

Package ‘minesweeper’

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Type Package

Title Play Minesweeper

Version 1.0.1

Description

Play and record games of minesweeper using a graphics device that supports event handling. Replay recorded games and save GIF animations of them. Based on classic minesweeper as detailed by Crow P. (1997) <<https://minesweepergame.com/math/a-mathematical-introduction-to-the-game-of-minesweeper-1997.pdf>>.

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Encoding UTF-8

Imports grid

Suggests gifski

RoxygenNote 7.3.1

Depends R (>= 2.10)

URL <https://github.com/hrryt/minesweeper>

BugReports <https://github.com/hrryt/minesweeper/issues>

NeedsCompilation no

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play_minesweeper	<i>Start a Minesweeper Game</i>
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Description

Play minesweeper interactively in the current graphics device.

Usage

```
play_minesweeper(
  difficulty = c("expert", "intermediate", "beginner"),
  nrow = NULL,
  ncol = NULL,
  mine_count = NULL,
  mine_density = NULL,
  os_type = c("guess", "unix", "windows")
)
```

Arguments

difficulty	establishes default dimensions and mine count
nrow, ncol	dimensions of the minesweeper board
mine_count	number of mines to sweep
mine_density	proportion of cells that conceal a mine
os_type	used to interpret button argument of event handlers

Details

Expert difficulty is 16x30 with 99 mines, intermediate 16x16 with 40 mines, and beginner 9x9 with 10 mines.

The current graphics device must support event handling (see `grDevices::getGraphicsEvent()`). If `onIdle` is not supported, the timer will only update on mouse events.

Value

Object of class "minesweeper_recording" to pass to `replay_minesweeper()` or `save_minesweeper_gif()`, invisibly.

Controls

- **Left click** an empty square to reveal it.
- **Right click** an empty square to flag it.
- **Middle click** a number to reveal its adjacent squares.
- Press **r** to reset the board.
- Press **q** to quit.

Examples

```
x11() # Unix-specific example
recording <- play_minesweeper()
dev.off()
```

replay_minesweeper *Replay a Minesweeper Recording*

Description

Replay a recorded game of minesweeper in the current graphics device.

Usage

```
replay_minesweeper(recording)
```

Arguments

recording object of class "minesweeper_recording" returned by [play_minesweeper\(\)](#)

Value

recording, invisibly.

Examples

```
x11() # Unix-specific example
recording <- play_minesweeper()
replay_minesweeper(recording)
dev.off()
```

save_minesweeper_gif *Save a Minesweeper Recording to GIF*

Description

Save a recorded game of minesweeper to a GIF file.

Usage

```
save_minesweeper_gif(  
  recording,  
  gif_file = "animation.gif",  
  width = 800,  
  height = 600,  
  delay = 1,  
  loop = TRUE,  
  progress = TRUE,  
  ...  
)
```

Arguments

recording	object of class "minesweeper_recording" returned by play_minesweeper()
gif_file	output gif file
width	gif width in pixels
height	gif height in pixel
delay	time to show each image in seconds
loop	if the gif should be repeated. Set to FALSE to only play once, or a number to indicate how many times to repeat after the first.
progress	print some verbose status output
...	other graphical parameters passed to png

Details

Reduce the delay for greater temporal resolution.

Value

The file path of the GIF file.

Examples

```
x11() # Unix-specific example  
recording <- play_minesweeper()  
save_minesweeper_gif(recording)  
dev.off()
```

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