

Data: Data frame input by user

Result: Interactive litre 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)

  /* Create reactive expression of plotly background litre plot
  gP <- reactive(p <- ggplot(data); gP <- ggplotly(p))
  /* Declare shiny output litre plot
  output$hexPlot <- renderPlotly({

    /* Create reactive expression of plotly background litre plot
    plotlyHex <- reactive(gP())

    /* Tailor interactivity of the plotly litre plot object using custom
    JavaScript
    plotlyHex() %>% 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 'point'. These values can then be sent from R to JavaScript
  session$sendCustomMessage(type = "points",
  message=list(geneX=geneX, geneY=geneY, pointSize = pointSize,
  geneID=geneID, pointColor=pointColor))
  })

  /* Declare Shiny output boxplot

  output$boxPlot <- renderPlotly({

    /* Create reactive expression of plotly background boxplot BP <-

```