Package 'NetBIDshiny'

June 24, 2021

Type Package
Title A shiny app to assist NetBID2 master regulator analysis and visualize the results
Version 0.1.0
$Maintainer@R \ person('Xinran', 'Dong', email = 'xinran.dong@stjude.org')$
Description A shiny app for assisting NetBID2 (data-driven context-specific network and Bayesian inference, version II) analysis, including the master regulator estimation and result visualization.
License file LICENSE
Encoding UTF-8
LazyData true
Depends R (>= 3.6.0), NetBID2 (>= 0.1.2), shiny (>= 1.2.0), shinyjs (>= 1.0), shinythemes (>= 1.1.2), DT (>= 0.5), shinyFiles (>= 0.7.3), fs (>= 1.3.1), V8 (>= 2.3), zip (>= 2.0.2)
Imports
Suggests
RoxygenNote 7.1.1
R topics documented:
NetBIDshiny.runner 2 NetBIDshiny.viewer 2
Index 4

2 NetBIDshiny.viewer

NetBIDshiny.runner

 ${\tt NetBIDshiny.runner}\ is\ a\ function\ to\ run\ a\ shiny\ app\ for\ NetBID2\ hidden\ driver\ identification.$

Description

NetBIDshiny.runner is a shiny app for NetBID2 hidden driver identification and the generation of figures for top drivers with the help of two lazy functions in NetBID2, NetBID.lazyMode.DriverEstimation() and NetBID.lazyMode.DriverVisualization(). User could follow the online tutorial https://jyyulab.github.io/NetBID_shiny/ for usage.

Usage

```
NetBIDshiny.runner(
  search_network_path = c("Current Directory", "Home"),
  search_eSet_path = c("Current Directory", "Home"),
  project_main_dir = NULL
)
```

Arguments

search_network_path

a vector of characters, path for network data searching in the app server. User could choose from: 'Current Directory','Home','R Installation','Available Volumes', and could put user-defined server path (better use absolute path). Default is c('Current Directory','Home'). If set to NULL, only 'Current Directory' will be used.

search_eSet_path

a vector of characters, path for expressionSet class RData searching in the app server. User could choose from: 'Current Directory','Home','R Installation','Available Volumes', and could put user-defined server path (better use absolute path). Default is c('Current Directory','Home'). If set to NULL, only 'Current Directory' will be used.

project_main_dir

character, absolute path of the main working directory for driver analysis. If NULL, the server will add a new button for user to select the output directory. Default is NULL. If not NULL, there will be an additional link in the result page for downloading the zip file containing all information.

NetBIDshiny.viewer

NetBIDshiny.viewer is a function to run a shiny app for NetBID2 result visualization.

Description

NetBIDshiny.viewer is a shiny app for NetBID2 result visualization. User could follow the online tutorial https://jyyulab.github.io/NetBID_shiny/ for usage.

NetBIDshiny.viewer 3

Usage

```
NetBIDshiny.viewer(
  load_data_path = NULL,
  search_path = c("Current Directory", "Home")
)
```

Arguments

 ${\tt load_data_path} \quad character, path \ for \ the \ pre-loaded \ data. \ If \ NULL, \ will \ pre-load \ the \ demo \ dataset.$

search_path

a vector of characters, path for master table Rdata searching in the app server. User could choose from: 'Current Directory','Home','R Installation','Available Volumes', and could put user-defined server path (better use absolute path). Default is c('Current Directory','Home'). If set to NULL, only 'Current Directory' will be used.

Index

NetBIDshiny.runner, 2 NetBIDshiny.viewer, 2