

# Package ‘labelR’

February 9, 2025

**Title** Automate the Production of Custom Labels, Badges, Certificates,  
and Other Documents

**Version** 0.4.0

**Description** Create custom labels, badges, certificates  
and other documents. Automate the production of potentially large  
numbers of herbarium and collection labels, accreditation badges,  
attendance and participation certificates, etc, and deliver them automatically.  
Documents are generated in PDF format, which requires a working  
installation of 'LaTeX', such as 'TinyTeX'.

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**URL** <https://github.com/EcologyR/labelR/>,  
<https://ecologyr.github.io/labelR/>

**BugReports** <https://github.com/EcologyR/labelR/issues/>

**Depends** R (>= 3.5.0)

**LazyData** true

**Suggests** blastula, keyring, testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Imports** rmarkdown

**NeedsCompilation** no

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## Contents

abstract.table . . . . .	2
attendance.table . . . . .	3
badges.table . . . . .	3
collection.table . . . . .	4
configure_email . . . . .	5
create_abstractbook . . . . .	6
create_attendance_certificate . . . . .	8
create_badge . . . . .	10
create_collection_label . . . . .	12
create_herbarium_label . . . . .	13
create_multichoice . . . . .	16
create_participation_certificate . . . . .	18
create_tiny_label . . . . .	20
herbarium.table . . . . .	22
multichoice.table . . . . .	22
participation.table . . . . .	23
tiny.table . . . . .	24

<b>Index</b>	<b>26</b>
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abstract.table	<i>abstract.table</i>
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---

### Description

Example data to create abstract books

### Usage

abstract.table

### Format

An object of class `data.frame` with 8 rows and 4 columns.

### Details

#### abstract\_title

New Progress in Healing Potions, A Magical Alternative to Muggle Medicine  
 Advances in Magical Creature Protection: A New Approach to Hippogriff Conservation  
 The Ethical Use of Legilimency, Where Should the Limits Be Drawn?  
 The Influence of Dark Magic on Contemporary Magical Arts  
 Wandlore and Its Impact on Spellcasting Efficiency: A Comparative Study  
 Magical Plants and Their Role in Potion Brewing: Discovering New Ingredients  
 The Role of the Patronus Charm in Combatting Dark Creatures: A Defensive Approach  
 Time-Turners and Temporal Ethics: Should the Laws Be Reconsidered?

#### authors

Severus Snape(1,2,\*); Poppy Pomfrey  
 Newt Scamander(1,2); Rubeus Hagrid  
 Albus Dumbledore(1,2,3,\*); Emma Watson  
 Bellatrix Lestrange(1,2); Fenrir Greyback  
 Garrick Ollivander(1,\*); Albus Dumbledore  
 Pomona Sprout(1,\*); Severus Snape  
 Remus Lupin(1,\*); Kingsley Shacklebolt  
 Hermione Granger(1,\*); Amelia Bones

---

attendance.table      *attendance.table*

---

**Description**

Example data to create attendance certificates

**Usage**

attendance.table

**Format**

An object of class data.frame with 4 rows and 1 columns.

**Details**

A data frame with the name of attendees

Names  
Harry Potter  
Hermione Granger  
Neville Longbottom  
Ginny Weasley

---

badges.table      *badges.table*

---

**Description**

Example data to create identification badges

**Usage**

badges.table

**Format**

An object of class data.frame with 8 rows and 2 columns.

**Details**

List	Affiliation
Cornelius Fudge	Ministry of Magic
Rita Skeeter	The Daily Prophet
Bartemius Crouch	Magic Security Department, Ministry of Magic
Newt Scamander	Department of Magizoology (Ministry of Magic)
Garrick Ollivander	Ollivander's Wand Shop in Diagon Alley
Lily Potter	Gryffindor House (Hogwarts S.W.W.)
Peter Pettigrew	Gryffindor House (Hogwarts S.W.W.)
Sirius Black	Azkaban prisoner

---

collection.table      *collection.table*

---

**Description**

Example data to create collection labels

**Usage**

collection.table

**Format**

An object of class `data.frame` with 40 rows and 8 columns.

