

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 POI

Code Examples for Apache POI

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

1. Have you contributed to the implementation of the [Apache POI](#) project?
- ☐ Yes

☐ No

Code Examples for Apache POI

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

```
org.apache.poi.hssf.eventusermodel.HSSFRequest.addListenerForAllRecords
org.apache.poi.hssf.eventusermodel.HSSFListener)
```

Example

```
01 /**
02  * Should we output the formula, or the value it has?
03  */
04 boolean outputFormulaValues;
05 FormatTrackingHSSFListener formatListener;
06 PublicMorozoffHSSFRequest requestPublic;
07 /**
08  * For parsing Formulas
09  */
10 SheetRecordCollectingListener workbookBuildingListener;
11 outputFormulaValues=true;
12 MissingRecordAwareHSSFListener listener=new MissingRecordAwareHSSFList
13 formatListener=new FormatTrackingHSSFListener(listener);
14 requestPublic=new PublicMorozoffHSSFRequest();
15 if(outputFormulaValues)
16 {
17 }
18 workbookBuildingListener=new EventWorkbookBuilder.SheetRecordCollectin
19 // workbookBuildingListener -> a single listener to associate with ALL
20 requestPublic.addListenerForAllRecords(workbookBuildingListener);
```

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 POI

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

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

Example

```
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 }
```

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 POI

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

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

Example

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

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 POI

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

```
org.apache.poi.ss.usermodel.DataFormat.getFormat(java.lang.String)
```

Example

```

1 private final Workbook wb;
2 private final String DEFAULT_DATE_FORMAT="ddd mmm dd hh:mm:ss yyy";
3 DataFormat df=wb.createDataFormat();
4 // DEFAULT_DATE_FORMAT -> string matching a built in format
5 df.getFormat(DEFAULT_DATE_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? | <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 POI

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

```
org.apache.poi.hssf.usermodel.HSSFCellStyle.setAlignment(short)
```

Example

```

1 /**
2  * the xls workbook
3  */
4 private HSSFWorkbook workBook;
5 HSSFCellStyle cellStyle=workBook.createCellStyle();
6 // HSSFCellStyle.ALIGN_CENTER -> - the type of alignment
7 cellStyle.setAlignment(HSSFCellStyle.ALIGN_CENTER);

```

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 POI

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

```
org.apache.poi.hssf.usermodel.HSSFCell.setCellType(int)
```

Example

```
01 /**
02  * current row
03  */
04 private HSSFRow currentRow;
05 /**
06  * column
07  */
08 private short currentCol=0;
09 HSSFCell cell=currentRow.createCell(currentCol);
10 cell.setCellType(HSSFCell.CELL_TYPE_STRING);
```

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 POI

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

```
org.apache.poi.hssf.usermodel.HSSFCell.setCellValue(java.util.Calendar)
```

Example

```
01 protected HSSFSheet sheet;
02 protected int index=0;
03 Object datas;
04 HSSFRow row=sheet.createRow(index);
05 if(datas != null)
06 {
07     if(datas.getClass().isArray())
08     {
09         Object[] values=(Object[])datas;
10         for(int i=0; i < values.length; i++)
11         {
12             HSSFCell cell=row.createCell(i);
13             // (Calendar)values[i] -> the date value to set this cell to. For form
14             // value, for numerics we'll set its value. For othertypes we
15             // cell and set its value.
16             cell.setCellValue((Calendar)values[i]);
17         }
18     }
19 }
```

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 POI

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

```
org.apache.poi.hssf.usermodel.HSSFCell.setCellValue(java.lang.String)
```

Example

```
01 private TableView tableViewer=null;
02 HSSFWorkbook wb=new HSSFWorkbook();
03 HSSFSheet sheet=wb.createSheet("Sheet");
04 HSSFRow row=sheet.createRow(0);
05 short col=0;
06 TableModel model=tableViewer.getModel();
07 Iterator<TableColumn> it=model.getColumnIterator();
08 while(it.hasNext())
09 {
10     TableColumn column=it.next();
11     if(!isVisible(column))
12     {
13         continue;
14     }
15     HSSFCell cell=row.createCell(col++);
16 }
17 // column.getTitle() -> value to set the cell to. For formulas we'll s
18 //         for String cells we'll set its value. For other types we wi
19 //         and set its value. If value is null then we will change the
20 cell.setCellValue(column.getTitle());
```

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 POI

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

```
org.apache.poi.hssf.usermodel.HSSFCellStyle.setFillForegroundColor (shor
```

Example

```
1 /**
2  * the xls workbook
3  */
4  private HSSFWorkbook workBook;
5  HSSFCellStyle cellStyle=workBook.createCellStyle();
6  // HSSFCOLOR.BLACK.index -> color
7  cellStyle.setFillForegroundColor (HSSFCOLOR.BLACK.index);
```

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 POI

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

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

Example

```
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 }
```

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.