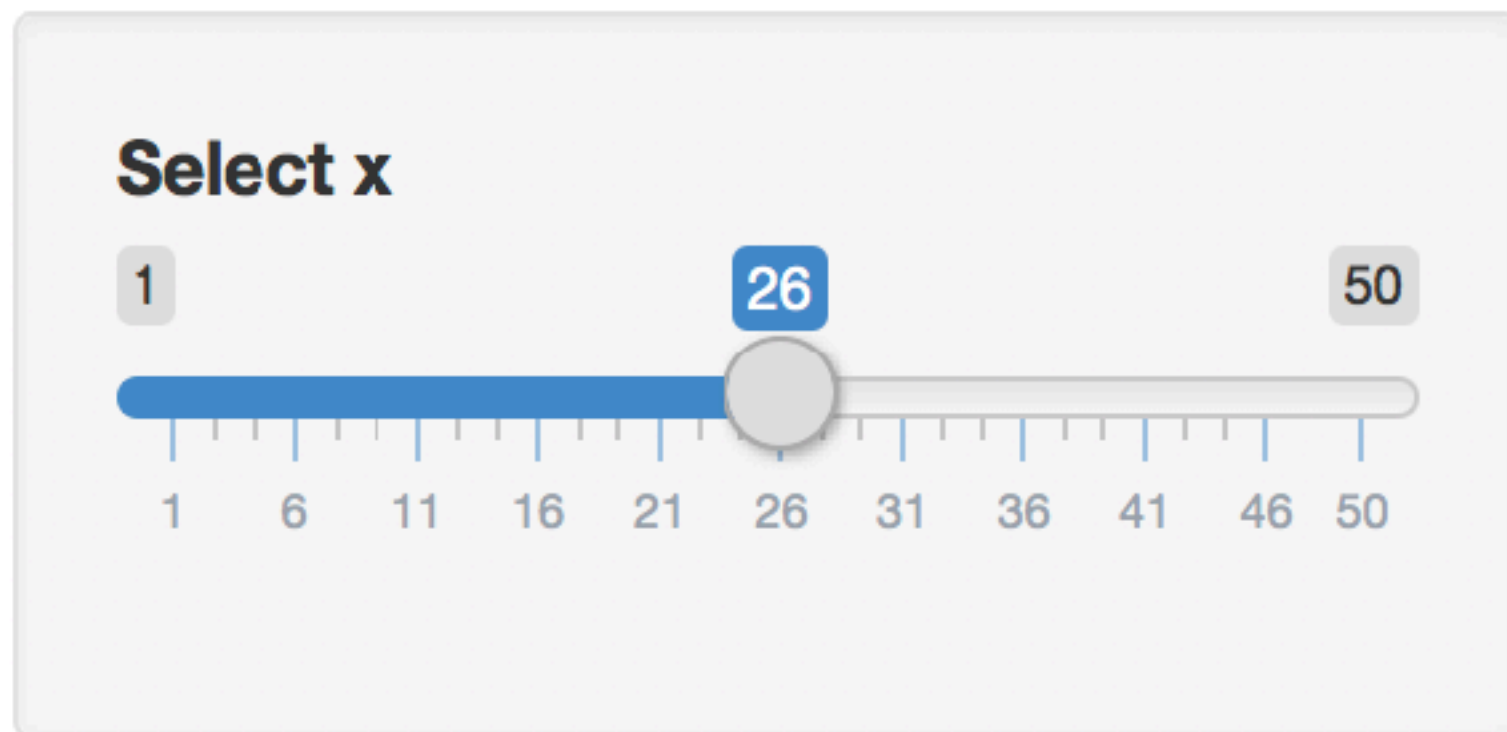# Reactivity recap

DataCamp

Three lessons

1. Reactives are equivalent to no argument functions. Think about them as functions, think about them as variables that can depend on user input and other reactives.

2. Reactives are for reactive values and expressions, observers are for their side effects.

3. Do not define a reactive() inside a render*() function.

What's wrong?

```r
ui <- fluidPage(
  titlePanel("Add 2"),
  sidebarLayout(
    sidebarPanel(
      sliderInput("x", "Select x", min = 1, max = 50, value = 30) ),
    mainPanel( textOutput("x_updated") )
  )
)

server <- function(input, output) {
  add_2             <- function(x) { x + 2 }
  current_x         <- add_2(input$x)
  output$x_updated  <- renderText({ current_x })
}

shinyApp(ui, server)
```

What's wrong?

Add 2

Select x

| 1 | 26 | 50 |

1   6   11   16   21   26   31   36   41   46   50

28

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BUILDING WEB APPLICATIONS IN R WITH SHINY

Let's practice!