Exam 2 – Wine & Shiny App

Load the data from *winequality-red.csv* file, and build a shiny app according to the following recommendations:

1. The title of the app is “Analysis of the Wine Quality dataset”.
2. Create all buttons in a side panel and all results in the main panel.
3. Divide the main panel in 2 tabs and name them “tab1” and “tab2”.
4. Add an input such that you can select the level of quality, more than one level allowed.
5. Show a scatter plot of citric acid and pH where the color of points depends on the quality selected in 4).
6. Add an input where you can modify the title of the scatterplot.
7. Add an input where you can select one variable of the dataset, to be used in 8),
8. Depending on the selected levels of quality, show boxplots of quality and the variable of the dataset selected in 7), with different colors in the “tab1”.
9. Pay attention to the label on the y axis, make sure it changes according to the variable selected in 7),
10. Add another input where you can modify the title of the boxplot.
11. Create an input to select a range of values of the variable free sulfur dioxide.
12. Filter the dataset according to 11).
13. We have many variables in the dataset, create an input such that you can select the columns you want to show.
14. Display a data table that takes into account the filtration in 11) and the selection in 13) in “tab1”.
15. Add another input “Click to show descriptive statistics” such that if you click it, the descriptive statics of data in 14) are shown in “tab1”.
16. In “tab2”, show a barplot of the number of wines with quality selected in 4) and the color of bars depends on the quality selected in 4).