Assignment for Shiny

Kal Csigi

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# Shiny “Bite-sized”Assignment:

As many of you know, I appreciate a good cup of coffee [read: coffee snob]. Over the course of my time at VCU, I’ve compiled a list of coffee shops in Richmond that I have visited. I want to show this to people on the internet so they can know where to get a good cup of coffee and where to avoid (yes, I know Google exists but I don’t trust the reviews on there). I’ve got a server lined up to host a shiny app for me but I’ve slept through too many BIOL 691 classes and was absent for the guest lecture on Shiny (I was up late checking election results) so don’t know how to make a Shiny app or do any R coding really. I’ve bribed you with food to make a Shiny app for me (because you’re such a good friend). I stole Jessica’s notes from our lab and it mentions to use the generic formula:

ui <- fluidPage()  
server <- function(input,output){}  
shinyApp(ui=ui, server=server)

The bottom line looks complete so we don’t need to touch that. But it looks like the top two lines need some work. We need to make a Shiny app that allows the user to upload a file which will be displayed on the app. I will use the data sheet I’ve compiled of coffee shops to upload and that should be displayed on the page.

All I know about Shiny is that it is a package, so I know that it needs to be installed and called into the library R. You’re pretty much on your own from this point on though.

Jess’ notes make mention of the fileInput function for our ui object. We will need to insert this function into the ui section and give it \* 1) a name in quotations and  
\* 2) a label to display to the user. \* A label name such as “File Input” or “Upload Kal’s Coffee Data Here” should suffice.

So I did some searching on stack overflow and found that pasting this code into our ui will allow us to look at an abbreviated version of the table or to look at the entire thing. RadioButtons is an input feature for R that allows us to put a clickable choice to the shiny viewer.

radioButtons("disp", "Display",  
 choices = c(Head = "head",  
 All = "all"),  
 selected = "head"),

This should go below our previously made fileInput function. Note the comma at the end. This NEEDS to be there before we put any output names into our ui.

I overheard some graduate students talking in the booth next to me at Little Mexico after seminar this past week (I don’t know who they were but one of them had a man-bun). They were mentioning that tableOutput() with an output specific name within the parentheses will tell R that this is the name that we would like to call our output. \* We will use this to call our table into our server object. So, we should put a specific name in quotations within the parentheses like “contents” or “table” here to save ourselves confusion down the line.

* Our server function, according to Jess’ notes, say that we need to tell our server that the output we want is a table and we want to use specific input that we named above.

output$\_\_\_\_\_\_\_\_\_\_<- renderTable({  
  
 req(input$\_\_\_\_\_\_\_\_\_\_\_\_\_)  
 df <- read.csv(input$\_\_\_\_\_\_\_\_\_\_\_\_$datapath,header=TRUE)  
   
 if(input$disp == "head") {  
 return(head(df))  
 }  
 else {  
 return(df)  
 }})}}

This function above will do that for us but i spilled coffee on Jess’ notebook before I could copy this all down. Fortunately, everything that I spilled coffee on was all the name-specific functions that are going to be different to each person I’ve bribed to do this. Strange how coincidental that was…. Anyways, You’ll need to fill in the specific input and output names we assigned above in our ui object for this to be complete. So, i think if everything is in there correctly, using the shinyApp function, we can run this, upload the coffee data I’ve given to you, and see either part or all of it.