**Details**

field1	field2	field3	field4	field5
Bombus terrestris subsp. glumbumble	Apidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Bombus terrestris subsp. glumbumble	Apidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Bombus terrestris subsp. glumbumble	Apidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Item
Bombus terrestris subsp. glumbumble	Apidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Amata huebneri	Erebidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Amata huebneri	Erebidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Item
Amata huebneri	Erebidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Item
Amata huebneri	Erebidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Arion hortensis	Arionidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Arion hortensis	Arionidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Item
Arion hortensis	Arionidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Item
Arion hortensis	Arionidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item
Acromantula gigantea	Macroaranidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Item

Acromantula gigantea	Macroaranidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/11/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Trogssionis sp. 1	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis sp. 2	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Bombus terrestris subsp. glumbumble	Apidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Bombus terrestris subsp. glumbumble	Apidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Bombus terrestris subsp. glumbumble	Apidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Ite
Bombus terrestris subsp. glumbumble	Apidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Amata huebneri	Erebidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Amata huebneri	Erebidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Ite
Amata huebneri	Erebidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Ite
Amata huebneri	Erebidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Arion hortensis	Arionidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Arion hortensis	Arionidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Ite
Arion hortensis	Arionidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Ite
Arion hortensis	Arionidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/11/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Trogssionis sp. 1	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis sp. 2	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite

---

 configure\_email

*Configure email sending*


---

## Description

Configure the email application to automatically send certificates.

## Usage

```
configure_email(
    user = NULL,
    app.name = NULL,
    subject = NULL,
    body = NULL,
    cc = NULL,
    bcc = NULL
)
```

**Arguments**

user	Character. Gmail account that will be used to send certificates.
app.name	Name of the mail application used to send emails. To create one, access <a href="https://myaccount.google.com/apppasswords">https://myaccount.google.com/apppasswords</a> .
subject	Character. Subject of the email to be sent. If not specified, labelER will use a default value.
body	Character. Body text of the email to be sent. If not specified, labelER will use a default value.
cc	Character. String (or vector of strings) containing the email addresses to send the email as a copy.
bcc	Character. String (or vector of strings) containing the email addresses to send the email as a hidden copy.

**Value**

A list including at least a 'user' string and an 'app.name' string. Optionally, slots 'subject', 'body', 'cc' and 'bcc' can be edited to compile the email to send.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Jimena Mateo-Martín, Francisco Rodriguez-Sanchez

**Examples**

```
## Not run:
email.info <- configure_email(user = 'example@gmail.com')

## If you already have created an application:
email.info <- configure_email(user = 'example@gmail.com', app.name = "emailsend")

## End(Not run)
```

---

create\_abstractbook    *Create Book of Abstracts*

---

**Description**

Create a book of abstracts given a dataframe or tibble.

**Usage**

```

create_abstractbook(
  data = NULL,
  path = NULL,
  filename = NULL,
  title.column = NULL,
  authors.column = NULL,
  affiliation.column = NULL,
  text.column = NULL,
  frontpage = NULL,
  toc = TRUE,
  toc.title = "Index",
  title.cex = 22,
  authors.cex = 16,
  affiliations.cex = 14,
  text.cex = 14,
  keep.files = FALSE,
  template = NULL
)

```

**Arguments**

<code>data</code>	a data frame including titles, author names, affiliations and abstracts.
<code>path</code>	Character. Path to folder where the PDF file will be saved.
<code>filename</code>	Character. Filename of the pdf. If NULL, default is "AbstractBook".
<code>title.column</code>	Character. Name of the column in data storing abstracts' titles.
<code>authors.column</code>	Character. Name of the column in data storing authors' names and affiliations. Numeric (and symbol, e.g. '*') affiliations MUST be specified between brackets. Authors must be separated using a semi-colon (;').
<code>affiliation.column</code>	Character. Name of the column in data storing the addresses for each affiliation number (specified between brackets after author names, in <code>authors.column</code> ). Separations between authors must be specified using a semi-colon (;').
<code>text.column</code>	Name of the column in data storing the abstract text.
<code>frontpage</code>	Character. Path to PDF file to be inserted before the book of abstracts (as front page and/or introduction).
<code>toc</code>	Logical. If TRUE, a Table of Contents will be included.
<code>toc.title</code>	Character. Title to name the Table of Contents. Default is "Index".
<code>title.cex</code>	Text font size used for the title. Default is 22.
<code>authors.cex</code>	Text font size used for the authors' names. Default is 16.
<code>affiliations.cex</code>	Text font size used for the affiliation addresses Default is 14.
<code>text.cex</code>	Text font size used for the abstract main text body. Default is 14.
<code>keep.files</code>	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.

