

# Package ‘easyreporting’

September 4, 2024

**Type** Package

**Title** Helps creating report for improving Reproducible Computational Research

**Version** 1.16.0

**Description** An S4 class for facilitating the automated creation of markdown files inside other packages/software even without knowing markdown language. Best if implemented in functions as ``recursive" style programming.

**License** Artistic-2.0

**Encoding** UTF-8

**biocViews** ReportWriting

**LazyData** false

**BugReports** <https://github.com/drighelli/easyreporting/issues>

**Imports** rmarkdown, methods, tools, shiny, rlang

**Suggests** distill, BiocStyle, knitr, readxl, edgeR, limma, EDASeq, statmod

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---

|             |                    |
|-------------|--------------------|
| addResource | <i>addResource</i> |
|-------------|--------------------|

---

**Description**

addResource

**Usage**

```
addResource(object, source, reference, description)
```

**Arguments**

|             |  |
|-------------|--|
| object      | an easyreporting class instance                                    |
| source      | a string indicating the reference (i.e. "GEO")                     |
| reference   | a string indicanting the reference of the source (i.e. "GSE60231") |
| description | a natural language description                                     |

**Value**

an easyreporting class instance

**Examples**

```
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
rd <- addResource(rd, source="GEO", "GSE60231", "Transcriptome of BMDC to different antigen delivery systems")
## Not run:
compile(rd)

## End(Not run)
```

---

|                                   |                    |
|-----------------------------------|--------------------|
| addResource, easyreporting-method | <i>addResource</i> |
|-----------------------------------|--------------------|

---

**Description**

addResource

**Usage**

```
## S4 method for signature 'easyreporting'
addResource(object, source, reference, description)
```

**Arguments**

|             |  |
|-------------|--|
| object      | an easyreporting class instance                                    |
| source      | a string indicating the reference (i.e. "GEO")                     |
| reference   | a string indicanting the reference of the source (i.e. "GSE60231") |
| description | a natural language description                                     |

**Value**

an easyreporting class instance

**Examples**

```
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
rd <- addResource(rd, source="GEO", "GSE60231", "Transcriptome of BMDC to different antigen delivery systems")
## Not run:
compile(rd)

## End(Not run)
```

---

compile

*compile*

---

**Description**

prints the sessionInfo and compiles the produced rmarkdown file into an HTML report.

**Usage**

```
compile(object)
```

**Arguments**

|        |                               |
|--------|-------------------------------|
| object | an easyreporting class object |
|--------|-------------------------------|

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report", title="example_report",
                    author=c("It's me"))
compile(rd)

## End(Not run)
```

---

compile,easyreporting-method  
*compile*

---

**Description**

prints the sessionInfo and compiles the rmarkdown file

**Usage**

```
## S4 method for signature 'easyreporting'  
compile(object)
```

**Arguments**

object            an easyreporting class object

**Value**

none

**Examples**

```
## Not run:  
rd <- easyreporting(filenamePath="./project_report", title="example_report",  
                    author=c("It's me"))  
  
compile(rd)  
  
## End(Not run)
```

---

easyreporting            *easyreporting*

---

**Description**

An S4 class for managing rmarkdown report. Each instance describes an rmarkdown file.

**Usage**

```
easyreporting(  
  filenamePath,  
  title,  
  author,  
  optionList = NULL,  
  documentType = "rmarkdown::html_document",  
  bibfile = ""
```

```

)

easyreporting(
  filenamePath,
  title,
  author,
  optionList = NULL,
  documentType = "rmarkdown::html_document",
  bibfile = ""
)

```

### Arguments

|              |   |
|--------------|---|
| filenamePath | the path with the name of the rmarkdown.  |
| title        | the title of the report section.  |
| author       | the author(s) of the report.  |
| optionList   | a list of options for the general rmarkdown document.   |
| documentType | type of report final document, if author(s) is a person it will be <code>distill::distill_article</code> ( <code>rmarkdown::html_document</code> default) |
| bibfile      | a bibfile for bibliography.   |

### Value

an S4 `easyreporting` class instance

### Slots

|                                |  |
|--------------------------------|--|
| filenamePath                   | the path with the name of the rmarkdown.   |
| title                          | the title of the report section.   |
| author                         | the author(s) of the report.   |
| type of report final document, | if author(s) is a person it will be <code>distill::distill_article</code> ( <code>rmarkdown::html_document</code> default) |
| bibfile                        | a bibfile for bibliography.  |
| optionList                     | a list of options for the general rmarkdown document.  |

### Examples

