

Package ‘jsmodule’

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Title 'RStudio' Addins and 'Shiny' Modules for Medical Research

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Description

'RStudio' addins and 'Shiny' modules for descriptive statistics, regression and survival analysis.

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URL <https://github.com/jinseob2kim/jsmodule>

BugReports <https://github.com/jinseob2kim/jsmodule/issues>

Suggests testthat, shinytest, knitr, rmarkdown

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NeedsCompilation no

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coxModule	<i>coxModule: shiny modulde server for Cox's model.</i>
-----------	---

Description

Shiny modulde server for Cox's model.

Usage

```
coxModule(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  default.unires = T, id.cluster = NULL)
```

Arguments

input	input
output	output
session	session
data	reactive data
data_label	reactive data label
data_varStruct	reactive list of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
design.survey	reactive survey data. default: NULL
default.unires	Set default independent variables using univariate analysis.
id.cluster	reactive cluster variable if marginal cox model, Default: NULL

Details

Shiny modulde server for Cox's model.

Value

Shiny modulde server for Cox's model.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      coxUI("cox")
    ),
    mainPanel(
      DTOutput("coxtable")
    )
  )
)
```

```
)  
server <- function(input, output, session) {  
  data <- reactive(mtcars)  
  data.label <- reactive(jstable::mk.lev(mtcars))  
  
  out_cox <- callModule(coxModule, "cox", data = data, data_label = data.label,  
                        data_varStruct = NULL)  
  
  output$coxtable <- renderDT({  
    datatable(out_cox()$table, rownames=T, caption = out_cox()$caption)  
  })  
}
```

coxUI

coxUI: shiny module UI for Cox's model.

Description

Shiny module UI for Cox's model.

Usage

```
coxUI(id)
```

Arguments

id id

Details

Shiny module UI for Cox's model.

Value

coxUI

Examples

```
coxUI(1)
```

csvFile	<i>csvFile: Shiny module Server for file upload.</i>
---------	--

Description

Shiny module Server for file(csv or xlsx) upload.

Usage

```
csvFile(input, output, session, nfactor.limit = 20)
```

Arguments

input	input
output	output
session	session
nfactor.limit	nfactor limit to include, Default: 20

Details

Shiny module Server for file(csv or xlsx) upload.

Value

Shiny module Server for file(csv or xlsx) upload.

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      csvFileInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  data <- callModule(csvFile, "datafile")

  output$data <- renderDT({
    data()$data
  })
}
```

```

    })
    output$label <- renderDT({
      data()$label
    })
  }

```

 csvFileInput

csvFileInput: Shiny module UI for file upload.

Description

Shiny module UI for file(csv or xlsx) upload.

Usage

```
csvFileInput(id, label = "Upload data (csv/xlsx/sav/sas7bdat/dta)")
```

Arguments

id	id
label	label, Default: 'csv/xlsx/sav/sas7bdat/dta file'

Details

Shiny module UI for file(csv or xlsx) upload.

Value

Shiny module UI for file(csv or xlsx) upload.

Examples

```

library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      csvFileInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {

```

```
data <- callModule(csvFile, "datafile")

output$data <- renderDT({
  data()$data
})

output$label <- renderDT({
  data()$label
})
}
```

FilePs	<i>FilePs: Shiny module Server for file upload for propensity score matching.</i>
--------	---

Description

Shiny module Server for file upload for propensity score matching.

Usage

```
FilePs(input, output, session, nfactor.limit = 20)
```

Arguments

input	input
output	output
session	session
nfactor.limit	nfactor limit to include, Default: 20

Details

Shiny module Server for file upload for propensity score matching.

Value

Shiny module Server for file upload for propensity score matching.

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FilePsInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
```

```

        tabPanel("Data", DTOutput("data")),
        tabPanel("Matching data", DTOutput("matdata")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )

server <- function(input, output, session) {
  mat.info <- callModule(FilePs, "datafile")

  output$data <- renderDT({
    mat.info()$data
  })

  output$matdata <- renderDT({
    mat.info()$matdata
  })

  output$label <- renderDT({
    mat.info()$label
  })
}

```

FilePsInput

FilePsInput: Shiny module UI for file upload for propensity score matching.

Description

Shiny module UI for file upload for propensity score matching.

Usage

```
FilePsInput(id, label = "Upload data (csv/xlsx/sav/sas7bdat/dta)")
```

Arguments

id	id
label	label, Default: 'csv/xlsx/sav/sas7bdat file'

Details

Shiny module UI for file upload for propensity score matching.

Value

Shiny module UI for file upload for propensity score matching.

Examples

```

library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      sidebarPanel(
        FilePsInput("datafile")
      ),
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Matching data", DTOutput("matdata")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  mat.info <- callModule(FilePs, "datafile")

  output$data <- renderDT({
    mat.info()$data
  })

  output$matdata <- renderDT({
    mat.info()$matdata
  })

  output$label <- renderDT({
    mat.info()$label
  })
}

```

FileRepeated

FileRepeated: File upload server module for repeated measure analysis.

Description

File upload server module for repeated measure analysis.

Usage

```
FileRepeated(input, output, session, nfactor.limit = 20)
```

Arguments

input	input
output	output

```

session      session
nfactor.limit  nfactor limit to include, Default: 20

```

Details

File upload server module for repeated measure analysis.

Value

File upload server module for repeated measure analysis.

Examples

```

library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FileRepeatedInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  data <- callModule(FileRepeated, "datafile")

  output$data <- renderDT({
    data()$data
  })

  output$label <- renderDT({
    data()$label
  })
}

```

FileRepeatedInput

FileRepeatedInput: File upload UI for repeated measure analysis.

Description

File upload UI for repeated measure analysis.

Usage

```
FileRepeatedInput(id, label = "Upload data (csv/xlsx/sav/sas7bdat/dta)")
```

Arguments

id	id
label	label, Default: 'csv/xlsx/sav/sas7bdat/dta file'

Details

File upload UI for repeated measure analysis.

Value

File upload UI for repeated measure analysis.

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FileRepeatedInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  data <- callModule(FileRepeated, "datafile")

  output$data <- renderDT({
    data()$data
  })

  output$label <- renderDT({
    data()$label
  })
}
```

Description

File upload server module for survey data analysis.

