Package 'Rigma'

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Type Package

Title Access to the 'Figma' API

Version 0.3.0 Maintainer Alexandros Kouretsis <alexandros@appsilon.com> Description The goal of Rigma is to provide a user friendly client to the 'Figma' API https://www.figma.com/developers/api. It uses the latest `httr2` for a stable interface with the REST API. More than 20 methods are provided to interact with 'Figma' files, and teams. Get design data into R by reading published components and styles, converting and downloading images, getting access to the full 'Figma' file as a hierarchical data structure, and much more. Enhance your creativity and streamline the application development by automating the extraction, transformation, and loading of design data to your applications and 'HTML' documents. License MIT + file LICENSE URL https://github.com/AleKoure/Rigma, https://AleKoure.github.io/Rigma/ BugReports https://github.com/AleKoure/Rigma/issues **Imports** bslib, checkmate, cli, dplyr, fs, glue, httr2 (>= 0.2.3), lubridate, magrittr, png, purrr, rlang, tibble, tidyr, withr, xml2 **Suggests** covr, httptest2, knitr, rmarkdown, testthat (>= 3.0.0) VignetteBuilder knitr Config/testthat/edition 3 **Encoding UTF-8** Language en-US RoxygenNote 7.3.2 NeedsCompilation no **Author** Alexandros Kouretsis [aut, cre], Eli Pousson [aut] (https://orcid.org/0000-0001-8280-1706)

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Description

Extracts color for design data collected from the Figma API. Can convert to hex. Infered color data are added in a new column named as color.

Usage

```
add_color(design_tibble, hex = TRUE)
```

as_design_tibble 3

Arguments

design_tibble Tabular data to be augmented with color colomn.

hex logical. If TRUE hex data are added to color column else nested data for RGBA

channels.

Value

Adds color column to design_tibble data

Examples

```
## Not run:
file_key <- "sFHgQh9dL6369o5wrZHmdR"
resp <- get_file_styles(file_key) %>%
   as_design_tibble() %>%
   add_color()
## End(Not run)
```

as_design_tibble

Transform data to tabular format

Description

Transforms data returned from a Figma API request to tabular format.

Usage

```
as_design_tibble(rigma_resp, message = TRUE)
```

Arguments

rigma_resp A response object from Figma API.
message logical. Control printing of messages.

Value

tibble data extracted from Figma response objects. Subclasses of type design_tibble are added to the resulting tibbles.

```
## Not run:
file_key <- "sFHgQh9dL6369o5wrZHmdR"
resp <- get_file_styles(file_key = file_key)
as_design_tibble(resp)
## End(Not run)</pre>
```

delete_comment

DELETE comments

Description

Deletes a specific comment. Only the person who made the comment is allowed to delete it.

Usage

```
delete_comment(file_key, comment_id)
```

Arguments

```
file_key string. The key that a Figma file is referred by. comment_id string. The comment id.
```

Value

S3 object of class rigma_delete_comment. Contains the parsed JSON response with fields error, status, and i18n.

Examples

```
## Not run:
# navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
first_comment_id <- get_comments(file_key)$comments[[1]]$id
delete_comment(file_key, first_comment_id)
## End(Not run)</pre>
```

```
delete_comment_reactions
```

DELETE comment reactions

Description

Removes a particular comment reaction. The only person with the ability to delete a comment reaction is the original poster.

Usage

```
delete_comment_reactions(file_key, comment_id, emoji)
```

extract_bslib_palette 5

Arguments

file_key string. The key that a Figma file is referred by.

comment_id string. Comment id of comment to delete reaction from.

emoji string. The emoji type of reaction to delete as a string enum :eyes:, :heart_eyes:,

:heavy_plus_sign:, :+1:, :-1:, :joy: and :fire:

Value

S3 object of class rigma_delete_comment_reactions. Contains the parsed JSON response with fields error, status, and i18n.

Examples

```
## Not run:
# navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
first_comment_id <- get_comments(file_key)$comments[[1]]$id
delete_comment_reactions(file_key, first_comment_id, ":eyes:")
## End(Not run)</pre>
```

extract_bslib_palette Extract bslib palette

Description

Extract bslib palette

Usage

```
extract_bslib_palette(design_tibble, version = 5)
```

Arguments

design_tibble A design_tibble returned bu the add_color() function version Bootstrap version to use for extracting color variables

Details

This function filters for bslib high level color variables published as styles of a Figma file and/or team. The color should be extracted and added as a variable to the retrieved data.

