Summary:

## In this project we are using the Shiny Web Application. For each step of our analysis, we will show step by step instructions on how to conduct the Shiny Reactive Apps with our chosen data. We chose the data palmerpenguins. The palmerpenguins (penguins) data set was collected by Dr. Kristen Gorman and the Palmer Station, Antarctica LTER, which is the Long-Term Ecological Research Network. There are two packages within palmerpenguins: penguins and penguins\_raw. There is data collected for 344 penguins, and the 3 different species of the penguins in the dataset: Adelie, Chinstrap, and Gentoo. The 3 islands in the dataset are Biscoe, Dream, and Torgersen, in the Palmer Archipelago, Antarctica. Throughout our analysis, we show and create 4 different instances of reactivity. In the first Reactive , we welcome the user for the dataset and learn more about them. In the second Reactive, we introduce the dataset penguins comparing with the packages of Iris and Mtcars. To reiterate, the aim of our project is to introduce and operate palmerpenguins dataset, the iris and Mtcars are only comparison. In the third Reactive, we look at different numeric variables and categorical variables based on different species, sex, islands. Lastly, in the fourth reactive we run a series of plots against the dataset penguins that result in different data visualizations.