## Index

A	boxWidgetClass, 108 ButtonPress, 137
A, note, <b>4</b>	
app-defaults, 14	C
application defaults, 14	
application header file, 4	CallbackProc, 12
application programmer, 2	callbacks, 12
Arg, <b>16</b>	chapter format, 4
ArgList, 16	child, 2
argument lists, 16	class, <b>2</b> , <b>4</b>
AsciiSink.h, 94	class header file, 4
AsciiSink object, 87	class name, 4
class name, 94	client, 2
AsciiSink object, 94	C, note, <b>4</b>
resources, 95	Command.h, 18
AsciiSink object, 96	CommandP.h, 18
resources, 103	Command widget, 18
asciiSinkObjectClass, 94	class name, 18
AsciiSinkP.h, 94	Command widget, 18
AsciiSrc.h, 91	resources, 19
AsciiSrc object, 87	actions, 22
class name, 91	translation bindings, 22
AsciiSrc object, 91	commandWidgetClass, 18
resources, 92	compiling applications, 14
AsciiSrc object, 96	conventions:
asciiSrcObjectClass, 91	used in manual, 3
AsciiSrcP.h, 91	chapter format, 4
AsciiText.h, 86	conversions, 8
AsciiTextP.h, 86	Bitmap, <b>9</b>
AsciiText widget:	ColorCursor, 9
class name, 86	Cursor, 9
AsciiText widget, <b>86</b>	Pixel, <b>9</b>
resources, 87	Justify, 21
AsciiText widget, 96	ShapeStyle, 21
asciiTextWidgetClass, 86	Justify, 27, 39
,,	ShapeStyle, 40
В	Orientation, 43
	Justify, 53
bitmap conversions, 9	ShapeStyle, 54
bitmapFilePath, <b>9</b>	BackingStore, 60
BitmapFilePath, <b>9</b>	Justify, 69
Box.h, 108, 126	ShapeStyle, 70
BoxP.h, 108	XawTextEditType, 89
Box widget, 108	XawTextResizeMode, 90
class name, 108	XawTextScrollMode, 90
Box widget, 108	AsciiType, 91, 93
resources, 109	XawTextEditType, 93
layout semantics, 110	XawTextResizeMode, 98
resources, 127	XawTextScrollMode, 98
1000 01000, 127	Tan Temperomitione, 70

XawTextEditType, 100	FullName, 2
Orientation, 110	
Widget, 113, 117	$\mathbf{G}$
Orientation, 121	
Gravity, 128	geometry management, 108
Core widget, 132	GripAction, 123
creating new widgets, 132	GripCallData, 25
creating widgets, 7	Grip.h, 22
	<del>-</del>
cursor, 9	GripP.h, 22
D	Grip widget, 18
D	class name, 22
	Grip widget, 22
destroyCallback, 13	resources, 23
Dialog.h, 110	actions, 24
DialogP.h, 111	GripAction routine, 24
Dialog widget, 108, <b>110</b>	GripAction table, 25
class name, 111	gripWidgetClass, 22
resources, 111	
constraint resources, 112	Н
layout semantics, 113	
automatically created children, 114	horizDistance, 113, 117
special considerations, 114	nonzeistanee, 113, 117
dialogWidgetClass, 111	I
D, note, 4	•
D, note, 4	initialization, $\bf 6$
E	midanzadon, <b>0</b>
E	
. 10	_
events, 10	
examples, 17	_in_out, 3
T.	<del>-</del>
F	I
	_
fallback resources, <b>6</b>	input, <b>5</b>
FindPosition, 105	input focus, <b>5</b>
float resources:	Input Method, 80
setting, 45	instance, 2
FMT8BIT, 83	internationalization, 6
Form.h, 115	Intrinsic.h, 13
FormP.h, 115	introduction, 1
Form widget, 108	,
class name, 115	${f J}$
Form widget, <b>115</b>	•
	jumpProc, 44, <b>45</b>
resources, 115	jumpi 100, 44, <b>4</b> 5
constraint resources, 116	<b>W</b>
re-layout, 118	K
formWidgetClass, 115	
fromHoriz, 113, 117	KeyPress, 137
fromLeft, 114	_
fromVert, 113, 117	${f L}$
	Label.h, 25
	LabelP.h, 25
	Label widget, 18
	<i>5 - i</i>