Usage

```
FileSurvey(input, output, session, nfactor.limit = 20)
```

Arguments

input	input
output	output
session	session
nfactor.limit	nfactor limit to include, Default: 20

Details

File upload server module for survey data analysis.

Value

File upload server module for survey data analysis.

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FileSurveyInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  data <- callModule(FileSurvey, "datafile")

  output$data <- renderDT({
    data()$data
  })

  output$label <- renderDT({
    data()$label
  })
}
```

FileSurveyInput	<i>FileSurveyInput: File upload UI for survey data analysis.</i>
-----------------	--

Description

File upload UI for survey data analysis.

Usage

```
FileSurveyInput(id, label = "Upload data (csv/xlsx/sav/sas7bdat/dta)")
```

Arguments

id	id
label	label, Default: 'csv/xlsx/sav/sas7bdat/dta file'

Details

File upload UI for survey data analysis.

Value

File upload UI for survey data analysis.

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FileSurveyInput("datafile")
    ),
    mainPanel(
      tabsetPanel(type = "pills",
        tabPanel("Data", DTOutput("data")),
        tabPanel("Label", DTOutput("data_label", width = "100%"))
      )
    )
  )
)

server <- function(input, output, session) {
  data <- callModule(FileSurvey, "datafile")

  output$data <- renderDT({
    data()$data
  })

  output$label <- renderDT({
```

```

      data()$label
    })
  }

```

GEEModuleLinear	<i>GEEModuleLinear: shiny modulde server for gaussian generalized estimating equation(GEE) using reactive data.</i>
-----------------	---

Description

Shiny modulde server for gaussian generalized estimating equation(GEE) using reactive data.

Usage

```

GEEModuleLinear(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, id.gee)

```

Arguments

input	input
output	output
session	session
data	reactive data, ordered by id.
data_label	reactive data label
data_varStruct	List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
id.gee	reactive repeated measure variable

Details

Shiny modulde server for gaussian generalized estimating equation(GEE) using reactive data.

Value

Shiny modulde server for gaussian generalized estimating equation(GEE).

Examples

```

library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      GEEModuleUI("linear")
    ),
    mainPanel(
      DTOutput("lineartable")
    )
  )

```

```

)
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))
  id.gee <- reactive("mpg")

  out_linear <- callModule(GEEModuleLinear, "linear", data = data, data_label = data.label,
                           data_varStruct = NULL, id.gee = id.gee)

  output$lineartable <- renderDT({
    hide = which(colnames(out_linear())$table) == "sig")
    datatable(out_linear())$table, rownames=T, extension= "Buttons", caption = out_linear()$caption,
              options = c(opt.tbreg(out_linear()$caption),
                           list(columnDefs = list(list(visible=FALSE, targets =hide))
                           ),
                           list(scrollX = TRUE)
    )
  }) %>% formatStyle("sig", target = 'row', backgroundColor = styleEqual("**", 'yellow'))
}
}

```

GEEModuleLogistic

GEEModuleLogistic: shiny modulde server for binomial gaussian generalized estimating equation(GEE) using reactive data.

Description

Shiny modulde server for binomial gaussian generalized estimating equation(GEE) using reactive data.

Usage

```
GEEModuleLogistic(input, output, session, data, data_label,
                  data_varStruct = NULL, nfactor.limit = 10, id.gee)
```

Arguments

input	input
output	output
session	session
data	reactive data, ordered by id.
data_label	reactive data label
data_varStruct	List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
id.gee	reactive repeated measure variable

Details

Shiny module server for binomial gaussian generalized estimating equation(GEE) using reactive data.

Value

Shiny module server for binomial gaussian generalized estimating equation(GEE).

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      GEEModuleUI("logistic")
    ),
    mainPanel(
      DTOutput("logistictable")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))
  id.gee <- reactive("mpg")

  out_logistic <- callModule(GEEModuleLogistic, "logistic", data = data, data_label = data.label,
    data_varStruct = NULL, id.gee = id.gee)

  output$logistictable <- renderDT({
    hide = which(colnames(out_logistic()$table) == "sig")
    datatable(out_logistic()$table, rownames=T, extension= "Buttons",
      caption = out_logistic()$caption,
      options = c(opt.tbreg(out_logistic()$caption),
        list(columnDefs = list(list(visible=FALSE, targets =hide))
        ),
        list(scrollX = TRUE)
      )
    ) %>% formatStyle("sig", target = 'row', backgroundColor = styleEqual("**", 'yellow'))
  })
}
```


Description

Shiny modulde UI for generalized estimating equation(GEE).

Usage

```
GEEModuleUI(id)
```

Arguments

```
id          id
```

Details

Shiny modulde UI for generalized estimating equation(GEE).

Value

Shiny modulde UI for generalized estimating equation(GEE).

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      GEEModuleUI("linear")
    ),
    mainPanel(
      DTOutput("lineartable")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))
  id.gee <- reactive("mpg")

  out_linear <- callModule(GEEModuleLinear, "linear", data = data, data_label = data.label,
    data_varStruct = NULL, id.gee = id.gee)

  output$lineartable <- renderDT({
    hide = which(colnames(out_linear()$table) == "sig")
    datatable(out_linear()$table, rownames=T, extension= "Buttons", caption = out_linear()$caption,
      options = c(opt.tbreg(out_linear()$caption),
        list(columnDefs = list(list(visible=FALSE, targets =hide))
        ),
        list(scrollX = TRUE)
      )
    ) %>% formatStyle("sig", target = 'row',backgroundColor = styleEqual("**", 'yellow'))
  })
}
```

```
}

```

ggpairsModule	<i>ggpairsModule: shiny module server for basic/scatter plot.</i>
---------------	---

Description

Shiny module server for basic/scatter plot.

Usage

```
ggpairsModule(input, output, session, data, data_label,
  data_varStruct = NULL)
```

Arguments

input	input
output	output
session	session
data	data
data_label	data label
data_varStruct	List of variable structure, Default: NULL

Details

Shiny module server for basic/scatter plot.