template      Character (optional) RMarkdown template to use. If not provided, using the default template included in `labeler`.

### Details

You can copy and modify at your convenience [this Google form template](#) to retrieve abstract information which will match `labeler`'s requirements for a straightforward use.

### Value

A PDF file named after `filename` is saved on disk, in the folder defined by `path`. If `keep.files = TRUE`, an RMarkdown will also appear in the same folder.

### Author(s)

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Jimena Martín-Mateo, Francisco Rodriguez-Sanchez

### Examples

```
create_abstractbook(
  data=abstract.table,
  path = "labeler_output",
  filename = "congress_abstractbook",
  title.column = "abstract_title",
  authors.column = "authors",
  affiliation.column = "affiliation",
  text.column = "abstract_text",
  title.cex = 20,
  authors.cex = 15,
  affiliations.cex = 14,
  text.cex = 12,
  frontpage = "Congress_frontpage.pdf"
)
```

---

`create_attendance_certificate`

*Create certificate of attendance*

---

### Description

Create certificate of attendance (1 certificate per DIN-A4 page)

### Usage

```
create_attendance_certificate(
  data = NULL,
  path = NULL,
  filename = NULL,
```



```

language = c("English", "Spanish"),
name.column = NULL,
email.column = NULL,
email.info = NULL,
type = "",
title = "",
date = "",
hours = "",
freetext = "",
signer = "",
signer.role = "",
signature.pic = NULL,
lpic = NULL,
rpic = NULL,
keep.files = FALSE,
template = NULL
)

```

### Arguments

data	a data frame containing attendees' names (in name.column)
path	Character. Path to folder where the PDF certificates will be saved.
filename	Character. Filename of the pdf. If NULL, default is "Attendance" for English, "Asistencia" for Spanish".
language	Character. Select 'English' or 'Spanish'.
name.column	Character. Name of the column in data storing attendees' name.
email.column	Character. Name of the column in data storing attendees' email address to automatically send them their certificates.
email.info	Object created using <a href="#">configure_email()</a> function.
type	Character (optional). Type of event (conference, workshop, seminar...)
title	Character. Title of the event
date	Date of the event
hours	Number of hours the event has lasted
freetext	Character (optional). Free text to insert between the event title and date. Can include LaTeX commands (see examples).
signer	Character. Person who signs the certificate
signer.role	Character. Signer's role or position
signature.pic	Character (optional). Path to a PNG image to appear in the bottom, above signer's name.
lpic	Character (optional). Path to a PNG image to appear in the top-left.
rpic	Character (optional). Path to a PNG image to appear in the top-right.
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in labeler.

**Value**

PDF certificates are saved on disk, in the folder defined by `path`. If `keep.files = TRUE`, the RMarkdown template and PNG logo files will also appear in the same folder.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

**Examples**

```
create_attendance_certificate(
  data = attendance.table,
  path = "labeledR_output",
  language = "English",
  name.column = "Names",
  type = "class",
  title = "Potions Class",
  date = "01/01/2021",
  hours = 200,
  freetext = "organised by {\bf Hogwarts School year 1992-1993}",
  signer = "A.P.W.B. Dumbledore",
  signer.role = "School Headmaster",
  lpic = NULL,
  rpil = NULL,
  signature.pic = NULL,
)
```

---

create\_badge

*Create badges*

---

**Description**

Create badges (8 badges per DIN-A4 page)

