NASA: DATANAUTS 2018
SHINY

Motivation for Shiny

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- But…
  - Output is usually in static formats or pre-determined calculations
  - Modern visualization is interactive, browser-based

RStudio®

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http://shiny.rstudio.com
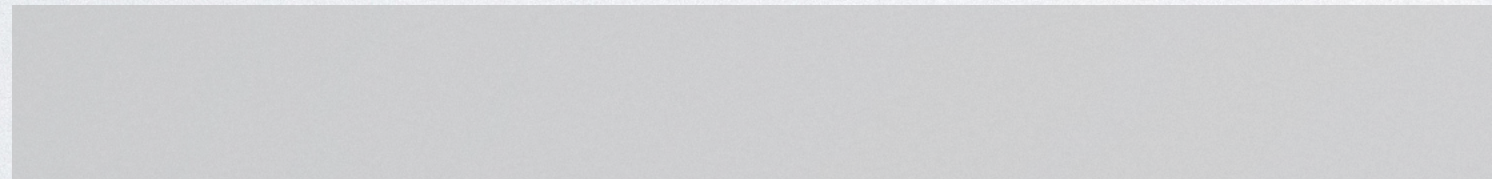
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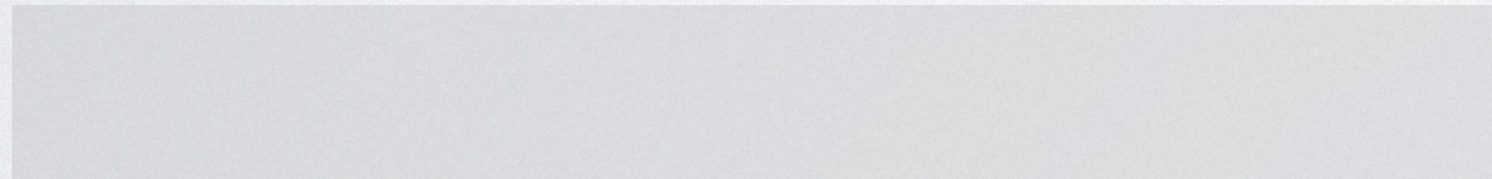
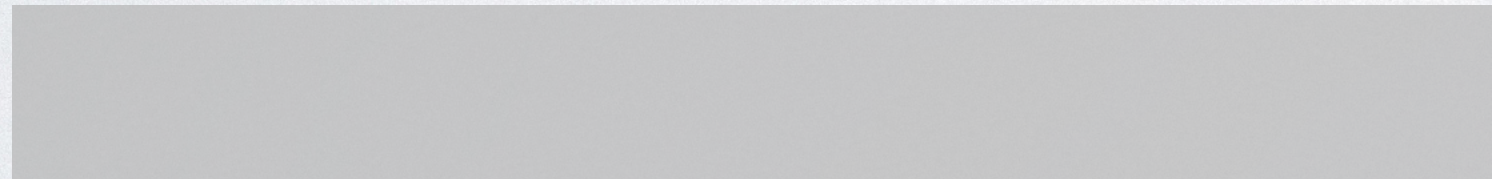- Install Shiny: `install.packages("shiny")`

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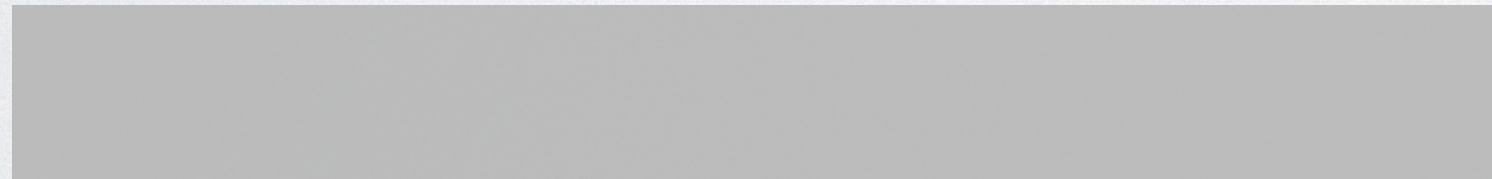Studio®

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- Call `shiny::runApp(appdir)` to launch the app, and Esc or Ctrl+C to stop

R Studio

Demos
https://shiny.rstudio.com/gallery/

Demo:
A (really) simple app

```
shiny::runExample("01_hello")
```

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Demo: Kmeans visualizer

http://shiny.rstudio.com/gallery/kmeans-example.html

Demo: Retirement simulator

http://shiny.rstudio.com/gallery/retirement-simulation.html

- Simulating wealth with random returns, inflation, and withdrawals
- By Michael Kapler

Demo: Super Zips

http://shiny.rstudio.com/gallery/superzip-example.html

- Inspired by a Washington Post interactive feature on the subject
- Built with `leaflet`
  - Interactive maps with data

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Demo: Radiant

https://github.com/mostly-harmless/radiant

- Business analytics GUI using R and Shiny
- By Vincent Nijs
  - (as far as I know) had minimal HTML/CSS/JavaScript experience

Links

- **Slides**
  - bit.ly/datanauts18-shiny

- **Shiny**
  - shiny.rstudio.com
- **Example Gallery**
  - shiny.rstudio.com/gallery

- **Cheat Sheets**
  - rstudio.com/resources/cheatsheets