

cdk_selection(3)

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NAME

cdk_selection – curses selection list widget.

SYNOPSIS

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cc [ flag ... ] file ... -lcdk [ library ... ]
#include <cdk.h>

int activateCDKSelection (
    CDKSELECTION *selection,
    chtype * actions);

void destroyCDKSelection (
    CDKSELECTION *selection);

void drawCDKSelection (
    CDKSELECTION *selection,
    boolean box);

void eraseCDKSelection (
    CDKSELECTION *selection);

boolean getCDKSelectionBox (
    CDKSELECTION *selection);

int getCDKSelectionChoice (
    CDKSELECTION *selection,
    int index);

int *getCDKSelectionChoices (
    CDKSELECTION *selection);

int getCDKSelectionCurrent (
    CDKSELECTION *selection);

chtype getCDKSelectionHighlight (
    CDKSELECTION *selection);

int getCDKSelectionItems (
    CDKSELECTION *selection,
    char **list);

int getCDKSelectionMode (
    CDKSELECTION *selection,
    int index);

int *getCDKSelectionModes (
    CDKSELECTION *selection);

char *getCDKSelectionTitle (
    CDKSELECTION *selection);

int injectCDKSelection (
    CDKSELECTION *selection,
    chtype input);

void moveCDKSelection (
    CDKSELECTION *selection,
    int xpos,
    int ypos,
    boolean relative,
    boolean refresh);

CDKSELECTION *newCDKSelection (
    CDKSCREEN *cdkscreen,
    int xpos,
    int ypos,
    int spos,
    int height,
```



cdk_selection(3)

cdk_selection(3)

```

        int width,
        char *title,
        char **selectionList,
        int selectionListLength,
        char **choiceList,
        int choiceListLength,
        chtype highlight,
        boolean box,
        boolean shadow);

void positionCDKSelection (
        CDKSELECTION *selection);

void setCDKSelection (
        CDKSELECTION *selection,
        chtype highlight,
        int *defChoices,
        boolean box);

void setCDKSelectionBackgroundAttrib (
        CDKSELECTION *selection,
        chtype attribute);

void setCDKSelectionBackgroundColor (
        CDKSELECTION *selection,
        char * color);

void setCDKSelectionBox (
        CDKSELECTION *selection,
        boolean boxWidget);

void setCDKSelectionBoxAttribute (
        CDKSELECTION *selection,
        chtype character);

void setCDKSelectionChoice (
        CDKSELECTION *selection,
        int index,
        int choice);

void setCDKSelectionChoices (
        CDKSELECTION *selection,
        int *choices);

void setCDKSelectionCurrent (
        CDKSELECTION *selection,
        int index);

void setCDKSelectionHighlight (
        CDKSELECTION *selection,
        chtype highlight);

void setCDKSelectionHorizontalChar (
        CDKSELECTION *selection,
        chtype character);

void setCDKSelectionItems (
        CDKSELECTION *selection,
        char **list,
        int listSize);

void setCDKSelectionLLChar (
        CDKSELECTION *selection,
        chtype character);

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cdk_selection(3)

cdk_selection(3)

```

void setCDKSelectionLRChar (
    CDKSELECTION *selection,
    chtype character);

void setCDKSelectionMode (
    CDKSELECTION *selection,
    int index,
    int mode);

void setCDKSelectionModes (
    CDKSELECTION *selection,
    int *modes);

void setCDKSelectionPostProcess (
    CDKSELECTION *selection,
    PROCESSFN callback,
    void * data);

void setCDKSelectionPreProcess (
    CDKSELECTION *selection,
    PROCESSFN callback,
    void * data);

void setCDKSelectionTitle (
    CDKSELECTION *selection,
    char *title);

void setCDKSelectionULChar (
    CDKSELECTION *selection,
    chtype character);

void setCDKSelectionURChar (
    CDKSELECTION *selection,
    chtype character);

void setCDKSelectionVerticalChar (
    CDKSELECTION *selection,
    chtype character);

```

DESCRIPTION

The Cdk selection widget creates a selection list. The following functions create or manipulate the Cdk selection list widget.