Value

Shiny module server for basic/scatter plot.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(GGally)

ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      ggpairsModuleUI1("ggpairs")
    ),
    mainPanel(
      plotOutput("ggpairs_plot"),
      ggpairsModuleUI2("ggpairs")
    )
  )
)
```

```

server <- function(input, output, session) {

  data <- mtcars
  data.label <- jstable::mk.lev(mtcars)

  out_ggpairs <- callModule(ggpairsModule, "ggpairs", data = data, data_label = data.label,
                           data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_ggpairs())
  })
}

```

ggpairsModule2	<i>ggpairsModule2: shiny module server for basic/scatter plot for reactive data.</i>
----------------	--

Description

Shiny module server for basic/scatter plot for reactive data.

Usage

```

ggpairsModule2(input, output, session, data, data_label,
               data_varStruct = NULL)

```

Arguments

input	input
output	output
session	session
data	Reactive data
data_label	Reactive data label
data_varStruct	List of variable structure, Default: NULL

Details

Shiny module server for basic/scatter plot for reactive data.

Value

Shiny module server for basic/scatter plot

Examples

```

library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(GGally)

ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      ggpairsModuleUI1("ggpairs")
    ),
    mainPanel(
      plotOutput("ggpairs_plot"),
      ggpairsModuleUI2("ggpairs")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_ggpairs <- callModule(ggpairsModule2, "ggpairs", data = data, data_label = data.label,
                           data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_ggpairs())
  })
}

```

ggpairsModuleUI1

ggpairsModuleUI1: Variable selection module UI for ggpairs

Description

Variable selection module UI for ggpairs

Usage

```
ggpairsModuleUI1(id)
```

Arguments

```
id          id
```

Details

Variable selection module UI for ggpairs

Value

Variable selection module UI for ggpairs

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(GGally)

ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      ggpairsModuleUI1("ggpairs")
    ),
    mainPanel(
      plotOutput("ggpairs_plot"),
      ggpairsModuleUI2("ggpairs")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_ggpairs <- callModule(ggpairsModule2, "ggpairs", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_ggpairs())
  })
}
```

ggpairsModuleUI2

ggpairsModuleUI2: Option & download module UI for ggpairs

Description

Option & download module UI for ggpairs

Usage

```
ggpairsModuleUI2(id)
```

Arguments

id id

Details

Option & download module UI for ggpairs

Value

Option & download module UI for ggpairs

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(GGally)

ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      ggpairsModuleUI1("ggpairs")
    ),
    mainPanel(
      plotOutput("ggpairs_plot"),
      ggpairsModuleUI2("ggpairs")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_ggpairs <- callModule(ggpairsModule2, "ggpairs", data = data, data_label = data.label,
                           data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_ggpairs())
  })
}
```

ggplotdownUI

ggplotdownUI: Option & download module UI for ggplot

Description

Option & download module UI for ggplot

Usage

```
ggplotdownUI(id)
```

Arguments

id id

Details

Option & download module UI for ggplot

Value

Option & download module UI for ggplot

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      kaplanUI("kaplan")
    ),
    mainPanel(
      plotOutput("kaplan_plot"),
      ggplotdownUI("kaplan")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_kaplan <- callModule(kaplanModule, "kaplan", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_kaplan())
  })
}
```

jsBasicAddin

jsBasicAddin: Rstudio addin of jsBasicGadget

Description

Rstudio addin of jsBasicGadget

Usage

```
jsBasicAddin()
```

Details

Rstudio addin of jsBasicGadget

Value

Rstudio addin of jsBasicGadget

See Also

[rstudio-editors](#)

Examples

```
if(interactive()){  
  jsBasicAddin()  
}
```

jsBasicGadget

jsBasicGadget: Shiny Gadget of Basic Statistics in Medical Research.

Description

Shiny Gadget including Data, Label info, Table 1, Regression(linear, logistic), Basic plot

Usage

```
jsBasicGadget(data, nfactor.limit = 20)
```

Arguments

data data
nfactor.limit nlevels limit for categorical variables

Details

Shiny Gadget including Data, Label info, Table 1, Regression(linear, logistic), Basic plot

Value

Shiny Gadget including Data, Label info, Table 1, Regression(linear, logistic), Basic plot

Examples

```
if(interactive()){  
  jsBasicGadget(mtcars)  
}
```

jsPropensityAddin *jsPropensityAddin: Rstudio addin of jsPropensityGadget*

Description

Rstudio addin of jsPropensityGadget

Usage

```
jsPropensityAddin()
```

Details

Rstudio addin of jsPropensityGadget

Value

Rstudio addin of jsPropensityGadget

See Also

[rstudio-editors](#)

Examples

```
if(interactive()){  
  jsPropensityAddin()  
}
```

jsPropensityGadget *jsPropensityGadget: Shiny Gadget for propensity score analysis.*

Description

Shiny Gadget including original/matching/IPTW data, Label info, Table 1, Cox model, Basic/kaplan-meier plot.

Usage

```
jsPropensityGadget(data)
```

Arguments

data data

Details

Shiny Gadget including original/matching/IPTW data, Label info, Table 1, Cox model, Basic/kaplan-meier plot.

Value

Shiny Gadget including original/matching/IPTW data, Label info, Table 1, Cox model, Basic/kaplan-meier plot.