```

rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author="It's me")

```

---

|              |                     |
|--------------|---------------------|
| erGUIVolcano | <i>erGUIVolcano</i> |
|--------------|---------------------|

---

**Description**

executes a Shiny GUI to perform a volcano plot and trace its executed functions.

**Usage**

```
erGUIVolcano()
```

**Value**

none

**Examples**

```
## Not run:  
erGUIVolcano()  
  
## End(Not run)
```

---

|                 |                        |
|-----------------|------------------------|
| getBibliography | <i>getBibliography</i> |
|-----------------|------------------------|

---

**Description**

returns the bibfile name attached to the object

**Usage**

```
getBibliography(object)
```

**Arguments**

object            an easyreporting class object

**Value**

none

**Examples**

```
## Not run:  
TBD  
  
## End(Not run)
```

---

getBibliography, easyreporting-method  
*getBibliography*

---

**Description**

returns the bibfile name attached to the object

**Usage**

```
## S4 method for signature 'easyreporting'  
getBibliography(object)
```

**Arguments**

object            an easyreporting class object

**Value**

none

**Examples**

```
example(easyreporting)  
getBibliography(rd)
```

---

getOptionsList            *getOptionsList*

---

**Description**

returns the optionList from the easyreporting class (see the makeOptionList function for more details).

**Usage**

```
getOptionsList(object)
```

**Arguments**

object            an easyreporting class object

**Value**

a list of options



### Examples

```
## Not run:  
rd <- easyreporting(filenamePath="./project_report", title="example_report",  
                    author=c("It's me"))  
optList <- getOptionsList(rd)  
  
## End(Not run)
```

---

*getOptionsList,easyreporting-method*  
*getOptionsList*

---

### Description

returns the optionList from the easyreporting class

### Usage

```
## S4 method for signature 'easyreporting'  
getOptionsList(object)
```

### Arguments

object            an easyreporting class object

### Value

a list of options

### Examples

```
## Not run:  
rd <- easyreporting(filenamePath="./project_report", title="example_report",  
                    author=c("It's me"))  
optList <- getOptionsList(rd)  
  
## End(Not run)
```

---

`getReportFilename`      *getReportFilename*

---

**Description**

returns the filename with its path of the report generated by easyreporting

**Usage**

```
getReportFilename(object)
```

**Arguments**

`object`                  an easyreporting class object

**Value**

a string of report file name with path

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
(rep <- getReportFilename(rd))

## End(Not run)
```

---

`getReportFilename,easyreporting-method`  
*getReportFilename*

---

**Description**

returns the report filename with path

**Usage**

```
## S4 method for signature 'easyreporting'
getReportFilename(object)
```

**Arguments**

`object`                  an easyreporting class object

**Value**

a string of report file name with path

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
(rep <- getReportFilename(rd))

## End(Not run)
```

---

|                                 |                           |
|---------------------------------|---------------------------|
| <code>initReportFilename</code> | <i>initReportFilename</i> |
|---------------------------------|---------------------------|

---

**Description**

`initReportFilename`

**Usage**

```
initReportFilename(  
  object,  
  filepath = NULL,  
  title = NULL,  
  author = NULL,  
  optionList = NULL,  
  bibfile = NULL,  
  documentType = NULL,  
  resources = NULL  
)
```

**Arguments**

|                           |  |
|---------------------------|--|
| <code>object</code>       | an easyreporting class object                    |
| <code>filepath</code>     | the name of the report with or without the path  |
| <code>author</code>       | the name of the report author                    |
| <code>documentType</code> | type of report final document. (html is default) |
| <code>mainTitle</code>    | the title of the report                          |

**Value**

an easyreporting class object

---

```
initReportFilename,easyreporting-method
    initReportFilename
```

---

**Description**

internal funtion usefull to init the report for the first time.

**Usage**

