### Note

This is a three part assignment on R Shiny. As a first step, create a folder named A04\_Gwid. So, if your GWID is G19860011, that will be the name of the folder. The three folders (or projects) will need to be named partA, partB and partC respectively. This means that there will be three separate folders for the three parts below. Create the three folders manually or as part of the R Shiny project creation. The dataset has been provided in kickers.csv.

#### Part A

Recall the football kicker example from the slides in week 04. This part of the assignment requires you to

- (a) Read the data file in server.R
- (b) Solve the logistic regression with "Success" as the dependent variable and a choice of ScoreDiff and Distance as the single independent variable. Use a drop down list for the two variables to allow the user to choose the desired independent variable.
- (c) Display the text results in the mainPanel

Use fluidPage and sidebarLayout as we used in the slides.

Name your files as ui.R and server.R. Please make sure that you comment your R code.

#### Part B

Modify Part A to use <u>tabsets</u> layout. Name the first tab "Text Output" and the second tab as "Plot." The Text Output tab contains the output identical to Part A. The "Plot" tab contains the plot of the logistic function (actual data, estimated data points as well as the estimated logistic curve.

Name your files as ui.R and server.R. Please make sure that you comment your R code.

#### Part C

Change Part C by adding a <u>read file</u> option to the user in the sidebarPanel. This will allow the user to read a file and the file name does not have to be hard coded.

Name your files as ui.R and server.R. Please make sure that you comment your R code.

# How to submit

Zip the folder named after your GWID with the three subfolders and submit the zipped file as the assignment. This is the minimal directory structure for your zipped submission.

```
G19860011
|
+---PartA
| kickers.csv
| server.R
| ui.R
|
+---PartB
| kickers.csv
| server.R
| ui.R
|
+---PartC
| kickers.csv
| server.R
```

## References

https://github.com/rstudio/shiny-examples