

Package ‘tower’

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Title Easy Middle Ware Library for 'shiny'

Version 0.2.0

Description The best way to implement middle ware for 'shiny' Applications. 'tower' is designed to make implementing behavior on top of 'shiny' easy with a layering model for incoming HTTP requests and server sessions. 'tower' is a very minimal package with little overhead, it is mainly meant for other package developers to implement new behavior.

URL <https://github.com/ixpantia/tower>

BugReports <https://github.com/ixpantia/tower/issues>

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Encoding UTF-8

RoxygenNote 7.3.2

Imports compiler, glue, purrr, stringr, curl, jsonlite, rlang

Suggests testthat (>= 3.0.0), shiny

Config/testthat/edition 3

NeedsCompilation no

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add_body	<i>Add a body to a response</i>
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Description

Adds a body to a response, if no content type is set, it will be detected

Usage

```
add_body(res, body)
```

Arguments

res	A response builder object
body	The body to add

Value

The response builder object

add_body_json	<i>Add a body to a response as JSON</i>
---------------	---

Description

Adds a body to a response as JSON

Usage

```
add_body_json(res, body)
```

Arguments

res	A response builder object
body	The body to add

Value

The response builder object

add_cookie	<i>Add a cookie to a response</i>
------------	-----------------------------------

Description

Adds a cookie to a response

Usage

```
add_cookie(res, name, value)
```

Arguments

res	A response builder object
name	The name of the cookie
value	The value of the cookie

Value

The response builder object

add_delete_route	<i>Add a DELETE route</i>
------------------	---------------------------

Description

Adds a DELETE route to a tower

Usage

```
add_delete_route(tower, path, handler)
```

Arguments

tower	A tower object
path	A string containing the path to match
handler	A function to call when the route is matched

Value

The tower with the added DELETE route

add_get_route	<i>Add a GET route</i>
---------------	------------------------

Description

Adds a GET route to a tower

Usage

```
add_get_route(tower, path, handler)
```

Arguments

tower	A tower object
path	A string containing the path to match
handler	A function to call when the route is matched

Value

The tower with the added GET route

add_http_layer	<i>Add an HTTP layer to a tower</i>
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Description

Add an HTTP layer to a tower. This layer will be called before the 'shiny' app's httpHandler.

Usage

```
add_http_layer(tower, layer)
```

Arguments

tower	A tower
layer	A function that takes a request and returns either a response. A layer can short circuit by returning a response directly or call the next layer will req\$NEXT(req) which will call the next layer in the middleware.

Value

The tower with the added layer

add_patch_route	<i>Add a PATCH route</i>
-----------------	--------------------------

Description

Adds a PATCH route to a tower

Usage

```
add_patch_route(tower, path, handler)
```

Arguments

tower	A tower object
path	A string containing the path to match
handler	A function to call when the route is matched

Value

The tower with the added PATCH route

add_post_route	<i>Add a POST route</i>
----------------	-------------------------

Description

Adds a POST route to a tower

Usage

```
add_post_route(tower, path, handler)
```

Arguments

tower	A tower object
path	A string containing the path to match
handler	A function to call when the route is matched

Value

The tower with the added POST route

add_put_route	<i>Add a PUT route</i>
---------------	------------------------

Description

Adds a PUT route to a tower

Usage

```
add_put_route(tower, path, handler)
```

Arguments

tower	A tower object
path	A string containing the path to match
handler	A function to call when the route is matched

Value

The tower with the added PUT route

add_route	<i>Add an HTTP layer to a tower</i>
-----------	-------------------------------------

Description

Adds an HTTP layer to a tower

Usage

```
add_route(tower, method = "GET", path, handler)
```

Arguments

tower	A tower object
method	A string containing the HTTP method to match
path	A string containing the path to match
handler	A function to call when the layer is matched

Value

The tower with the added route

add_server_layer	<i>Add a server layer to a tower</i>
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Description

Add a server layer to a tower. This layer will run before the 'shiny' app's server function. This is useful for adding custom logic to the server function without modifying the original server function.

Usage

```
add_server_layer(tower, layer)
```

Arguments

tower	A tower
layer	A function that takes input, output, and session and has no return value. This function will be called before the original server function. If you want to short-circuit the server use an exception.

Value

The tower with the added layer

app_into_parts	<i>Into parts</i>
----------------	-------------------

Description

Splits a shiny.appobj into its parts, the ui and server

Usage

```
app_into_parts(app)
```

Arguments

app	A shiny.appobj
-----	----------------

Value

A list with the ui and server handlers

build_http_cookie	<i>Build a cookie</i>
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Description

Builds an HttpOnly cookie from a key and value

Usage

```
build_http_cookie(key, value)
```

Arguments

key	A string containing the cookie key
value	A string containing the cookie value

Value

A string containing the formatted cookie

<code>build_response</code>	<i>Build a response</i>
-----------------------------	-------------------------

Description

Builds a response

Usage

```
build_response(res)
```

Arguments

<code>res</code>	A response builder object
------------------	---------------------------

Value

A 'shiny' response object

<code>build_tower</code>	<i>Build a 'shiny' app from a tower</i>
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Description

Build a 'shiny' app from a tower. This will create a new 'shiny' app with the specified layers added.

Usage

```
build_tower(tower)
```

Arguments

<code>tower</code>	A tower
--------------------	---------

Value

A 'shiny' app object that can be started

create_tower *Create a new tower*

Description

Create a new tower to build upon.

Usage

```
create_tower(app)
```

Arguments

app A 'shiny' app object

Value

A new tower object to add more layers to

print.tower *Print a tower*

Description

Print a tower

Usage

```
## S3 method for class 'tower'  
print(x, ...)
```

Arguments

x A tower
... Ignored arguments (for compatibility with print)

Value

No return value, called for side effects

req_body_form	<i>Extract form data from a request</i>
---------------	---

Description

Extracts form data from a request

Usage

```
req_body_form(req)
```

Arguments

req	A request object
-----	------------------

Value

A list containing the form data in the body

req_body_json	<i>Extract the request body from a JSON request</i>
---------------	---

Description

Extracts the request body from a JSON request

Usage

```
req_body_json(req, ...)
```

Arguments

req	A request object
...	Additional arguments to pass to fromJSON when parsing the request body. This will only be used the first time the request body is parsed. Subsequent calls will return the cached result.

Value

The R object representation of the body's JSON content

req_cookies	<i>Extract cookies from a request</i>
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Description

Extracts cookies from a request

Usage

```
req_cookies(req)
```

Arguments

req	A request object
-----	------------------

Value

A list containing the cookies

req_query	<i>Extract query parameters from a request</i>
-----------	--

Description

Extracts query parameters from a request

Usage

```
req_query(req)
```

Arguments

req	A request object
-----	------------------

Value

A list containing the query parameters

response_builder	<i>Create a response builder</i>
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Description

Creates a response builder

Usage

```
response_builder()
```

Value

A response builder object

set_content_type	<i>Set the content type of a response</i>
------------------	---

Description

Sets the content type of a response

Usage

```
set_content_type(res, content_type)
```

Arguments

res	A response builder object
content_type	The content type to set

Value

The response builder object

set_header	<i>Set a header on a response</i>
------------	-----------------------------------

Description

Sets or adds a header to a response

Usage

```
set_header(res, name, value)
```

Arguments

res	A response builder object
name	The name of the header
value	The value of the header

Value

The response builder object

set_status	<i>Set the status of a response</i>
------------	-------------------------------------

Description

Sets the status of a response

Usage

```
set_status(res, status)
```

Arguments

res	A response builder object
status	The status to set

Value

The response builder object

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