

Package ‘muiTreeView’

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Type Package

Title 'MUI X Tree View' for 'shiny' Apps and 'Quarto'

Version 0.1.1

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Description Give access to 'MUI X Tree View' components, which lets users navigate hierarchical lists of data with nested levels that can be expanded and collapsed.

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Encoding UTF-8

Imports htmltools, shiny.react (>= 0.4.0)

Suggests shiny, testthat (>= 3.0.0)

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URL <https://felixluginbuhl.com/muiTreeView/>

BugReports <https://github.com/lgnbhl/muiTreeView/issues>

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asMuiTree*Create choice structure for [RichTreeView()]*

Description

This function is adapted from ‘shinyWidgets::create_tree()’. A big thank you to the authors of the shinyWidgets for creating the ‘create_tree()’ function.

Usage

```
asMuiTree(data, levels = names(data), levels_id = NULL, ...)
```

Arguments

<code>data</code>	A ‘data.frame’.
<code>levels</code>	Variables identifying hierarchical levels, values of those variables will be used as text displayed.
<code>levels_id</code>	Variable to use as ID for nodes. Careful! Spaces are not allowed in IDs.
...	Addtional arguments.

Value

a ‘list’ that can be used in [RichTreeView()].

See Also

‘shinyWidgets::create_tree()’

muiTreeViewDependency *Mui X Tree View JS dependency*

Description

Mui X Tree View JS dependency

Usage

```
muiTreeViewDependency()
```

Value

HTML dependency object.

RichTreeView

RichTreeView

Description

<https://mui.com/x/api/tree-view/rich-tree-view/>

Usage

RichTreeView(...)

Arguments

... Props to pass to the component.

Details

- **apiRef** { current?: { focusItem?: func, getItem?: func, getItemDOMElement?: func, getItemOrderedChildren?: func } }
Default is - The ref object that allows Tree View manipulation. Can be instantiated with useTreeViewApiRef().
- **checkboxSelection** bool
Default is FALSE If true, the Tree View renders a checkbox at the left of its label that allows selecting it.
- **classes** object
Default is - Override or extend the styles applied to the component. See CSS classes API below for more details.
- **defaultExpandedItems** Array string
Default is [] Expanded item ids. Used when the item's expansion is not controlled.
- **defaultSelectedItems** any
Default is [] Selected item ids. (Uncontrolled) When multiSelect is true this takes an array of strings; when false (default) a string.
- **disabledItemsFocusable** bool
Default is FALSE If true, will allow focus on disabled items.
- **disableSelection** bool
Default is FALSE If true selection is disabled.
- **expandedItems** Array string
Default is - Expanded item ids. Used when the item's expansion is controlled.
- **expansionTrigger** 'content' | 'iconContainer'
Default is 'content' The slot that triggers the item's expansion when clicked.
- **getItemChildren** func
Default is (item) = item.children Used to determine the children of a given item. Signature: function(item: R) = Array<item> The item to check.
- **getItemId** func
Default is (item) = item.id Used to determine the id of a given item. Signature: function(item: R) = string<item> The item to check.

- **getItemLabel func**
Default is (item) = item.label Used to determine the string label for a given item.Signature:function(item: R) = stringitem The item to check.
- **id string**
Default is - This prop is used to help implement the accessibility logic. If you don't provide this prop. It falls back to a randomly generated id.
- **isItemDisabled func**
Default is - Used to determine if a given item should be disabled.Signature:function(item: R) = booleanitem The item to check.
- **isItemEditable func | bool**
Default is () = FALSE Determine if a given item can be edited.
- **itemChildrenIndentation number | string**
Default is 12px Horizontal indentation between an item and its children. Examples: 24, "24px", "2rem", "2em".
- **multiSelect bool**
Default is FALSE If true, ctrl and shift will trigger multiselect.
- **onExpandedItemsChange func**
Default is - Callback fired when Tree Items are expanded/collapsed.Signature:function(event: React.SyntheticEvent, itemIds: array) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemExpansion() method.itemIds The ids of the expanded items.
- **onItemClick func**
Default is - Callback fired when the content slot of a given Tree Item is clicked.Signature:function(event: React.MouseEvent, itemId: string) = voidevent The DOM event that triggered the change.itemId The id of the focused item.
- **onItemExpansionToggle func**
Default is - Callback fired when a Tree Item is expanded or collapsed.Signature:function(event: React.SyntheticEvent | null, itemId: array, isExpanded: boolean) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemExpansion() method.itemId The itemId of the modified item.isExpanded true if the item has just been expanded, false if it has just been collapsed.
- **onItemFocus func**
Default is - Callback fired when a given Tree Item is focused.Signature:function(event: React.SyntheticEvent | null, itemId: string) = voidevent The DOM event that triggered the change. Warning: This is a generic event not a focus event.itemId The id of the focused item.
- **onItemLabelChange func**
Default is - Callback fired when the label of an item changes.Signature:function(itemId: TreeViewItemId, newLabel: string) = voiditemId The id of the item that was edited.newLabel The new label of the items.
- **onItemSelectedToggle func**
Default is - Callback fired when a Tree Item is selected or deselected.Signature:function(event: React.SyntheticEvent, itemId: array, isSelected: boolean) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemSelection() method.itemId The itemId of the modified item.isSelected true if the item has just been selected, false if it has just been deselected.