class name, 25	object, 2
Label widget, 25	
resources, 25	P
labelWidgetClass, 25	
libICE, 14	Paned.h, 118
libSM, 14	PanedP.h, 118
libX11, 14	Paned widget, 108
libXaw, 14	class name, 118
libXext, 14	Paned widget, 118
libXmu, 14	using, 118
libXt, 14	resources, 119
linking applications, 14	constraint resources, 121
List.h, 28	layout semantics, 122
ListP.h, 28	change height settings, 123
List widget, 18	disable pane resizing, 123
class name, 28	enable pane resizing, 123
List widget, 28	disable auto-reconfiguring, 124
resources, 28	enable auto-reconfiguring, 124
actions, 31	get height settings, 124
callbacks, 31	getting the number of children, 124
default translation table, 31	
	panedWidgetClass, 118
listWidgetClass, 28	Panner.h, 33
locale, 6	PannerP.h, 33
3.6	Panner widget, 18
M	class name, 33
	Panner widget, 33
MenuButton.h, 67	resources, 33
MenuButtonP.h, 67	actions, 35
MenuButton widget:	callbacks, 36
class name, 67	default translation table, 36
MenuButton widget, 67	pannerWidgetClass, 33
resources, 67	parent, 2
actions, 70	pixel, 9
menuButtonWidgetClass, 67	Porthole.h, 124
Menus, 58	Porthole P.h., 124
popup, 58	Porthole widget, 108
pulldown, 58	class name, 124
using, 58	Porthole widget, <b>124</b>
method, 2	resources, 125
MultiSink object, 87, 96	callbacks, 126
MultiSrc object, 87, 96	layout semantics, 126
	portholeWidgetClass, 124
N	
	R
name:	
widget, 2	Radio button, 51
notes, 4	radioData, 56
1000, 1	Radio groups, 51, 55
0	
V	one of many, 55
	zero or one of many, 55
	realizing widgets, 9
	Repeater.h, 36
	=
	RepeaterP.h, 36

Repeater widget, 18, 36	class name, 63
class name, 37	SmeBSB object, <b>63</b>
resources, 37	resources, 63
actions, 40	smeBSBObjectClass, 63
translation bindings, 40	SmeBSBP.h, 63
repeaterWidgetClass, 37	Sme.h, 65
ReportProc, 36, 126	SmeLine.h, 65
resource, <b>2</b> , 8, 14	SmeLine object, 58
	class name, 65
_	SmeLine object, 65
	resources, 65, 66
_return, 3	smeLineObjectClass, 65
	SmeLineP.h, 65
R	Sme object, 58, <b>65</b>
	class name, 66
rgb.txt, 9	Highlight method, 66
R, note, <b>4</b>	Notify method, 66
,	subclassing, 66
S	Unhighlight method, 66
	smeObjectClass, 66
Scrollbar.h, 41	SmeP.h, 65
ScrollbarP.h, 41	string conversions, <b>8</b>
Scrollbar widget, 18	StringDefs.h, 13
class name, 41	StripCharP.h, 48
Scrollbar widget, <b>41</b>	StripChart.h, 48
resources, 41	StripChart widget, 18
actions, 44	class name, 48
callbacks, 44	StripChart widget, <b>48</b>
default translation table, 44	resources, 48
setting thumb values, 45	getting the value, 50
scrollbarWidgetClass, 41	getValue callback, <b>50</b>
ScrollProc, 44	stripChartWidgetClass, 48
SetSelection, 102	subclassing, 132
Simple.h, 46	superclass, 2, 4
SimpleMenP.h, 59	
SimpleMenu.h, 58	${f T}$
SimpleMenu widget, <b>58</b>	_
class name, 59	Text.h, 96
resources, 59	TextP.h, 96
actions, 61	TextSink.h, 103
default translations, 61	TextSink object, 95
MenuPopdown routine, 61, 62	class name, 103
positioning, <b>62</b>	TextSink object, 103
simpleMenuWidgetClass, 59	DisplayText, <b>103</b>
SimpleP.h, 46	subclassing, 103
Simple widget, 18	ClearToBackground, <b>104</b>
class name, 46	FindPosition, <b>104</b>
Simple widget, <b>46</b>	InsertCursor, <b>104</b>
resources, 46	FindDistance, 105
simpleWidgetClass, 46	Resolve, <b>105</b>
simple widgets, 18	MaxHeight, <b>106</b>
SmeBSB.h, 63	MaxLines, <b>106</b>
SmeBSB object, 58	SetTabs, <b>106</b>
•	•

