How to include and display images in R package?

Asked 3 years, 1 month ago Modified 2 years, 1 month ago Viewed 528 times 🛟 Part of R Language Collective



I am trying to package a Shiny module that displays a modal with a logo (in png format). For this purpose, I have created a "inst/www" directory to store the logo file. The directory tree looks something like this:



4)

```
DESCRIPTION

inst

www

logo.png

man

logo.png

NAMESPACE

packagetest.Rproj

R

logo.png

logo.pn
```

However, after building and installing, the package doesn't seem to read from the predefined directory where I put my "logo.png". Instead, it reads from the main project where I inserted the function from the package. The testUI() function of the package is something like this:

```
testUI <- function(id) {</pre>
 ns <- NS(id)
  shiny::showModal(
    modalDialog(
      title = img(src="inst/www/logo.png", style="display:block; margin-left:auto;
margin-right:auto;"),
     br(),
      fluidRow(
        column(6, align="center", offset = 3,
               textInput(ns("username"), label = NULL, placeholder = "Username"),
               passwordInput(ns("password"), label = NULL, placeholder = "Password")
        )
      ),
      footer = (
        fluidRow(
          column(6, align="center", offset = 3,
                 actionButton(ns("signin"), "Sign in")
     )
   )
 )
```

From what I've seen in other projects, the "inst" folder seems to be the way to go but I'm still new to R packages so I don't really know what I'm doing. Any help on this is much appreciated, thanks!



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edited Apr 27, 2021 at 2:34

asked Apr 27, 2021 at 0:33



1 Answer





...and almost a year later, I found the answer to my question while working on an actual package that needs to include image assets! According to the <u>official R package documentation section</u> on the inst folder:





To find a file in inst/ from code use system.file(). For example, to find inst/extdata/mydata.csv, you'd call system.file("extdata", "mydata.csv", package = "mypackage"). Note that you omit the inst/ directory from the path. This will work if the package is installed, or if it's been loaded with devtools::load_all().



In this case, assuming my package is called "testpackage":

```
testUI <- function(id) {</pre>
 ns <- NS(id)
  shiny::showModal(
    modalDialog(
      title = img(
                src=system.file("www/logo.png", package = "testpackage"),
                style="display:block; margin-left:auto; margin-right:auto;"
      ),
      br(),
      fluidRow(
        column(6, align="center", offset = 3,
               textInput(ns("username"), label = NULL, placeholder = "Username"),
               passwordInput(ns("password"), label = NULL, placeholder = "Password")
      ),
      footer = (
        fluidRow(
          column(6, align="center", offset = 3,
                 actionButton(ns("signin"), "Sign in")
      )
    )
```

}

Note that I didn't use the comma separated directory structure as shown in the official example as I found that it's more intuitive to enter the full relative path, keeping in mind that:

When a package is installed, everything in inst/ is copied into the top-level package directory. In some sense inst/ is the opposite of .Rbuildignore - where .Rbuildignore lets you remove arbitrary files and directories from the top level, inst/ lets you add them. You are free to put anything you like in inst/ with one caution: because inst/ is copied into the top-level directory, you should never use a subdirectory with the same name as an existing directory. This means that you should avoid inst/build, inst/data, inst/demo, inst/exec, inst/help, inst/html, inst/inst, inst/libs, inst/Meta, inst/man, inst/po, inst/R, inst/src, inst/tests, inst/tools and inst/vignettes.

Hope this helps anyone else that's facing the same issue :)

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answered Apr 13, 2022 at 4:02

