

Lab 12

透過網頁展示專案成果

Static Websites, Rmd Templates & Shiny App

其實，你已握有一個強大的武器...



這個武器就是 GitHub

- 版本控制（備份）、專案規劃與管理、合作開發
- 其它免費服務¹
- 架設靜態網站 (GitHub Pages)
 - 將專案展示在網頁上
 - 這是保存成果**最好**的方式



¹ 例如, [GitHub Actions](#) 自動化服務。簡單來說就是可以透過 GitHub 執行預寫好的程式（任何語言皆可）。
這意味著你可以做任何程式做得到的事（e.g. 自動分析資料產生報表）

Why Through the Web?

- Persistence

- 你終究會忘記 or 遺失電腦上的各種檔案 (Word、簡報、PDF)

- Easy Access through URL (for yourself & others)

- Sharing
- Portfolio
- Self Soothing

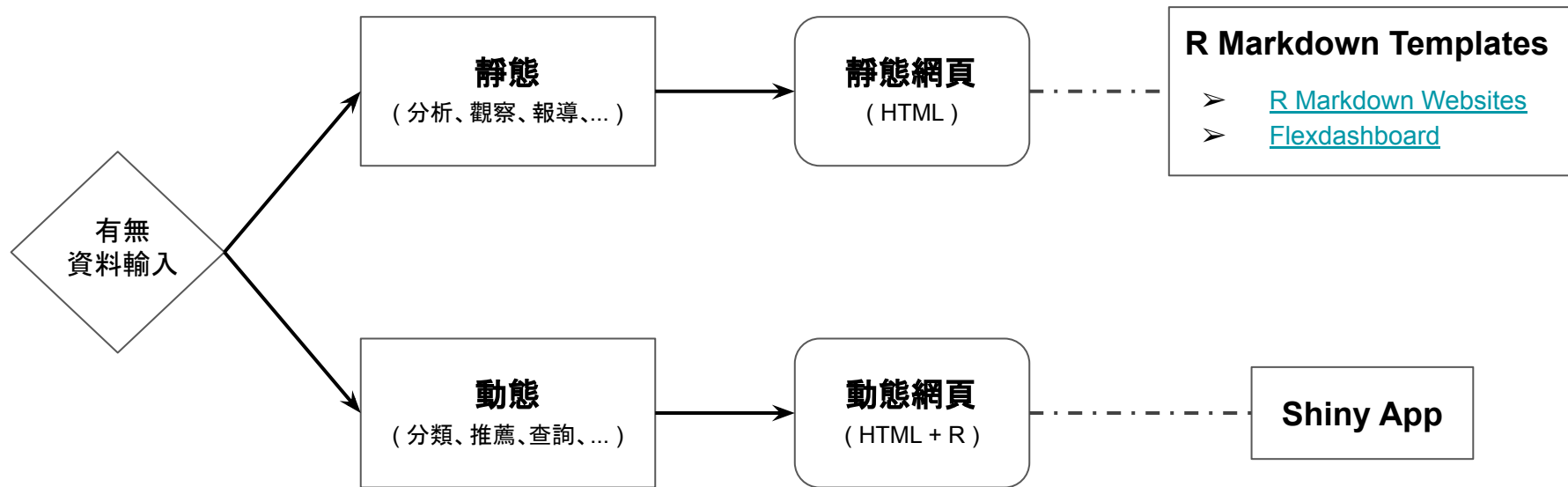
My projects

Below is an incomplete list of packages and projects I have worked on. For a full list, please see my vitae.

