



ASBCB Omics Codeathon  
– April 2023

# Workshop

## R Shiny Application Development

By:

Hiba Ben Aribi

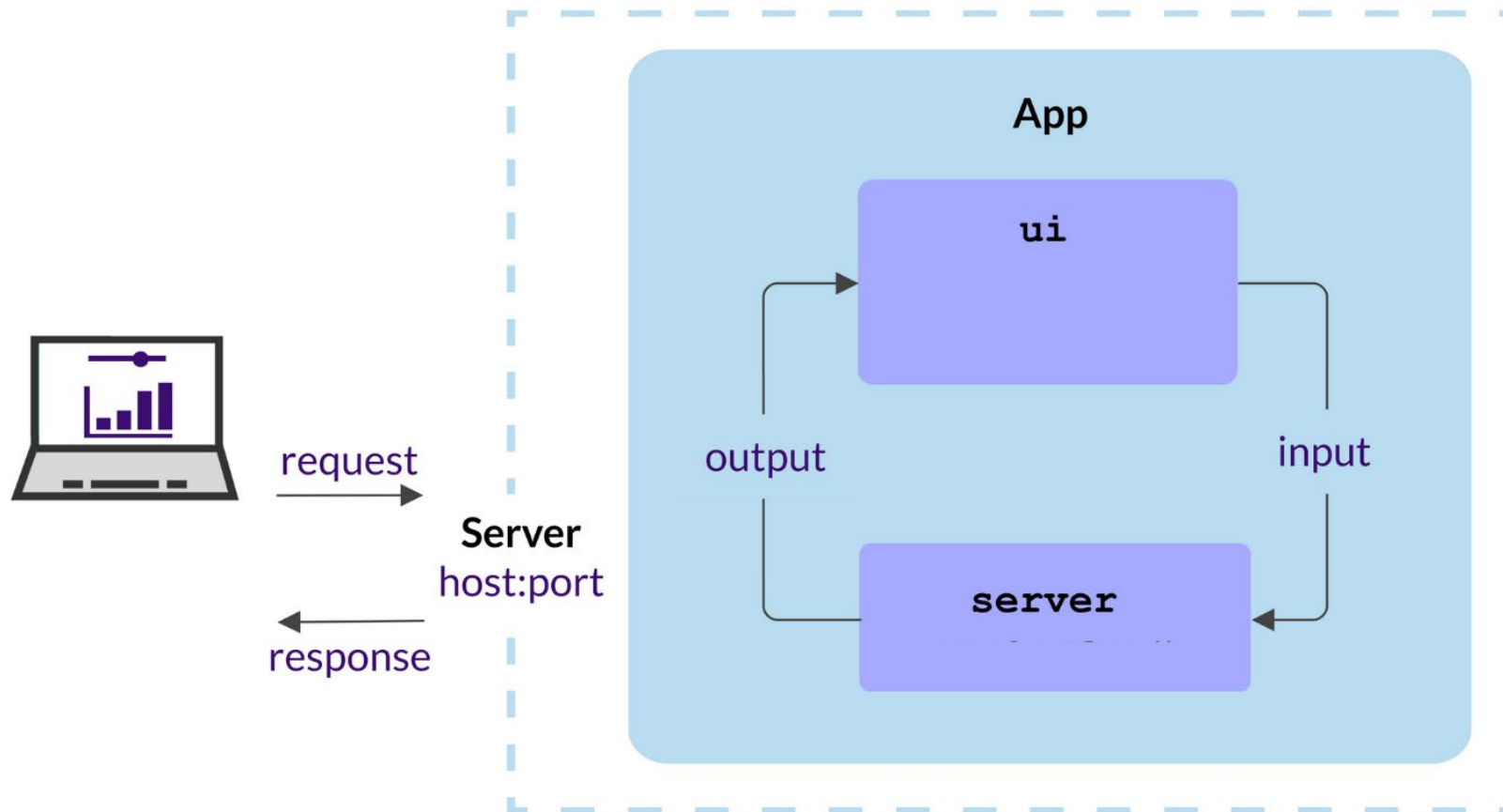
Affiliation:



National Institute of  
Applied Science and  
Technology, Tunisia

# Introduction To Shiny

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# Start the tutorial

GitHub :

- [https://github.com/HibaBenAribi/Learn\\_Shiny](https://github.com/HibaBenAribi/Learn_Shiny)
- [https://bit.ly/Learn\\_Shiny](https://bit.ly/Learn_Shiny)

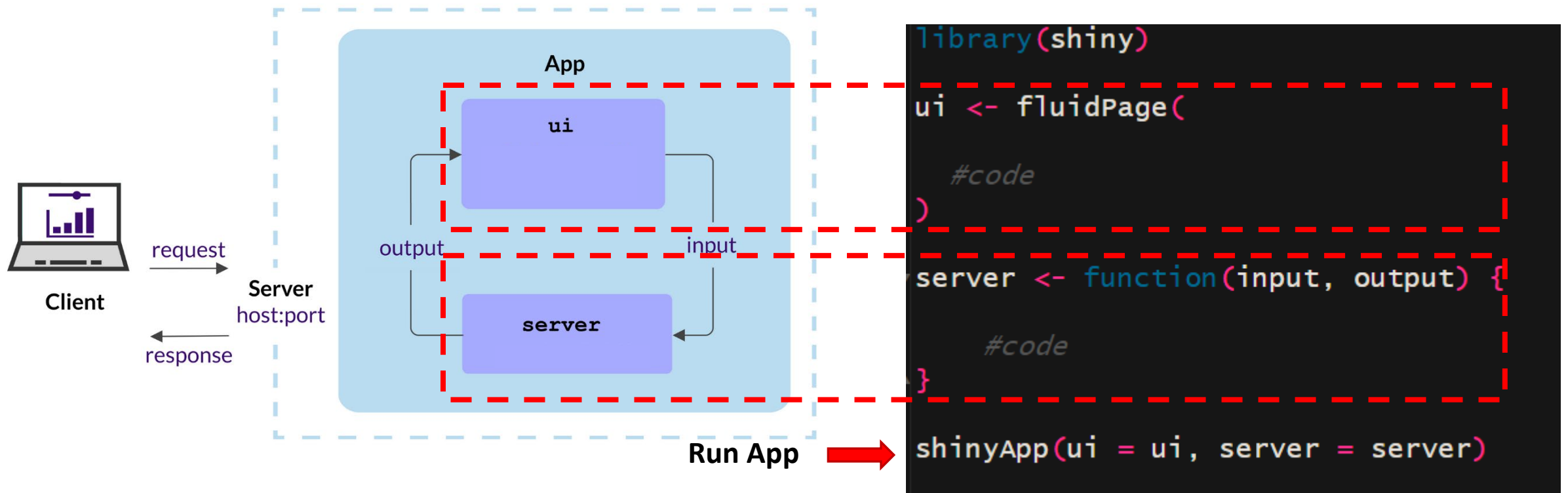


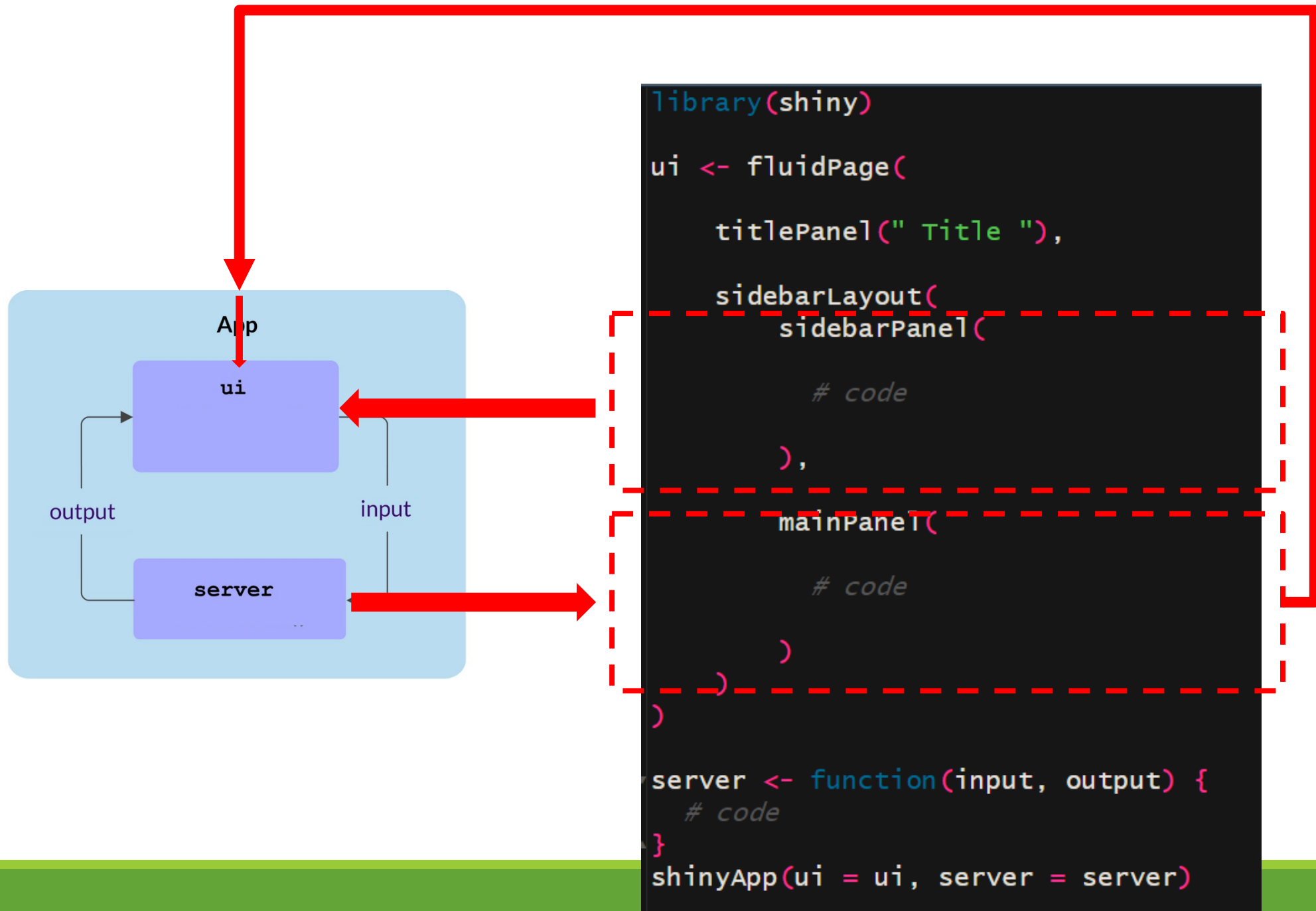