```
## S4 method for signature 'easyreporting'
initReportFilename(
  object,
  filepath = NULL,
  title = NULL,
  author = NULL,
  optionList = NULL,
  bibfile = "",
  documentType = "rmarkdown::html_document"
)
```

**Arguments**

|                           |   |
|---------------------------|---|
| <code>object</code>       | an easyreporting class object   |
| <code>filepath</code>     | the name of the report with or without the path   |
| <code>author</code>       | the name of the report author as a <a href="#">person</a> format (where expected comment named fields are ORCID, url, affiliation, affiliation_url). In case author is a character, it will be reported as it is. |
| <code>bibfile</code>      | a bibfile for bibliography.   |
| <code>documentType</code> | type of report final document, if author(s) is a person it will be <code>distill::distill_article</code> ( <code>rmarkdown::html_document</code> default)   |
| <code>mainTitle</code>    | the title of the report   |

**Value**

an easyreporting class object

**See Also**

[person](#)

---

makeOptionsList      *makeOptionsList*

---

### Description

makes an list of rmarkdown options

### Usage

```
makeOptionsList(  
  cacheFlag = TRUE,  
  evalFlag = TRUE,  
  echoFlag = TRUE,  
  warningFlag = FALSE,  
  showMessages = FALSE,  
  includeFlag = TRUE,  
  collapseFlag = FALSE,  
  purlFlag = TRUE,  
  errorFlag = TRUE,  
  messageFlag = TRUE,  
  highlightFlag = TRUE,  
  promptFlag = FALSE,  
  stripWhiteFlag = TRUE,  
  tidyFlag = FALSE  
)
```

### Arguments

|               |   |
|---------------|---|
| cacheFlag     | boolean for caching chunk data (default TRUE)   |
| evalFlag      | boolean for evaluating the code chunk in the compiled version (default TRUE)                        |
| echoFlag      | boolean for showing the code chunk (default TRUE)   |
| warningFlag   | boolean for showing the chunk warnings (default FALSE)  |
| showMessages  | boolean for showing the chunk warnings in compiled version (default FALSE)                          |
| includeFlag   | boolean for including the code chunk in the compiled version (default TRUE)                         |
| collapseFlag  | boolean for collapsing the code chunk in the compiled version (default FALSE),                      |
| purlFlag      | boolean for extracting the code chunk as R code in a separate R file (default TRUE),                |
| errorFlag     | boolean for including the error generated by the code chunk in the compiled version (default TRUE), |
| messageFlag   | boolean for including the code chunk messages in the compiled version (default TRUE),               |
| highlightFlag | boolean for highlighting the code chunk in the compiled version (default TRUE),                     |
| promptFlag    | boolean for including a ">" for the code chunk in the compiled version (default FALSE),             |

`stripWhiteFlag` boolean for removing the white spaces at beginning/end of the code chunk in the compiled version (default TRUE),

`tidyFlag` boolean for creating a tidy code chunk in the compiled version (default FALSE).

**Value**

list of rmarkdown options

**Examples**

```
optList <- makeOptionsList()
```

---

`mkdCodeChunkCommented` *mkdCodeChunkCommented*

---

**Description**

it creates a complete code chunk, adding a natural language comment before of it.

**Usage**

```
mkdCodeChunkCommented(
  object,
  comment = NULL,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

**Arguments**

`object` an easyreporting class object

`comment` a string with the natural language comment for the chunk.

`code` a string within the code.

`optionList` a list of options (default is the class options).

`sourceFilesList` a optional list of files to source inside the chunk.

**Value**

none

## Examples

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
optList <- makeOptionsList(includeFlag=TRUE, cacheFlag=TRUE)
mkdCodeChunkCommented(rd,
                      comment="This is the comment of the following code chunk",
                      code="a <- 1\n b <- 2\n (c <- a+b)\n", optionList=optList,
                      sourceFilesList=NULL)

## End(Not run)
```

---

```
mkdCodeChunkCommented,easyreporting-method
      mkdCodeChunkCommented
```

---

## Description

it creates a complete code chunk, adding a natural language comment before of it.

## Usage

```
## S4 method for signature 'easyreporting'
mkdCodeChunkCommented(
  object,
  comment = NULL,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