**Usage**

```
create_badge(
  data = NULL,
  path = NULL,
  filename = NULL,
  event = NULL,
  name.column = NULL,
  affiliation.column = NULL,
  lpic = NULL,
  rpil = NULL,
  keep.files = FALSE,
  template = NULL
)
```

**Arguments**

data	a data frame including names and (optionally) affiliations.
path	Character. Path to folder where the PDF file will be saved.
filename	Character. Filename of the pdf. If NULL, default is "Badges".
event	Character. Title of the event.
name.column	Character. Name of the column in data storing participants' name.
affiliation.column	Character (optional). Name of the column in data storing participants' affiliation.
lpic	Character (optional) Path to a PNG image to be located in the badge top-left.
rpic	Character (optional) Path to a PNG image to be located in the badge top-right.
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in labeler.

**Value**

A PDF file named "Badges.pdf" is saved on disk, in the folder defined by path. If keep.files = TRUE, an RMarkdown and PNG lpic and rpic files will also appear in the same folder.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

**Examples**

```
create_badge(  
  data = badges.table,  
  path = "labeler_output",  
  filename = NULL,  
  event = "INTERNATIONAL CONFERENCE OF MUGGLEOLOGY",  
  name.column = "List",  
  affiliation.column = "Affiliation",  
  lpic = NULL,  
  rpic = NULL)
```

---

```
create_collection_label
```

*Create collection labels*

---

### Description

Create collection labels (8 labels per DIN-A4 page)

### Usage

```
create_collection_label(
  data = NULL,
  path = NULL,
  filename = NULL,
  qr = NULL,
  field1.column = NULL,
  field2.column = NULL,
  field3.column = NULL,
  field4.column = NULL,
  field5.column = NULL,
  logo = NULL,
  bgcolor = "D0ECC1",
  textcolor = "1E3F20",
  keep.files = FALSE,
  template = NULL
)
```

### Arguments

data	a data frame. Each row contains the information by species that will appear in the label.
path	Character. Path to folder where the PDF file will be saved.
filename	Character. Filename of the pdf. If NULL, default is "Collection_label".
qr	String. Free text or column of data that specifies the link for the QR code. If the specified value of qr is not a column name of data, all the QRs will be equal, pointing to the same link.
field1.column	Character (optional). Name of the column in data storing the first free text to appear at the top of the label.
field2.column	Character (optional). Name of the column in data storing the second free text to appear below field1.
field3.column	Character (optional). Name of the column in data storing the third free text to appear below field2.
field4.column	Character (optional). Name of the column in data storing the fourth free text to appear below field3.

field5.column	Character (optional). Name of the column in data storing the fifth free text to appear below field4.
logo	Character (optional) Path to a PNG image to be located in the label bottom.
bgcolor	HTML color for label background. Default is D0ECC1
textcolor	HTML color for label text. Default is 1E3F20
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in labeler.

### Value

A PDF file named "Collection\_label.pdf" is saved on disk, in the folder defined by path. If keep.files = TRUE, an RMarkdown and PNG logo files will also appear in the same folder.

### Author(s)

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

### Examples

```
create_collection_label(  
  data = collection.table,  
  path = "labeler_output",  
  qr = "QR_code",  
  field1.column = "field1",  
  field2.column = "field2",  
  field3.column = "field3",  
  field4.column = "field6",  
  field5.column = "field7"  
)
```

---

create\_herbarium\_label

*Create herbarium labels*

---

### Description

Create herbarium labels (4 labels per DIN-A4 page)

**Usage**

```

create_herbarium_label(
  data = data,
  path = NULL,
  filename = NULL,
  title = NULL,
  subtitle = NULL,
  qr = NULL,
  family.column = NULL,
  taxon.column = NULL,
  author.column = NULL,
  det.column = NULL,
  date.det.column = NULL,
  location.column = NULL,
  area.description.column = NULL,
  latitude.column = NULL,
  longitude.column = NULL,
  elevation.column = NULL,
  field1.column = NULL,
  field2.column = NULL,
  field3.column = NULL,
  collector.column = NULL,
  collection.column = NULL,
  assistants.column = NULL,
  date.column = NULL,
  keep.files = FALSE,
  template = NULL
)

