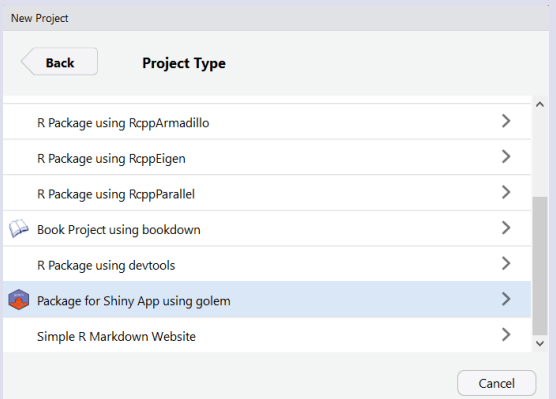
golem :: A Framework for Building Robust Shiny Apps

Create, maintain & deploy a packaged Shiny Application

1. Create a golem

With RStudio:

File ➡ New Project ➡ New Directory ➡ Package for Shiny App using golem



Using the command line:

golem::create_golem(path = "~/appdemo")
Creates a golem at '~/appdemo'.

2. Set up your golem with dev/01_start.R

golem::fill_desc(pkg_name = "appdemo", …)
Fills the package DESCRIPTION with the author information, the application title & description, links…

golem::set_golem_options()
Sets {golem} global options.

golem::use_recommended_tests()
Creates a test template for your app.

golem::use_recommended_deps()
Adds {shiny}, {DT}, {attempt}, {glue}, {htmltools}, and {golem} as dependencies.

golem::use_favicon(path = "path/to/favicon.ico")
Changes the default favicon.

golem::use_utils_ui()
Creates 'R/golem_utils_ui.R', with UI-related helper functions.

golem::use_utils_server()
Creates 'R/golem_utils_server.R', with server-related helper functions.

3. Day-to-day dev with golem

A. Look at your golem

- **Launch your app with *dev/run_dev.R*:**

options(golem.app.prod = FALSE)
Sets the prod or dev mode. (see ?golem::app_dev)

golem::detach_all_attached()
Detaches all loaded packages and cleans your environment.

golem::document_and_reload()
Documents and reloads your package.

appdemo::run_app()
Launches your application.

B. Customise your golem with dev/02_dev.R

- **Edit R/app_ui.R & R/app_server.R**

'R/app_ui.R' & 'R/app_server.R' hold the UI and server logic of your app. You can edit them directly, or add elements created with golem (e.g, modules).

- **Add shiny modules**

golem::add_module(name = "example")
Creates 'R/mod_example.R', with mod_example_ui and mod_example_server functions inside.

- **Add external files**

golem::add_js_file("script")
Creates 'inst/app/www/script.js'.

golem::add_js_handler("script")
Creates 'inst/app/www/script.js' with a skeleton for shiny custom handlers.

golem::add_css_file("custom")
Creates 'inst/app/www/custom.css'.

- **Use golem built-in JavaScript functions**

golem::activate_js()
Activates the built-in JavaScript functions. To be inserted in the UI.

golem::invoke_js("jsfunction", ns("ref_ui"))
Invokes from the server any JS function: built-in golem JS functions or custom ones created with add_js_handler()

4. Exhibit your golem

Locally

remotes::install_local()
Installs your golem locally like any other package.

To Rstudio products

golem::add_rstudioconnect_file()
Creates an app.R file, ready to be deployed to RStudio Connect.

golem::add_shinyappsio_file()
Creates an app.R file, ready to be deployed to shinyapps.io.

golem::add_shinyserver_file()
Creates an app.R file, ready to be deployed to Shiny Server.

With Docker

golem::add_dockerfile()
Creates a Dockerfile that can launch your app.

golem::add_dockerfile_shinyproxy()
Creates a Dockerfile for ShinyProxy.

golem::add_dockerfile_heroku()
Creates a Dockerfile for Heroku.

Tips and tricks

golem::print_dev("text")
Prints *text* in your console if *golem::app_dev()* is *TRUE*.

golem::make_dev(function)
Makes function depend on *golem::app_dev()* being *TRUE*.

golem::browser_button()
Creates a backdoor to your app (see ?golem::browser_button).

- How to make a *run_dev* script for a specific module:

```
golem::detach_all_attached()
golem::document_and_reload()

ui <- mod_example_ui( "my_module" )
server <- function(input,output,session){
  callModule( mod_example_server, "my_module", session )
}
shinyApp(ui, server)
```

Keep in mind that a golem is a package. Everything you know about package development works with your packaged Shiny App created with {golem}! (documentation, tests, CI & CD, ...)