Package 'DCEtool'

May 18, 2025

Title Efficient and Accessible Discrete Choice Experiments

Version 1.1.1

Description Design, conduct and analyze 'DCEs' from a virtual interface in shiny. Reference: Perez-Troncoso, D. (2022) <https://github.com/danielpereztr/DCEtool>.

License GPL-3

Encoding UTF-8

RoxygenNote 7.3.2

Depends survival, shinyBS, shinycssloaders

Imports shiny, shinyWidgets, mvtnorm, DT, writexl, readxl, idefix, tidyr, mlogit, magrittr, htmltools,knitr,usethis, dfidx, adjustedcranlogs, rlist, remotes, ggplot2, MASS

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Repository CRAN

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DCEtool *Efficient and Accessible DCEs: DCEtool*

Description

Design, conduct, and analyze discrete choice experiments from a visual interface.

Usage

```
DCEtool()
```

Value

Use the visual interface to generate, load and download designs and data bases.

Examples

```
## Not run:

  DCEtool()


## End(Not run)
```

dce_toolbox *Generate Efficient Optimal and Bayesian DCEs*

Description

Generates experimental designs for DCEs. (Backend of DCEtool) .

Usage

```
dce_toolbox(attributes, csets, alts, nochoice, priors, alg)
```

Arguments

attributes	A vector where each number represents an attribute and its values the number of levels.
csets	An integer indicating the number of sets in the DCE.
alts	An integer indicating the number of alternatives in each set.
nochoice	A boolean indicating whether there is an opt-out option (TRUE) or not (FALSE)
priors	A vector indicating the prior parameters of the conditional logit model.
alg	A string indicating the optimization algorithm: "cea" or "fedorov".

Value

design	The design matrix
DB-error	The Bayesian D-error if the optimization algorithm is "cea"
D-error	The D-error if the optimization algorithm is "fedorov"
details	A string compiling the details of the procedure

Examples

```
## Not run:
  dce_toolbox(attributes = c(2,3), csets = 12,
                               alts = 2, nochoice = FALSE,
                               priors = c(0,0,0), alg = "fedorov")

## End(Not run)
```

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list.match *Select members of a list that match given regex pattern*

Description

Select members of a list that match given regex pattern

Usage

```
list.match(.data, pattern, ...)
```

Arguments

.data	A list or vector
pattern	character. The regex pattern to match the name of the members
...	Additional parameters to pass to grep

Examples

```
x <- list(p1 = list(type='A',score=list(c1=10,c2=8)),
       p2 = list(type='B',score=list(c1=9,c2=9)),
       p3 = list(type='B',score=list(c1=9,c2=7)))
list.match(x,'p[12]')
list.match(x,'3')
```

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