

Package ‘uscoauditlog’

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Type Package

Title United States Copyright Office Product Management Division SR
Audit Data Dataset Cleaning Algorithms

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Description

Intended to be used by the United States Copyright Office Product Management Division Business Analysts. Include algorithms for the United States Copyright Office Product Management Division SR Audit Data dataset. The algorithm takes in the SR Audit Data excel file and reformat the spreadsheet such that the values and variables fit the format of the online database. Support functions in this package include `clean_str()`, which cleans instances of variable `AUDIT_LOG`; `clean_data_to_excel()`, which cleans and output the reorganized SR Audit Data dataset in excel format; `clean_data_to_dataframe()`, which cleans and stores the reorganized SR Audit Data data set to a data frame; `format_from_excel()`, which reads in the outputted excel file from the `clean_data_to_excel()` function and formats and returns the data as a dictionary that uses `FIELD` types as keys and `NON-FIELD` types as the values of those keys. `format_from_dataframe()`, which reads in the outputted data frame from the `clean_data_to_dataframe()` function and formats and returns the data as a dictionary that uses `FIELD` types as keys and `NON-FIELD` types as the values of those keys; `support_function()`, which takes in the dictionary outputted either from the `format_from_dataframe()` or `format_from_excel()` function and returns the data as a formatted data frame according to the original U.S. Copyright Office SR Audit Data online database. The main function of this package is `clean_format_all()`, which takes in an excel file and returns the formatted data into a new excel and text file according to the format from the U.S. Copyright Office SR Audit Data online database.

License GPL (>= 2)

Encoding UTF-8

Depends R (>= 3.4.0), stringr, openxlsx, readxl

NeedsCompilation no

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clean_data_to_dataframe
Helper Function

Description

Cleans and output the reorganized SR Audit Data dataset into a data frame

Usage

```
clean_data_to_dataframe(filename)
```

Arguments

filename Input name of the .xlsx file

Value

Returns a dataframe that includes the cleaned data.

Examples

```
## Not run:
## Read in the original excel file
filename = "data.xlsx"
clean_data_to_dataframe(filename)

## End(Not run)
```

clean_data_to_excel *Helper Function*

Description

Cleans and output the reorganized SR Audit Data dataset in .xlsx format

Usage

```
clean_data_to_excel(filename)
```

Arguments

filename Input name of the .xlsx file

Value

Returns an excel sheet that includes the cleaned data.

Examples

```
## Not run:  
filename = "data.xlsx"  
clean_data_to_excel(filename)  
  
## End(Not run)
```

clean_format_all *Main Function*

Description

Takes in a .xlsx file and returns the formatted data into a new .xlsx and .txt file according to the format of the U.S. Copyright Office SR Audit Data online database.

Usage

```
clean_format_all(excelfile)
```

Arguments

excelfile Input the original raw SR Audit Data spreadsheet

Value

Returns an excel sheet and text file that includes the cleaned and formatted data that are congruent to the format of the U.S. Copyright Office SR Audit Data online database.

Examples

```
#This is the main function. Users should be only using this function for data cleaning.
## Not run:
filename = "data.xlsx"
clean_format_all(excelfile)

## End(Not run)
```

clean_str

Helper Function

Description

Cleans instances of variable AUDIT_LOG from the U.S. Copyright Office SR Audit Data spreadsheet

Usage

```
clean_str(str)
```

Arguments

str Input an instance value from variable AUDIT_LOG

Value

Returns a cleaned string version of an instance from variable AUDIT_LOG.

Examples

```
str = "2*J15*Owner2*L12*LAAS2*K10*2*C110*SR_STAT_ID2*N14*Open2*O16*Closed"
clean_str(str)
```

format_from_dataframe *Helper Function*

Description

Reads in the outputted data frame from the clean_data_to_dataframe function and formats and returns the data as a dictionary that uses FIELD types as keys and NON-FIELD types as the values of those keys

Usage

```
format_from_dataframe(dataframedata)
```

Arguments

dataframedata Input the cleaned .xlsx sheet outputted from the function clean_data_to_dataframe

Value

Returns a vector dictionary that contains the formatted version of the cleaned data.

Examples

```
## Not run:
filename = "data.xlsx"
dataframedata = clean_data_to_dataframe(filename)
format_from_dataframe(dataframedata)

## End(Not run)
```

format_from_excel *Helper Function*

Description

Reads in the outputted excel file from the clean_data_to_excel function and formats and returns the data as a dictionary that uses FIELD types as keys and NON-FIELD types as the values of those keys

Usage

```
format_from_excel(filename)
```

Arguments

filename Input the cleaned .xlsx sheet outputted from the function clean_data_to_excel

Value

Returns a vector dictionary that contains the formatted version of the cleaned data.

Examples

```
## Not run:
filename = "data.xlsx"
filename = clean_data_to_excel(filename)
format_from_excel(filename)

## End(Not run)
```

support_function	<i>Helper Function</i>
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Description

Takes in the dictionary outputted either from the `format_from_dataframe` or `format_from_excel` function and returns the data as a formatted data frame according to the original U.S. Copyright Office SR Audit Data online database.

Usage

```
support_function(data)
```

Arguments

data	Input the dictionary variable from the <code>format_from_dataframe</code> or <code>format_from_excel</code> function
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Value

Returns a formatted data frame according to the original U.S. Copyright Office SR Audit Data online database.

Examples

```
## Not run:  
filename = "data.xlsx"  
dataframedata = clean_data_to_dataframe(filename)  
data = format_from_dataframe(dataframedata)  
support_function(data)  
  
## End(Not run)
```

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