See Also

[data.table::matchit](#), [match.data](#), [cox2::display](#), [svycox::display](#), [survfit](#), [coxph](#), [Surv](#), [jskm](#), [svyjskm](#), [ggsave](#), [svykm](#)

Examples

```
if(interactive()){
  jsPropensityGadget(mtcars)
}
```

jsRepeatedAddin

jsRepeatedAddin: Rstudio addin of jsRepeatedGadget

Description

Rstudio addin of jsRepeatedGadget

Usage

```
jsRepeatedAddin()
```

Details

Rstudio addin of jsRepeatedGadget

Value

Rstudio addin of jsRepeatedGadget

See Also

[rstudio-editors](#)

Examples

```
if(interactive()){
  jsRepeatedAddin()
}
```

jsRepeatedGadget *jsRepeatedGadget: Shiny Gadget of Repeated measure analysis.*

Description

Shiny Gadget including Data, Label info, Table 1, GEE(linear, logistic), Basic plot

Usage

```
jsRepeatedGadget(data, nfactor.limit = 20)
```

Arguments

data	data
nfactor.limit	nlevels limit for categorical variables

Details

Shiny Gadget including Data, Label info, Table 1, GEE(linear, logistic), Basic plot

Value

Shiny Gadget including Data, Label info, Table 1, GEE(linear, logistic), Basic plot

Examples

```
if(interactive()){  
  jsRepeatedGadget(mtcars)  
}
```

jsSurveydAddin *jsSurveydAddin: Rstudio addin of jsSurveyGadget*

Description

Rstudio addin of jsSurveyGadget

Usage

```
jsSurveydAddin()
```

Details

Rstudio addin of jsSurveyGadget

Value

Rstudio addin of jsSurveyGadget

See Also

[rstudio-editors](#)

Examples

```
if(interactive()){  
  jsSurveydAddin()  
}
```

jsSurveyGadget

jsSurveyGadget: Shiny Gadget of survey data analysis.

Description

Shiny Gadget including Data, Label info, Table 1, svyglm, Basic plot

Usage

```
jsSurveyGadget(data, nfactor.limit = 20)
```

Arguments

data	data
nfactor.limit	nlevels limit for categorical variables

Details

Shiny Gadget including Data, Label info, Table 1, svyglm, Basic plot

Value

Shiny Gadget including Data, Label info, Table 1, svyglm, Basic plot

Examples

```
if(interactive()){  
  jsSurveyGadget(mtcars)  
}
```

`kaplanModule`*kaplanModule: shiny module server for kaplan-meier plot.*

Description

Shiny module server for kaplan-meier plot.

Usage

```
kaplanModule(input, output, session, data, data_label,  
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,  
  id.cluster = NULL, timeby = NULL, range.x = NULL, range.y = NULL,  
  pval.coord = NULL)
```

Arguments

<code>input</code>	input
<code>output</code>	output
<code>session</code>	session
<code>data</code>	Reactive data
<code>data_label</code>	Reactive data label
<code>data_varStruct</code>	Reactive List of variable structure, Default: NULL
<code>nfactor.limit</code>	nlevels limit in factor variable, Default: 10
<code>design.survey</code>	Reactive survey data. default: NULL
<code>id.cluster</code>	Reactive cluster variable if marginal model, Default: NULL
<code>timeby</code>	timeby, Default: NULL
<code>range.x</code>	range of x axis, Default: NULL
<code>range.y</code>	range of y axis, Default: NULL
<code>pval.coord</code>	pval.coord, Default: NULL

Details

Shiny module server for kaplan-meier plot.

Value

Shiny module server for kaplan-meier plot.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      kaplanUI("kaplan")
    ),
    mainPanel(
      plotOutput("kaplan_plot"),
      ggplotdownUI("kaplan")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_kaplan <- callModule(kaplanModule, "kaplan", data = data, data_label = data.label,
                          data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_kaplan())
  })
}
```

kaplanUI

kaplanUI: shiny module UI for kaplan-meier plot

Description

Shiny module UI for kaplan-meier plot

Usage

```
kaplanUI(id)
```

Arguments

id id

Details

Shiny module UI for kaplan-meier plot

Value

Shiny module UI for kaplan-meier plot

Examples

```

library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      kaplanUI("kaplan")
    ),
    mainPanel(
      plotOutput("kaplan_plot"),
      ggplotdownUI("kaplan")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_kaplan <- callModule(kaplanModule, "kaplan", data = data, data_label = data.label,
                          data_varStruct = NULL)

  output$kaplan_plot <- renderPlot({
    print(out_kaplan())
  })
}

```

logistic.display2

logistic.display2: Modified epiDisplay's logistic.display function.

Description

Modified epiDisplay's logistic.display function for reactive data.

Usage

```

logistic.display2(logistic.model, alpha = 0.05, crude = TRUE,
  crude.p.value = FALSE, decimal = 2, simplified = FALSE)

```

Arguments

logistic.model	glm object(binomial)
alpha	alpha, Default: 0.05
crude	crude, Default: TRUE
crude.p.value	crude.p.value, Default: FALSE
decimal	decimal, Default: 2
simplified	simplified, Default: FALSE

Details

Modified epiDisplay's logistic.display function for reactive data.

Value

logistic table

Examples

```
model1 <- glm(am ~ cyl + disp, data = mtcars, family = binomial)
logistic.display2(model1, crude = TRUE, crude.p.value = TRUE, decimal = 3)
```

logisticModule

logisticModule: Shiny module server for logistic regression.

Description

Shiny module server for logistic regression.

Usage

```
logisticModule(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  default.unires = T)
```

Arguments

input	input
output	output
session	session
data	data
data_label	data label
data_varStruct	List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
design.survey	survey data. default: NULL
default.unires	Set default independent variables using univariate analysis, Default: T

Details

Shiny module server for logistic regression.

Value

Shiny module server for logistic regression.

Examples

```

library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      regressModuleUI("logistic")
    ),
    mainPanel(
      DTOutput("logistictable")
    )
  )
)

server <- function(input, output, session) {

  data <- mtcars
  data.label <- jstable::mk.lev(mtcars)

  out_logistic <- callModule(logisticModule, "logistic", data = data, data_label = data.label,
                             data_varStruct = NULL)

  output$logistictable <- renderDT({
    datatable(out_logistic()$table, rownames=T, caption = out_logistic()$caption)
  })
}

```

logisticModule2	<i>logisticModule2: Shiny modulde server for logistic regression for reactive data.</i>
-----------------	---

Description

Shiny modulde server for logistic regression for reactive data.

Usage

```

logisticModule2(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  default.unires = T)

```

Arguments

input	input
output	output
session	session
data	reactive data
data_label	reactive data label

`data_varStruct` List of variable structure, Default: NULL
`nfactor.limit` nlevels limit in factor variable, Default: 10
`design.survey` reactive survey data. default: NULL
`default.unires` Set default independent variables using univariate analysis, Default: T

Details

Shiny module server for logistic regression.

Value

Shiny module server for logistic regression.

Examples

