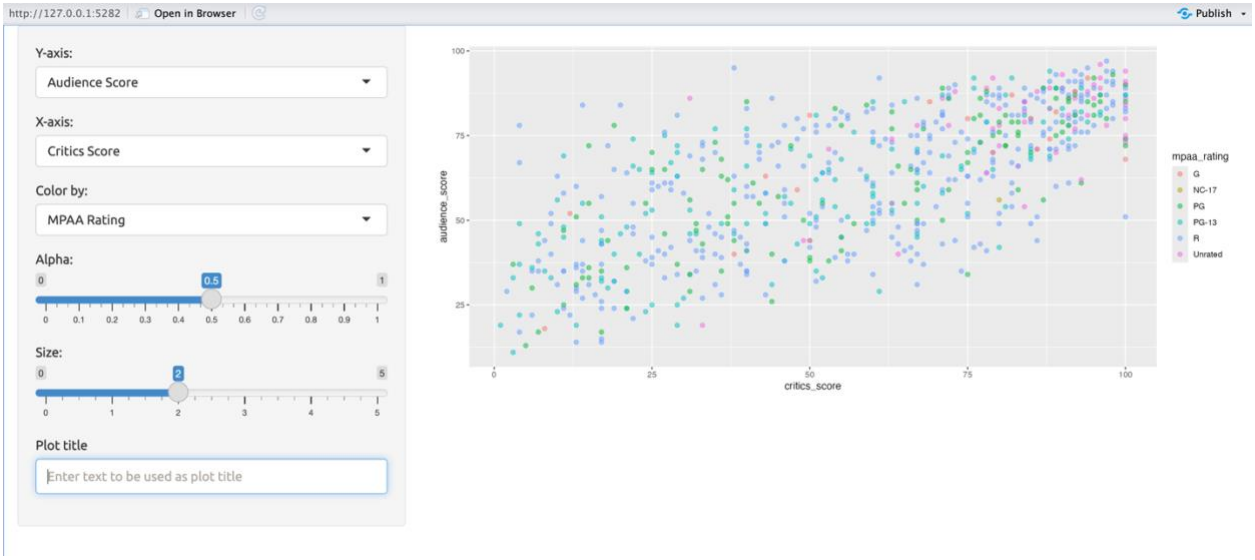
PA 446 – Coding for Civic Data Applications
Assignment
Total points – 54 points

Create a Shiny web application using the *movieratings.csv* data.

The application should look like this:



The application should have the following:

1. A select input with the label “Y-axis” where the user can choose from IMDB rating, IMDB number of votes, Critics Score, Audience Score, and Run time. (7pts)

2. A select input with the label “X-axis” where the user can choose from IMDB rating, IMDB number of votes, Critics Score, Audience Score, and Run time. (7pts)

3. A select input with the label “Color by:” where the user can choose from Title Type, Genre, MPAA rating, Critics Rating, and Audience Rating. (7pts)

Hint: [For all the select inputs, give choices based on the variable name in the dataset. For example, for the Y-axis, you will create a selectinput by giving the input an ID, a label and then choice = c(“IMDB number of votes” = “imdb_num_votes”, “IMDB rating” = imdb_rating”,……..)]

4. A slider input with the label “Alpha:” where the user can choose between 0 and 1. (5pts)

5. A slider input with the label “Size:” where the user can choose between 0 and 5. (5pts)

6. A text input with the label “Plot Title” where the user can input the name of the plot. (2pts)

7. A scatterplot. The scatterplot should have:

    a. X-axis that changes based on the selection made by the user under “X-axis.” (1pts)
    b. Y-axis that changes based on the selection made by the user under “Y-axis.” (1pts)
    c. Colored points based on the selection made by the user under “Color by:” (1pts)
    d. Points on the plot reflect change in alpha based on the selection made by the user under “Alpha”. (1pts)
    e. Points on the plot that change size based on the selection made by the user under “Size.” (1pts)
    f. A title that changes based on the text input given by the user. (1pts)

Hint: [The arguments for parts (d and e) are passed inside the geom_point function.]

8. A layout such that the plot is on the right side and all inputs are on the left side. (6pts)

9. A theme of your choice. (2pts)

10. A shiny app function that runs the application. (2pts)

11. Upload your R script on BB. It should consist of all the associated libraries. (5pts)