shinyapp.R

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```
library(shiny)
library(ggvis)

ui=fluidPage(
  tabsetPanel(
   tabPanel(
      title = "Home",
      sidebarLayout(sidebarPanel(
      sliderInput(inputId = "num1",label = "Number Of Observation",value=20,min=1,max=100),
      textInput(inputId = "txt",label="X axis Label",value = "Histogram" ),
      actionButton(inputId = "go1",label="Update")),
      mainPanel(ggvisOutput(plot_id = "hist1")))
    ),
    tabPanel(
      title = "Normal Distribution",
      sidebarLayout(sidebarPanel(
      numericInput(inputId = "nobs",label = "Number Of Observation",value = 20,min=1,max=100),
      numericInput(inputId = "nmean",label = "Mean",value = 0),
      numericInput(inputId = "nsd",label = "Standard Deviations",value=1),
      textInput(inputId = "ntxt",label="X axis Label",value = "Histogram" ),
      actionButton(inputId = "go2",label="Update")),
      mainPanel(ggvisOutput(plot_id = "hist2")))
    ),
    tabPanel(
      title = "Uniform Distribution",
      sidebarLayout(sidebarPanel(
      numericInput(inputId = "uobs",label = "Number Of Observation",value = 20,min=1,max=100),
      numericInput(inputId = "umin",label = "Lower Limit",value = 0),
      numericInput(inputId = "umax",label = "Upper Limit",value=1),
      textInput(inputId = "utxt",label="X axis Label",value = "Histogram" ),
      actionButton(inputId = "go3",label="Update")),
      mainPanel(ggvisOutput(plot_id = "hist3")))
    ),
    tabPanel(title = "Exponential Distribution",
             sidebarLayout(sidebarPanel(
             numericInput(inputId = "eobs",label = "Number Of Observation",value = 20,min=1,max=100),
             numericInput(inputId = "erate",label = "Rate",value = 1),
             textInput(inputId = "etxt",label="X axis Label",value = "Histogram" ),
             actionButton(inputId = "go4",label="Update")),
             mainPanel(ggvisOutput(plot_id = "hist4")))
    )
  )

)

server=function(input,output){
```

```
  data1=reactive({data.frame(first=sample(1:input$num1,input$num1,replace=T))})
  observeEvent(input$go1,{
    output$hist1=reactive({
      isolate(data1() %>% ggvis(x=~first)) %>% layer_histograms(fill:="#436EEE",fill.hover:="#FFA500") %
    })})

  data2=reactive({data.frame(second=rnorm(input$nobs,input$nmean,input$nsd))})
  observeEvent(input$go2,{
  output$hist2=reactive({
    isolate(data2() %>% ggvis(x=~second)) %>% layer_histograms(fill:="#436EEE",fill.hover:="#FFA500") %
      })})

  data3=reactive({data.frame(third=runif(input$uobs,input$umin,input$umax))})
  observeEvent(input$go3,{
    output$hist3=reactive({
      isolate(data3() %>% ggvis(x=~third)) %>% layer_histograms(fill:="#436EEE",fill.hover:="#FFA500") %
    })})

  data4=reactive({data.frame(fourth=rexp(input$eobs,input$erate))})
  observeEvent(input$go4,{
    output$hist4=reactive({
      isolate(data4() %>% ggvis(x=~fourth)) %>% layer_histograms(fill:="#436EEE",fill.hover:="#FFA500")
    })})

