

# Gadgets, Add-ins and HTML Templates



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# htmlTemplates

**Bring your templates to your apps**

# Ways To Build the UI

- 1** Use R functions and packages  
shiny, shinydashboard, miniUI
- 2** Create your own HTML  
index.html
- 3** Insert your apps into an existing template  
htmlTemplate

index.html

# Basic idea

```
<!DOCTYPE html>
<html>
  <head>
    {{ headContent() }}
    {{ bootstrapLib() }}
  </head>
  <body>
    <h1>A Bivariate Normal Distribution</h1>
    <div>
      {{ button }}
      {{ slider }}
    </div>
  </body>
</html>
```

## htmlTemplate UI

```
ui <- htmlTemplate(
  button = actionButton("action", "Action"),
  slider = sliderInput("x", "X", 1, 100, 50)
)
```

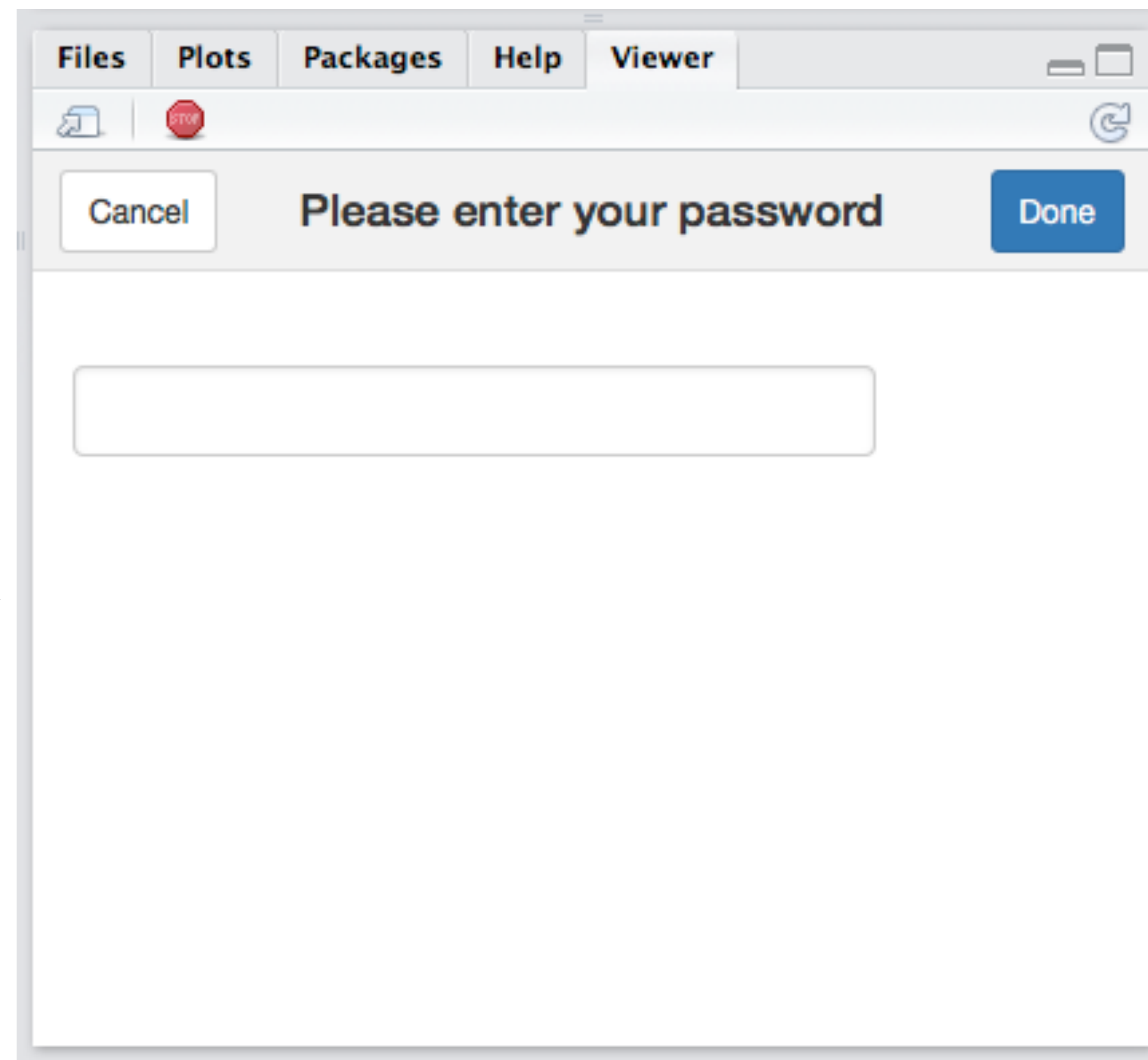
# **Shiny Gadgets**

**Enhance Your  
R Programing  
Experience**

# Shiny Gadgets

Shiny apps that are started and stopped by R users during the course of an analysis from inside the RStudio IDE.

