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?

| 1 ▾ |

---

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 Xerces

Code Examples for Apache Xerces

The next questions refer to code examples showing the usage of some methods of the Apache Xerces API.

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

    ◯ Yes

    ◯ No

Code Examples for Apache Xerces

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

**org.apache.xerces.xni.parser.XMLParserConfiguration.setErrorHandler(
org.apache.xerces.xni.parser.XMLErrorHandler)**

Example

```
1 private final HtmlPage page_;
2 final DomNode node;
3 final URL url;
4 this.page_=(HtmlPage)node.getPage();
5 final HTMLParserListener listener=page_.getWebClient().getHTMLParserLis
6 // newHTMLErrorHandler(listener,url) -> The error resolver.
7 fConfiguration.setErrorHandler(new HTMLErrorHandler(listener,url));
```

◄ |▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓| ►

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?	◯	◯	◯	◯
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	◯	◯	◯	◯

Please, justify your answers.

```
┌─────────────────────────────────────────────┐
│                                             │
│                                             │
│                                             │
│                                             │
│                                             │
└─────────────────────────────────────────────┘
```

Code Examples for Xerces

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

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

Example
```
1 private final HtmlPage page_;
2 private static final String FEATURE_PARSE_NOSCRIPT="http://cyberneko.or
3          + "parse-noscript-content";
4 final DomNode node;
5 this.page_=(HtmlPage)node.getPage();
6 // FEATURE_PARSE_NOSCRIPT -> The unique identifier (URI) of the feature
7 // !page_.getWebClient().isJavaScriptEnabled() -> The requested state o
8 setFeature(FEATURE_PARSE_NOSCRIPT,!page_.getWebClient().isJavaScriptEna
```

◀ ▶

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

`org.apache.xerces.xni.parser.XMLInputSource.XMLInputSource(java.lang.St`
`java.lang.String,java.lang.String,java.io.Reader,java.lang.Stri`

Example
```
01 final DomNode parent;
```

```
02 final String source;
03 final HtmlPage page=(HtmlPage)parent.getPage();
04 final URL url=page.getWebResponse().getRequestSettings().getUrl();
05 // null -> The public identifier, if known.
06 // url.toString() -> The system identifier. This value should always b
07 //          be relative or absolute. If the system identifier is relati
08 //          identifier should be set.
09 // null -> The base system identifier. This value should always be set
10 //          of the base system identifier, if possible.
11 // newStringReader(source) -> The character stream.
12 // null -> The original encoding of the byte stream used by the reader
13 new XMLInputSource(null,url.toString(),null,new StringReader(source),n
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

org.apache.xml.serialize.XMLSerializer.XMLSerializer(java.io.Writer, org.apache.xml.serialize.OutputFormat)

Example
```
01 private PronomService pronomService;
02 private String filenamePattern;
03 File targetDir;
04 Element sigFile=pronomService.getSignatureFileV1().getElement();
```

```
05 int version=Integer.valueOf(sigFile.getAttribute("Version"));
06 String fileName=String.format(filenamePattern,version);
07 BufferedWriter writer=null;
08 File outputFile=new File(targetDir,fileName);
09 writer=new BufferedWriter(new FileWriter(outputFile));
10 // writer -> The writer to use
11 // newOutputFormat(Method.XML,"UTF-8",true) -> The output format to us
12 new XMLSerializer(writer,new OutputFormat(Method.XML,"UTF-8",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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

**org.apache.xml.serialize.XMLSerializer.XMLSerializer(java.io.OutputStre
org.apache.xml.serialize.OutputFormat)**

Example
```
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);
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

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

Example
```
1 CoreDocumentImpl document;
2 ElementImpl element=new ElementImpl(document,"jeeapplicationserver");
3 ElementImpl jmsconnectionfactories=new ElementImpl(document,"jmsconnect
4 element.appendChild(jmsconnectionfactories);
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

```
```

Code Examples for Apache Xerces

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

org.apache.xml.serialize.BaseMarkupSerializer.asContentHandler()

```
Example
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 Serializer serializer=new XMLSerializer(outStream,format);
6 serializer.asContentHandler();
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

```
```

Code Examples for Apache Xerces

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

```
org.apache.xml.serialize.BaseMarkupSerializer.comment(java.lang.String)
```

Example
```
01 final File fileName;
02 final ProjectDef projectDef;
03 OutputStream outStream=new FileOutputStream(fileName + ".vcproj");
04 OutputFormat format=new OutputFormat("xml","UTF-8",true);
05 XMLSerializer serializer=new XMLSerializer(outStream,format);
06 for(Iterator iter=projectDef.getComments().iterator(); iter.hasNext())
07 {
08 String comment=((CommentDef)iter.next()).getText();
09 serializer.comment(comment);
10 }
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

```
org.apache.xerces.xni.XMLAttributes.getLocalName(int)
```

Example
```
01 private HtmlElement body_;
02 final QName elem;
03 final XMLAttributes attrs;
04 if(body_ != null && "body".equalsIgnoreCase(elem.localpart) && attrs !
```

```
05 {
06 final int length=attrs.getLength();
07 for(int i=0; i < length; ++i)
08 {
09 // i -> The attribute index (zero-based).
10 final String attrName=attrs.getLocalName(i).toLowerCase();
11 }
12 }
```

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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

Please, justify your answers.

Code Examples for Apache Xerces

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

org.apache.xml.serialize.OutputFormat.OutputFormat(java.lang.String, java.lang.String,boolean)

Example
```
1 // "xml" -> The specified output method
2 // "UTF-8" -> The specified encoding
3 // true -> True for pretty printing
4 new OutputFormat("xml","UTF-8",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?	○	○	○	○
How useful are the comments describing the arguments of the aforementioned method in understanding its usage?	○	○	○	○

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.