}


shinyApp(ui=ui,server = server)
```

Screenshots from Shiny App

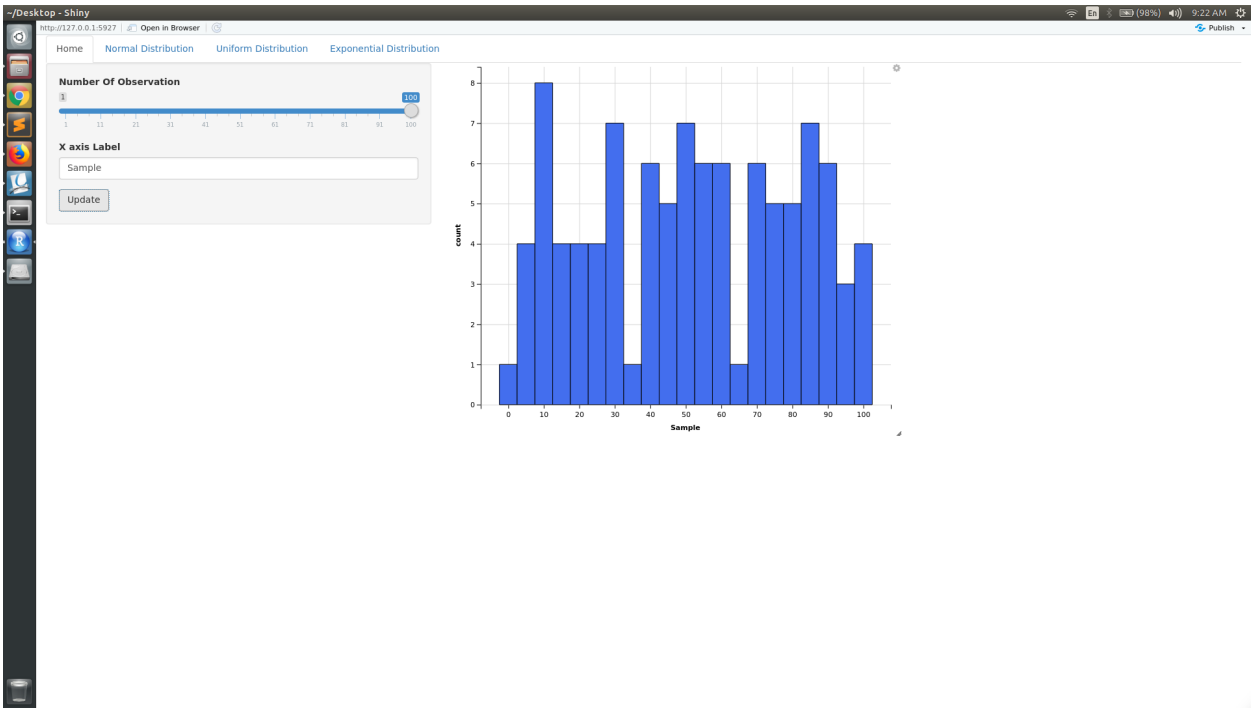

Figure 1: Sample.

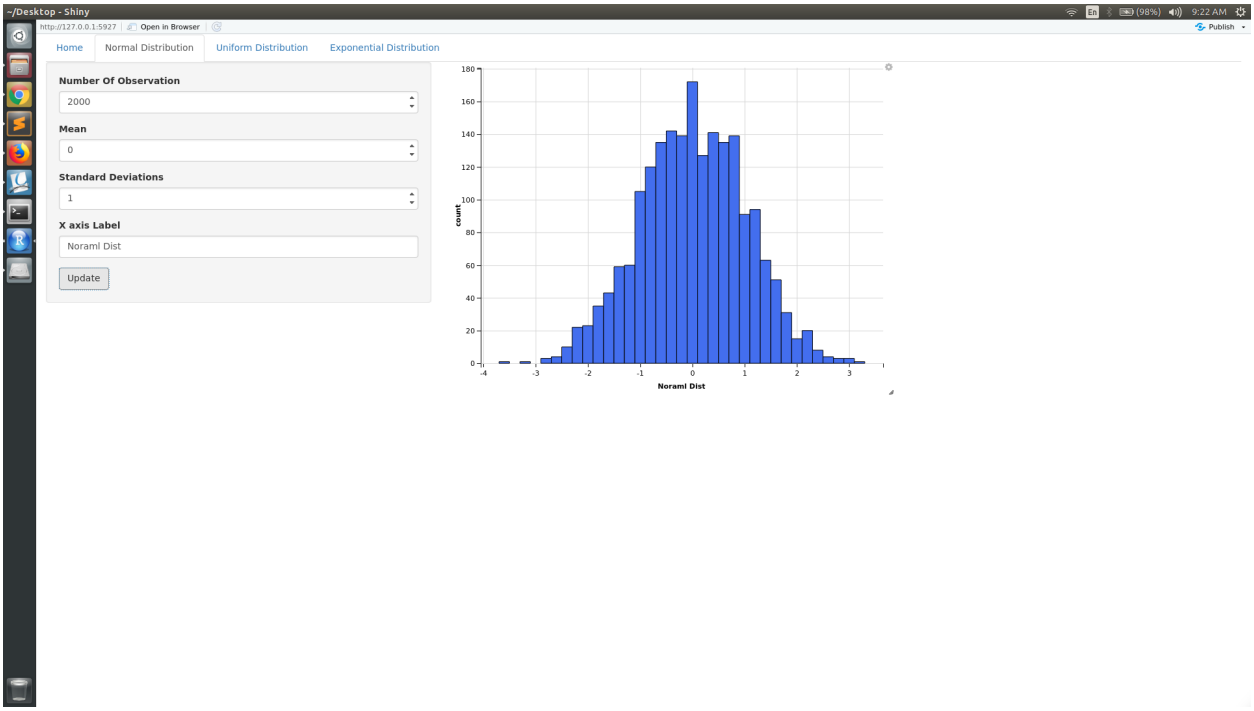