GetCursorBounds, 107	type conversions, 8
textSinkObjectClass, 103	
TextSinkP.h, 103	${f U}$
TextSrc.h, 99	
TextSrc object, 96	underlying model, 3
class name, 99	user, 2
TextSrc object, 99	using widgets, 6
resources, 99	
Read, <b>100</b>	/
Replace, 100	
subclassing, 100	/usr/include/X11/bitmaps, 9
Scan, <b>101</b>	/usr/lib/X11/app-defaults, 14
Search, <b>101</b>	11
textSrcObjectClass, 99	$\mathbf{V}$
TextSrcP.h, 99	
Text widget:	vertDistance, 113, 117
default key bindings, 72	Viewport.h, 129
edit modes, 72	Viewport.h, 129
User's Guide to the Text widget, 72	Viewport widget, 108
query replace, 73	class name, 129
search, 73	Viewport widget, <b>129</b>
file insertion, 74	resources, 129
actions, <b>75</b>	layout semantics, 131
Text Selections for Users, 75	viewportWidgetClass, 129
Text Selections for Application Programmers, 80	**7
default translations, 81	$\mathbf{W}$
Text widget, 95	2
customizing, 95	widget, 3
class name, 96	widgetClass, 132
Text widget, 96	widget class, 3
resources, 96	widget creation, 7
ConvertSelection, 102	widget programmer, 3
textWidgetClass, 96	Window widget, 132
Toggle.h, 50	WrapMode, 91, 99
ToggleP.h, 50	writing applications, 13
Toggle widget, 18, <b>50</b>	
class name, 51	$\mathbf{X}$
resources, 51	
used in radio groups, 51	X11/Intrinsic.h, 13
actions, 54	X11/Xaw/Command.h, 13
default translation table, 54	X11/Xaw/Label.h, 13
toggleWidgetClass, 50	X11/Xaw/Template.c, 133, 135
toolkit initialization, <b>6</b>	X11/Xaw/Template.h, 133
TreeP.h, 126	X11/Xaw/TemplateP.h, 133, 134
Tree widget, 108	X11/Xlib.h, 13
class name, 126	XawAsciiSave, 94
Tree widget, <b>126</b>	XawAsciiSaveAsFile, <b>94</b>
constraint resources, 128	XawAsciiSourceChanged, 94
convenience routines, 128	XawAsciiSourceFreeString, <b>94</b> , 114
layout semantics, 128	XawChain, 113, 117
treeWidgetClass, 126	XawChain, 113, 117 XawChainBottom, 113, 117
100 1114501014005, 120	XawChainLeft, 113, 117
	XawChainRight, 113, 117
	MawChamMgm, 113, 117

XawChainTop, 113, 117 XawDialogAddButton, 114 XawDialogGetValueString, 114 XawEdgeType, 112, 116 XawEditDone, 84, 101 XawEditError, 84, 101 XawFormDoLayout, 118 XawGripCallData, 24, 25 XawGripCallDataRec, 24, 25 XawListChange, 31, 32 XawListHighlight, 32 XAW\_LIST\_NONE, 32 XawListReturnStruct, 31, 32 XawListShowCurrent, 32 XawListUnhighlight, 32 XawPanedAllowResize, 123 XawPanedGetMinMax, 124 XawPanedGetNumSub, 124

XawPanedSetMinMax, 123
XawPanedSetRefigureMode, 124
XawPositionError, 84, 101
XawPositionSimpleMenu, 62
XawRubber, 112, 113, 116, 117
XawScrollbarSetThumb, 45
XawScrollbarThumb, 45
XawsdLeft, 101, 102
XawsdRight, 101, 102
XawselectAll, 80
XawselectChar, 80
XawselectLine, 80

XawselectPosition, 80 XawselectWord, 80 XawSimpleMenuAddGlobalActions, **62** XawSimpleMenuClearActiveEntry, **63** XawSimpleMenuGetActiveEntry, **62** 

