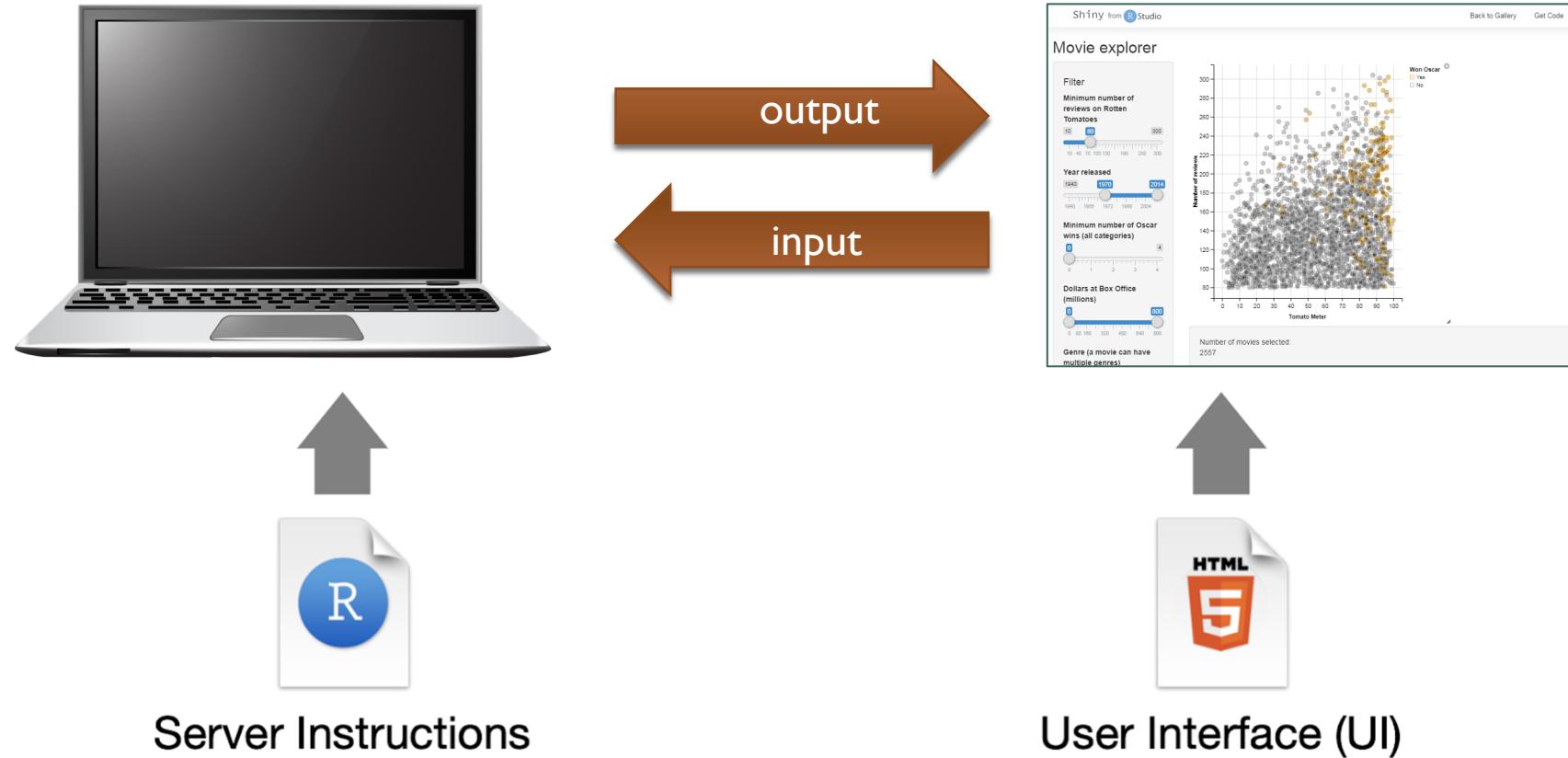


Tema 2

¿Cómo construir una
Shiny app?

