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# **GooCalendar Documentation**

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**Samuel Abels, Cédric Krier, Antoine Smolders**

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## Contents

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<b>1</b>	<b>Calendar Objects</b>	<b>3</b>
<b>2</b>	<b>EventStore Objects</b>	<b>7</b>
<b>3</b>	<b>Event Objects</b>	<b>9</b>
<b>4</b>	<b>Indices and tables</b>	<b>11</b>
	<b>Python Module Index</b>	<b>13</b>
	<b>Index</b>	<b>15</b>



The *gocalendar* module supplies a calendar widget drawn with GooCanvas that can display a month view and a week view. It also supplies classes to manage events you can add to the calendar.



# CHAPTER 1

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## Calendar Objects

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A *Calendar* is a calendar widget using GooCanvas that can display a month view and a week view. It holds an *EventStore* which contains events displayed in the calendar.

**class** goocalendar.**Calendar** ([*event\_store* [, *view* [, *time\_format* [, *firstweekday* ] ] ] ])

Creates a *Calendar* object. All arguments are optional. *event\_store* should be an *EventStore*. *view* should be either 'month' or 'week'. Default value is 'month'. *time\_format* determines the format of displayed time in the calendar. Default value is '%H:%M'. *firstweekday* is a constant of module calendar specifying the first day of the week. Default value is *calendar.SUNDAY*.

Instance attributes:

goocalendar.**event\_store**

*EventStore* currently plugged. Setting a new event store will automatically redraw the canvas to display the events of the new event store.

goocalendar.**view**

The current view: 'month' or 'week'.

goocalendar.**selected\_date**

*datetime.date* which determines the current selected day in the calendar.

goocalendar.**firstweekday**

Determines the first day of the week (0 is Monday).

Instance methods:

goocalendar.**select** (*date*)

Select the given date in the calendar. Date should be a *datetime.date*.

goocalendar.**previous\_page** ()

Go to the previous page of the calendar.

goocalendar.**next\_page** ()

Go to the next page of the calendar.

goocalendar.**set\_view** (*view*)

Change calendar's view. Possible values: 'month' or 'week'.

`gocalendar.draw_events()`

Redraws events.

`gocalendar.update()`

Redraws calendar and events.

Instance signals:

`event-pressed`

The `event-pressed` signal is emitted when an `Event` is pressed with the button 1 of the mouse.

```
def callback(calendar, event, user_param1, ...)
```

***calendar*** The *Calendar* that received the signal.

***event*** The pressed *Event* object.

***user\_param1*** the first user parameter (if any) specified with the `connect()` method.

... additional user parameters (if any).

`event-activated`

The `event-activated` signal is emitted when an *Event* is double-clicked with the button 1 of the mouse.

```
def callback(calendar, event, user_param1, ...)
```

***calendar*** The *Calendar* that received the signal.

***event*** The double-clicked *Event* object.

***user\_param1*** the first user parameter (if any) specified with the `connect()` method.

... additional user parameters (if any).

`event-released`

The `event-released` signal is emitted when the button 1 of the mouse is released on an event.

```
def callback(calendar, event, user_param1, ...)
```

***calendar*** The *Calendar* that received the signal.

***event*** The double-clicked *Event* object.

***user\_param1*** the first user parameter (if any) specified with the `connect()` method.

... additional user parameters (if any).

`day-pressed`

The `day-pressed` signal is emitted when a day is pressed with the mouse button 1.

```
def callback(calendar, date, user_param1, ...)
```

***calendar*** The *Calendar* that received the signal.

***date*** `datetime.date` corresponding to the day pressed.

***user\_param1*** the first user parameter (if any) specified with the `connect()` method.

... additional user parameters (if any).

`day-activated`

The `day-activated` signal is emitted when the day is double-clicked with the mouse button 1.

```
def callback(calendar, date, user_param1, ...)
```



**calendar** The *Calendar* that received the signal.

**date** *datetime.date* corresponding to the activated day.

**user\_param1** the first user parameter (if any) specified with the connect() method

... additional user parameters (if any).

#### day-selected

The day-selected signal is emitted when the selected day changes.

```
def callback(calendar, date, user_param1, ...)
```

**calendar** The *Calendar* that received the signal.

**date** *datetime.date* corresponding to the new selected day.

**user\_param1** the first user parameter (if any) specified with the connect() method.

... additional user parameters (if any).

#### view-changed

The view-changed signal is emitted when the view changes

```
def callback(calendar, view, user_param1, ...)
```

**calendar** The *Calendar* that received the signal.

**view** 'month' or 'week'

**user\_param1** the first user parameter (if any) specified with the connect() method

... additional user parameters (if any).

#### page-changed

The page-changed signal is emitted when the page currently showed in the calendar is changed.

```
def callback(calendar, date, user_param1, ...)
```

**calendar** The *Calendar* that received the signal.

**date** *datetime.date* corresponding to the selected day in the calendar.

**user\_param1** the first user parameter (if any) specified with the connect() method.

... additional user parameters (if any).