AVAILABLE FUNCTIONS

activateCDKSelection

activates the selection widget and lets the user interact with the widget. The parameter **selection** is a pointer to a non-NULL selection widget. If the **actions** parameter is passed with a non-NULL value, the characters in the array will be injected into the widget. To activate the widget interactively pass in a *NULL* pointer for **actions**. If the character entered into this widget is *RETURN* or *TAB* then this function will return 1. It will also set the widget data *exitType* to *vNORMAL*. If the character entered into this widget was *ESCAPE* then the widget will return a value of -1 and the widget data *exitType* will be set to *vESCAPE_HIT*.

destroyCDKSelection

removes the widget from the screen and frees memory the object used.

drawCDKSelection

draws the selection widget on the screen. If the **box** parameter is true, the widget is drawn with a box.

eraseCDKSelection

removes the widget from the screen. This does *NOT* destroy the widget.

getCDKSelectionBox

returns true if the widget will be drawn with a box around it.



cdk_selection(3)

cdk_selection(3)

getCDKSelectionChoice

returns the selection choice at the given index.

getCDKSelectionChoices

returns an array of the current selection choices for the widget.

getCDKSelectionCurrent

returns the current selection index.

getCDKSelectionHighlight

returns the attribute of the highlight bar.

getCDKSelectionItems

copies the selection-list items into the caller's array and returns the number of items in the list.

getCDKSelectionMode

returns the selection mode at the given index.

getCDKSelectionModes

returns an array of the current modes for the widget.

getCDKSelectionTitle

returns the first line of the title of the selection widget. The caller must free the returned value.

injectCDKSelection

injects a single character into the widget. The parameter **selection** is a pointer to a non-NULL selection widget. The parameter **character** is the character to inject into the widget. The return value and side-effect (setting the widget data *exitType*) depend upon the injected character:

RETURN or *TAB*

the function returns 1. The widget data *exitType* is set to *vNORMAL*.

ESCAPE

the function returns -1. *vESCAPE_HIT*. The widget data *exitType* is set to *vESCAPE_HIT*.

Otherwise

unless modified by preprocessing, postprocessing or key bindings, the function returns -1. The widget data *exitType* is set to *vEARLY_EXIT*.

moveCDKSelection

moves the given widget to the given position. The parameters **xpos** and **ypos** are the new position of the widget. The parameter **xpos** may be an integer or one of the pre-defined values *TOP*, *BOTTOM*, and *CENTER*. The parameter **ypos** may be an integer or one of the pre-defined values *LEFT*, *RIGHT*, and *CENTER*. The parameter **relative** states whether the **xpos/ypos** pair is a relative move or an absolute move. For example, if **xpos** = 1 and **ypos** = 2 and **relative** = **TRUE**, then the widget would move one row down and two columns right. If the value of **relative** was **FALSE** then the widget would move to the position (1,2). Do not use the values *TOP*, *BOTTOM*, *LEFT*, *RIGHT*, or *CENTER* when **relative** = **TRUE**. (weird things may happen). The final parameter **refresh** is a boolean value which states whether the widget will get refreshed after the move.

newCDKSelection

creates a selection widget and returns a pointer to it. Parameters:

screen

is the screen you wish this widget to be placed in.

xpos controls the placement of the object along the horizontal axis. It may be an integer or one of the pre-defined values *LEFT*, *RIGHT*, and *CENTER*.

ypos controls the placement of the object along the vertical axis. It may be an integer or one of the pre-defined values *TOP*, *BOTTOM*, and *CENTER*.

spos is where the scroll bar is to be placed. It may be one of three values:

LEFT

puts the scroll bar on the left of the scrolling list. *RIGHT* puts the scroll bar on the right side of the list, and



cdk_selection(3)

cdk_selection(3)

NONE

does not add a scroll bar.

height and**width**

control the height and width of the widget. If you provide a value of zero for either of the height or the width, the widget will be created with the full width and height of the screen. If you provide a negative value, the widget will be created the full height or width minus the value provided.

title is the string which to display at the top of the widget. The title can be more than one line; just provide a carriage return character at the line break.

selectionList

is the list of items to display in the selection list

selectionListLength

is the number of elements in the given list.

choiceList

is the list of choices that will be selected when the user presses the space bar.

choiceListLength

is the length of this list.

highlight

specifies the display attribute of the currently selected item.

box is true if the widget should be drawn with a box around it.

shadow

turns the shadow on or off around this widget.

