Usage:

1. Just choose the **outcome** from the Outcome panel on the right.
2. Select any number of **predictors** from the Predictor panel on the right.
    - ***Note:*** Off-course including the outcome in the predictors choice have no sense.

Output:

- You will see on the right panel three items:
    1. Pairwise plot for the **outcome** and all **predictors** you choose.
    2. A summary of a linear model fit with the outcome and predictors you choose.
    3. A subset of the **mtcars** data frame where the **outcome** in the first column followed by the **predictors** in the rest of the columns.

Ui.R Code

```
#ui.R
require(shiny)
require(markdown)
require(knitr)

data(mtcars)

shinyUI(
  pageWithSidebar(
    headerPanel("Fitting mtcars variables and predictors"),
    sidebarPanel(
      h2("Introduction"),
      p("This application fits any outcome in the mtcars data
frame with any number of
        predictors within the mtcars. It visualize the output
and predictors relationship in scatter matrix
        and the linear model summary is displayed below the
scatter matrix."),
      h2("Choosing Outcome and Predictors"),
      h3("Chossing Outcome"),
      selectInput("outcome", "Choose Outcome",
colnames(mtcars), selected = "mpg", multiple = FALSE,
                  selectize = TRUE),
      h3("Chossing predictors"),
      checkboxGroupInput("predictors","Choose
Predictors",colnames(mtcars),selected = "wt"),
      includeMarkdown(path="./help.Rmd")

    ),
    mainPanel(
      h2("Scattar Plot and Model Results"),
      h3("Scatter Plot"),
      plotOutput('pair_plot'),
      h3("Model Results"),
      verbatimTextOutput("my_model"),
      h3("Data"),
      verbatimTextOutput("df")

    )
  )

)
```

Server.R Code

```
prepare_data_frame <- function(outcome, predictors) {
    df <- cbind(mtcars[, outcome], mtcars[, predictors])
    df <- as.data.frame(df)
    colnames(df) <- c(outcome, predictors)
    return(df)
}

require(shiny)
shinyServer(function(input, output) {
    output$y <- renderPrint({
        input$outcome
    })
    output$x <- renderPrint({
        input$predictors
    })
    output$df <- renderPrint({
        prepare_data_frame(input$outcome, input$predictors)
    })
    output$pair_plot <- renderPlot({
        df1 <- prepare_data_frame(input$outcome,
input$predictors)
        pairs(df1)
    })
    output$my_model <- renderPrint({
        f0 <- paste(input$outcome, "~",
paste(input$predictors, collapse = "+"),
            sep = "")
        f1 <- formula(f0)
        lm1 <- lm(f1, data = mtcars)
        summary(lm1)
    })

})
```