- **onSelectedItemsChange** func
Default is - Callback fired when Tree Items are selected/deselected.Signature:function(event: React.SyntheticEvent, itemIds: Array | string) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemSelection() method.itemIds The ids of the selected items. When multiSelect is true, this is an array of strings; when false (default) a string.
- **selectedItems** any
Default is - Selected item ids. (Controlled) When multiSelect is true this takes an array of strings; when false (default) a string.
- **selectionPropagation { descendants?: bool, parents?: bool }**
Default is parents: FALSE, descendants: FALSE When selectionPropagation.descendants is set to true.- Selecting a parent selects all its descendants automatically. - Deselecting a parent deselects all its descendants automatically.When selectionPropagation.parents is set to true.- Selecting all the descendants of a parent selects the parent automatically. - Deselecting a descendant of a selected parent deselects the parent automatically.Only works when multiSelect is true. On the SimpleTreeView / , only the expanded items are considered (since the collapsed item are not passed to the Tree View component at all)
- **slotProps object**
Default is The props used for each component slot.
- **slots object**
Default is Overridable component slots.See Slots API below for more details.
- **sx Array func| object| bool | func| object**
Default is - The system prop that allows defining system overrides as well as additional CSS styles.See the sx page for more details.

Value

Object with shiny.tag class suitable for use in the UI of a Shiny app.

SimpleTreeView

SimpleTreeView

Description

<https://mui.com/x/api/tree-view/simple-tree-view/>

Usage

SimpleTreeView(...)

Arguments

... Props to pass to the component.

Details

- **apiRef** { current?: { focusItem?: func, getItem?: func, getItemDOMElement?: func, getItemOrderedChildren?: func } }

Default is - The ref object that allows Tree View manipulation. Can be instantiated with useTreeViewApiRef().
- **checkboxSelection** bool

Default is FALSE If true, the Tree View renders a checkbox at the left of its label that allows selecting it.
- **children** node

Default is - The content of the component.
- **classes** object

Default is - Override or extend the styles applied to the component.See CSS classes API below for more details.
- **defaultExpandedItems** Array string

Default is [] Expanded item ids. Used when the item's expansion is not controlled.
- **defaultSelectedItems** any

Default is [] Selected item ids. (Uncontrolled) When multiSelect is true this takes an array of strings; when false (default) a string.
- **disabledItemsFocusable** bool

Default is FALSE If true, will allow focus on disabled items.
- **disableSelection** bool

Default is FALSE If true selection is disabled.
- **expandedItems** Array string

Default is - Expanded item ids. Used when the item's expansion is controlled.
- **expansionTrigger** 'content' | 'iconContainer'

Default is 'content' The slot that triggers the item's expansion when clicked.
- **id** string

Default is - This prop is used to help implement the accessibility logic. If you don't provide this prop. It falls back to a randomly generated id.
- **itemChildrenIndentation** number | string

Default is 12px Horizontal indentation between an item and its children. Examples: 24, "24px", "2rem", "2em".
- **multiSelect** bool

Default is FALSE If true, ctrl and shift will trigger multiselect.
- **onExpandedItemsChange** func

Default is - Callback fired when Tree Items are expanded/collapsed.Signature:function(event: React.SyntheticEvent, itemIds: array) = void event The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemExpansion() method.itemIds The ids of the expanded items.
- **onItemClick** func

Default is - Callback fired when the content slot of a given Tree Item is clicked.Signature:function(event: React.MouseEvent, itemId: string) = void event The DOM event that triggered the change.itemId The id of the focused item.