#### Instance properties:

##### text-color

The color of the text. Default: #2E3634

##### inactive-text-color

The color of the inactive text. Default: #8B8F8E

##### border-color

The color of border. Default: #D2D0D2

##### selected-border-color

The color of selected border. Default: #5EC590

##### inactive-border-color

The color of inactive border. Default: #E8E7E8

`body-color`

The color of the body. Default: white

`today-body-color`

The color of the today body. Default: ivory

`font`

The attributes specifying which font to use.

## CHAPTER 2

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### EventStore Objects

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An *EventStore* is the store of *Event* that can be plugged to a *Calendar*.

**class** goocalendar.**EventStore**

There is no arguments for this class.

Instance methods:

goocalendar.**add**(*event*)

Add the given event to the event store.

goocalendar.**remove**(*event*)

Remove the given event from the event store.

goocalendar.**clear**()

Remove all events from the event store and restore it to initial state.

goocalendar.**get\_events**(*start, end*)

Returns a list of all events that intersect with the given start and end datetime. If no start time nor end time are given, the method returns a list containing all events.

Instance signals:

event-added

The event-added signal is emitted when an Event is added to the event store.

```
def callback(event_store, event, user_param1, ...)
```

**event\_store** The *EventStore* that received the signal.

**event** The added *Event*.

**user\_param1** the first user parameter (if any) specified with the connect() method.

... additional user parameters (if any).

event-removed

The event-removed signal is emitted when an Event is removed from the event store.

```
def callback(event_store, event, user_param1, ...)
```

*event\_store* The *EventStore* that received the signal.

*event* The removed *Event*.

*user\_param1* the first user parameter (if any) specified with the connect() method.

... additional user parameters (if any).

events-cleared

The events-cleared signal is emitted when the event store is cleared.

```
def callback(event_store, user_param1, ...)
```

*event\_store* The *EventStore* that received the signal.

*user\_param1* the first user parameter (if any) specified with the connect() method.

... additional user parameters (if any).

## CHAPTER 3

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### Event Objects

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An *Event* represents an event in a *Calendar*.

**class** goocalendar.**Event** (*caption*, *start*[, *end*[, *all\_day*[, *text\_color*[, *bg\_color*[, *editable* ]]]]])  
*caption* argument is mandatory and will be the string displayed on the event. *start* argument is mandatory and determines the starting time of the event. It should be a *datetime*. All other arguments are optional. *end* argument may be a *datetime*, *all\_day* a boolean value. An event will be considered as all day event if no *end* argument is supplied. *text\_color* and *bg\_color* arguments are supposed to be color strings. *editable* determines if the event can be modified.

Instance attributes:

goocalendar.**id**  
Unique identification integer.

goocalendar.**caption**  
Caption to display on the event in the calendar.

goocalendar.**start**  
*datetime* determining event start time.

goocalendar.**end**  
*datetime* determining event end time.

goocalendar.**all\_day**  
Boolean determining if the day is an all day event or a normal event.

goocalendar.**text\_color**  
String determining caption text color.

goocalendar.**bg\_color**  
String determining background color.

goocalendar.**editable**  
Boolean determining if the event can be modified. Default value is *True*.

goocalendar.**multidays**  
Boolean property determining if the event is longer than one day.

Supported operations:

All comparisons operations are supported.

event1 is considered less than event2 if it starts before event2. If two events start at the same time, the event which ends the first one is considered smaller.

Example usage:

```
>>> import datetime
>>> import goocalendar
>>> event_store = goocalendar.EventStore()
>>> calendar = goocalendar.Calendar(event_store)
>>> event = goocalendar.Event('Event number 1',
...     datetime.datetime(2012, 8, 21, 14),
...     datetime.datetime(2012, 8, 21, 17),
...     bg_color='lightgreen')
>>> event_store.add(event)
```

## CHAPTER 4

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### Indices and tables

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- `genindex`
- `modindex`
- `search`





**g**

gocalendar, ??



## A

`add()` (*in module goocalendar*), 7  
`all_day` (*in module goocalendar*), 9

## B

`bg_color` (*in module goocalendar*), 9

## C

`caption` (*in module goocalendar*), 9  
`clear()` (*in module goocalendar*), 7

## D

`draw_events()` (*in module goocalendar*), 3

## E

`editable` (*in module goocalendar*), 9  
`end` (*in module goocalendar*), 9  
`event_store` (*in module goocalendar*), 3

## F

`firstweekday` (*in module goocalendar*), 3

## G

`get_events()` (*in module goocalendar*), 7  
`goocalendar` (*module*), 1  
`goocalendar.Calendar` (*class in goocalendar*), 3  
`goocalendar.Event` (*class in goocalendar*), 9  
`goocalendar.EventStore` (*class in goocalendar*),  
7

## I

`id` (*in module goocalendar*), 9

## M

`multidays` (*in module goocalendar*), 9

## N

`next_page()` (*in module goocalendar*), 3

## P

`previous_page()` (*in module goocalendar*), 3

## R

`remove()` (*in module goocalendar*), 7

## S

`select()` (*in module goocalendar*), 3  
`selected_date` (*in module goocalendar*), 3  
`set_view()` (*in module goocalendar*), 3  
`start` (*in module goocalendar*), 9

## T

`text_color` (*in module goocalendar*), 9

## U

`update()` (*in module goocalendar*), 4

## V

`view` (*in module goocalendar*), 3