## Arguments

|                 |   |
|-----------------|---|
| object          | an easyreporting class object                             |
| comment         | a string with the natural language comment for the chunk. |
| code            | a string within the code.                                 |
| optionList      | a list of options (default is the class options).         |
| sourceFilesList | a optional list of files to source inside the chunk.      |

## Value

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
optList <- makeOptionsList(includeFlag=TRUE, cacheFlag=TRUE)
mkdCodeChunkCommented(rd,
                      comment="This is the comment of the following code chunk",
                      code=c(quote(a <- 1), quote(b <- 2), quote(c <- a+b)),
                      optionList=optList, sourceFilesList=NULL)
mkdCodeChunkCommented(rd,
                      comment="This is the comment of the following code chunk",
                      code="a <- 1\n b <- 2\n(c <- a+b)\n", optionList=optList,
                      sourceFilesList=NULL)

## End(Not run)
```

---

mkdCodeChunkComplete    *mkdCodeChunkComplete*

---

**Description**

it creates a complete code chunk.

**Usage**

```
mkdCodeChunkComplete(
  object,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

**Arguments**

|                 |   |
|-----------------|---|
| object          | an easyreporting class object   |
| code            | a string or an expression generated with <code>quote</code> containing a function call or the entire code chunk to trace. |
| optionList      | a list of options.  |
| sourceFilesList | a list of files to source.  |

**Value**

none



**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdCodeChunkComplete(rd, code="a <- 1\n b <- 2\n c <- a+b\n print(c)")

## End(Not run)
```

---

```
mkdCodeChunkComplete,easyreporting-method
      mkdCodeChunkComplete
```

---

**Description**

it creates a complete code chunk.

**Usage**

```
## S4 method for signature 'easyreporting'
mkdCodeChunkComplete(
  object,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

**Arguments**

|                 |   |
|-----------------|---|
| object          | an easyreporting class object   |
| code            | a string or an expression (or a list of expressions) generated with <a href="#">quote</a> containing a function call or the entire code chunk to trace. |
| optionList      | a list of options.  |
| sourceFilesList | a list of files to source.  |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdCodeChunkComplete(rd, code=c(quote(a <- 1), quote(b <- 2), quote(c<- a+b),
                                quote(print(c))))
mkdCodeChunkComplete(rd, code="a <- 1\n b <- 2\n c <- a+b\n print(c)")

## End(Not run)
```

---

|                 |                        |
|-----------------|------------------------|
| mkdCodeChunkEnd | <i>mkdCodeChunkEnd</i> |
|-----------------|------------------------|

---

**Description**

it creates a code chunk end. Always use it after a `mkdCodeChunkSt()`

**Usage**

```
mkdCodeChunkEnd(object)
```

**Arguments**

object            an easyreporting class object

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdCodeChunkSt(rd)
## just leaving empty
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

|                                      |                        |
|--------------------------------------|------------------------|
| mkdCodeChunkEnd,easyreporting-method | <i>mkdCodeChunkEnd</i> |
|--------------------------------------|------------------------|

---

**Description**

it creates a code chunk end. Always use it after a `mkdCodeChunkSt()`

**Usage**

```
## S4 method for signature 'easyreporting'
mkdCodeChunkEnd(object)
```

**Arguments**

object            an easyreporting class object

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

mkdCodeChunkSt(rd)
## just leaving empty
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

|                |                       |
|----------------|-----------------------|
| mkdCodeChunkSt | <i>mkdCodeChunkSt</i> |
|----------------|-----------------------|

---

**Description**

it creates a code chunk start. A list of options and files to source for the chunk can optionally be passed to the function.

**Usage**

```
mkdCodeChunkSt(
  object,
  optionList = getOptionsList(object),
  sourceFilesList = NULL,
  isComplete = FALSE
)
```

**Arguments**

|                 |   |
|-----------------|---|
| object          | an easyreporting class object                               |
| optionList      | a list of options   |
| sourceFilesList | a list of files that can be sourced inside the code chunk.  |
| isComplete      | a flag determining if the chunk is already a complete chunk |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

## no options
mkdCodeChunkSt(rd)
## just leaving empty
mkdCodeChunkEnd(rd)

## setting options
optList <- makeOptionsList(includeFlag=TRUE)
mkdCodeChunkSt(rd, optionList=optList)
## just leaving empty
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

