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| ***RV3 - ui.R (Mark*** [***L***[***eonawicz***](https://github.com/leonawicz)](https://github.com/leonawicz)***)*** |
| library(shiny)  shinyUI(pageWithSidebar(          headerPanel(                  HTML(  '<div id="stats\_header">  Distributions of Random Variables  <a href="http://snap.uaf.edu" target="\_blank">  <img id="stats\_logo" align="right" alt="SNAP Logo" src="http://www.snap.uaf.edu/images/snap\_acronym\_rgb.gif" />  </a>  </div>'  ),  "Distributions of Random Variables"          ),          sidebarPanel(                  radioButtons("dist","Distribution type:",                          list(  **# discrete distributions**  "Bernoulli"**=**"bern",  "Binomial"**=**"bin",  "Discrete Uniform"**=**"dunif",  "Geometric"**=**"geom",  "Hypergeometric"**=**"hgeom",  "Negative Binomial"**=**"nbin",  "Poisson"**=**"poi",  **# continuous Distributions**    "Beta"**=**"beta",  "Cauchy"**=**"cauchy",  "Chi-squared"**=**"chisq",  "Exponential"**=**"exp",  "F"**=**"F",  "Gamma"**=**"gam",  "Laplace (Double xponential)"**=**"lap",  "Logistic"**=**"logi",  "Log-Normal"**=**"lognorm",  "Normal"**=**"norm",  "Pareto"**=**"pareto",  "t"**=**"t",  "Uniform"**=**"unif",  "Weibull"**=**"weib"                                  )                  ),          sliderInput("n","Sample size:",1,1000,500),  **# Conditional - New Output**          uiOutput("dist1"),          uiOutput("dist2"),          uiOutput("dist3"),  **# Other inputs – as before**  checkboxInput("density","Show density curve",**FALSE**),                  conditionalPanel(                          condition**=**"input.density==true",                          numericInput("bw","bandwidth:",1)                  ),          downloadButton('dldat', 'Download Sample')    ),  **# Main Panel – as before**          mainPanel(              tabsetPanel(                 tabPanel("Plot",plotOutput("plot",height**=**"auto")),                  tabPanel("Summary",verbatimTextOutput("summary")),                  tabPanel("Table",tableOutput("table"))                  )          )  )) |
| **RV3 – server.R** |
| library(shiny)  library(datasets)  rt2 **<-** **function**(n**=**500,dft**=**15){ rt(n**=**n,df**=**dft) }  formals(rgamma)[1**:**2] **<-** c(500,1)  rchisq2 **<-** **function**(n**=**500,dfx**=**1){ rchisq(n**=**n,df**=**dfx) }  formals(rf)[1**:**3] **<-** c(500,1,15)  rexp2 **<-** **function**(n**=**500,rate2**=**1){ rexp(n**=**n,rate**=**rate2) }  formals(rbeta)[1**:**3] **<-** c(500,2,2)  load("plotmathExpressions.RData", envir**=**.GlobalEnv)  ……  #All this stuff is same as before  ……  output$dist3 **<-** renderUI({        lab **<-** **switch**(input**$**dist,                     dunif**=**"Step size:",  hgeom**=**"K:")        ini **<-** **switch**(input**$**dist,                          dunif**=**1, hgeom**=**5)  **if**(any(input**$**dist**==**c("dunif","hgeom"))) {  numericInput(dat()[[2]][3],lab,ini)  }  ……            output**$**summary **<-** renderPrint({                  summary(dat()[[1]])          })            output**$**table **<-** renderTable({                  data.frame(x**=**dat()[[1]])          })  }) |