```

library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      regressModuleUI("logistic")
    ),
    mainPanel(
      DTOutput("logistictable")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_logistic <- callModule(logisticModule2, "logistic", data = data, data_label = data.label,
                             data_varStruct = NULL)

  output$logistictable <- renderDT({
    datatable(out_logistic()$table, rownames=T, caption = out_logistic()$caption)
  })
}
  
```

mklist

mklist: function to make variable list Including specific variables.

Description

Function to make variable list Including specific variables.

Usage

```
mklist(varlist, vars)
```

Arguments

varlist	Original variable list.
vars	variable to include.

Details

Internal function

Value

variable list including specific variables.

Examples

```
data_varStruct <- list(variable = names(mtcars))
mklist(data_varStruct, names(mtcars))
```

mksetdiff	<i>mksetdiff: function to make variable list excluding specific variables.</i>
-----------	--

Description

Function to make variable list excluding specific variables.

Usage

```
mksetdiff(varlist, vars)
```

Arguments

varlist	Original variable list
vars	variable to exclude.

Details

Internal function

Value

variable list excluding specific variables.

Examples

```
data_varStruct <- list(variable = names(mtcars))
mksetdiff(data_varStruct, "mpg")
```

regress.display2	<i>regress.display2: modified epiDisplay's regress.display function</i>
------------------	---

Description

regress.display function for reactive data

Usage

```
regress.display2(regress.model, alpha = 0.05, crude = FALSE,
  crude.p.value = FALSE, decimal = 2, simplified = FALSE)
```

Arguments

regress.model	lm object
alpha	alpha, Default: 0.05
crude	crude, Default: FALSE
crude.p.value	crude.p.value, Default: FALSE
decimal	decimal, Default: 2
simplified	simplified, Default: FALSE

Details

regress.display function for reactive data

Value

regress table

Examples

```
model1 <- glm(mpg ~ cyl + disp + vs, data = mtcars)
regress.display2(model1, crude = TRUE, crude.p.value = TRUE, decimal = 3)
```

regressModule	<i>regressModule: Shiny modulde server for linear regression.</i>
---------------	---

Description

Shiny modulde server for linear regression.

Usage

```
regressModule(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  default.unires = T)
```

Arguments

input	input
output	output
session	session
data	data
data_label	data label
data_varStruct	List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
design.survey	survey data. default: NULL
default.unires	Set default independent variables using univariate analysis, Default: T

Details

Shiny modulde server for linear regression.

Value

Shiny modulde server for linear regression.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      regressModuleUI("linear")
    ),
    mainPanel(
      DTOutput("lineartable")
    )
  )
)

server <- function(input, output, session) {

  data <- mtcars
  data.label <- jstable::mk.lev(mtcars)

  out_linear <- callModule(regressModule, "linear", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$lineartable <- renderDT({
    datatable(out_linear())$table, rownames=T, caption = out_linear()$caption)
  })
}
```

regressModule2	<i>regressModule2: Shiny modulde server for linear regression for reactive data.</i>
----------------	--

Description

Shiny modulde server for linear regression for reactive data.

Usage

```
regressModule2(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  default.unires = T)
```

Arguments

input	input
output	output
session	session
data	reactive data
data_label	reactive data label
data_varStruct	List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
design.survey	reactive survey data. default: NULL
default.unires	Set default independent variables using univariate analysis, Default: T

Details

Shiny modulde server for linear regression.

Value

Shiny modulde server for linear regression.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      regressModuleUI("linear")
    ),
    mainPanel(
      DTOutput("lineartable")
    )
  )
)
```

```

)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_linear <- callModule(regressModule2, "linear", data = data, data_label = data.label,
                          data_varStruct = NULL)

  output$lineartable <- renderDT({
    datatable(out_linear())$table, rownames=T, caption = out_linear()$caption)
  })
}

```

regressModuleUI

regressModuleUI: shiny modulde UI for linear regression.

Description

Shiny modulde UI for linear regression.

Usage

```
regressModuleUI(id)
```

Arguments

id id

Details

Shiny modulde UI for linear regression.

Value

Shiny modulde UI for linear regression.

Examples

```

library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      regressModuleUI("linear")
    ),
    mainPanel(
      DTOutput("lineartable")
    )
  )
)

```

```

)
server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_linear <- callModule(regressModule2, "linear", data = data, data_label = data.label,
                          data_varStruct = NULL)

  output$lineartable <- renderDT({
    datatable(out_linear())$table, rownames=T, caption = out_linear()$caption)
  })
}

```

survIDINRI_helper *survIDINRI_helper: Helper function for IDI.INF.OUT in survIDINRI packages*

Description

Helper function for IDI.INF.OUT in survIDINRI packages

Usage

```
survIDINRI_helper(var.event, var.time, list.vars.ind, t, data,
                 dec.auc = 3, dec.p = 3, id.cluster = NULL)
```

Arguments

var.event	event
var.time	time
list.vars.ind	list of independent variable
t	time
data	data
dec.auc	digits for AUC, Default: 3
dec.p	digits for p value, Default: 3
id.cluster	cluster variable if marginal model, Default: NULL

Details

Helper function for IDI.INF.OUT in survIDINRI packages

Value

IDI, NRI

See Also

[data.table-package model.matrix coxph Surv IDI.INF.OUT IDI.INF](#)

Examples

```
#library(survival)
#survIDINRI_helper("status", "time", list.vars.ind = list("age", c("age", "sex")),
#                  t = 365, data = lung)
```

tb1module	<i>tb1module: table 1 shiny module server.</i>
-----------	--

Description

Table 1 shiny module server for descriptive statistics.

Usage

```
tb1module(input, output, session, data, data_label,
          data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
          showAllLevels = T)
```

Arguments

input	input
output	output
session	session
data	Data
data_label	Data label
data_varStruct	Variable structure list of data, Default: NULL
nfactor.limit	maximum factor levels to include, Default: 10
design.survey	survey data of survey package. default: NULL
showAllLevels	Show All label information with 2 categorical variables, Default: T

Details

Table 1 shiny module server for descriptive statistics.

Value

Table 1 shiny module server for descriptive statistics.

Examples