```
mkdCodeChunkSt,easyreporting-method
      mkdCodeChunkSt
```

---

**Description**

it creates a code chunk start. A list of options and files to source for the chunk can optionally be passed to the function.

**Usage**

```
## S4 method for signature 'easyreporting'
mkdCodeChunkSt(
  object,
  optionList = getOptionsList(object),
  sourceFilesList = NULL,
  isComplete = FALSE
)
```

**Arguments**

|                              |   |
|------------------------------|---|
| <code>object</code>          | an easyreporting class object                               |
| <code>optionList</code>      | a list of options   |
| <code>sourceFilesList</code> | a list of files that can be sourced inside the code chunk.  |
| <code>isComplete</code>      | a flag determining if the chunk is already a complete chunk |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

## no options
mkdCodeChunkSt(rd)
## just leaving empty
mkdCodeChunkEnd(rd)

## setting options
optList <- makeOptionsList(includeFlag=TRUE)
mkdCodeChunkSt(rd, optionList=optList)
## just leaving empty
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

```
mkdCodeChunkTitledCommented
      mkdCodeChunkCommented
```

---

**Description**

it creates a complete code chunk, adding a natural language comment before of it.

**Usage**

```
mkdCodeChunkTitledCommented(
  object,
  title = NULL,
  level = 1,
  comment = NULL,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

**Arguments**

|                 |   |
|-----------------|---|
| object          | an easyreporting class object                             |
| title           | the title to assign to the code chunk section             |
| level           | the level of the title (default is 1)                     |
| comment         | a string with the natural language comment for the chunk. |
| code            | a string within the code.                                 |
| optionList      | a list of options (default is the class options).         |
| sourceFilesList | a optional list of files to source inside the chunk.      |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
optList <- makeOptionsList(includeFlag=TRUE, cacheFlag=TRUE)
mkdCodeChunkCommented(rd,
                      comment="This is the comment of the following code chunk",
                      code="a <- 1\n b <- 2\n (c <- a+b)\n", optionList=optList,
                      sourceFilesList=NULL)

## End(Not run)
```

---

```
mkdCodeChunkTitledCommented,easyreporting-method
      mkdCodeChunkTitledCommented
```

---

**Description**

it creates a complete code chunk, adding a natural language comment before of it.

**Usage**

```
## S4 method for signature 'easyreporting'
mkdCodeChunkTitledCommented(
  object,
  title = NULL,
  level = 1,
  comment = NULL,
  code,
  optionList = getOptionsList(object),
  sourceFilesList = NULL
)
```

**Arguments**

|                              |   |
|------------------------------|---|
| <code>object</code>          | an easyreporting class object                             |
| <code>title</code>           | the title to assign to the code chunk section             |
| <code>level</code>           | the level of the title (default is 1)                     |
| <code>comment</code>         | a string with the natural language comment for the chunk. |
| <code>code</code>            | a string within the code.                                 |
| <code>optionList</code>      | a list of options (default is the class options).         |
| <code>sourceFilesList</code> | a optional list of files to source inside the chunk.      |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
optList <- makeOptionsList(includeFlag=TRUE, cacheFlag=TRUE)
mkdCodeChunkTitledCommented(rd, title="Title Example", level=1,
                             comment="This is the comment of the following code chunk",
                             code="a <- 1\n b <- 2\n(c <- a+b)\n", optionList=optList,
                             sourceFilesList=NULL)

## End(Not run)
```

mkdGeneralMsg

*mkdGeneralMsg***Description**

It appends a general message to the report, useful for describing a code chunk or a part of the report. Useful for adding natural language comments.