# Requirements

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- Install R
- Install R studio
- Install dependencies

# Shiny App Layout



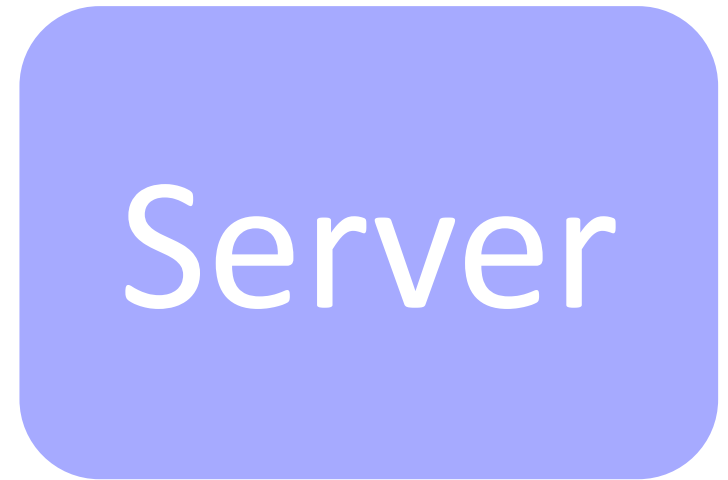




Output\$result



Input\$value



# The User Interface : Input

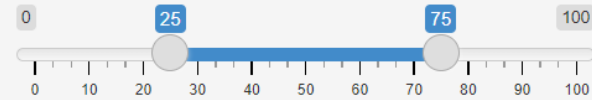
## File input

Browse... No file selected

## Date input

2014-01-01

## Slider range



## Single checkbox

☒ Choice A

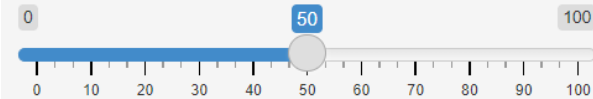
## Text input

Enter text...

