

CS614 – Prof. Berardi
Homework #5 (Lecture 7)

In this assignment, you will build and `shiny` dashboard to aid with data exploration. The data set is for this exercise is from a commercial app used for meditation and covers the in-app activities for 50 users.

The data, located above, consists of the following variables:

ID: Participant ID

| <u>Variable Name</u> | <u>Description</u> | <u>Variable Name</u> | <u>Description</u> |
|------------------------|--|----------------------|---|
| ID | Participant ID | completed | Was the activity session completed or not |
| date | Timestamp of activity start time (string) | session_type | Type of activity |
| logged_at_local | Timestamp of activity start time (POSIXct) | program title | Title of program |
| duration_in_sec | Duration of activity | | |

You have three tasks for this assignment.

1.) Build a `shiny` app that does the following:

- uses a drop-down menu to select a participant and accepts a date range.
- has the date range initial start/end dates automatically change to the first/last date for the selected participant.
- produces a Date-by-Start Time scatter plot, with activity type mapped to the shape and color shaded by duration
- has a brushing feature that can select data and print the number of observations selected and the average duration for the observations selected.

An example of such an app is found [here](#).

2.) Add one additional feature of your choosing to the `shiny` app.

3.) [Host your app](#) on the shinyapps.io server and embed in a `.Rmd` file using `knitr::include_app()`. You should save as an `html` file, see [here](#) for an example. Within your app, tell me one interesting thing you found while exploring with your app. (After embedding the app and telling me something interesting, include your code at the end of the `.Rmd` file.)