# Simple Shiny Gadget



## 1. Layout

### MiniUI Package

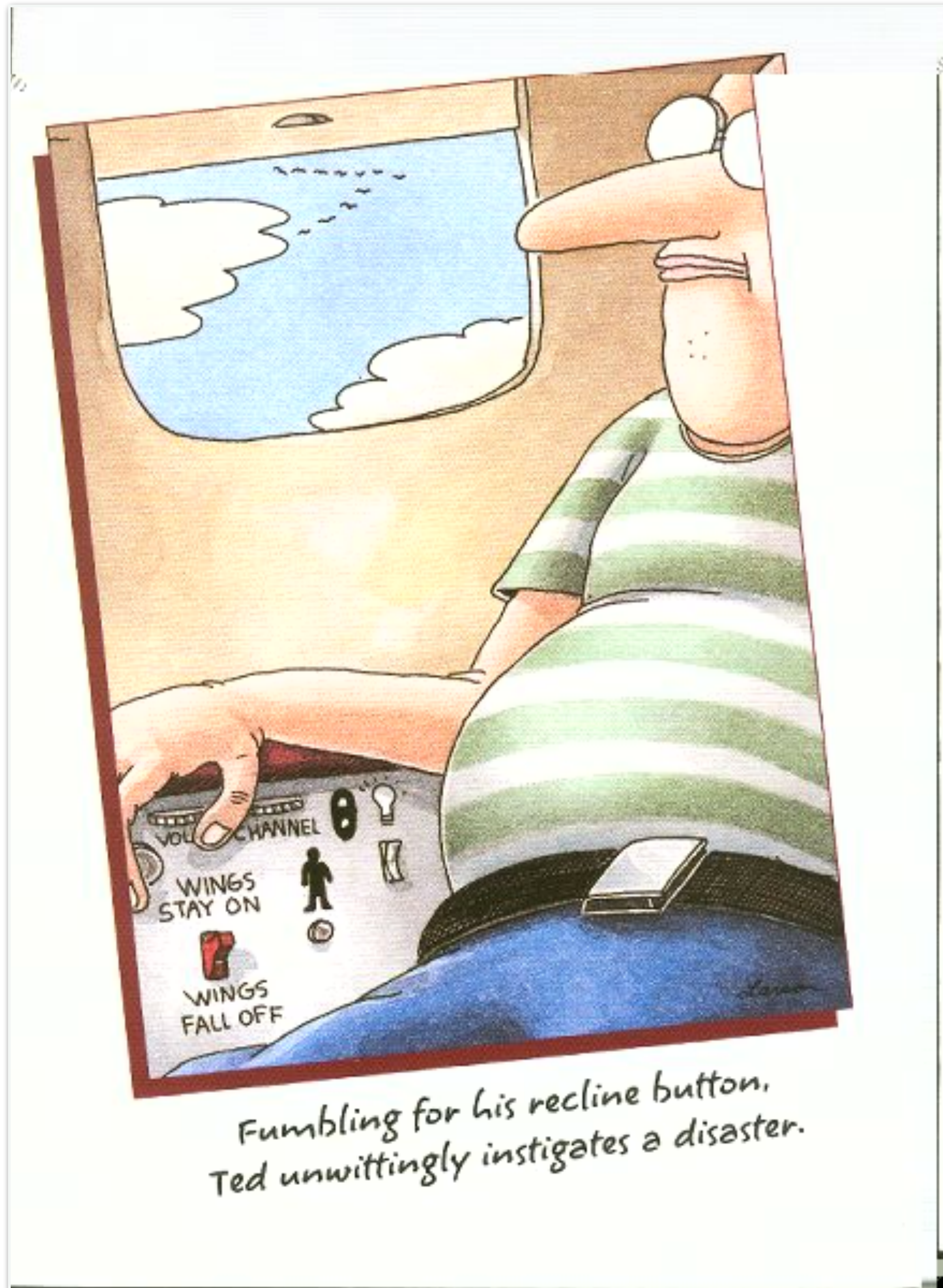
A Shiny UI for  
small spaces

## 2. Done

### Done Button

R Users initiate  
and terminate





*“Fumbling for  
his recline  
button, Ted  
unwittingly  
instigates a  
disaster”*



# Two Different Use Cases

**Shiny Gadget**

**Invoked**

**Analysts**

**Programming**

**Shiny App**

**Deployed**

**Decision makers**

**Communicating**

# **RStudio Add-ins**

**Make the RStudio IDE Extensible**

# RStudio Add-ins

RStudio add-ins give R users the ability to add their own features

# What features can you build?

- Code builder tools
- Editor tools
- Integration with data and other tools
- Kick off scripts or external jobs
- Many more

# Anatomy of an Add-in

1. An **R package** (new or existing)
2. An **R function** that does the add-in work, invoking functions from the `rstudioapi` package to interact with the IDE.
3. An **addins.DCF** file (under `inst/rstudio`) that declares the add-in's metadata



Add-ins can be **interactive** or **non-interactive**

Add-ins are easy to **share**

# <https://github.com/daattali/rstudio-addins>

## List of useful RStudio addins made by useRs

One of the main problems right now with RStudio addins is discoverability: there's just no easy way to find addins. This repo can help in three ways: if you want to browse for useful addins, if you want to showcase your addin, or if you want to look at how others are implementing addins to get ideas for developing your own (since there aren't too many resources or examples yet, it could be useful to inspect other people's code).