## Date range

2024-02-08 to 2024-02-08

## Slider



## Checkbox group

- ☒ Choice 1
- ☐ Choice 2
- ☐ Choice 3

## Numeric input

1

## Select box

Choice 1

## Action button

Action

## Radio buttons

- ☒ Choice 1
- ☐ Choice 2
- ☐ Choice 3



# The User Interface : Input

## Shiny Widgets Gallery

For each widget below, the Current Value(s) window displays the value that the widget provides to shinyServer. Notice that the values change as you interact with the widgets.

### Action button

Action

Current Value:

```
[1] 0  
attr(,"class")  
[1] "shinyActionButtonValue" "integer"
```

See Code

### Single checkbox

☒ Choice A

Current Value:

```
[1] TRUE
```

See Code

### Checkbox group

☒ Choice 1

☐ Choice 2

☐ Choice 3

Current Values:

```
[1] "1"
```

See Code

# The User Interface : Input

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## File input

Browse...

No file selected

## Text input

Enter text...

## Numeric input

1

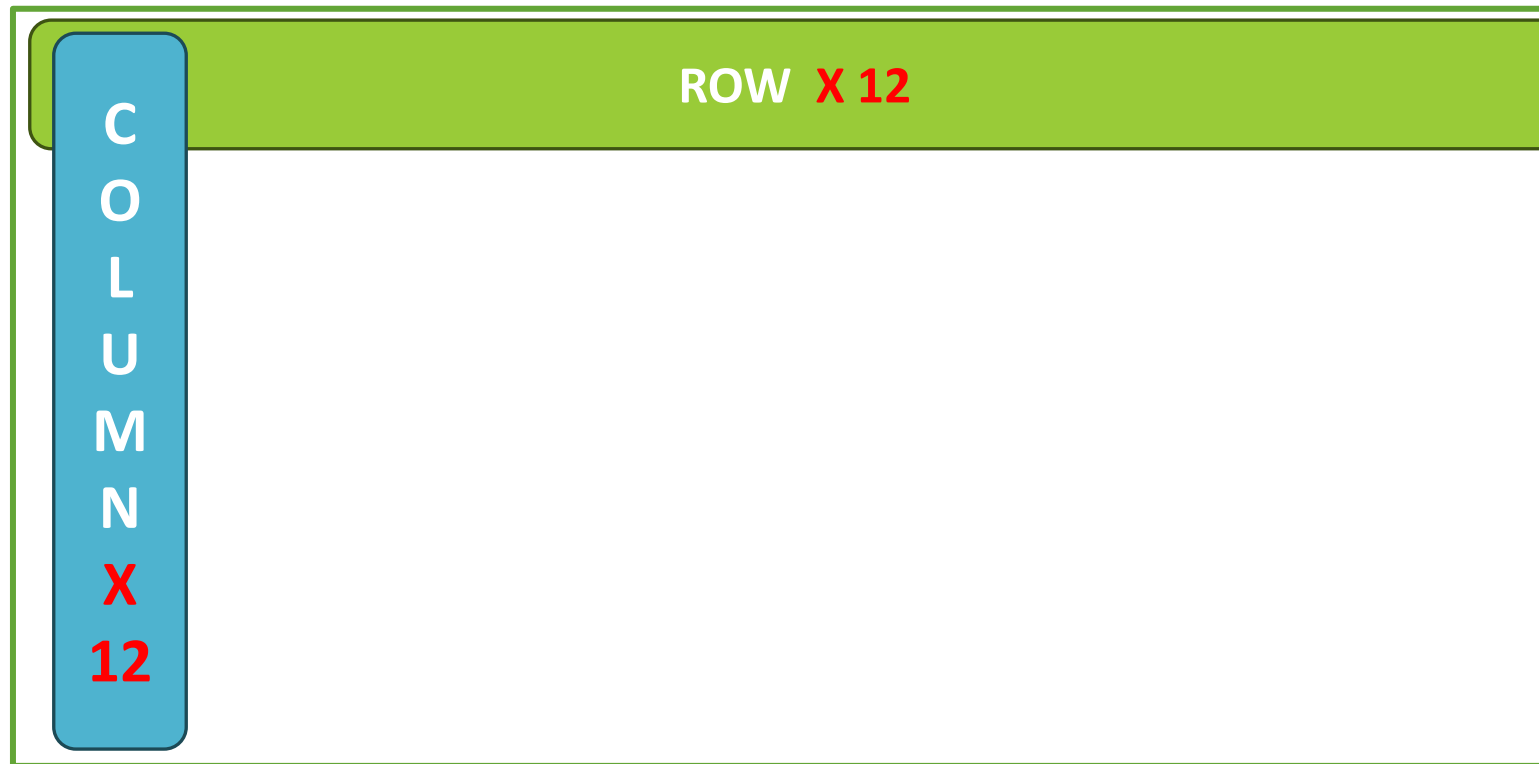