- **onItemExpansionToggle func**
Default is - Callback fired when a Tree Item is expanded or collapsed.Signature:function(event: React.SyntheticEvent | null, itemId: array, isExpanded: boolean) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemExpansion() method.itemId The itemId of the modified item.isExpanded true if the item has just been expanded, false if it has just been collapsed.
- **onItemFocus func**
Default is - Callback fired when a given Tree Item is focused.Signature:function(event: React.SyntheticEvent | null, itemId: string) = voidevent The DOM event that triggered the change. Warning: This is a generic event not a focus event.itemId The id of the focused item.
- **onItemSelectedToggle func**
Default is - Callback fired when a Tree Item is selected or deselected.Signature:function(event: React.SyntheticEvent, itemId: array, isSelected: boolean) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemSelection() method.itemId The itemId of the modified item.isSelected true if the item has just been selected, false if it has just been deselected.
- **onSelectedItemsChange func**
Default is - Callback fired when Tree Items are selected/deselected.Signature:function(event: React.SyntheticEvent, itemIds: Array | string) = voidevent The DOM event that triggered the change. Can be null when the change is caused by the publicAPI.setItemSelection() method.itemIds The ids of the selected items. When multiSelect is true, this is an array of strings; when false (default) a string.
- **selectedItems any**
Default is - Selected item ids. (Controlled) When multiSelect is true this takes an array of strings; when false (default) a string.
- **selectionPropagation { descendants?: bool, parents?: bool }**
Default is parents: FALSE, descendants: FALSE When selectionPropagation.descendants is set to true.- Selecting a parent selects all its descendants automatically. - Deselecting a parent deselects all its descendants automatically.When selectionPropagation.parents is set to true.- Selecting all the descendants of a parent selects the parent automatically. - Deselecting a descendant of a selected parent deselects the parent automatically.Only works when multiSelect is true. On the SimpleTreeView / , only the expanded items are considered (since the collapsed item are not passed to the Tree View component at all)
- **slotProps object**
Default is - The props used for each component slot.
- **slots object**
Default is - Overridable component slots.See Slots API below for more details.
- **sx Array func| object| bool | func| object**
Default is - The system prop that allows defining system overrides as well as additional CSS styles.See the sx page for more details.

Value

Object with shiny.tag class suitable for use in the UI of a Shiny app.

TreeItem*TreeItem*

Description

<https://mui.com/x/api/tree-view/tree-item/>

Usage

```
TreeItem(...)
```

Arguments

... Props to pass to the component.

Details

- **itemId** string
Default is - The id of the item. Must be unique.
- **children** any
Default is - The content of the component.
- **classes** object
Default is - Override or extend the styles applied to the component. See CSS classes API below for more details.
- **disabled** bool
Default is FALSE If true, the item is disabled.
- **id** string
Default is - The id attribute of the item. If not provided, it will be generated.
- **label** node
Default is - The label of the item.
- **onBlur** func
Default is - Callback fired when the item root is blurred.
- **onFocus** unsupportedProp
Default is - This prop isn't supported. Use the onItemFocus callback on the tree if you need to monitor an item's focus.
- **onKeyDown** func
Default is - Callback fired when a key is pressed on the keyboard and the tree is in focus.
- **slotProps** object
Default is The props used for each component slot.
- **slots** object
Default is Overridable component slots. See Slots API below for more details.
- **sx** Array|func|object|bool|func|object
Default is - The system prop that allows defining system overrides as well as additional CSS styles. See the sx page for more details.

Value

Object with `shiny.tag` class suitable for use in the UI of a Shiny app.

`TreeItemIcon``TreeItemIcon`

Description

<https://mui.com/x/api/tree-view/tree-item-icon/>

Usage

```
TreeItemIcon(...)
```

Arguments

... Props to pass to the component.

Details

- `slotProps` object
Default is The props used for each component slot.
- `slots` object
Default is Overridable component slots.See Slots API below for more details.

Value

Object with `shiny.tag` class suitable for use in the UI of a Shiny app.

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