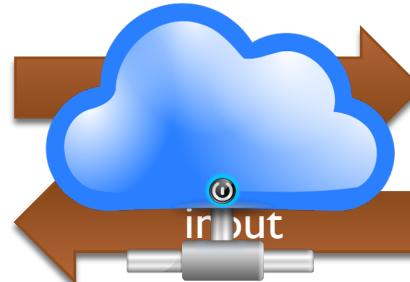
Arquitectura de Shiny app

Una Shiny app es una página web conectada a una computadora con sesión abierta de R



Arquitectura de Shiny app

Una Shiny app es una página web conectada a un servidor con sesión abierta de R



Server Instructions



User Interface (UI)

PLANTILLA DE LA APP

```
library(shiny)

ui <- fluidPage()

server <- function(input, output) {}

shinyApp(ui = ui, server = server)
```

PLANTILLA DE LA APP

Se integra la app
(comunicación entre ui y server)

```
library(shiny)
```

Llamamos la paquetería

```
ui <- fluidPage()
```

Página web donde interactúan
con los usuarios

```
server <- function(input, output) {}
```

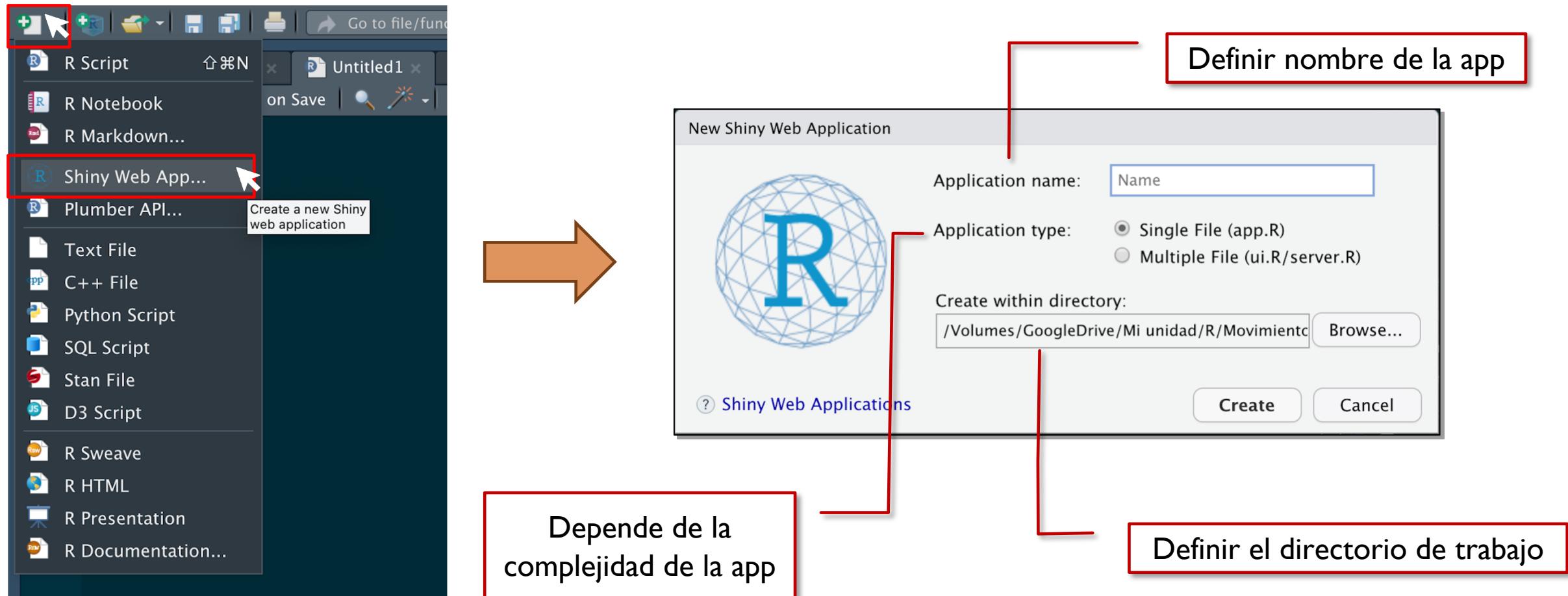
Comportamiento
de nuestra app

```
shinyApp(ui = ui, server = server)
```