```

**Arguments**

<code>data</code>	a data frame. Each row contains the information by species that will appear in the label.
<code>path</code>	Character. Path to folder where the PDF file will be saved.
<code>filename</code>	Character. Filename of the pdf. If NULL, default is "Herbarium".
<code>title</code>	Main title at the top of the labels. Can be blank if set to NULL.
<code>subtitle</code>	Subtitle at the bottom of the labels. Can be blank if set to NULL.
<code>qr</code>	String. Free text or column of data that specifies the link for the QR code. If the specified value of qr is not a column name of data, all the QRs will be equal, pointing to the same link.
<code>family.column</code>	Character (optional). Name of the column in data storing the family of the taxon.
<code>taxon.column</code>	Character (optional). Name of the column in data storing the taxon name.
<code>author.column</code>	Character (optional). Name of the column in data storing the taxon author.
<code>det.column</code>	Character (optional). Name of the column in data storing the determiner of the voucher.

date.det.column	Character (optional). Name of the column in data storing the date when the voucher was determined.
location.column	Character (optional). Name of the column in data storing where the voucher was collected.
area.description.column	Character (optional). Name of the column in data storing the description of the area.
latitude.column	Character (optional). Name of the column in data storing the latitude where the specimen was collected.
longitude.column	Character (optional). Name of the column in data storing the longitude where the specimen was collected.
elevation.column	Character (optional). Name of the column in data storing the elevation where the specimen was collected.
field1.column	Character (optional). Name of the column in data storing the first free text to appear at the top of the label.
field2.column	Character (optional). Name of the column in data storing the second free text to appear below field1.
field3.column	Character (optional). Name of the column in data storing the second free text to appear below field2.
collector.column	Character (optional). Name of the column in data storing the name of the collector.
collection.column	Character (optional). Name of the column in data storing the voucher's collection number.
assistants.column	Character (optional). Name of the column in data storing the names of the collector's assistants.
date.column	Character (optional). Name of the column in data storing the date when the specimen was collected.
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in labeler.

**Value**

A pdf file with four herbarium labels per page within an 'output' folder.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

## Examples

```

create_herbarium_label (
  data = herbarium.table,
  path = "labeler_output",
  title = "Magical flora of the British Isles",
  subtitle = "Project: Eliminating plant blindness in Hogwarts students",
  qr = "QR_code",
  family.column = "Family",
  taxon.column = "Taxon",
  author.column = "Author",
  det.column = "det",
  date.det.column = "Det_date",
  location.column = "Location",
  latitude.column = "Latitude",
  longitude.column = "Longitude",
  elevation.column = "Elevation",
  field1.column = "life_form",
  field3.column = "Height",
  collector.column = "Collector",
  collection.column = "Collection_number",
  assistants.column = "Assistants",
  date.column = "Date"
)

```

---

create\_multichoice      *Create multichoice exam*

---

## Description

Creates a multichoice exam, with 4 questions per page (first one has title plus 3 questions).

## Usage

```

create_multichoice(
  data = NULL,
  path = NULL,
  filename = NULL,
  title = NULL,
  question.column = NULL,
  option1.column = NULL,
  option2.column = NULL,
  option3.column = NULL,
  option4.column = NULL,
  image.column = NULL,
  solutions = F,
  start = 1,
  seeds = NULL,

```



```

    frontpage = NULL,
    keep.files = FALSE,
    template = NULL
  )