## Action button

Action

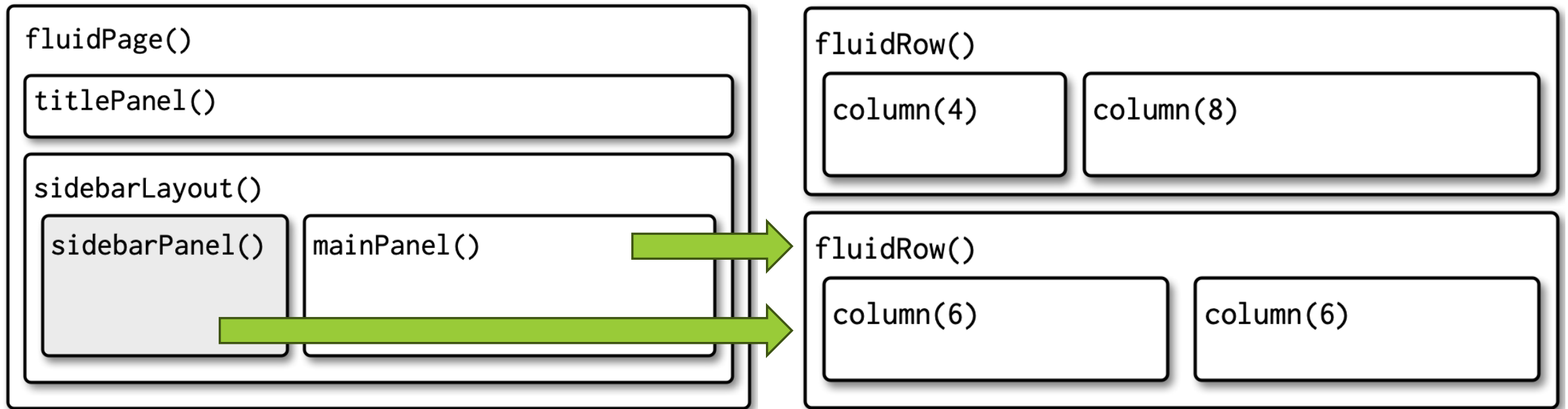
# The User Interface : columns and rows

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# The User Interface : columns and rows

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# Advanced design

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<https://shiny.posit.co/r/getstarted/build-an-app/customizing-ui/theming.html>

<https://shiny.posit.co/r/articles/build/dashboards/>

[https://rstudio.github.io/shinydashboard/get\\_started.html](https://rstudio.github.io/shinydashboard/get_started.html)

<https://daattali.com/shiny/shinycssloaders-demo/>

<https://github.com/daattali/shinycssloaders>

Let's create a Shiny Application for  
gene expression data visualization

## Contact me

Hiba Ben Aribi

Email : [benaribi.hiba@gmail.com](mailto:benaribi.hiba@gmail.com)

Linkdeen :Hiba Ben Aribi

<https://www.linkedin.com/in/hiba-ben-aribi-b29634239/>

# Thank you for your attention