PLANTILLA DE LA APP

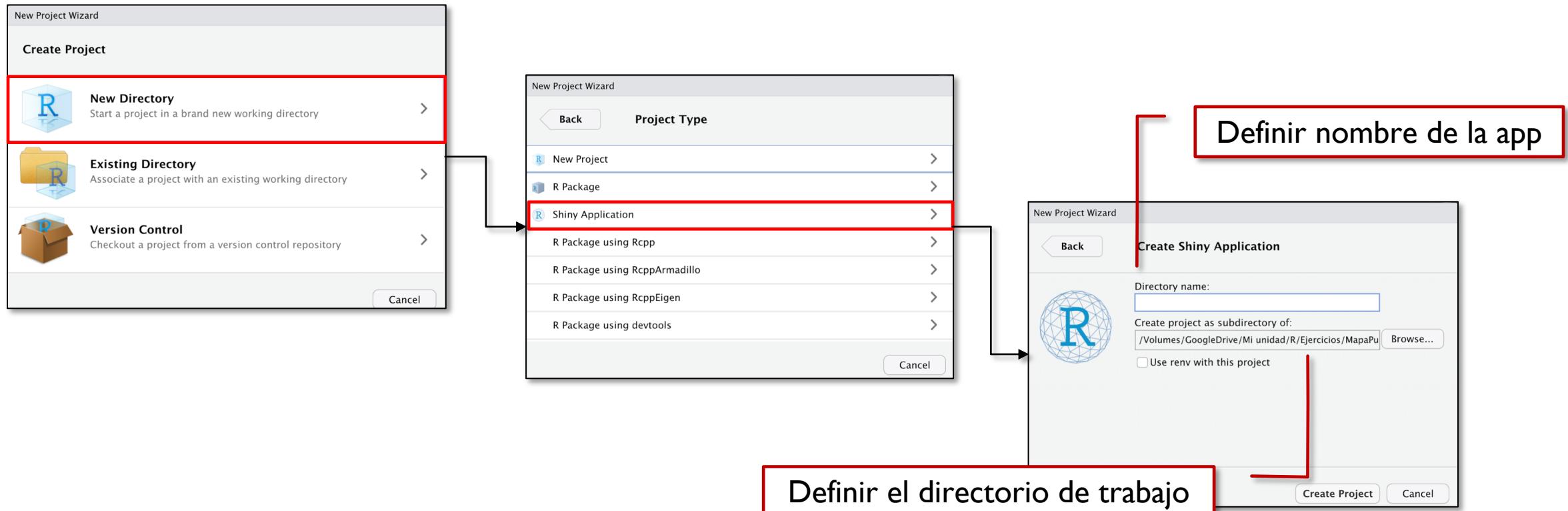


EJERCICIO I: CREAR UN PROYECTO DE SHINY EN RSTUDIO



EJERCICIO I: CREAR UN PROYECTO DE SHINY EN RSTUDIO

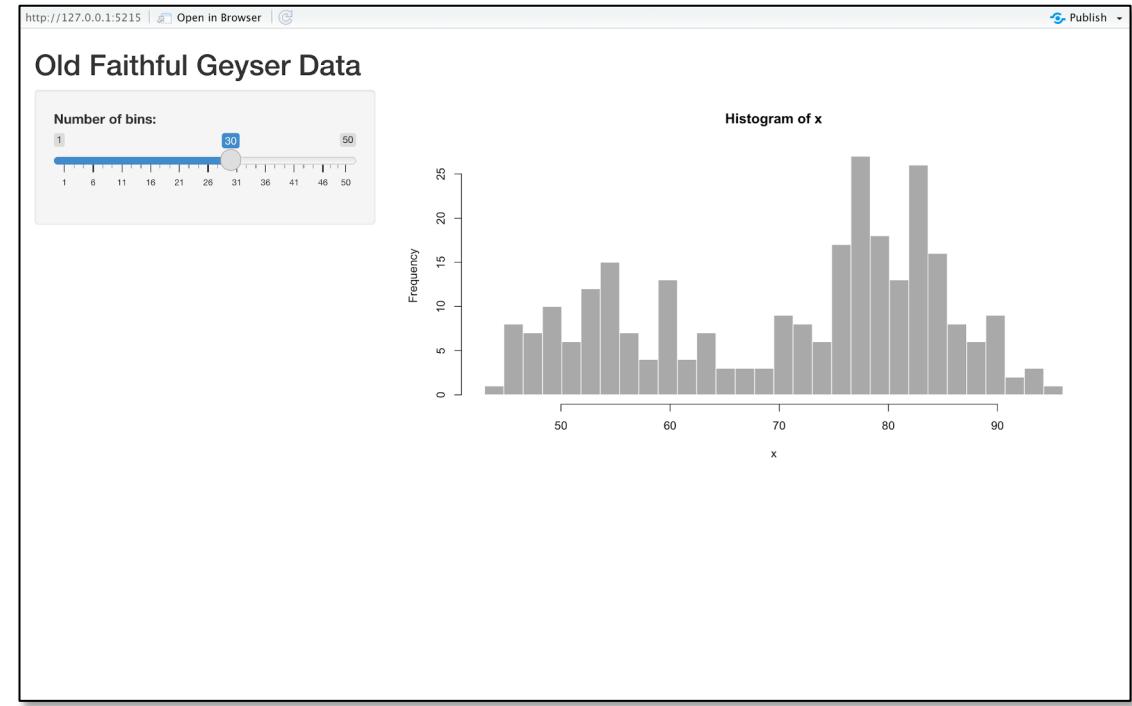
File > New Project > New Directory > Shiny Application > Create Shiny Application