```

### Arguments

data	a data frame including the questions and choices, and may include a column with adjacent image paths.
path	Character. Path to folder where the PDF file will be saved.
filename	Character. Filename of the pdf. If NULL, default is "multichoice".
title	Title of the exam. If different models are rendered, they will be shown too.
question.column	Character. Name of the column in data storing the question to be shown.
option1.column	Character. Name of the column in data storing the CORRECT answer. It will not always appear on the first place; options will be randomly sorted.
option2.column	Character. Name of the column in data storing the second choice (INCORRECT).
option3.column	Character (optional for 2 choice questions). Name of the column in data storing the third choice (INCORRECT).
option4.column	Character (optional for 3 choice questions). Name of the column in data storing the fourth choice (INCORRECT).
image.column	Character (optional). Name of the column containing file paths to an image which may appear by the side of the question.
solutions	Logical. Whether or not a PDF with the solutions should be rendered.
start	Numeric. Number of the first question (useful if exams are split in several parts).
seeds	Numeric vector of undefined length. Seeds to randomize question order and choice order. If the length of seeds is longer than one, a multiple choice exam will be rendered for EACH ONE specified.
frontpage	Character (optional). Path to PDF file to be inserted before the document (as front page and/or instructions).
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in labeler.

### Value

A PDF file is saved on disk, in the folder defined by path. If keep.files = TRUE, an RMarkdown file will also appear in the same folder.

### Author(s)

Ignacio Ramos-Gutierrez, Jimena Mateo-Martín, Julia G. de Aledo, Francisco Rodriguez-Sanchez

**Examples**

```

create_multichoice(
  data = multichoice.table,
  path = "labeler_output",
  filename = "example_exam",
  title = "Example test",
  question.column = "question",
  option1.column = "opt1.correct",
  option2.column = "opt2",
  option3.column = "opt3",
  option4.column = "opt4",
  start = 1,
  solutions=T,
  seeds = c(1:2)
)

```

---

```

create_participation_certificate

```

*Create certificate of participation*

---

**Description**

Create certificate of participation (1 certificate per DIN-A4 page)

**Usage**

```

create_participation_certificate(
  data = NULL,
  path = NULL,
  filename = NULL,
  language = c("English", "Spanish"),
  name.column = NULL,
  affiliation.column = "",
  comm.type.column = "",
  title.column = "",
  coauthor.column = "",
  date.column = "",
  email.column = NULL,
  email.info = NULL,
  type = "",
  event = "",
  freetext = "",
  signer = "",
  signer.role = "",
  signature.pic = NULL,
  lpic = NULL,
  rplic = NULL,
)

```

```

    keep.files = FALSE,
    template = NULL
)

```

### Arguments

<code>data</code>	A data frame containing participants' names and contributions.
<code>path</code>	path Character. Path to folder where the PDF certificates will be saved.
<code>filename</code>	Character. Filename of the pdf. If NULL, default is "Participation" for English, "Participacion" for Spanish'.
<code>language</code>	Character. Select 'English' or 'Spanish'.
<code>name.column</code>	Character. Name of the column in data storing participants' name.
<code>affiliation.column</code>	Character (optional). Name of the column in data storing participants' affiliation
<code>comm.type.column</code>	Character. Name of the column in data reporting participation type (e.g. poster, oral communication, etc)
<code>title.column</code>	Character. Name of the column in data storing the title of the contribution.
<code>coauthor.column</code>	Name of the column in data storing the names of the coauthors to the contribution.
<code>date.column</code>	Character. Name of the column in data storing dates of participation.
<code>email.column</code>	Character. Name of the column in data storing attendees' email address to automatically send them their certificates.
<code>email.info</code>	Object created using <code>configure_email()</code> function.
<code>type</code>	Character (optional). Type of event (conference, workshop, seminar...)
<code>event</code>	Character. Title of the event
<code>freetext</code>	Character (optional). Free text to insert before the date. Can include LaTeX commands (see examples).
<code>signer</code>	Character. Person who signs the certificate
<code>signer.role</code>	Character. Signer's role or position
<code>signature.pic</code>	Character (optional) Path to a PNG image to appear in the bottom, above signer's name.
<code>lpic</code>	Character (optional) Path to a PNG image to appear in the top-left.
<code>rpic</code>	Character (optional) Path to a PNG image to appear in the top-right.
<code>keep.files</code>	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
<code>template</code>	Character (optional) RMarkdown template to use. If not provided, using the default template included in <code>labeler</code> .