Value

List with colors used in high level variables of bs_theme().

get_comments

Examples

```
## Not run:
file_key <- "sFHgQh9dL6369o5wrZHmdR"
file_key %>%
   get_file_styles() %>%
   as_design_tibble() %>%
   add_color() %>%
   extract_bslib_palette()
## End(Not run)
```

get_comments

GET comments

Description

Gets a list of comments left on the file.

Usage

```
get_comments(file_key)
```

Arguments

file_key string. The key that a Figma file is referred by.

Value

 ${\tt S3}$ object of class ${\tt rigma_get_comments}$. Contains the parsed JSON response.

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_comments(file_key)
## End(Not run)</pre>
```

get_comments_reactions

```
get_comments_reactions
```

GET comments reactions

Description

Obtains a paginated list of the comments' reactions.

Usage

```
get_comments_reactions(file_key, comment_id, cursor = NULL)
```

Arguments

file_key string. The key that a Figma file is referred by.

comment_id string. The comment id.

cursor string obtained from the result of the previous request, a cursor for pagination.

Value

S3 object of class rigma_get_comments_reactions. Contains the parsed JSON response with fields reactions, and pagination.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
resp <- get_comments(file_key)
resp_reactions <- get_comments_reactions(file_key, resp$comments[[1]]$id)
## End(Not run)</pre>
```

get_component

GET component

Description

Get metadata on a component by key. To publish components join a Figma team and subscribe for professional account.

Usage

```
get_component(key)
```

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Arguments

key

string. The unique identifier of the component.

Value

S3 object of class rigma_get_component.

Examples

```
## Not run:
component_key <- "my_key"
get_component(component_key)
## End(Not run)</pre>
```

get_component_sets

GET component set

Description

Get metadata on a component_set by key. To publish components join a Figma team and subscribe for professional account.

Usage

```
get_component_sets(key)
```

Arguments

key

string. The unique identifier of the component.

Value

S3 object of class rigma_get_component_set.

```
## Not run:
component_key <- "my_key"
get_component_sets(component_key)
## End(Not run)</pre>
```

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GET file
GET file

Description

Direct access to the desired file is made available using the GET file API endpoint. It returns a JSON object representing the file pointed to by:key. Any Figma file url, such as https://www.figma.com/file/:key/:title, can be used to parse the file key.

Usage

```
get_file(
  file_key,
  version = NULL,
  ids = NULL,
  depth = NULL,
  geometry = NULL,
  plugin_data = NULL,
  branch_data = NULL
```

Arguments

file_key

branch_data

version	string. A certain version ID to obtain. By omitting this, you'll obtain the file's most recent version.
ids	string. list the document's nodes that are important to you, separated by commas. If supplied, only the nodes listed, their children, and everything between the root node and the listed nodes will be returned as part of the document.
depth	integer. A positive number indicating the depth of the traversal across the document tree. For instance, changing this to 2 returns both Pages and all top level objects on each page instead of just returning Pages. All nodes are returned if this argument is not set.
geometry	string. To export vector data, set equal to "paths".
plugin_data	string. A list of plugin IDs separated by commas or the word "shared." The result's 'pluginData' and 'sharedPluginData' attributes will contain any data ex-

string. The key that a Figma file is referred by.

isting in the document created by those plugins.

boolean. The requested file's branch metadata is returned. If the file is a branch, the returned response will also provide the key for the main file. If the file has branches, the response will also contain the metadata for those branches. Standard: false.

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Value

S3 object of class figma_file_resp. Contains the parsed content, the path, and the API response compatible with httr2 methods. The retrieved file's metadata includes the name, lastModified, thumbnailUrl, editorType, linkAccess, and version attributes. A Node with the DOCU-MENT type is present in the document attribute.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_file(file_key)
## End(Not run)</pre>
```

```
get_file_components
```

GET file components

Description

Get a list of published components within a file library. Note that published components are only available via the professional plan.

Usage

```
get_file_components(file_key)
```

Arguments

file_key

string. The key that a Figma file is referred by.

Value

S3 object of class rigma_get_file_components. Components are stored in the meta field.