If you made a cool RStudio addin, feel free to make a pull request to add it to the list.

Name	Description	Package	On CRAN?	Author	More links	Notes
Colour picker	Lets you easily select colours	<a href="#">shinyjs</a>	✓	<a href="#">Dean Attali</a>	<a href="#">screenshot</a> , <a href="#">demo GIF</a>	
ggplot2 Marginal Plots	Add marginal plots to ggplot2	<a href="#">ggExtra</a>	✓	<a href="#">Dean Attali</a>	<a href="#">screenshot</a>	
ggplot Theme Assist	Customize your ggplot theme	<a href="#">ggthemeassist</a>	✓	<a href="#">Calli Gross</a>	<a href="#">demo GIF</a>	
Schedule Rscripts	Easily scheduling Rscripts	<a href="#">taskscheduleR</a>	✗	<a href="#">jwijffels</a>	<a href="#">screenshot</a>	
Assign default values	Set function arguments in selection to their default values	<a href="#">jadd</a>	✗	<a href="#">Jenny Bryan</a>	<a href="#">demo GIF</a>	
Wrap Rmd	Wrap selected R Markdown text but don't insert lines breaks into	<a href="#">WrapRmd</a>	✗	<a href="#">TJ Mahr</a>		

# Other RStudio packages and features

## 2016 Q1

### **Shiny**

Gadgets, HTML Templates, modules, error stack traces, Javascript events, checking inputs

### **RStudio Server Pro**

Multiple R versions, multiple concurrent R sessions, shared projects, collaborative editing, console auditing

### **RStudio**

Addins, R Markdown outline view, tear-able source panels, Emacs key bindings, parameterized R Markdown support, pane zooming

### **R Markdown**

Formats, floating TOC, code folding, tabbed sections, new themes

### **Other packages**

Feather, nibble, memoise, tidyr, httr, devtools, purrr

# Thank you

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[rstudio.com](https://rstudio.com)