## **Manual -Performance Indicator**

# (libraries used to make Performance Indicator Program)

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#### RODBC -

For using some functions so that we can connect to server directly and fetch data from it, we need to install RODBC package. odbcDriverConnect() function is used to connect to server(or database to be more specific). sqlFetch() is used to fetch data(like tables) from the database.

### **Dplyr** -

Functions that were used after installing this package - merge() function is used to merge data frames

unique() function was used to remove duplicate entries in a vector.

table() function is used to make table from given columns of a data frame

cbind() function was used to combine vectors to a table.

rbind() function was used to combine vectors to a table.

t() function was used to take the transpose of a table

**Gaplot** - Function that were used after installing this package -

**ggplot()** - It used for plotting variety of graphs, several other functions are added with it to for making specific type of graph.

geom\_bar() - it is used along with ggplot to make bar plots.

theme(): To format visual parameters of the graph such as background colour of the graph, text size and so on.

**shiny, shinyWidgets** - Function that were used after installing these two packages -

**fluidPage()** - Other functions are passed to this function for making specific things on web pages like tabs, dropdown menus etc.

**selectbarPanel()** - this function was used to make dropdown menus on the left side of the web page.

**selectInput()** - this function was used to make drop down menu from which the user can select one of the options.

conditionalPanel() - this function is used to when we want a dropdown

menu to appear only if some specific option is chosen from dropdown menu above it.

**uiOutput()** - this function is used to display dropdown menu according to data sent from server.R.

mainPanel() - this function was used to plot the data on the right side of web page. In this function we pass another function plotOutput() to plot the data taken from server.R.

**reactive()** and **renderUI ()** - these two functions were used to manipulate the data in drop down menus.For example there is a hierarchy in order - Zone,Region,State,City so if we select some option in zone we need to make changes in Region,State and in City accordingly.For that purpose we need to use reactive() and renderUI().

renderPlot() is used in server.R to pass the data to be plotted to ui.R.

#### plotly

ggplotly() : To convert a ggplot2::ggplot() object to a plotly object.

plotlyOutput() : To output and render functions for using plotly within Shiny

applications in ui.R

renderPlotly(): Output and render functions for using plotly within Shiny

applications in server.R