```
## Not run:
#navigate to team page and get id from url
file_key <- "gYRjH0y8ZM0VtEf08kf6ch"
get_file_components(file_key)
## End(Not run)</pre>
```

Description

Get a list of published component_sets within a file library. Note that published components are only available via the professional plan.

Usage

```
get_file_component_sets(file_key)
```

Arguments

file_key

string. Id of the team to list components from.

Value

S3 object of class rigma_get_file_component_sets. Components are stored in the meta field.

Examples

```
## Not run:
#navigate to team page and get id from url
file_key <- "gYRjH0y8ZM0VtEf08kf6ch"
get_file_component_sets(file_key)
## End(Not run)</pre>
```

get_file_nodes

GET file nodes

Description

Returns a JSON object containing the nodes referenced by :ids. The Figma file referred to by :key is where the nodes are located. The node Id and file key can be parsed from any Figma node url: https://www.figma.com/file/:key/:title?node-id=:id.

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Usage

```
get_file_nodes(
   file_key,
   ids,
   version = NULL,
   depth = NULL,
   geometry = NULL,
   plugin_data = NULL)
```

Arguments

file_key string. The key that a Figma file is referred by.

ids character. Vector with the document's node ids that are important to you. If

supplied, only the nodes listed, their children, and everything between the root

node and the listed nodes will be returned as part of the document.

version string. A certain version ID to obtain. By omitting this, you'll obtain the file's

most recent version.

depth integer. A positive number indicating the depth of the traversal across the doc-

ument tree. For instance, changing this to 2 returns both Pages and all top level objects on each page instead of just returning Pages. All nodes are returned if

this argument is not set.

geometry string. To export vector data, set equal to "paths".

plugin_data string. A list of plugin IDs separated by commas or the word "shared." The

result's 'pluginData' and 'sharedPluginData' attributes will contain any data ex-

isting in the document created by those plugins.

Value

S3 object of the type rigma_get_file_nodes.

The supplied file's metadata includes the name, lastModified, thumbnailUrl, editorType, and version attributes.

The file link share permission level is described in the linkAccess field. A shared link may have one of five different permissions: "inherit," "view," "edit," "org view," and "org edit." The default permission for files produced in a team project is "inherit," and those files will take on the project's rights by default. "org view" and "org edit" only allow org users to access the link.

Each node has the ability to inherit properties from applicable styles. A mapping from style IDs to style metadata is contained in the styles key.

It's important to note that the nodes field is a list that can include null values. This can be because the provided file does not contain a node with the specified id.

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"</pre>
```

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```
get_file_nodes(file_key, ids = "0:0")
## End(Not run)
```

get_file_styles

GET file styles

Description

Get published styles in a file library by name.

Usage

```
get_file_styles(file_key)
```

Arguments

file_key

string. The key that a Figma file is referred by.

Value

S3 object of class rigma_get_file_styles. Styles are stored in the meta field.

Examples

```
## Not run:
#navigate to team page and get id from url
file_key <- "gYRjH0y8ZM0VtEf08kf6ch"
get_file_styles(file_key)
## End(Not run)</pre>
```

get_file_versions

GET file versions

Description

A list of the versions of a file.

Usage

```
get_file_versions(file_key)
```

Arguments

file_key

string. The key that a Figma file is referred by.

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Value

S3 object of class rigma_get_file_versions. Contains the parsed JSON response with fields versions, and pagination.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_file_versions(file_key)
## End(Not run)</pre>
```

get_image

GET image

Description

If there are no errors, "images" will be filled with a list of node IDs and their corresponding URLs for the displayed images, and "status" will be left empty. After 30 days, the picture assets will stop working.

It's important to note that the picture map could include null values. This suggests that the node's attempt to render has failed. The lack of a node id or other factors, such as the absence of renderable components, may be responsible. Whether or not the render was successful, it is assured that any node that was requested for rendering will be represented in this map.

Usage

```
get_image(
   file_key,
   ids,
   scale = NULL,
   format = NULL,
   svg_include_id = NULL,
   svg_simplify_stroke = NULL,
   use_absolute_bounds = NULL,
   version = NULL
```

Arguments

```
file_key string. The key that a Figma file is referred by.

ids string. A comma separated list of node IDs to render

scale numeric. The image scaling factor is a number between 0.01 and 4
```

get_image_fills 15

format string. A string enum for the image output format, can be "jpg", "png", "svg", or "pdf"

svg_include_id logical. Whether or not to give each SVG element an id attribute. Standard: FALSE

svg_simplify_stroke

logical. Whether to simplify inside/outside strokes and use stroke attribute if possible instead of mask element. Default: TRUE.

use_absolute_bounds

logical. Whether the node is cropped or the area around it is vacant, use the node's full dimensions. To export text nodes without cropping, use this method.