```

library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      tb1moduleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1")
    )
  )
)

server <- function(input, output, session) {

  data <- mtcars
  data.label <- jstable::mk.lev(mtcars)

  out_tb1 <- callModule(tb1module, "tb1", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$table1 <- renderDT({
    tb <- out_tb1()$table
    cap <- out_tb1()$caption
    out.tb1 <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
    return(out.tb1)
  })
}

```

 tb1module2

tb1module: table 1 shiny module server for reactive data.

Description

Table 1 shiny module server for descriptive statistics for reactive data.

Usage

```

tb1module2(input, output, session, data, data_label,
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,
  showAllLevels = T)

```

Arguments

input	input
output	output
session	session
data	Reactive data

<code>data_label</code>	Reactive data label
<code>data_varStruct</code>	Variable structure list of data, Default: NULL
<code>nfactor.limit</code>	maximum factor levels to include, Default: 10
<code>design.survey</code>	Reactive survey data of survey package. Default: NULL
<code>showAllLevels</code>	Show All label information with 2 categorical variables, Default: F

Details

Table 1 shiny module server for descriptive statistics.

Value

Table 1 shiny module server for descriptive statistics.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      tb1moduleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_tb1 <- callModule(tb1module2, "tb1", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$table1 <- renderDT({
    tb <- out_tb1()$table
    cap <- out_tb1()$caption
    out.tb1 <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
    return(out.tb1)
  })
}
```

tb1moduleUI	<i>tb1moduleUI: table 1 module UI.</i>
-------------	--

Description

Table 1 shiny module UI for descriptive statistics.

Usage

```
tb1moduleUI(id)
```

Arguments

id	id
----	----

Details

Table 1 shiny module UI for descriptive statistics.

Value

Table 1 module UI.

Examples

```
library(shiny);library(DT);library(data.table);library(jstable)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      tb1moduleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- reactive(jstable::mk.lev(mtcars))

  out_tb1 <- callModule(tb1module2, "tb1", data = data, data_label = data.label,
    data_varStruct = NULL)

  output$table1 <- renderDT({
    tb <- out_tb1()$table
    cap <- out_tb1()$caption
    out.tb1 <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
    return(out.tb1)
  })
}
```

```

    })
  }

```

 tb1simple

tb1simple: tb1 module server for propensity score analysis

Description

Table 1 module server for propensity score analysis

Usage

```

tb1simple(input, output, session, data, matdata, data_label,
         data_varStruct = NULL, group_var, showAllLevels = T)

```

Arguments

input	input
output	output
session	session
data	Original data with propensity score
matdata	Matching data
data_label	Data label
data_varStruct	List of variable structure, Default: NULL
group_var	Group variable to run propensity score analysis.
showAllLevels	Show All label information with 2 categorical variables, Default: T

Details

Table 1 module server for propensity score analysis

Value

Table 1 with original data/matching data/IPTW data

See Also

[var_label](#) [CreateTableOneJS](#) [svydesign](#) [svyCreateTableOne](#)

Examples

```

library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
library(haven);library(survey)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FilePsInput("datafile"),
      tblsimpleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1_original"),
      DTOutput("table1_ps"),
      DTOutput("table1_iptw")
    )
  )
)

server <- function(input, output, session) {

  mat.info <- callModule(FilePs, "datafile")

  data <- reactive(mat.info())$data
  matdata <- reactive(mat.info())$matdata
  data.label <- reactive(mat.info())$data.label

  vlist <- eventReactive(mat.info(), {
    mklist <- function(varlist, vars){
      lapply(varlist,
        function(x){
          inter <- intersect(x, vars)
          if (length(inter) == 1){
            inter <- c(inter, "")
          }
          return(inter)
        })
    }
  })
  factor_vars <- names(data())[data()[, lapply(.SD, class) %in% c("factor", "character")]]
  factor_list <- mklist(data_varStruct(), factor_vars)
  conti_vars <- setdiff(names(data()), c(factor_vars, "pscore", "iptw"))
  conti_list <- mklist(data_varStruct(), conti_vars)
  nclass_factor <- unlist(data()[, lapply(.SD, function(x){length(unique(x)[!is.na(unique(x))])}),
    .SDcols = factor_vars])
  class01_factor <- unlist(data()[, lapply(.SD, function(x){identical(levels(x), c("0", "1"))}),
    .SDcols = factor_vars])

  validate(
    need(!is.null(class01_factor), "No categorical variables coded as 0, 1 in data")
  )
  factor_01vars <- factor_vars[class01_factor]
  factor_01_list <- mklist(data_varStruct(), factor_01vars)
  group_vars <- factor_vars[nclass_factor >=2 & nclass_factor <=10 & nclass_factor < nrow(data())]
  group_list <- mklist(data_varStruct(), group_vars)

```

```

except_vars <- factor_vars[nclass_factor>10 | nclass_factor==1 | nclass_factor==nrow(data())]

## non-normal: shapiro test
f <- function(x) {
  if (diff(range(x, na.rm = T)) == 0) return(F) else return(shapiro.test(x)$p.value <= 0.05)
}

non_normal <- ifelse(nrow(data()) <=3 | nrow(data()) >= 5000,
  rep(F, length(conti_vars)),
  sapply(conti_vars, function(x){f(data()[[x]])})
)
return(list(factor_vars = factor_vars, factor_list = factor_list, conti_vars = conti_vars,
  conti_list = conti_list, factor_01vars = factor_01vars,
  factor_01_list = factor_01_list, group_list = group_list,
  except_vars = except_vars, non_normal = non_normal)
)
})

out.tb1 <- callModule(tb1simple2, "tb1", data = data, matdata = matdata, data_label = data.label,
  data_varStruct = NULL, vlist = vlist,
  group_var = reactive(mat.info())$group_var)

output$table1_original <- renderDT({
  tb <- out.tb1()$original$table
  cap <- out.tb1()$original$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_ps <- renderDT({
  tb <- out.tb1()$ps$table
  cap <- out.tb1()$ps$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_iptw <- renderDT({
  tb <- out.tb1()$iptw$table
  cap <- out.tb1()$iptw$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})
}