### Value

PDF certificates are saved on disk, in the folder defined by `path`. If `keep.files = TRUE`, the RMarkdown template and PNG logo files will also appear in the same folder.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

**Examples**

```
create_participation_certificate(  
  data = participation.table,  
  path = "labeledR_output",  
  language = "Spanish",  
  name.column = "Name",  
  affiliation.column = "House",  
  comm.type.column = "Comm.type",  
  title.column = "Title",  
  date.column = "Date",  
  type = "online seminar",  
  event = "Hogwarts School of Witchcraft and Wizardry",  
  freetext = "which lasted 2 hours",  
  signer = "A.P.W.B. Dumbledore",  
  signer.role = "School Headmaster",  
  lpic = NULL,  
  rpil = NULL,  
  signature.pic = NULL  
)
```

---

create\_tiny\_label      *Create tiny labels*

---

**Description**

Create tiny labels (16 labels per DIN-A4 page)

**Usage**

```
create_tiny_label(  
  data = NULL,  
  qr = NULL,  
  path = NULL,  
  filename = NULL,  
  field1.column = NULL,  
  field2.column = NULL,  
  field3.column = NULL,  
  field4.column = NULL,  
  field5.column = NULL,  
  keep.files = FALSE,  
  template = NULL  
)
```

**Arguments**

data	a data frame including information of a species
qr	String. Free text or column of data that specifies the link for the QR code. If the specified value of qr is not a column name of data, all the QRs will be equal, pointing to the same link.
path	Character. Path to folder where the PDF file will be saved.
filename	Character. Filename of the pdf. If NULL, default is "Tiny_label".
field1.column	Character (optional). Name of the column in data storing the first free text to appear at the top of the label.
field2.column	Character (optional). Name of the column in data storing the second free text to appear below field1.
field3.column	Character (optional). Name of the column in data storing the third free text to appear below field2.
field4.column	Character (optional). Name of the column in data storing the fourth free text to appear below field3.
field5.column	Character (optional). Name of the column in data storing the fifth free text to appear below field4.
keep.files	Logical. Keep the RMarkdown template and associated files in the output folder? Default is FALSE.
template	Character (optional) RMarkdown template to use. If not provided, using the default template included in <code>labeler</code> .

**Value**

A PDF file named "Tiny\_label.pdf" is saved on disk, in the folder defined by `path`. If `keep.files` = TRUE, an RMarkdown file will also appear in the same folder.

**Author(s)**

Ignacio Ramos-Gutierrez, Julia G. de Aledo, Francisco Rodriguez-Sanchez

**Examples**

```
create_tiny_label(  
  data = tiny.table,  
  qr = "QR_code",  
  path = "labeler_output",  
  field1.column = "field1",  
  field2.column = "field2",  
  field3.column = "field3",  
  field4.column = "field4",  
  field5.column = "field5"  
)
```

---

herbarium.table      *herbarium.table*

---

### Description

Example data to create herbarium labels

### Usage

herbarium.table

### Format

An object of class `data.frame` with 6 rows and 19 columns.

### Details

ID	Collector	Collection_number	Assistants	Family	Taxon
1	Hermione Granger	2	Sprout, P., Potter, H., Weasley, R.	SOLANACEAE	Mandragora officinarum
2	Ron Weasley	5	Potter, H.	SALICACEAE	Salix muhammadalii
3	Dobby H.E.	1	Winky H.E.	Zosteraceae	Zostera phycobranchea
4	Pomona Sprout	1990-301a	Dumbledore, A.	Suffocaceae	Lucifericaptia obscura
5	Luna Lovegood	5	Xenophilus Lovegood	rosaceae	Prunus zeppelin
6	Algie Longbottom	3	Longbottom, N.	Mimbulaceae	Mimulus mimbletonia

---

multichoice.table      *multichoice.table*

---

### Description

Example data to create multiple choice tests

### Usage

multichoice.table

### Format

An object of class `data.frame` with 7 rows and 5 columns.

