

Class Documentation

alarmClock Class Reference

```
#include <alarmClock.h>
```

Public Member Functions

- `boolean isSet ()`
- `void setAlarm (unsigned long)`
- `void unSetAlarm ()`
- `boolean poll ()`
- `unsigned long getRemainingTime ()`
- `alarmClock ()`
- `alarmClock (void(*ringer)(void))`

Detailed Description

Utility class for managing one-shot time events.

Author:

Keegan Morrow

Version:

7

Constructor & Destructor Documentation

alarmClock::alarmClock ()

Constructor

alarmClock::alarmClock (void(*) (void) *ringer*)

Constructor

Parameters:

<i>ringer</i>	Function pointer to the event handler function. Must be a function without parameters or a return. This can also be set to NULL to just use the timer.
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Member Function Documentation

unsigned long alarmClock::getRemainingTime ()

Gets the time remaining time.

Returns:

Time in milliseconds from now

boolean alarmClock::isSet ()

Checks if the alarm is active.

Returns:

true if active

boolean alarmClock::poll ()

Polling function, this should be called as often as possible (normally from loop()). The call to the event handler occurs inside this.

Returns:

true if the alarm occurred

void alarmClock::setAlarm (unsigned long *Time*)

Sets the alarm time (resets) and activates the timer

Parameters:

<i>Time</i>	set time in ms from now
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void alarmClock::unSetAlarm ()

Deactivates the timer.

The documentation for this class was generated from the following files:

- alarmClock.h
- alarmClock.cpp

repeatAlarm Class Reference

```
#include <alarmClock.h>
```

Public Member Functions

- **repeatAlarm** (void(*ringer)(void))
 - void **setInterval** (unsigned long)
 - void **setIntervalReset** (unsigned long)
 - void **reset** ()
 - boolean **poll** ()
 - unsigned long **getRemainingTime** ()
 - unsigned long **getInterval** ()
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Detailed Description

Utility class for managing repeating time events.

Author:

Keegan Morrow

Version:

7

Constructor & Destructor Documentation

repeatAlarm::repeatAlarm (void*)(void) *ringer*

Constructor

Parameters:

<i>ringer</i>	Function pointer to the event handler function. Must be a function without parameters or a return.
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Member Function Documentation

unsigned long repeatAlarm::getInterval ()

Gets the current interval time.

Returns:

Time in milliseconds

unsigned long repeatAlarm::getRemainingTime ()

Gets the time remaining time.

Returns:

Time in milliseconds from now

boolean repeatAlarm::poll ()

Polling function, this should be called as often as possible (normally from loop()). The call to the event handler occurs inside this.

Returns:

true if the alarm occurred

void repeatAlarm::reset ()

Reset the time remaining to the current interval time.

void repeatAlarm::setInterval (unsigned long *interval*)

Sets the interval time without changing the current time remaining.

Parameters:

<i>interval</i>	The interval time in milliseconds
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void repeatAlarm::setIntervalReset (unsigned long *interval*)

Sets the interval time and resets the time remaining to the new interval time.

Parameters:

<i>interval</i>	The interval time in milliseconds
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The documentation for this class was generated from the following files:

- alarmClock.h
- alarmClock.cpp

File Documentation

alarmClock.cpp File Reference

```
#include "alarmClock.h"
```

alarmClock.h File Reference

```
#include <WProgram.h>
```

Classes

- class **alarmClock**
- class **repeatAlarm**

Macros

- `#define ALARMCLOCKREV 7`
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Macro Definition Documentation

```
#define ALARMCLOCKREV 7
```