MiscDateView

Inherits From: View : Responder : Object

Declared In: misckit/MiscDateView.h

Class Description

MiscDateView is a palette-loadable object which contains a number of fields and button controls.   It is specifically intended for the entry and validation of dates.   No parameters are settable in the interface object, therefore no InterfaceInspector for this class has been written.

The three editable/selectable text fields are used for entry of year, month, and date, in numeric form.   Year -> Month -> Day fields are nextText objects (i.e. the user can tab between them).   Pressing Return or Enter at any point in the sequence validates the date (provided fields are filled).   Valid dates are from 1901 through 2050.   Leap years are taken into account.

The non-selectable, non-editable field to the right of the three entry fields is used to display the day of the week.   It is also accessible through the calling program.

By each editable field are two buttons, used to decrement and increment the values (if any) displayed in the editable fields.   Date validation is performed after each button press.

See also: Button, TextField

Instance Variables

id **day**;
id **dayDown**;
id **dayUp**;
id **dow**;
id **month**;
id **monthDown**;
id **monthUp**;
id **year**;
id **yearDown**;
id **yearUp**;

day	The TextField containing the numerical day value.
dayUp	The button incrementing the value in the day field.
dayDown	The button decrementing the value in the day field.
dow	The TextField containing the alphabetic representation of the day of the week.
month	The TextField containing the numerical month value.

monthUp	The button incrementing the value in the month field.
monthDown	The button decrementing the value in the month field.
year	The TextField containing the numerical year value.
yearUp	The button incrementing the value in the year field.
yearDown	The button decrementing the value in the year field.

Method Types

Initializing a DateView	- initFrame:
Setting the date	± getTodaysDate: ± decDay: ± decMonth: ± decYear: ± incDay: ± incMonth: ± incYear: ± outputDOW:
Date checking	- isDateValid: - isItaLeapYear: ± whatDayIs::: ± checkDay: ± getDay: ± getMonth:

	± getYear:	
	Displaying	- drawSelf::
Archiving	- read:	
	- write:	

Instance Methods

checkDay:
  - **checkDay:**_sender_

Checks the validity of the values entered in the MiscDateView and checks the day of the week, by calling the whatDayIs::: and isDateValid: methods.   If   any of the fields are blank, dow is filled with "**XX**".   Always returns **self**.
See also: - whatDayIs:::,   ±isDateValid:

decDay:
  - **decDay:**_sender_

Decrements the value of the number field (if any) in the **day** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decMonth:,   ± decYear:, ± incDay:, ± incMonth:, ± incYear:

decMonth:
  - **decMonth:**_sender_

Decrements the value of the number field (if any) in the **month** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decDay:,   ± decYear:, ± incDay:, ± incMonth:, ± incYear:

decYear:
- **decYear:***sender*

Decrements the value of the number field (if any) in the **day** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decDay:,   ± decMonth:, ± incDay:, ± incMonth:, ± incYear:

drawSelf::
- **decDay:**(const NXRect *)*rects* **:**(int)*rectCount*

Draws the MiscDateView.   Always returns **self**.

getDay:
- (int)**getDay:***sender*

Returns the integer value of the number field (if any) in the **day** field.
See also: - getMonth:,   ± getYear:

getMonth:
- (int)**getMonth:***sender*

Returns the integer value of the number field (if any) in the **month** field.
See also: - getDay:,   ± getYear:

getTodaysDate:
- **getTodaysDate:***sender*

Takes the date from the system, parses it, converts to numbers (where necessary) and fills the appropriate fields.   **dow** is filled directly from the system call, not calculated. Always

returns **self**.

getYear:
   - (int)**getYear:***sender*

Returns the integer value of the number field (if any) in the **year** field.
See also: - getDay:,   ± getMonth:

incDay:
   - **incDay:***sender*

Increments the value of the number field (if any) in the **day** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decDay:,   decMonth:,   ± decYear:,   ± incMonth:, ± incYear:

incMonth:
   - **incMonth:***sender*

Increments the value of the number field (if any) in the **month** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decDay:,   decMonth:,   ± decYear:,   ± incDay:, ± incYear:

incYear:
   - **incYear:***sender*

Increments the value of the number field (if any) in the **year** field.   Date checking ensures that the other fields are also updated.   Always returns **self**.
See also: - decDay:,   decMonth:,   ± decYear:,   ± incDay:, ± incMonth:

initFrame:
   - **initFrame:**(const NXRect *)*frameRect*

Initializes the MiscDateView instance.   This should not be called by the user, as MiscDateView is intended as a palette object.   Returns **self**.

isDateValid:
   - (BOOL)**isDateValid:***sender*

Checks for the validity of the values entered in the MiscDateView **day**, **month** and **year** fields (if any) and responds with an appropriate alert panel if they are not.   Returns NO on invalidity, else YES.

isItaLeapYear:
   - (BOOL)**isItaLeapYear:**(int)*year*

Checks if the integer passed is divisible by 4 (i.e. a leap year). Since the object only checks dates between 1901 through 2050, no real sophistication is embedded here.   Returns NO on non-leap years, else YES.

outputDOW:
   - **outputDOW:**(unsigned int)*number*

Takes an integer expressing the number of days since 1 January 1901, and outputs (using an internal lookup table) a 3-character abbreviation of the day of the week to **dow**. Returns **self**.

read:

- **read:**(NXTypedStream *)*stream*

Reads the MiscDateView from the typed stream *stream*.   Returns **self**.

See also: - **write:**

whatDayIs:::
- (unsigned int)**whatDayIs:**(int)*theDay* **:**(int)*theMonth* **:**(int)*theYear*

Takes three values, with no checking except for year (this checking is the user's responsibility), and returns an integer value representing the number of days since 1 January 1901.

write:
- **write:**(NXTypedStream *)*stream*

Writes the receiving MiscDateView to the typed stream *stream*.   Returns **self**.

See also: - **read:**