**Details**

question	opt1.correct	opt2	opt3
In which Hogwarts house was Harry sorted in?	Gryffindor	Slytherin	Hufflepu
Who was Dobby?	A house elf	A hippogryph	A muggl
Which was Longbottom's name?	Neville	Ronald	Bill
Which was Hogwarts' most famous tree?	The Whomping Willow	The Elder Alder	The Mig
Which is the nearest town to Hogwarts?	Hogsmeade	London	Godric's
Who was Harry's Godfather?	Sirius Black	Remus Lupin	Severus
Which of the following is not a middle name from Albus Dumbledore:	Billius	Wulfric	Brian

---

participation.table    *participation.table*

---

**Description**

Example data to create participation certificates

**Usage**

participation.table

**Format**

An object of class data.frame with 4 rows and 5 columns.

**Details**

Name	Date	Title	Comm.type
Severus Snape	01/01/1993	Advanced potions with more than six plants	oral communication
Minerva McGonagall	01/01/1994	From cat to ape: transformations in the XX century	poster
Alastor Moody	01/01/1995	Disentangling the three unforgivable curses	poster
Rubeus Hagrid	01/01/1996	Why is your hippogriff not flying? Insights on flight efficiency	oral communication

---

 tiny.table

*tiny.table*


---

## Description

Example data to create tinylabels

## Usage

```
tiny.table
```

## Format

An object of class `data.frame` with 40 rows and 8 columns.

## Details

field1	field2	field3	field4	field5
Bombus terrestris subsp. glumbumble	Apidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Bombus terrestris subsp. glumbumble	Apidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Bombus terrestris subsp. glumbumble	Apidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Italy
Bombus terrestris subsp. glumbumble	Apidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Amata huebneri	Erebidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Amata huebneri	Erebidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Italy
Amata huebneri	Erebidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Italy
Amata huebneri	Erebidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Arion hortensis	Arionidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Arion hortensis	Arionidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Italy
Arion hortensis	Arionidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Italy
Arion hortensis	Arionidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Acromantula gigantea	Macroaranidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Acromantula gigantea	Macroaranidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Acromantula gigantea	Macroaranidae	13/11/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Acromantula gigantea	Macroaranidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Trogssionis sp. 1	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Italy
Trogssionis sp. 2	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Italy
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Italy
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Italy
Bombus terrestris subsp. glumbumble	Apidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Bombus terrestris subsp. glumbumble	Apidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Bombus terrestris subsp. glumbumble	Apidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Italy
Bombus terrestris subsp. glumbumble	Apidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Amata huebneri	Erebidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy
Amata huebneri	Erebidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Italy
Amata huebneri	Erebidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Italy
Amata huebneri	Erebidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Italy



Arion hortensis	Arionidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Arion hortensis	Arionidae	01/09/1992	Great Yarmouth, Norwich, United Kingdom	Ite
Arion hortensis	Arionidae	13/11/1992	Cargan, Antrim Glens, Northern Ireland.	Ite
Arion hortensis	Arionidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	05/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	01/09/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/11/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Acromantula gigantea	Macroaranidae	13/12/1992	Hogwarts Gardens, Hogsmeade, Scotland (UK)	Ite
Trogssionis sp. 1	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis sp. 2	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite
Trogssionis schetelonica	Canellae	10/5/23	Grazalema mountain range (Cadiz, Spain)	Ite

# Index

## \* datasets

- abstract.table, [2](#)
- attendance.table, [3](#)
- badges.table, [3](#)
- collection.table, [4](#)
- herbarium.table, [22](#)
- multichoice.table, [22](#)
- participation.table, [23](#)
- tiny.table, [24](#)

abstract.table, [2](#)  
attendance.table, [3](#)

badges.table, [3](#)

collection.table, [4](#)  
configure\_email, [5](#)  
configure\_email(), [9](#), [19](#)  
create\_abstractbook, [6](#)  
create\_attendance\_certificate, [8](#)  
create\_badge, [10](#)  
create\_collection\_label, [12](#)  
create\_herbarium\_label, [13](#)  
create\_multichoice, [16](#)  
create\_participation\_certificate, [18](#)  
create\_tiny\_label, [20](#)

herbarium.table, [22](#)

multichoice.table, [22](#)

participation.table, [23](#)

tiny.table, [24](#)