

```
ooo_meta_inspector.py

#!/usr/bin/python
# -*- coding: UTF-8 -*-
#
#The MIT License
#
#Copyright (c) 2011
#
#Permission is hereby granted, free of charge, to any person obtaining a copy
#of this software and associated documentation files (the "Software"), to deal
#in the Software without restriction, including without limitation the rights
#to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
#copies of the Software, and to permit persons to whom the Software is
#furnished to do so, subject to the following conditions:
#
#The above copyright notice and this permission notice shall be included in
#all copies or substantial portions of the Software.
#
#THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
#IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
#FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
#AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
#LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
#OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN
#THE SOFTWARE.
#
#Authors:
#    Vili Auvinen (vili.k.auvinen@jyu.fi)
#    Olli Kauppinen (olli.kauppinen@jyu.fi)
#    Juho Tammela (juho.i.tammela@jyu.fi)

'''
The module provides the methods for getting OpenOffice.org file formats' odt, odp, and ods n

@author: Olli Kauppinen
'''

import sys
import zipfile
import xml.dom.minidom
import fnmatch

def getMetaInformation(documentDict,elementTagName):
    '''Gets the meta information by the given elementTagName from odt,odp and ods documents.

@return: The meta information.
    '''
    element=documentDict['meta.xml'].getElementsByTagName(elementTagName)
    if element:
        return element[0].firstChild.nodeValue
    else:
        return 'not defined'

def getDocumentStatistic(documentDict,attributeName):
    '''Gets the document statistic by the given attributeName.

@return: The statistic value.
    '''
    element=documentDict['meta.xml'].getElementsByTagName('meta:document-statistic')
    if element:
        return element[0].getAttribute (attributeName)
    else:
        return 'Statistic not defined'
```

```
ooo_meta_inspector.py

def getMeta(documentDict):
    '''Gets all the document meta information.

@return: The meta information in the dictionary. Tag names are the key values in the dict
'''
meta = {'dc:title': None,
'meta:creation-date': None,
'meta:initial-creator': None,
'meta:editing-duration': None,
'dc:date': None,
'dc:creator': None,
'meta:editing-cycles': None}

for metaName in meta.keys():
    meta[metaName] = getMetaInformation(documentDict,metaName)

return meta

def getOdtStatistic (documentDict):
    '''Gets all the odt document statistic information.

@return: The statistic information in the dictionary. Attribute names are the key values
'''
odtStatistic = {'meta:table-count': None,
'meta:image-count': None,
'meta:object-count': None,
'meta:page-count': None,
'meta:paragraph-count': None,
'meta:paragraph-count': None,
'meta:word-count': None,
'meta:character-count': None}

for odtStatisticName in odtStatistic.keys():
    odtStatistic[odtStatisticName] = getDocumentStatistic(documentDict,odtStatisticName)

return odtStatistic

def getOdsStatistic (documentDict):
    '''Gets all the ods document statistic information.

@return: The statistic information in the dictionary. Attribute names are the key values
'''
odsStatistic = {'meta:table-count': None,
'meta:cell-count': None,
'meta:object-count': None}

for odsStatisticName in odsStatistic.keys():
    odsStatistic[odtStatisticName] = getDocumentStatistic(documentDict,odtStatisticName)

return odsStatistic

def printOdpStatistic ():
    '''Get all the odp document statistic information.

@return: The statistic information in the dictionary. Attribute names are the key values
'''
odpStatistic = {'meta:object-count': None}
odpStatistic['meta:object-count'] = getDocumentStatistic(documentDict,odtStatisticName)
return odpStatistic
```