Figure 2: Normal Distribution

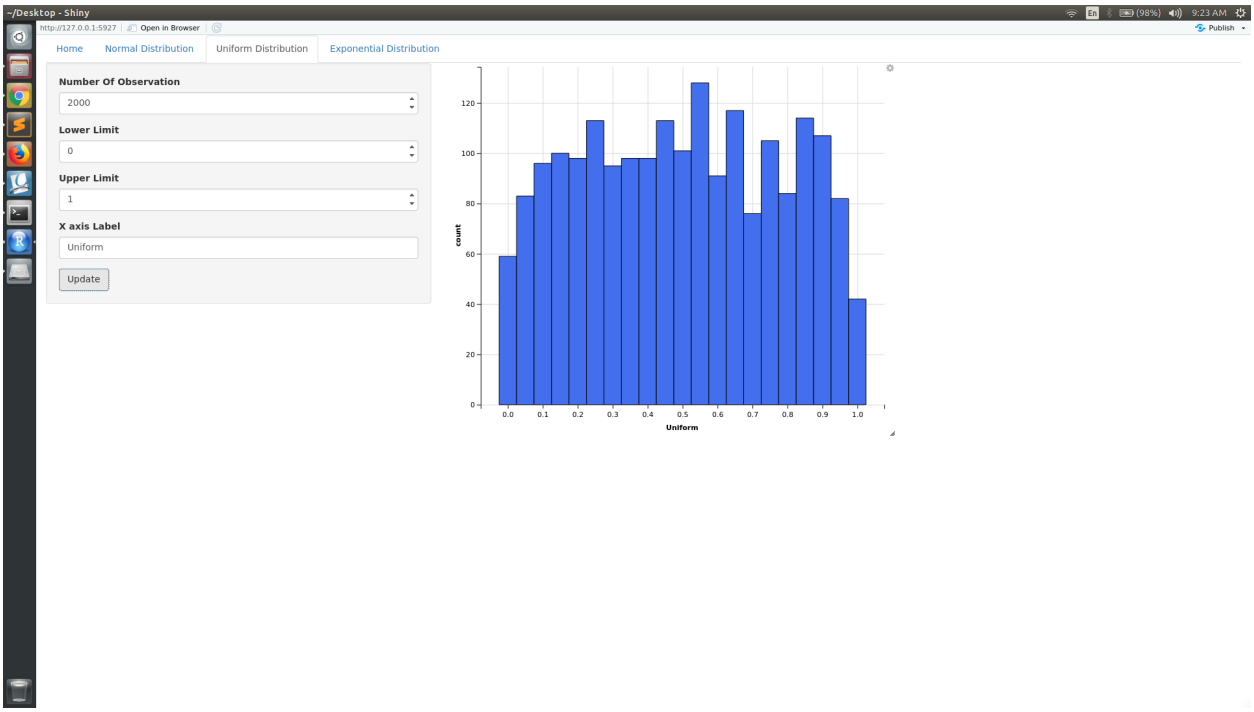

Figure 3: Uniform Distribution

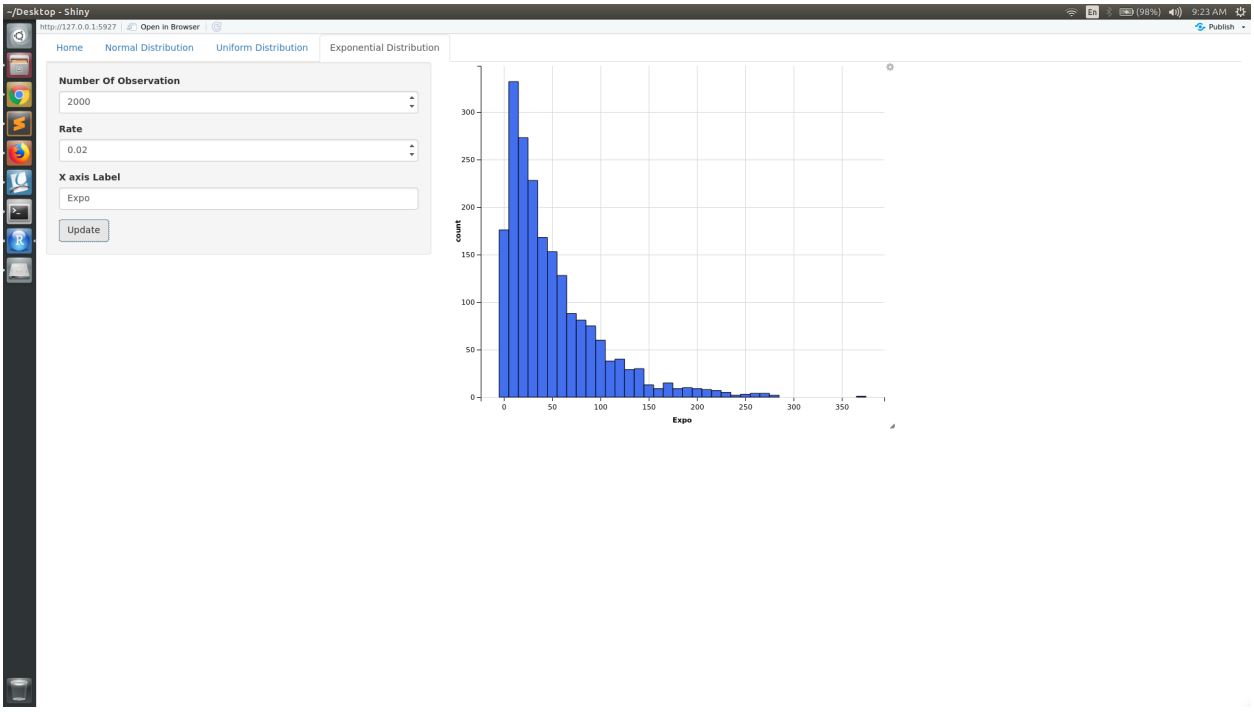

Figure 4: Exponential Distribution