Standard: false.

string. A specific version ID to use. Omitting this will use the current version of

the file

Value

version

S3 object of class rigma_get_image. Contains the parsed JSON response with fields err, and images.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_image(file_key, ids = "0:1", format = "svg")
## End(Not run)</pre>
```

get_image_fills

GET image fills

Description

This API endpoint provides download URLs for all of the images that are present in a document's image fills. Figma represents any user-supplied images using image fills. When you drag a picture into Figma, it builds a rectangle with a single fill to represent it. The user can then modify the attributes of the fill and change the rectangle as they see fit.

Usage

```
get_image_fills(file_key)
```

Arguments

file_key string. The key that a Figma file is referred by.

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Value

This API provides a mapping from image references to download URLs for the images. Image URLs have a 14-day maximum lifespan. Image references are located in the output of the GET files endpoint under the imageRef attribute in a Paint.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_image_fills(file_key)
## End(Not run)</pre>
```

get_project_files

GET project files

Description

List the files in a given project.

Usage

```
get_project_files(project_id, branch_data = FALSE)
```

Arguments

project_id string. Id of the project to list files from.

branch_data string. Returns branch metadata in the response for each main file with a branch

inside the project. Default: "false"

Value

S3 object of class rigma_get_project_files. Contains the parsed JSON response with fields name, and files.

```
## Not run:
#navigate to file and get key from url
project_id <- "71686204"
get_project_files(project_id)
## End(Not run)</pre>
```

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```
get_team_components GET team components
```

Description

Get a paginated list of published components within a team library. Note that team components are only available via the professional plan.

Usage

```
get_team_components(team_id, page_size = 30, after = NULL, before = NULL)
```

Arguments

team_id string. The team's ID, with a list of its components.

page_size number Number of items in a paged list of results. Defaults to 30.

after number. Cursor providing the id for which to begin component retrieval. Ex-

clusive with before parameter. The cursor value is a tracked integer that is kept

internally but has no Ids.

before number. The id before which to begin obtaining components is shown by the

cursor. Exclusive with after The cursor value is a tracked integer that is kept

internally but has no Ids.

Value

S3 object of class rigma_get_team_components. Components are stored in the meta field.

Examples

```
## Not run:
#navigate to team page and get id from url
get_team_components(team_id = "1168610438838663284")
## End(Not run)
```

```
get_team_component_sets
```

GET team component sets

Description

Get a paginated list of published component_sets within a team library. Note that published components are only available via the professional plan.

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Usage

```
get_team_component_sets(team_id, page_size = 30, after = NULL, before = NULL)
```

Arguments

team_id string. The team's ID, with a list of its components.

page_size number Number of items in a paged list of results. Defaults to 30.

after number. Cursor providing the id for which to begin component retrieval. Ex-

clusive with before parameter. The cursor value is a tracked integer that is kept

internally but has no Ids.

before number. The id before which to begin obtaining components is shown by the

cursor. Exclusive with after The cursor value is a tracked integer that is kept

internally but has no Ids.

Value

S3 object of class rigma_get_team_component_sets. Components are stored in the meta field.

Examples

```
## Not run:
#navigate to team page and get id from url
get_team_component_sets(team_id = "1168610438838663284")
## End(Not run)
```

get_team_projects

GET team projects

Description

Get a list of all the Projects inside the specified team using this Endpoint. Only projects visible to the authorized user or the holder of the developer token will be returned. It should be noted that a user's team ID cannot yet be determined from a token. Go to the team page of the team you are a part of to get your team ID. After the term "team" and before your team name, the team id will appear in the URL.

Usage

```
get_team_projects(team_id)
```

Arguments

team_id string. Id of the team to list projects from.

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Value

S3 object of class rigma_get_team_projects. Contains the parsed JSON response with fields name, and projects.

Examples

