

Package ‘DCEtool’

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Title Efficient and Accessible Discrete Choice Experiments

Version 1.2.0

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

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Encoding UTF-8

RoxygenNote 7.3.2

Depends survival, shinyBS, shinycssloaders

Imports shiny, shinyWidgets, mvtnorm, DT, writexl, readxl, idfix, ggplot2, magrittr, remotes, rlist, shinyhelper, usethis, htmltools

Suggests tidyr, mlogit, knitr, dfix, adjustedcranlogs, MASS, httr, markdown, shinyjs

VignetteBuilder knitr

NeedsCompilation no

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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)
```

| | |
|------------|--|
| list.match | <i>Select members of a list that match given regex pattern</i> |
|------------|--|

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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