Shiny R

So shiny, So much R!
What is Shiny?

- Shiny is an R package that makes it easy to build interactive web apps straight from R.
- That means you can create awesome interactive visualizations!
- [https://shiny.rstudio.com/](https://shiny.rstudio.com/)
How to use Shiny?

- There are lots of online examples and tutorials of how to use Shiny on the Shiny website.
- Shiny requires you to create a UI (user interface) and Server in R to display your project and make it interactive.
- Servers and UIs are a little tricky- You do NOT have to use Shiny for your final project.
Code Overview: Packages You Need

#install.packages("shiny")

#install.packages("maps")

#install.packages("mapproj")

library(shiny)

library(maps)

library(mapproj)
The server is the “back-end” of your program. It provides all the functionality of your program. The server usually reads in data, calls the plot functions, etc.
Code Overview: The Server

```r
server <- function(input, output, session) {
  selectedData <- reactive({
    iris[, c(input$xcol, input$ycol)]
  })
}
```
Code Overview: The UI (User Interface)

The UI is what you (the user) sees. It’s where all the pretty select buttons, toggle bars, titles, etc are created.
Code Overview: The UI (User Interface)

```r
ui <- fluidPage(
    titlePanel("This is my title!"))
```

Demo Time

- Kmeans
- Census Data Visualization
- More demos!! [https://shiny.rstudio.com/gallery/]