# Package 'shinytabconstructor'

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Type Package

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_	A package to structure and run shiny code in a way that makes it ehensible when codebases grow large
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addTab *Create a new tab* 

## Description

Create a new tab

#### Usage

```
addTab(name, parent = "ui", active = TRUE, open = TRUE)
```

## Arguments

name	A character string. What to call the tab? Cannot start with a number.
parent	A character string. The name of the tab the new parent should go under. Defaults to 'ui' which indicates the tab should be accessible on the top level of the main menu
active	A Boolean. Should the .yaml be initialized to immediately include the tab in the app?
open	A Boolean. Should RStudio attempt to open the tab you just created?

checkDuplicateTabNames

Check the files against naming conventions

## Description

Check the files against naming conventions

#### Usage

```
checkDuplicateTabNames(tocheck = NULL)
```

#### **Arguments**

tocheck An optional character vector of names to check against the existing ones

checkNamingConventions

Check the naming conventions of the app files

#### Description

Check the naming conventions of the app files

#### Usage

```
checkNamingConventions(files, criteria = "[^a-z0-9_\\.\\/]")
```

#### **Arguments**

files A character vector of file names

criteria A regex expression to definite the allowable characters

#### Value

**TRUE** 

## **Examples**

```
checkNamingConventions(c("01-desc.R", "a.good.name.R", "another_acceptable.name.R"))
```

deleteTab

Remove an existing tab

#### **Description**

Remove an existing tab

## Usage

```
deleteTab(name, cascade = FALSE)
```

#### Arguments

name A character string. What to call the tab? Cannot start with a number.

cascade A boolean, should it delete all tabs below it?

filesInTreeStructure 4

extractTabName

Extract the tab name from the file name

## Description

Extract the tab name from the file name

#### Usage

```
extractTabName(path)
```

#### **Arguments**

path

An .R or .yaml file path

#### Value

A character string

## **Examples**

```
extractTabName("a.dot.delimited.name.tabname.R")
```

 ${\tt filesInTreeStructure} \quad \textit{Determine a directory file structure}$ 

## Description

Determine a directory file structure

## Usage

```
filesInTreeStructure(file, pattern = NULL)
```

## **Arguments**

file

The root directory or file

pattern

An optional pattern to filter out directories containing files

#### Value

A list

findTab 5

findTab

Find an existing tab

## Description

Find an existing tab

## Usage

findTab(name)

## Arguments

name

The name of the tab to find the location for

#### Value

A filepath of the location of that tab

getChildTabs

Get the names of the tabs that are nested under a given tab

## Description

Get the names of the tabs that are nested under a given tab

#### Usage

```
getChildTabs(name)
```

## Arguments

name

A character string, the name of the tab

#### Value

A character vector

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getExistingTabs

Find the existing tab names

#### Description

Find the existing tab names

#### Usage

```
getExistingTabs()
```

#### Value

A character vector

#### **Examples**

getExistingTabs()

getServerLocation

Find the physical location of the server file within project

#### **Description**

Find the physical location of the server file within project

#### Usage

```
getServerLocation()
```

#### Value

A character string: The fully qualified file path to the server folder

getTabLocation

Find the physical location of the tabs within the project

#### Description

Find the physical location of the tabs within the project

#### Usage

```
getTabLocation()
```

#### Value

A character string: The fully qualified file path to the tabs folder

includeR 7

includeR

Recursively source R scripts and return the values

#### **Description**

Recursively source R scripts and return the values

#### Usage

```
includeR(path, single_as_list = FALSE, ...)
```

#### Arguments

path A path to an R script

... Additional argument to list.files

singe\_as\_list A Boolean. Should a single sourced value be returned as list? Useful for server

functions

#### Value

A list if more than one file sourced, otherwise the value itself

initTabConstructor

Initialize the framework

#### Description

Initialize the framework

#### Usage

```
initTabConstructor()
```

makeMenu

Make a menu from a configured hierarchical list

#### Description

Make a menu from a configured hierarchical list

#### Usage

```
makeMenu(.list)
```

#### **Arguments**

.list

A (possibly) nested list of the .yaml files defining a menu structure

#### Value

A list of html menu objects

8 menuItemList

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#### Description

Create a menu item

#### Usage

```
menuItemList(text, .list, icon = NULL, badgeLabel = NULL,
  badgeColor = "green", tabName = NULL, href = NULL, newtab = TRUE,
  selected = NULL, expandedName = as.character(gsub("[[:space:]]", "",
  text)), startExpanded = FALSE)
```

## Arguments

text	Text to show for the menu item.
.list	An optional list of menuSubItems
icon	An icon tag, created by icon. If NULL, don't display an icon.
badgeLabel	A label for an optional badge. Usually a number or a short word like "new".
badgeColor	A color for the badge. Valid colors are listed in validColors.
tabName	The name of a tab that this menu item will activate. Not compatible with href.
href	An link address. Not compatible with tabName.
newtab	If href is supplied, should the link open in a new browser tab?
selected	If TRUE, this menuItem or menuSubItem will start selected. If no item have selected=TRUE, then the first menuItem will start selected.
expandedName	A unique name given to each menuItem that serves to indicate which one (if any) is currently expanded. (This is only applicable to menuItems that have children and it is mostly only useful for bookmarking state.)
startExpanded	Should this menuItem be expanded on app startup? (This is only applicable to menuItems that have children, and only one of these can be expanded at any given time).
id	For sidebarMenu, if id is present, this id will be used for a Shiny input value, and it will report which tab is selected. For example, if id="tabs", then input\$tabs will be the tabName of the currently-selected tab. If you want to be able to book-

#### **Details**

Exactly the same as menuItem except that the menuSubItems can be passed in a list. All creational credit to the maintainers of that package

mark and restore the selected tab, an id is required.

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serverFunc

Source the server functions

## Description

Source the server functions

#### Usage

```
serverFunc(input, output, session)
```

sourceR

Source R files to the .GlobalEnv

## Description

Source R files to the .GlobalEnv

## Usage

sourceR(dir)

## Arguments

dir

A directory path

tabItemList

Form a tab structure from one or more tab items

#### Description

Form a tab structure from one or more tab items

#### Usage

tabItemList(items)

#### **Arguments**

 $i\, tems$ 

One or more tabItem in a list

#### Value

A html div

10 thisTabName

thisTabName

Get name of tab based on file name

## Description

Get name of tab based on file name

## Usage

thisTabName()

## Value

A character string or NULL

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