**Usage**

```
mkdGeneralMsg(object, message)
```

**Arguments**

|         |                                     |
|---------|-------------------------------------|
| object  | an easyreporting class object       |
| message | the message to append to the report |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdGeneralMsg(rd, message="Writing a paragraph to describe my code chunk")

## End(Not run)
```

---

mkdGeneralMsg, easyreporting-method  
*mkdGeneralMsg*

---

**Description**

It appends a general message to the report. Useful for adding natural language comments.

**Usage**

```
## S4 method for signature 'easyreporting'  
mkdGeneralMsg(object, message)
```

**Arguments**

|         |                                     |
|---------|-------------------------------------|
| object  | an easyreporting class object       |
| message | the message to append to the report |

**Value**

none

**Examples**

```
## Not run:  
rd <- easyreporting(filenamePath="./project_report",  
                    title="example_report", author=c("It's me"))  
mkdGeneralMsg(rd, "Writing a paragraph to describe my code chunk")  
  
## End(Not run)
```

---

mkdGeneralTitledMsg    *mkdGeneralTitledMsg*

---

**Description**

It appends a a titled section followed by a general message to the report. Useful for adding natural language comments.

**Usage**

```
mkdGeneralTitledMsg(object, title = NULL, level = 1, message)
```



**Arguments**

|         |  |
|---------|--|
| object  | an easyreporting class object                  |
| title   | the title of the report section.               |
| level   | the level (1 to 6) of the title (default is 1) |
| message | the message to append to the report            |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdGeneralTitledMsg(rd, title="Generic SubTitle for this message", level=2,
                    message="Writing a paragraph to describe my code chunk")

## End(Not run)
```

---

mkdGeneralTitledMsg,easyreporting-method  
*mkdGeneralTitledMsg*

---

**Description**

It appends a a titled section followed by a general message to the report. Useful for adding natural language comments.

**Usage**

```
## S4 method for signature 'easyreporting'
mkdGeneralTitledMsg(object, title = NULL, level = 1, message)
```

**Arguments**

|         |   |
|---------|---|
| object  | an easyreporting class object                     |
| title   | the optional title to give to the message section |
| level   | the level (1 to 6) of the title (default is 1)    |
| message | the message to append to the report               |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
mkdGeneralTitledMsg(rd, title="Generic SubTitle for this message", level=2,
                    message="Writing a paragraph to describe my code chunk")

## End(Not run)
```

---

mkdSetGlobalOpts      *mkdSetGlobalOpts*

---

**Description**

mkdSetGlobalOpts

**Usage**

```
mkdSetGlobalOpts(object, optionList = list())
```

**Arguments**

object            an easyreporting class object  
optionList        a list of options

**Value**

an easyreporting class object

---

mkdSetGlobalOpts,easyreporting-method  
*mkdSetGlobalOpts*

---

**Description**

internal function for appending to the report the initial options setup

**Usage**

```
## S4 method for signature 'easyreporting'
mkdSetGlobalOpts(object, optionList = list())
```

**Arguments**

object            an easyreporting class object  
optionList        a list of options

**Value**

an easyreporting class object

---

|                |                       |
|----------------|-----------------------|
| mkdSourceFiles | <i>mkdSourceFiles</i> |
|----------------|-----------------------|

---

**Description**

includes a list of source files inside the rmarkdown

**Usage**

```
mkdSourceFiles(object, ...)
```

**Arguments**

|        |                               |
|--------|-------------------------------|
| object | an easyreporting class object |
| ...    | a list of files to source     |

**Value**

none

---

|                                      |                       |
|--------------------------------------|-----------------------|
| mkdSourceFiles, easyreporting-method | <i>mkdSourceFiles</i> |
|--------------------------------------|-----------------------|

---

**Description**

includes a list of source files inside the rmarkdown

**Usage**

```
## S4 method for signature 'easyreporting'
mkdSourceFiles(object, ...)
```

**Arguments**

|        |                                     |
|--------|-------------------------------------|
| object | an easyreporting class object       |
| ...    | a list of files to source with path |

**Value**

none

mkdTitle                    *mkdTitle*

---

### Description

Inserts an rmarkdown title inside the report, useful for create distinct sections inside the final resport.

### Usage

```
mkdTitle(object, title, level = 1)
```

### Arguments

|        |                                       |
|--------|---------------------------------------|
| object | an easyreporting class object         |
| title  | a string within the title.            |
| level  | a numeric from 1 to 6 (default is 1). |

### Value

none

### Examples

```
## Not run:  
rd <- easyreporting(filenamePath="./project_report",  
                    title="example_report", author=c("It's me"))  
  
mkdTitle(rd, "First Level Title")  
mkdTitle(rd, "Sub-Title", level=2)  
  