XawstAll, 101 XawstEOL, 101 XawstParagraph, 101 XawstPositions, 101 XawstWhiteSpace, 101 XawtextAppend, 89, 93, 100 YawTextBlock, 82

XawTextBlock, **82** XawTextBlockPtr, 82

XawselectNull, 80

XawselectParagraph, 80

XawTextDisableRedisplay, **85**XawTextDisplay, **85**XawTextDisplayCaret, **86**XawtextEdit, 89, 93, 100
XawTextEnableRedisplay, **84**XawTextGetInsertionPoint, **86**XawTextGetSelectionPos, **83**XawTextGetSource, **86** 

XawTextInvalidate, **84**XawTextPosition, **82**XawtextRead, 89, 93, 100
XawTextReplace, 72, **83**XawtextResizeBoth, 90, 98
XawtextResizeHeight, 90, 98
XawtextResizeNever, 90, 98
XawtextResizeWidth, 90, 98
XawtextScrollAlways, 90, 98
XawtextScrollNever, 90, 98
XawtextScrollWhenNeeded, 90, 98

XawTextSearch, **84**XawTextSearchError, 102
XawTextSetInsertionPoint, **85**XawTextSetSelection, **83**XawTextSetSelectionArray, 80, **85** 

Aaw TextsetsetectionArray, of

XawTextSetSource, 86

XawTextSinkClearToBackground, 103 XawTextSinkDisplayText, 103 XawTextSinkFindDistance, 103 XawTextSinkFindPosition, 103 XawTextSinkGetCursorBounds, 103 XawTextSinkInsertCursor, 103 XawTextSinkMaxHeight, 103 XawTextSinkMaxLines, 103 XawTextSinkResolve, 103 XawTextSinkSetTabs, 103

XawTextSourceConvertSelection, 100

XawTextSourceRead, 100 XawTextSourceReplace, 100 XawTextSourceScan, 100 XawTextSourceSearch, 100 XawTextSourceSetSelection, 100

XawTextTopPosition, 85 XawTextUnsetSelection, **83** XawtextWrapLine, 91, 99 XawtextWrapNever, 91, 99 XawtextWrapWord, 91, 99 XawToggleChangeRadioGroup, **56** 

XawToggleGetCurrent, **56**XawToggleSetCurrent, **56**XawToggleUnsetCurrent, **56**XawTreeForceLayout, **128**XawWMProtocols, 80

xrdb, 14

XrmParseCommand, 7 XtAddCallback, **12**, 13 XtAddCallbacks, 12 XtAppInitialize, **6**, 10, 13 XtAppMainLoop, **10**, 13 XtCallbackList, **12** XtCallbackProc, 12 XtCallbackRec, **12**  XtCreateManagedWidget, 7, 13

XtCreateWidget, 10, 12

XtDefaultBackground, 8, 9

XtDefaultForeground, 8, 9

XtDestroyWidget, 11

XtError, 7

XtGetApplicationResources, 15

XtGetValues, 11, 12, 138

XtInheritClearToBackground, 103, 104

XtInheritConvertSelection, 100

XtInheritDisplayText, 103

XtInheritFindDistance, 103

XtInheritFindPosition, 103

XtInheritGetCursorBounds, 103

XtInheritInsertCursor, 103

XtInheritMaxHeight, 103

XtInheritMaxLines, 103

XtInheritRead, 100

XtInheritReplace, 100

XtInheritResolve, 103

XtInheritScan, 100

XtInheritSearch, 100

XtInheritSetSelection, 100

XtInheritSetTabs, 103

XtManageChildren, 10

XtMapWidget, 10

XtMoveWidget, 108

XtN, 13

XtNameToWidget, 114, 131

XtNcallback, 13

XtNinput, 5

XtNumber, 16, 17

XtorientHorizontal, 43, 110, 121

XtorientVertical, 43, 110, 121

XtRealizeWidget, 7, 9, 10, 13

XtResizeWidget, 108

XtSetArg, 16

XtSetLanguageProc, 6

XtSetMappedWhenManaged, 10

XtSetValues, 11, 12, 108, 133, 134

XtWindow, 138