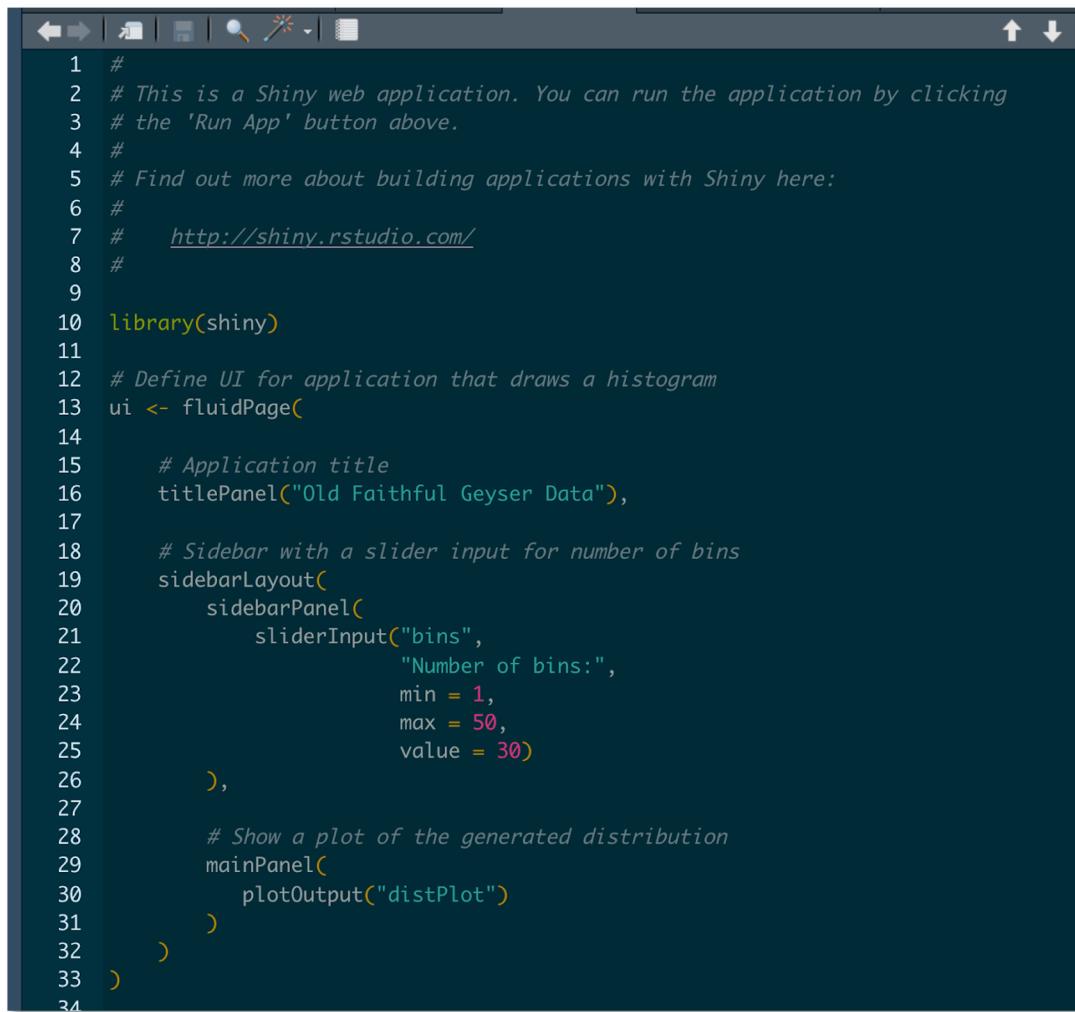
EJERCICIO I: CREAR UN PROYECTO DE SHINY EN RSTUDIO

Abre la app almacenada en un directorio a directory with runApp().

```
1 #  
2 # This is a Shiny web application. You can run the application by clicking  
3 # the 'Run App' button above.  
4 #  
5 # Find out more about building applications with Shiny here:  
6 #  
7 #     http://shiny.rstudio.com/  
8 #  
9  
10 library(shiny)  
11  
12 # Define UI for application that draws a histogram  
13 ui <- fluidPage(  
14  
15     # Application title  
16     titlePanel("Old Faithful Geyser Data"),  
17  
18     # Sidebar with a slider input for number of bins  
19     sidebarLayout(  
20         sidebarPanel(  
21             sliderInput("bins",  
22                 "Number of bins:",  
23                 min = 1,  
24                 max = 50,  
25                 value = 30)  
26         ),  
27  
28         # Show a plot of the generated distribution  
29         mainPanel(  
30             plotOutput("distPlot")  
31         )  
32     )  
33 )  
34 )
```



EJERCICIO I: CREAR UN PROYECTO DE SHINY EN RSTUDIO



The screenshot shows the RStudio interface with a Shiny application code editor. The code is a template for a histogram application. The UI section defines a title panel and a sidebar with a slider input for the number of bins. The server section contains an empty function definition.

```
1 #  
2 # This is a Shiny web application. You can run the application by clicking  
3 # the 'Run App' button above.  
4 #  
5 # Find out more about building applications with Shiny here:  
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21       sliderInput("bins",  
22         "Number of bins:",  
23         min = 1,  
24         max = 50,  
25         value = 30)  
26     ),  
27  
28     # Show a plot of the generated distribution  
29     mainPanel(  
30       plotOutput("distPlot")  
31     )  
32   )  
33 )  
34 )
```

Identificar dentro del código los elementos de la estructura de la app

librerias

library(shiny)

User interface

ui <- fluidPage()

Server

server <- function(input, output) {}

Run

shinyApp(ui = ui, server = server)