

Package ‘KeyboardSimulator’

January 20, 2025

Type Package

Title Keyboard and Mouse Input Simulation for Windows OS

Version 2.6.2

Date 2023-09-13

Description Control your keyboard and mouse with R code by simulating key presses and mouse clicks. The input simulation is implemented with the Windows API.

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Imports Rcpp (>= 1.0.0)

LinkingTo Rcpp

RoxygenNote 7.2.3

Encoding UTF-8

Depends R (>= 2.10)

OS_type windows

URL <https://github.com/ChiHangChen/KeyboardSimulator>

BugReports <https://github.com/ChiHangChen/KeyboardSimulator/issues>

NeedsCompilation yes

Author Jim Chen [aut, cre],
Jeff Keller [aut, ctb],
Garry Hopwood [ctb],
Chieh Hsu [ctb]

Maintainer Jim Chen <jim71183@gmail.com>

Repository CRAN

Date/Publication 2023-09-13 13:02:33 UTC

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Control your keyboard and mouse with R code by simulating key presses and mouse clicks. The input simulation is implemented with the Windows API.

Author(s)

Maintainer: Jim Chen <jim71183@gmail.com>

Authors:

- Jeff Keller <github@vtkellers.com> [contributor]

Other contributors:

- Garry Hopwood <garryhopwood@hotmail.com> [contributor]
- Chieh Hsu <tiff103012345@gmail.com> [contributor]

See Also

Useful links:

- <https://github.com/ChiHangChen/KeyboardSimulator>
- Report bugs at <https://github.com/ChiHangChen/KeyboardSimulator/issues>

keybd.press	<i>Simulate Key Press</i>
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Description

Simulate keyboard key presses. Multiple keys can be pressed simultaneously by using + as separator (see Examples). See [Keyboard_value](#) for supported keys.

Usage

```
keybd.press(button, hold = FALSE)
```

Arguments

- | | |
|--------|--|
| button | character. The key press to simulate (not case sensitive). |
| hold | logical. Whether the key should be held down. If TRUE, the key can be released by pressing the phsical key on the keyboard or by using the keybd.release function. |

See Also

[keybd.release](#)

Examples

```
## Not run:  
  
# press one key  
keybd.press("a")  
  
# press multiple keys  
keybd.press("Alt+F4")  
  
# press multiple keys using hold  
keybd.press("Alt", hold = TRUE)  
keybd.press("F4")  
keybd.release("Alt")  
  
## End(Not run)
```

<code>keybd.release</code>	<i>Simulate Key Release</i>
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Description

Simulate the release of keyboard keys held by [keybd.press](#). Multiple keys can be released simultaneously by using a + separator (see Examples). See [keyboard_value](#) for supported keys.

Usage

```
keybd.release(button)
```

Arguments

button	character. The key release to simulate (not case sensitive).
--------	--

See Also

[keybd.press](#)

Examples

```
## Not run:

# Move to the third working window
keybd.press("Alt", hold = TRUE)
keybd.press("Tab")
Sys.sleep(0.1)
keybd.press("Tab")
keybd.release("Alt")

## End(Not run)
```

<code>keybd.type_string</code>	<i>Type a raw string</i>
--------------------------------	--------------------------

Description

Type a raw string base on a given string.

Usage

```
keybd.type_string(string)
```

Arguments

string	character. The string expected to output (case sensitive).
--------	--

Examples

```
## Not run:  
  
# Type 'Hello world!'  
keybd.type_string("Hello world!")  
  
## End(Not run)
```

keyboard_value	keyboard_value
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Description

List of supported keyboard keys, along with their virtual-key and hardware scan codes. A field indicating whether the key is an "extended key" with a 0xE0 prefix byte is also included to differentiate between duplicate keys on the keyboard and num pad. For example, while the 1 key usually behaves the same as the 1 key on the num pad, some applications see these as two distinct keys.

Usage

keyboard_value

Format

An object of class `data.frame` with 137 rows and 5 columns.

Details

Supported keys:

- a
- b
- c
- d
- e
- f
- g
- h
- i
- j
- k
- l
- m

- n
- o
- p
- q
- r
- s
- t
- u
- v
- w
- x
- y
- z
- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R
- S
- T
- U
- V
- W
- X

- Y
- Z
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- num0
- num1
- num2
- num3
- num4
- num5
- num6
- num7
- num8
- num9
- f1
- f2
- f3
- f4
- f5
- f6
- f7
- f8
- f9
- f10
- f11
- f12
- backspace
- tab
- enter

- shift
- ctrl
- alt
- capslock
- esc
- pageup
- pagedown
- end
- home
- left
- up
- right
- down
- insert
- space
- del
- numlock
- win
- ‘
- ~
- !
- @
- #
- \$
- %
- ^
- &
- *
- (
-)
- -
- _
- +
- =
- [
- {
-]

- }
- \
- |
- ;
- :
- ’
- "
- ,
- <
- .
- >
- /
- ?

References

[Hardware Scan Codes, Virtual-Key Codes](#)

`mouse.click`

Simulate Mouse Clicks

Description

Simulate left, right, and middle mouse clicks.

Usage

```
mouse.click(button = "left", hold = FALSE)
```

Arguments

<code>button</code>	character. Allowed values are "left", "right", and "middle".
<code>hold</code>	logical. Whether the button should be held down.

See Also

[mouse.release](#)

Examples

```
## Not run:

# left mouse click
mouse.click(button = "left")

# left mouse click and hold
mouse.click(button = "left", hold = TRUE)

## End(Not run)
```

mouse.get_cursor *Get Current Cursor Coordinate*

Description

Get current cursor coordinate of screen .

Usage

```
mouse.get_cursor()
```

Examples

```
## Not run:

mouse.get_cursor()

## End(Not run)
```

mouse.move *Move Cursor to Specific Location*

Description

Move cursor to specific coordinate of screen .

Usage

```
mouse.move(x, y, duration = NA, step_ratio = 0.01)
```

Arguments

x	numeric. X-axis of screen.
y	numeric. Y-axis of screen.
duration	numeric. Cursor movement time in seconds, there might be some delay on different computer.
step_ratio	numeric. Ratio of total distance in each step, only available when duration is not NA.

Examples

```
## Not run:  
  
# Move cursor to middle of screen in 1080FHD monitor  
mouse.move(x = 960, y = 540)  
  
# Move cursor to middle of screen in 1080FHD monitor within 3 seconds  
mouse.move(x = 960, y = 540, duration = 3)  
  
## End(Not run)
```

mouse.release *Simulate Mouse Click Release*

Description

Simulate the release of mouse button held by [mouse.click](#).

Usage

```
mouse.release(button = "left")
```

Arguments

button	character. Allowed values are "left", "right", and "middle".
--------	--

See Also

[mouse.click](#)

Examples

```
## Not run:  
  
# right mouse click and hold  
mouse.click(button = "right", hold = TRUE)  
  
# release right click  
mouse.release(button = "right")  
  
## End(Not run)
```

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