```

tb1simple2

tb1simple2: tb1 module for propensity score analysis for reactive data

Description

tb1 module for propensity score analysis for reactive data

Usage

```
tb1simple2(input, output, session, data, matdata, data_label,
          data_varStruct = NULL, vlist, group_var, showAllLevels = T)
```

Arguments

input	input
output	output
session	session
data	Original reactive data with propensity score
matdata	Matching reactive data
data_label	Reactive data label
data_varStruct	List of variable structure, Default: NULL
vlist	List including factor/continuous/binary/except/non-normal variables
group_var	Group variable to run propensity score analysis.
showAllLevels	Show All label information with 2 categorical variables, Default: T

Details

Table 1 module server for propensity score analysis

Value

Table 1 with original data/matching data/IPTW data

See Also

[CreateTableOneJS](#) [svydesign](#) [svyCreateTableOne](#)

Examples

```
library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
library(haven);library(survey)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FilePsInput("datafile"),
      tb1simpleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1_original"),
      DTOutput("table1_ps"),
      DTOutput("table1_iptw")
    )
  )
)

server <- function(input, output, session) {
```



```

mat.info <- callModule(FilePs, "datafile")

data <- reactive(mat.info())$data
matdata <- reactive(mat.info())$matdata
data.label <- reactive(mat.info())$data.label

vlist <- eventReactive(mat.info(), {
  mklist <- function(varlist, vars){
    lapply(varlist,
           function(x){
             inter <- intersect(x, vars)
             if (length(inter) == 1){
               inter <- c(inter, "")
             }
             return(inter)
           })
  }
  factor_vars <- names(data())[data()[, lapply(.SD, class) %in% c("factor", "character")]]
  factor_list <- mklist(data_varStruct(), factor_vars)
  conti_vars <- setdiff(names(data()), c(factor_vars, "pscore", "iptw"))
  conti_list <- mklist(data_varStruct(), conti_vars)
  nclass_factor <- unlist(data()[, lapply(.SD, function(x){length(unique(x)[!is.na(unique(x))])}),
                                .SDcols = factor_vars])
  class01_factor <- unlist(data()[, lapply(.SD, function(x){identical(levels(x), c("0", "1"))}),
                                .SDcols = factor_vars])
  validate(
    need(!is.null(class01_factor), "No categorical variables coded as 0, 1 in data")
  )
  factor_01vars <- factor_vars[class01_factor]
  factor_01_list <- mklist(data_varStruct(), factor_01vars)
  group_vars <- factor_vars[nclass_factor >= 2 & nclass_factor <= 10 & nclass_factor < nrow(data())]
  group_list <- mklist(data_varStruct(), group_vars)
  except_vars <- factor_vars[nclass_factor > 10 | nclass_factor == 1 | nclass_factor == nrow(data())]

  ## non-normal: shapiro test
  f <- function(x) {
    if (diff(range(x, na.rm = T)) == 0) return(F) else return(shapiro.test(x)$p.value <= 0.05)
  }

  non_normal <- ifelse(nrow(data()) <= 3 | nrow(data()) >= 5000,
                      rep(F, length(conti_vars)),
                      sapply(conti_vars, function(x){f(data()[[x]])})
  )
  return(list(factor_vars = factor_vars, factor_list = factor_list, conti_vars = conti_vars,
             conti_list = conti_list, factor_01vars = factor_01vars,
             factor_01_list = factor_01_list, group_list = group_list,
             except_vars = except_vars, non_normal = non_normal)
  )
})

```

```

out.tb1 <- callModule(tb1simple2, "tb1", data = data, matdata = matdata, data_label = data.label,
                    data_varStruct = NULL, vlist = vlist,
                    group_var = reactive(mat.info()$group_var))

output$table1_original <- renderDT({
  tb <- out.tb1()$original$table
  cap <- out.tb1()$original$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_ps <- renderDT({
  tb <- out.tb1()$ps$table
  cap <- out.tb1()$ps$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_iptw <- renderDT({
  tb <- out.tb1()$iptw$table
  cap <- out.tb1()$iptw$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})
}

```

 tb1simpleUI

tb1simpleUI : tb1 module UI for propensity score analysis

Description

Table 1 module UI for propensity score analysis.

Usage

```
tb1simpleUI(id)
```

Arguments

id	id
----	----

Details

tb1 module UI for propensity score analysis

Value

Table 1 UI for propensity score analysis

Examples

```

library(shiny);library(DT);library(data.table);library(readxl);library(jstable)
library(haven);library(survey)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      FilePsInput("datafile"),
      tb1simpleUI("tb1")
    ),
    mainPanel(
      DTOutput("table1_original"),
      DTOutput("table1_ps"),
      DTOutput("table1_iptw")
    )
  )
)

server <- function(input, output, session) {

  mat.info <- callModule(FilePs, "datafile")

  data <- reactive(mat.info())$data
  matdata <- reactive(mat.info())$matdata
  data.label <- reactive(mat.info())$data.label

  vlist <- eventReactive(mat.info(), {
    mklist <- function(varlist, vars){
      lapply(varlist,
        function(x){
          inter <- intersect(x, vars)
          if (length(inter) == 1){
            inter <- c(inter, "")
          }
          return(inter)
        })
    }
  })
  factor_vars <- names(data())[data()[, lapply(.SD, class) %in% c("factor", "character")]]
  factor_list <- mklist(data_varStruct(), factor_vars)
  conti_vars <- setdiff(names(data()), c(factor_vars, "pscore", "iptw"))
  conti_list <- mklist(data_varStruct(), conti_vars)
  nclass_factor <- unlist(data()[, lapply(.SD, function(x){length(unique(x)[!is.na(unique(x))])})],
    .SDcols = factor_vars])
  class01_factor <- unlist(data()[, lapply(.SD, function(x){identical(levels(x), c("0", "1"))})],
    .SDcols = factor_vars])

  validate(
    need(!is.null(class01_factor), "No categorical variables coded as 0, 1 in data")
  )
  factor_01vars <- factor_vars[class01_factor]
  factor_01_list <- mklist(data_varStruct(), factor_01vars)
  group_vars <- factor_vars[nclass_factor >=2 & nclass_factor <=10 & nclass_factor < nrow(data())]
  group_list <- mklist(data_varStruct(), group_vars)

