);
5 // outStream -> The output stream to use
6 // format -> The output format to use, null for the default
7 new XMLSerializer(outStream, format);
```

How useful is this code example in understanding the usage of the XMLSerializer method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

Example 2

```
01 String path;
02 try
03 {
04 OutputFormat format=new OutputFormat();
05 if(path.startsWith("http:") || path.startsWith("http:"))
06 {
07 throw new KalumetException("Can't write journal file over a HTTP URL")
08 }
09 if(path.startsWith("file:") || path.startsWith("FILE:"))
10 {
11 path=path.substring(5);
12 }
13 }
14 // newFileOutputStream(path) -> The output stream to use
15 // format -> The output format to use, null for the default
16 new XMLSerializer(new FileOutputStream(path), format);
```

How useful is this code example in understanding the usage of the XMLSerializer method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

4

Example 3 1 private String basedir; 2 public final static String MAIN_LOG_FILE="log.xml"; 3 OutputFormat format=new OutputFormat(); 4 // newFileOutputStream(this.basedir+"/"+MAIN_LOG_FILE) -> The output st 5 // format -> The output format to use, null for the default 6 new XMLSerializer(new FileOutputStream(this.basedir + "/" + MAIN_LOG_FI

How useful is this code example in understanding the usage of the **xmlserializer** method?

- Not useful at all
- Slightly useful
- Useful
- Very us eful

[C] org.apache.xerces.dom.Nodelmpl.appendChild

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

```
org.apache.xerces.dom.NodeImpl.appendChild(org.w3c.dom.Node)
```

Example 1

- 1 CoreDocumentImpl document;
- 2 ElementImpl element=new ElementImpl(document, "environment");
- 3 element.appendChild(this.getJEEApplicationServers().toDOMElement(docume

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 CoreDocumentImpl document;
2 ElementImpl element=new ElementImpl(document, "environment");
3 ElementImpl notes=new ElementImpl(document, "notes");
4 element.appendChild(notes);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 3

```
1 CoreDocumentImpl document;
2 ElementImpl logfiles=new ElementImpl(document, "logfiles");
3 for(Iterator logFileIterator=this.getLogFiles().iterator(); logFileIter
4 {
5 LogFile logFile=(LogFile)logFileIterator.next();
6 logfiles.appendChild(logFile.toDOMElement(document));
7 }
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
1 CoreDocumentImpl document;
2 ElementImpl publishers=new ElementImpl(document, "publishers");
```

```
for(Iterator publisherIterator=this.getPublishers().iterator(); publish
{
   Email email=(Email)publisherIterator.next();
   publishers.appendChild(email.toDOMElement(document));
}
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

[C] org.apache.xerces.parsers.AbstractSAXParser.setFeature

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

org.apache.xerces.parsers.AbstractSAXParser.setFeature(java.lang.String

```
Example 1
```

```
final DomNode parent;
final HtmlPage page=(HtmlPage)parent.getPage();
final URL url=page.getWebResponse().getRequestSettings().getUrl();
final HtmlUnitDOMBuilder domBuilder=new HtmlUnitDOMBuilder(parent,url);
// "http://cyberneko.org/html/features/balance-tags/document-fragment"
// of the feature.
// true -> The requested state of the feature (true or false).
domBuilder.setFeature("http://cyberneko.org/html/features/balance-tags/
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 2

```
1 // "http://cyberneko.org/html/features/balance-tags/ignore-outside-cont
2 // of the feature.
3 // IgnoreOutsideContent_ -> The requested state of the feature (true or
4 setFeature("http://cyberneko.org/html/features/balance-tags/ignore-outs")
```

How understandable is this code example?

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Example 3

```
01 private final HtmlPage page_;
02 final DomNode node;
03 this.page_=(HtmlPage)node.getPage();
04 final HTMLParserListener listener=page_.getWebClient().getHTMLParserLi
05 final boolean reportErrors;
06 if(listener != null)
07 {
08 reportErrors=true;
09 }
10 reportErrors=false;
11 // "http:// cyberneko.org/html/features/report-errors" -> The unique i
12 // reportErrors -> The requested state of the feature (true or false).
13 setFeature("http:// cyberneko.org/html/features/report-errors", reportE
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

Code Examples for Apache Xerces

The next code snippets exemplify the usage of the method:

org.apache.xml.serialize.XMLSerializer.XMLSerializer(java.io.OutputStreorg.apache.xml.serialize.OutputFormat)

```
Example 1
01 String path;
02 try
03 {
04 OutputFormat format=new OutputFormat();
05 if(path.startsWith("http:") || path.startsWith("http:"))
06 {
07 throw new KalumetException("Can't write journal file over a HTTP URL")
08 }
09 if(path.startsWith("file:") || path.startsWith("FILE:"))
10 {
11 path=path.substring(5);
12 }
13 }
14 // newFileOutputStream(path) -> The output stream to use
15 // format -> The output format to use, null for the default
16 new XMLSerializer(new FileOutputStream(path), format);
```

- Not understandable at all
- Slightly understandable
- Understandable
- Very understandable

```
Example 2
1 final File fileName;
2 OutputStream outStream=new FileOutputStream(fileName + ".vcproj");
```

2	Output Daymat farmat ages Output Daymat (Herri H. Hump OH. towns)	
3	OutputFormat format= new OutputFormat("xml","UTF-8",true);	
4	// outStream -> The output stream to use	
5	// format -> The output format to use, null for the default	
6	<pre>new XMLSerializer(outStream, format);</pre>	

How understandable is this code example?	How	understar	ndable is	s this	code	example?
--	-----	-----------	-----------	--------	------	----------

Mindows allowed and alloyed and all	
Not understandable at all	

- Slightly understandable
- Understandable
- Very understandable

Comments

Comments

1.	Do you have any comments on the code examples presented in this survey?
	Your opinion is important to us. Please, share your email address if we can contact you to follow up on y of your responses.