shinymgr: : CHEAT SHEET

An R package for developing rapid, reproducible analyses with Shiny

shinymgr tutorials

learnr::**available_tutorials**(package = "shinymgr")
learnr::**run_tutorial**(name = "intro", package = "shinymgr")

Setting up shinymgr

shinymgr::**shiny_mgr_setup(***parentPath*, *demo = FALSE***)**
- set *demo = TRUE* to include example apps and modules

DIRECTORY BREAKDOWN

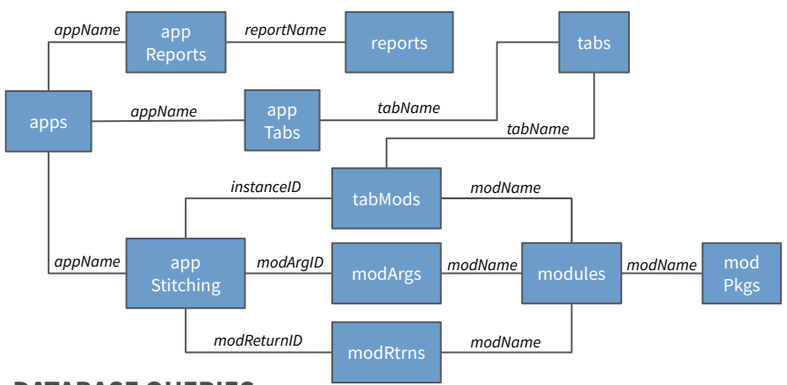
- **parentPath**
  - **shinymgr** (**shinyMgrPath** always refers to this folder)
    - **analyses** - *for storing analyses results (.RDS)*
    - **data** - *for storing external data used in modules*
    - **database** - *contains the shinymgr database*
      - shinymgr.sqlite
    - **modules** - *for storing custom modules*
    - **modules_app** - *stores apps made by builder*
    - **modules_mgr** - *essential shinymgr modules*
    - **reports** - *for storing .Rmd report templates*
    - **tests** - *for storing module unit tests*
    - **www** - *for storing media/css files*
    - global.R
    - ui.R
    - server.R

LAUNCHING THE SHINYMGR GUI

shinymgr::**launch_shinymgr(***shinyMgrPath***)**

The shinymgr database

Keeps track of apps, modules, reports, and instructions for the app builder



DATABASE QUERIES

shinymgr::**qry_app_flow(***appName, shinyMgrPath*)
shinymgr::**qry_app_stitching(***appName, shinyMgrPath*)
shinymgr::**qry_mod_info(***modName, shinyMgrPath*)
shinymgr::**qry_row(***tableName, rowConditions, colConditions, shinyMgrPath*)

Writing shinymgr modules

STARTING MODULE SCRIPTS

shinymgr::**mod_init(***modName, "author", shinyMgrPath***)**

MODULE SCRIPT HEADER

#!! ModName = *module function name (no spaces)*
#!! ModDisplayName = *module display name*
#!! ModDescription = *description of module*
#!! ModCitation = *citation for module*
#!! ModNotes = *developer notes*
#!! ModActive = *1/0*
#!! FunctionArg = *argumentName* **!!** *description* **!!** *class*
#!! FunctionReturn = *returnName* **!!** *description* **!!** *class*

MODULE UI FUNCTION

```
new_mod_ui <- function(id) {
  ns <- NS(id)
  tagList(
    # UI components go here
  )
}

See the Shiny Widget Gallery for
examples
```

MODULE SERVER FUNCTION

```
new_mod_server <- function(id, argNames) {
  moduleServer(id,
  function(input, output, session) {
    ns <- session$ns
    # Server components go here
    return(
      reactiveValues(
        returnName1 = reactive(returnName1()),
        returnName2 = reactive(returnName2())
      )
    )
  })
}
```

TESTING MODULES (SERVER FUNCTION ONLY)

```
test_that("something works", {
  # create any reactive argument values here
  testServer(app = new_mod_server, args = list(), {
    # create some hard-coded expected values
    # execute tests, often using expect_*() functions
  })
})
```

REGISTERING MODULES

shinymgr::**mod_register(***modName, shinyMgrPath***)**

VERIFYING MODULE INFO

shinymgr::**check_mod_info(***modName, shinyMgrPath***)**

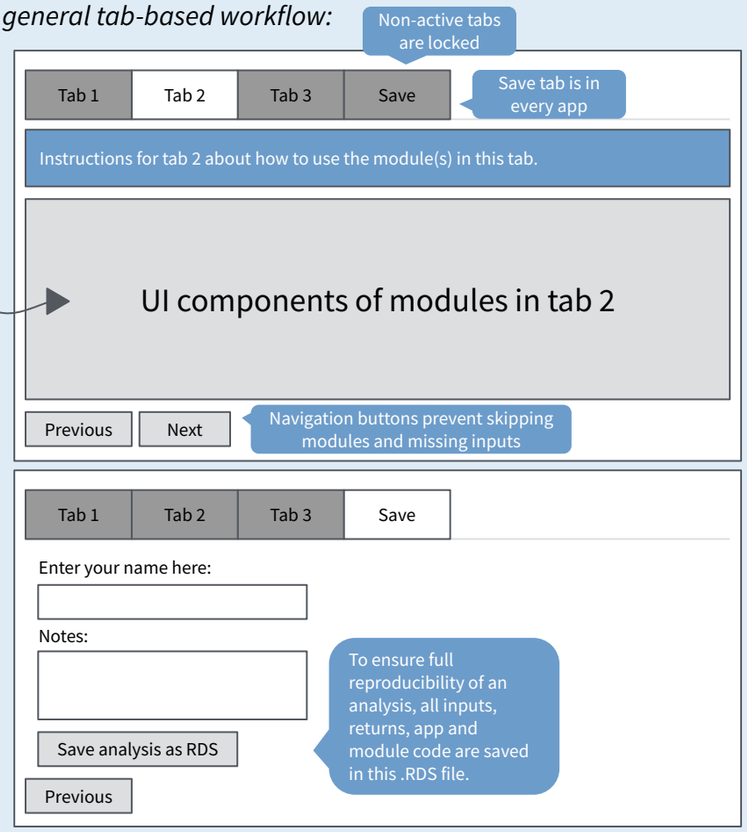
Deleting from the database

*shinymgr::**delete_*** all use the same arguments:*
"name", shinyMgrPath, fileDelete = FALSE

shinymgr::**delete_app()** - deletes app from the database
Set fileDelete = TRUE to delete the app R script
shinymgr::**delete_mod()** - deletes module from the database
Set fileDelete = TRUE to delete the module R script
shinymgr::**delete_report()** - deletes report from the database
Set fileDelete = TRUE to delete the report .Rmd file

shinymgr apps

Apps are created by the shinymgr app builder and their scripts are stored in the modules_app folder. Apps all follow the same general tab-based workflow:



RECREATE AN ANALYSIS FROM THE .RDS FILE

shinymgr::**restore_analysis**(*analysis_path*)
shinymgr::**rerun_analysis(***analysis_path***)**

Report .Rmd templates

```
---
title: 'Report title here'
output: html_document
params:
  file:
    input: file
    label: "Choose analysis output .RDS"
    value: ""
    multiple: FALSE
---
```{r setup, include=FALSE}
library(knitr)
knitr::opts_chunk$set(echo = FALSE)
ps <- readRDS(params$file)
```
```

RStudio® is a trademark of RStudio, Inc. • CC0 1.0 Universal Summary • See the wiki and download the package here • package version 1.1.0 • Updated: 2023-06