- animation: a gallery of animations in statistics and utilities to create animations
- blogdown: create blogs and websites with R Markdown
- bookdown: author books and technical documents with R Markdown
- DT: a wrapper of the JavaScript library DataTables
- formatR: Format R code automatically
- knitr: Dynamic report generation with R

<https://yihui.org/en/about/#my-projects>

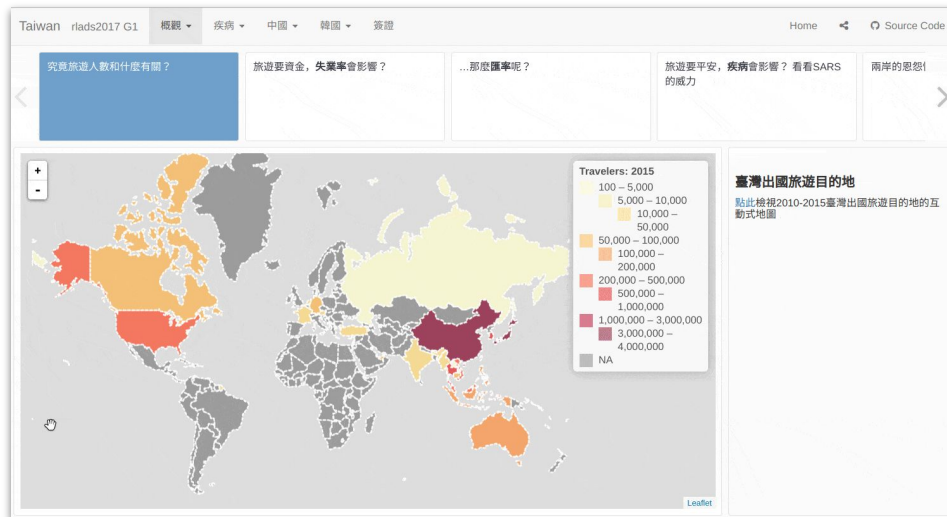
Today: R's Ecosystem for Online Sharing



R Markdown Templates



[R Markdown Websites](#)



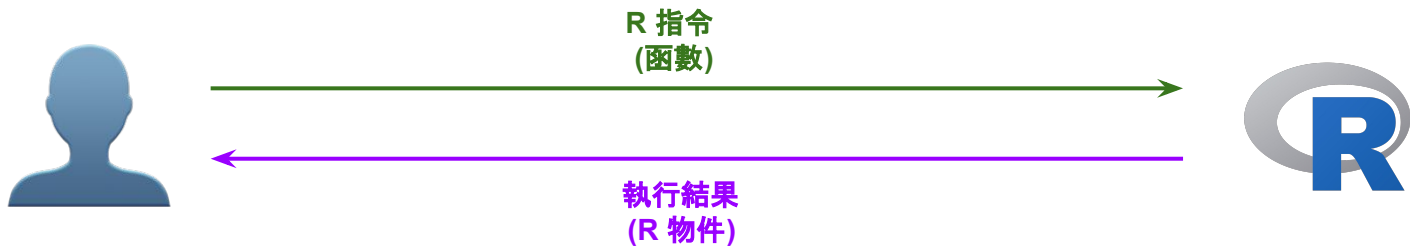
[Flexdashboard](#)