## End(Not run)
```

---

mkdTitle,easyreporting-method  
*mkdTitle*

---

### Description

Inserts an rmarkdown title inside the report.

### Usage

```
## S4 method for signature 'easyreporting'  
mkdTitle(object, title, level = 1)
```

**Arguments**

object            an easyreporting class object  
 title            a string within the title.  
 level            a numeric from 1 to 6 (default is 1).

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

mkdTitle(rd, "First Level Title")
mkdTitle(rd, "Sub-Title", level=2)

## End(Not run)
```

---

mkdVariableAssignment *mkdVariableAssignment*

---

**Description**

it includes a variable assignment in the report. NB: a call to the "mkdCodeChunkSt" has to be done before using it.

**Usage**

```
mkdVariableAssignment(object, variable.name, variable.object.name, show)
```

**Arguments**

object            an easyreporting class object  
 variable.name    a string indicating the name of the variabe to store in the report. (This can be changed here, but further uses of the variable needs to take into account the variable name change).  
 variable.object.name    the name of the already existing variable. (This cannot be canged.)  
 show            a boolean indicating if to show the message before writing it into the rmarkdown file.

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
## leaving the default options to the code chunk
mkdCodeChunkSt(rd)
## adding a variable assignment
variable <- 1
mkdVariableAssignment(rd, "variable", "variable", show=TRUE)
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

```
mkdVariableAssignment,easyreporting-method
      mkdVariableAssignment
```

---

**Description**

it includes a variable assignment in the report. NB: a call to the "mkdCodeChunkSt" has to be done before using it.

**Usage**

```
## S4 method for signature 'easyreporting'
mkdVariableAssignment(
  object,
  variable.name,
  variable.object.name,
  show = FALSE
)
```

**Arguments**

|                                   |  |
|-----------------------------------|--|
| <code>object</code>               | an easyreporting class object  |
| <code>variable.name</code>        | a string indicating the name of the variable to store in the report. (This can be changed here, but further uses of the variable needs to take into account the variable name change). |
| <code>variable.object.name</code> | the name of the already existing variable. (This cannot be changed.)   |
| <code>show</code>                 | a boolean indicating if to show the message before writing it into the rmarkdown file.   |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))
## leaving the default options to the code chunk
mkdCodeChunkSt(rd)
## adding a variable assignment
variable <- 1
mkdVariableAssignment(rd, "variable", "variable", show=TRUE)
mkdCodeChunkEnd(rd)

## End(Not run)
```

---

|                 |                        |
|-----------------|------------------------|
| setBibliography | <i>setBibliography</i> |
|-----------------|------------------------|

---

**Description**

add a bibfile name to the object that will be reflected into the report as a bibliography section

**Usage**

```
setBibliography(object, bibfile = NULL)
```

**Arguments**

|         |   |
|---------|---|
| object  | an easyreporting class object               |
| bibfile | a path string with the name of the bib file |

**Value**

none

**Examples**

```
## Not run:
TBD

## End(Not run)
```

---

```
setBibliography,easyreporting-method
    setBibliography
```

---

**Description**

add a bibfile name to the object that will be reflected into the report as a bibliography section

**Usage**

```
## S4 method for signature 'easyreporting'
setBibliography(object, bibfile = NULL)
```

**Arguments**

|         |  |
|---------|--|
| object  | an easyreporting class object          |
| bibfile | a string with the name of the bib file |

**Value**

none

**Examples**

```
## Not run:
# TBD

## End(Not run)
```

---

```
setOptionsList    setOptionsList
```

---

**Description**

set an optionList to the class, it automatically sets the options for the rmarkdown file. Are useful for the interpretation/execution of the code chunks.

**Usage**

```
setOptionsList(
  object,
  cacheFlag = TRUE,
  evalFlag = TRUE,
  echoFlag = TRUE,
  warningFlag = FALSE,
  showMessages = FALSE,
```



