

Shiny Training Cheat Sheet

Create a new Shiny app

File > New File > Shiny Web App... Enter name for app, set as single file app (if not already selected) and choose directory. Finally, click Create.

Basic Shiny

Inputs

```
{typeOfInput}Input(inputId, label, ...)
```

Outputs

```
{typeOfOutput}Output(outputId, ...)
```

Reactive expressions

```
reactiveData <- reactive({  
  return_data %>%  
  ...  
})
```

```
output$table <- renderDT({  
  returnData() %>%  
  ...  
})
```

Example

```
ui <- fluidPage(  
  
  textInput("myInput", "I'm a text input!"),  
  textOutput("myOutput")  
)  
  
server <- function(input, output, session) {  
  
  reactiveText <- reactive({  
    upper(input$myInput)  
  })  
  
  output$myOutput <- renderText({  
    reactiveText() # Reference a reactive expression - it is not a function!  
  })  
}  
  
shinyApp(ui, server)
```

Debugging

- Start simple
- Make sure your code works outside of Shiny! One way of writing Shiny apps is known as **markdown first**; you write your code in RMarkdown initially, and only once everything (or some logical unit of the whole code) is working, only then create (or add to) a `{shiny}` app
- Use the `cat()` or `print()` functions
- Breakpoints and `browser()`
- Run `options(shiny.reactlog=TRUE)`, run the app and press `Ctrl+F3` for an interactive summary of reactive activity