Tutorial

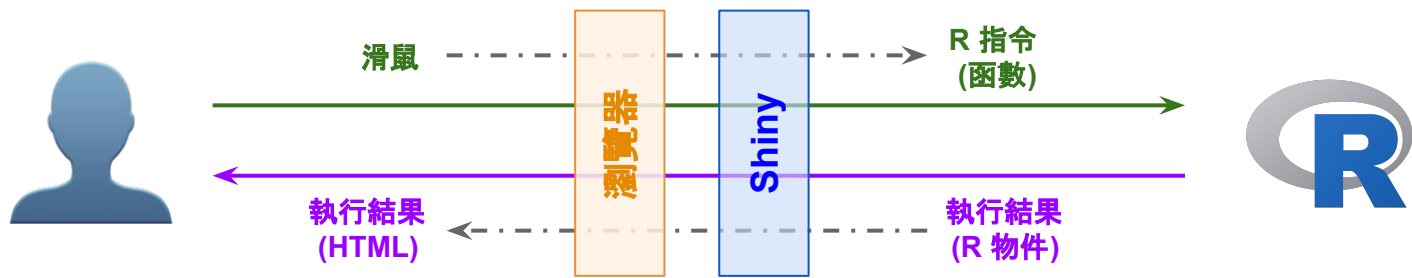
References

Shiny

Shiny



Shiny

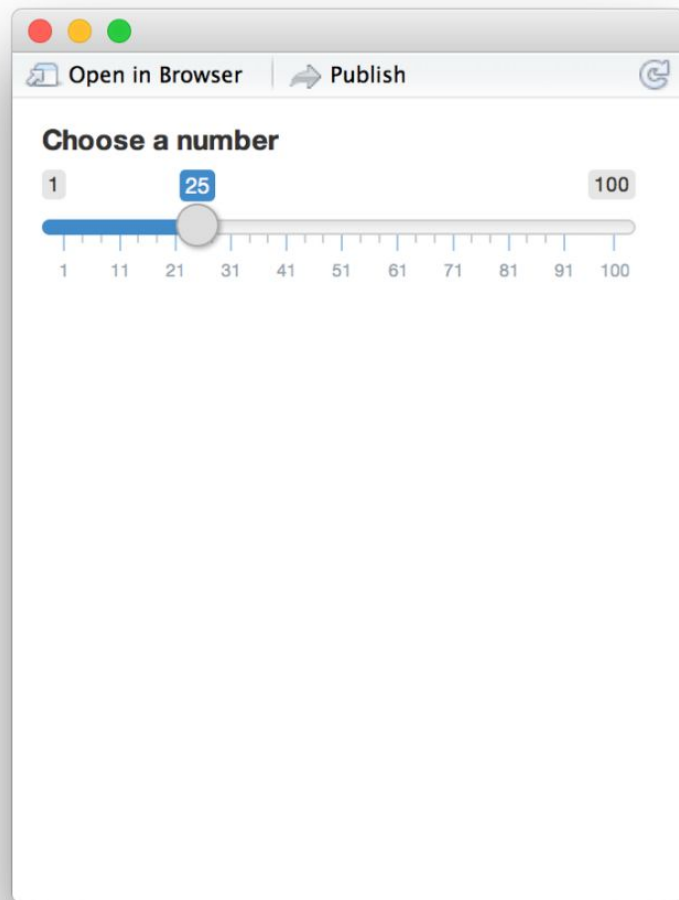


UI Inputs

```
library(shiny)
ui <- fluidPage(
  sliderInput(inputId = "num",
    label = "Choose a number",
    value = 25, min = 1, max = 100)
)

server <- function(input, output) {}

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



Buttons

Action

Submit

`actionButton()`
`submitButton()`

Single checkbox

☒ Choice A

`checkboxInput()`

Checkbox group

☒ Choice 1

☐ Choice 2

☐ Choice 3

`checkboxGroupInput()` `dateInput()`

Date input

2014-01-01

Date range

2014-01-24 to 2014-01-24

`dateRangeInput()`

File input

Choose File No file chosen

`fileInput()`

Numeric input

1

`numericInput()`

Password Input

.....

`passwordInput()`

Radio buttons

☒ Choice 1

☐ Choice 2

☐ Choice 3

`radioButtons()`

Select box

Choice 1

`selectInput()`

Sliders



`sliderInput()`

Text input

Enter text...

`textInput()`

UI Outputs

Function	Inserts
<code>dataTableOutput()</code>	an interactive table
<code>htmlOutput()</code>	raw HTML
<code>imageOutput()</code>	image
<code>plotOutput()</code>	plot
<code>tableOutput()</code>	table
<code>textOutput()</code>	text
<code>uiOutput()</code>	a Shiny UI element
<code>verbatimTextOutput()</code>	text

實習課小結

實習課的設計與期待

- R 程式基礎、資料分析、文本分析
 - base R, tidyverse, quanteda
- 使用 Git/GitHub 管理程式碼
 - GitHub Repo, GitHub Desktop
- 將成果 (透過網頁) 保存與分享
 - R Markdown, GitHub Pages, Shiny App





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