```

```

except_vars <- factor_vars[nclass_factor>10 | nclass_factor==1 | nclass_factor==nrow(data())]

## non-normal: shapiro test
f <- function(x) {
  if (diff(range(x, na.rm = T)) == 0) return(F) else return(shapiro.test(x)$p.value <= 0.05)
}

non_normal <- ifelse(nrow(data()) <=3 | nrow(data()) >= 5000,
  rep(F, length(conti_vars)),
  sapply(conti_vars, function(x){f(data()[[x]])})
)
return(list(factor_vars = factor_vars, factor_list = factor_list,
  conti_vars = conti_vars, conti_list = conti_list, factor_01vars = factor_01vars,
  factor_01_list = factor_01_list, group_list = group_list,
  except_vars = except_vars, non_normal = non_normal)
)
})

out.tb1 <- callModule(tb1simple2, "tb1", data = data, matdata = matdata, data_label = data.label,
  data_varStruct = NULL, vlist = vlist,
  group_var = reactive(mat.info())$group_var)

output$table1_original <- renderDT({
  tb <- out.tb1()$original$table
  cap <- out.tb1()$original$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_ps <- renderDT({
  tb <- out.tb1()$ps$table
  cap <- out.tb1()$ps$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})

output$table1_iptw <- renderDT({
  tb <- out.tb1()$iptw$table
  cap <- out.tb1()$iptw$caption
  out <- datatable(tb, rownames = T, extension= "Buttons", caption = cap)
  return(out)
})
}

```

timeROChelper

timeROChelper: Helper function for timerocModule

Description

Helper function for timerocModule

Usage

```
timeROChelper(var.event, var.time, vars.ind, t, data,  
  design.survey = NULL, id.cluster = NULL)
```

Arguments

var.event	event
var.time	time
vars.ind	independent variable
t	time
data	data
design.survey	survey data, Default: NULL
id.cluster	cluster variable if marginal model, Default: NULL

Details

Helper function for timerocModule

Value

timeROC object

See Also

[coxph](#) [svycoxph](#) [predict](#) [timeROC](#)

Examples

```
#library(survival)  
#timeROChelper("status", "time", c("age", "sex"), t = 365, data = lung)
```

timerocModule

timerocModule: shiny module server for time-dependent roc analysis

Description

shiny module server for time-dependent roc analysis

Usage

```
timerocModule(input, output, session, data, data_label,  
  data_varStruct = NULL, nfactor.limit = 10, design.survey = NULL,  
  id.cluster = NULL)
```

Arguments

input	input
output	output
session	session
data	Reactive data
data_label	Reactive data label
data_varStruct	Reactive List of variable structure, Default: NULL
nfactor.limit	nlevels limit in factor variable, Default: 10
design.survey	Reactive survey data. default: NULL
id.cluster	Reactive cluster variable if marginal model, Default: NULL

Details

shiny module server for time-dependent roc analysis

Value

shiny module server for time-dependent roc analysis

See Also

[quantile](#) [setkey](#) [data.table](#) [rbindlist](#)

Examples

```
library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(timeroc);library(survIDINRI)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      timerocUI("timeroc")
    ),
    mainPanel(
      plotOutput("plot_timeroc"),
      ggplotdownUI("timeroc"),
      DTOutput("table_timeroc")
    )
  )
)

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- jstable::mk.lev(mtcars)

  out_timeroc <- callModule(timerocModule, "timeroc", data = data, data_label = data.label,
                           data_varStruct = NULL)
```

```

output$plot_timeroc <- renderPlot({
  print(out_timeroc())$plot)
})

output$table_timeroc <- renderDT({
  datatable(out_timeroc())$tb, rownames=F, editable = F, extensions= "Buttons",
  caption = "ROC results",
  options = c(jstable::opt.tbreg("roctable"), list(scrollX = TRUE)))
})
}

```

timerocUI

timerocUI: shiny module UI for time-dependent roc analysis

Description

Shiny module UI for time-dependent roc analysis

Usage

```
timerocUI(id)
```

Arguments

id id

Details

Shiny module UI for time-dependent roc analysis

Value

Shiny module UI for time-dependent roc analysis

Examples

```

library(shiny);library(DT);library(data.table);library(jstable);library(ggplot2)
library(timeROC);library(survIDINRI)
ui <- fluidPage(
  sidebarLayout(
    sidebarPanel(
      timerocUI("timeroc")
    ),
    mainPanel(
      plotOutput("plot_timeroc"),
      ggplotdownUI("timeroc"),
      DTOutput("table_timeroc")
    )
  )
)

```

```

server <- function(input, output, session) {

  data <- reactive(mtcars)
  data.label <- jstable::mk.lev(mtcars)

  out_timeroc <- callModule(timerocModule, "timeroc", data = data, data_label = data.label,
                           data_varStruct = NULL)

  output$plot_timeroc <- renderPlot({
    print(out_timeroc()$plot)
  })

  output$table_timeroc <- renderDT({
    datatable(out_timeroc()$tb, rownames=F, editable = F, extensions= "Buttons",
              caption = "ROC results",
              options = c(jstable::opt.tbreg("roctable"), list(scrollX = TRUE)))
  })
}

```

timeROC_table	<i>timeROC_table: extract AUC information from list of timeROC object.</i>
---------------	--

Description

extract AUC information from list of timeROC object.

Usage

```
timeROC_table(ListModel, dec.auc = 3, dec.p = 3)
```

Arguments

ListModel	list of timeROC object
dec.auc	digits for AUC, Default: 3
dec.p	digits for p value, Default: 3

Details

extract AUC information from list of timeROC object.

Value

table of AUC information

See Also

[confint data.table-package](#)

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