```
## Not run:
#navigate to file and get key from url
team_id <- "1168610438838663284"
get_team_projects(team_id)
## End(Not run)</pre>
```

get_team_styles

GET team styles

Description

Get a list of published styles in a team library that is paginated.

Usage

```
get_team_styles(team_id, page_size = 30, after = NULL, before = NULL)
```

Arguments

team_id string. The team's ID, with a list of its styles.

page_size number. Number of items in a paged list of results. Defaults to 30.

after number. Cursor providing the id for which to begin component retrieval. Ex-

clusive with before parameter. The cursor value is a tracked integer that is kept

internally but has no Ids.

before number. The id before which to begin obtaining components is shown by the

cursor. Exclusive with after The cursor value is a tracked integer that is kept

internally but has no Ids.

Value

S3 object of class rigma_get_team_styles. Styles are stored in the meta field.

```
## Not run:
#navigate to team page and get id from url
get_team_styles(team_id = "1168610438838663284")
## End(Not run)
```

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```
possibly_thumbnail_color
```

Possibly extract thumbnail color

Description

Possibly extract thumbnail color

Usage

```
possibly_thumbnail_color(...)
```

Arguments

... Variables passed to wrapped function

Value

thumbnail_color function that handles errors

post_comment POST comment

D

Posts a new comment on the file.

Usage

```
post_comment(file_key, message, comment_id = NULL, client_meta)
```

Arguments

Description

file_key string. The key that a Figma file is referred by.
message string. The comment's textual content to post.

comment_id string. If there is one, the comment to respond to. You cannot reply to a remark

that is a reply to itself (a reply has a parent id), thus this must be a root comment.

client_meta string. The position of where to place the comment.

Value

S3 object of class rigma_post_comment. Contains the parsed JSON response with fields id, file_key, status, i18n, parent_id, user, created_at, resolved_at, message, reactions, client_meta, and order_id.

Examples

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
get_comments(file_key)
## End(Not run)</pre>
```

post_comment_reactions

POST comment reactions

Description

Posts a new comment reaction on a file comment.

Usage

```
post_comment_reactions(file_key, comment_id, emoji)
```

Arguments

file_key string. The key that a Figma file is referred by.

comment_id string. If there is one, the comment to respond to. You cannot reply to a remark

that is a reply to itself (a reply has a parent id), thus this must be a root comment.

emoji string. The emoji type of reaction as a string enum :eyes:, :heart_eyes:, :heavy_plus_sign:,

:+1:, :-1:, :joy: and :fire:

Value

S3 object of class rigma_post_comment_reactions. Contains the parsed JSON response with fields error, status, and i18n.

```
## Not run:
#navigate to file and get key from url
file_key <- "sFHgQh9dL6369o5wrZHmdR"
first_comment_id <- get_comments(file_key)$comments[[1]]$id
post_comment_reactions(file_key, first_comment_id, ":eyes:")
## End(Not run)</pre>
```

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safe_download

Safe download files

Description

Safe download files

Usage

```
safe_download(...)
```

Arguments

.. Variables passed to wrapped function

Value

download function that safely handles errors

Description

Get text data from styles

Usage

```
text_data_from_styles(design_tibble)
```

Arguments

design_tibble

S3 object of class design_tibble_style returned by queering the 'Figma' API for the published styles. Its design tibble should contain a unique file_key (map for each file_key if more than one exist.)

Details

Given a design_tibble with exported styles this function retrieves all TEXT style type metadata. It uses the GET file nodes API endpoint and collects all style data.

Value

tibble with text metadata of exported TEXT styles

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Examples

```
## Not run:
file_key <- "sFHgQh9dL6369o5wrZHmdR"
file_key %>%
  get_file_styles() %>%
  as_design_tibble() %>%
  text_data_from_styles()
## End(Not run)
```

thumbnail_color

Find thumbnail color

Description

Find thumbnail color

Usage

```
thumbnail_color(path, hex = TRUE)
```

Arguments

path string. Path to the thumbnail PNG

hex logical. If TRUE then the RGBA values are converted to hex

Details

Given a mono-colored thumbnail this function extracts the RGBA channels and returns a vector scaled from [0, 1] or a hex color code.

Value

The color of the thumbnail in hex or rgba

```
path <- system.file("extdata", "test_thumbnail.png", package = "Rigma")
thumbnail_color(path)</pre>
```

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