If the widget could not be created then a *NULL* pointer is returned.**positionCDKSelection**

allows the user to move the widget around the screen via the cursor/keypad keys. See **cdk_position (3)** for key bindings.

setCDKSelection

lets the programmer modify certain elements of an existing selection widget. The parameter names correspond to the same parameter names listed in the **newCDKSelection** function.

setCDKSelectionBackgroundAttrib

sets the background attribute of the widget. The parameter **attribute** is a curses attribute, e.g., A_BOLD.

setCDKSelectionBackgroundColor

sets the background color of the widget. The parameter **color** is in the format of the Cdk format strings. See **cdk_display (3)**.

setCDKSelectionBox

sets whether the widget will be drawn with a box around it.

setCDKSelectionBoxAttribute

sets the attribute of the box.

setCDKSelectionChoice

sets the selection choice value at the given index.

setCDKSelectionChoices

sets the selection choice values of the widget.

setCDKSelectionCurrent

sets the current selection index.

setCDKSelectionHighlight

sets the attribute of the highlight bar.



cdk_selection(3)

cdk_selection(3)

setCDKSelectionHorizontalChar

sets the horizontal drawing character for the box to the given character.

setCDKSelectionItems

sets the selection list items.

setCDKSelectionLLChar

sets the lower left hand corner of the widget's box to the given character.

setCDKSelectionLRChar

sets the lower right hand corner of the widget's box to the given character.

setCDKSelectionMode

sets the selection mode at the given index.

setCDKSelectionModes

sets the selection mode of the elements of the widget. There are two acceptable values for the modes: 0 which allows the user to change the selection value at the given index; and 1 which sets the element to a read-only state.

setCDKSelectionPostProcess

allows the user to have the widget call a function after the key has been applied to the widget. The parameter **function** is the callback function. The parameter **data** points to data passed to the callback function. To learn more about post-processing see *cdk_process (3)*.

setCDKSelectionPreProcess

allows the user to have the widget call a function after a key is hit and before the key is applied to the widget. The parameter **function** is the callback function. The parameter **data** is a pointer to *void*. To learn more about pre-processing see *cdk_process (3)*.

setCDKSelectionTitle

set the selection list's title.

setCDKSelectionULChar

sets the upper left hand corner of the widget's box to the given character.

setCDKSelectionURChar

sets the upper right hand corner of the widget's box to the given character.

setCDKSelectionVerticalChar

sets the vertical drawing character for the box to the given character.

KEY BINDINGS

When the widget is activated there are several default key bindings which help the user enter or manipulate the information quickly:



cdk_selection(3)

cdk_selection(3)

Key	Action
Left Arrow	Shift the whole list left one column.
Right Arrow	Shift the whole list right one column.
Up Arrow	Select the previous item in the list.
Down Arrow	Select the next item in the list.
Prev Page Ctrl-B	Scroll one page backward.
Next Page Ctrl-F	Scroll one page forward.
1 < g Home	Move to the first element in the list.
> G End	Move to the last element in the list.
\$ 	Shift the whole list to the far right. Shift the whole list to the far left.
Space	Cycles to the next choice on the current item.
Return	Exit the widget and return 1. Also set the widget data <i>exitType</i> to <i>vNORMAL</i> .
Tab	Exit the widget and return 1. Also set the widget data <i>exitType</i> to <i>vNORMAL</i> .
Escape	Exit the widget and return -1. Also set the widget data <i>exitType</i> to <i>vESCAPE_HIT</i> .
Ctrl-L	Refreshes the screen.

SEE ALSO**cdk(3), cdk_binding(3), cdk_display(3), cdk_position(3), cdk_screen(3)**