```

includeFlag = TRUE,
collapseFlag = FALSE,
purlFlag = TRUE,
errorFlag = TRUE,
messageFlag = TRUE,
highlightFlag = TRUE,
promptFlag = FALSE,
stripWhiteFlag = TRUE,
tidyFlag = FALSE
)

```

### Arguments

|                |  |
|----------------|--|
| object         | an easyreporting class object  |
| cacheFlag      | boolean for caching chunk data (default TRUE)  |
| evalFlag       | boolean for evaluating the code chunk in the compiled version (default TRUE)                                     |
| echoFlag       | boolean for showing the code chunk (default TRUE)  |
| warningFlag    | boolean for showing the chunk warnings (default FALSE)   |
| showMessages   | boolean for showing the chunk warnings in compiled version (default FALSE)                                       |
| includeFlag    | boolean for including the code chunk in the compiled version (default TRUE)                                      |
| collapseFlag   | boolean for collapsing the code chunk in the compiled version (default FALSE),                                   |
| purlFlag       | boolean for extracting the code chunk as R code in a separate R file (default TRUE),                             |
| errorFlag      | boolean for including the error generated by the code chunk in the compiled version (default TRUE),              |
| messageFlag    | boolean for including the code chunk messages in the compiled version (default TRUE),                            |
| highlightFlag  | boolean for highlighting the code chunk in the compiled version (default TRUE),                                  |
| promptFlag     | boolean for including a ">" for the code chunk in the compiled version (default FALSE),                          |
| stripWhiteFlag | boolean for removing the white spaces at beginning/end of the code chunk in the compiled version (default TRUE), |
| tidyFlag       | boolean for creating a tidy code chunk in the compiled version (default FALSE).                                  |

### Value

none

### Examples

```

## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

## setting default option

```

```

setOptionsList(rd)

## modifying only some options
rd <- setOptionsList(rd, warningFlag=TRUE,
                    showMessages=TRUE, includeFlag=TRUE)

## End(Not run)

```

---

```

setOptionsList,easyreporting-method
setOptionsList

```

---

## Description

set an optionList to the class

## Usage

```

## S4 method for signature 'easyreporting'
setOptionsList(
  object,
  cacheFlag = TRUE,
  evalFlag = TRUE,
  echoFlag = TRUE,
  warningFlag = FALSE,
  showMessages = FALSE,
  includeFlag = TRUE,
  collapseFlag = FALSE,
  purlFlag = TRUE,
  errorFlag = TRUE,
  messageFlag = TRUE,
  highlightFlag = TRUE,
  promptFlag = FALSE,
  stripWhiteFlag = TRUE,
  tidyFlag = FALSE
)

```

## Arguments

|                           |  |
|---------------------------|--|
| <code>object</code>       | an easyreporting class object  |
| <code>cacheFlag</code>    | boolean for caching chunk data (default TRUE)                                |
| <code>evalFlag</code>     | boolean for evaluating the code chunk in the compiled version (default TRUE) |
| <code>echoFlag</code>     | boolean for showing the code chunk (default TRUE)                            |
| <code>warningFlag</code>  | boolean for showing the chunk warnings (default FALSE)                       |
| <code>showMessages</code> | boolean for showing the chunk warnings in compiled version (default FALSE)   |
| <code>includeFlag</code>  | boolean for including the code chunk in the compiled version (default TRUE)  |

|                |  |
|----------------|--|
| collapseFlag   | boolean for collapsing the code chunk in the compiled version (default FALSE),                                   |
| pur1Flag       | boolean for extracting the code chunk as R code in a separate R file (default TRUE),                             |
| errorFlag      | boolean for including the error generated by the code chunk in the compiled version (default TRUE),              |
| messageFlag    | boolean for including the code chunk messages in the compiled version (default TRUE),                            |
| highlightFlag  | boolean for highlighting the code chunk in the compiled version (default TRUE),                                  |
| promptFlag     | boolean for including a ">" for the code chunk in the compiled version (default FALSE),                          |
| stripWhiteFlag | boolean for removing the white spaces at beginning/end of the code chunk in the compiled version (default TRUE), |
| tidyFlag       | boolean for creating a tidy code chunk in the compiled version (default FALSE).                                  |

**Value**

none

**Examples**

```
## Not run:
rd <- easyreporting(filenamePath="./project_report",
                    title="example_report", author=c("It's me"))

## setting default option
setOptionsList(rd)

## modifying only some options
rd <- setOptionsList(rd, warningFlag=TRUE,
                    showMessages=TRUE, includeFlag=TRUE)

## End(Not run)
```

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