

Data: Data frame input by user

Result: Interactive volcano plot

```

/* Declare Shiny server
server <- function(input, output, session){

  /* User input options
  observeEvent(input$goButton, values$x <- values$x + 1)
  observeEvent(input$selPair, values$x <- 0)
  observeEvent(input$selMetric, values$x <- 0)
  observeEvent(input$selOrder, values$x <- 0)
  observeEvent(input$binSize, values$x <- 0)
  observeEvent(input$selPair, values$selPair <- input$selPair)

  /* Define largest fold change dynamically based on data
  fcInMax <- max(ldply(dataMetrics, rbind)[["logFC"]])

  /* Construct dynamic input Shiny slider for fold change
  output$slider <- renderUI(sliderInput("logFC", "Log fold change:",
    min=0, max=fcInMax, step=0.1))

  /* Declare shiny output volcano plot
  output$volPlot <- renderPlotly({

    /* Create reactive expression of plotly background volcano plot
    gP <- reactive(p <- ggplot(data); gP <- ggplotly(p))

    /* Create reactive expression of plotly background volcano plot
    plotlyVol <- reactive(gP())

    /* Tailor interactivity of the plotly volcano plot object using custom
    JavaScript
    plotlyVol() %>% onRender("function(el, x, data){

      /* Read handle called 'points' to obtain variables sent from R into
      JavaScript
      Shiny.addCustomMessageHandler('points', function(drawPoints){

        /* Delete any old superimposed plotly geoms (dots)
        if (x.data.length > 0){Plotly.deleteTraces(el.id)}

        /* Create traces for selected gene IDs as points that state gene
        names upon hovering
        trace = {x: drawPoints.geneX, y: drawPoints.geneY, mode:
        'markers', color: drawPoints.pointColor, size:
        drawPoints.pointSize, text: drawPoints.geneID, hoverinfo:
        'text'}

        /* Superimpose traces onto the plotly litre plot object
        Plotly.addTraces(el.id, trace)

      })

    })

  })

  /* If the user changes the superimposed gene
  observe({

    /* Save information about superimposed gene selected by user with a
    handle called 'points'. These values can then be sent from R to
    JavaScript

```