

# Laslo Kraus: Podsetnik za AWT

## package java.awt

abst class **Component** ext Object imp MenuContainer

Container **getParent()**  
boolean **isDisplayable()**      boolean **isShowing()**  
void **setEnabled(boolean b)**      boolean **isEnabled()**  
void **setVisible(boolean b)**      boolean **isVisible()**  
Color **getForeground()**      void **setForeground(Color c)**  
Color **getBackground()**      void **setBackground(Color c)**  
Font **getFont()**      void **setFont(Font f)**  
void **setLocation(int x, int y)**      void **setSize(int width, int height)**  
void **setBounds(int x, int y, int width, int height)**  
int **getX()**      int **getY()**      int **getWidth()**      int **getHeight()**  
void **doLayout()**      void **validate()**      void **invalidate()**  
void **paint(Graphics g)**      Graphics **getGraphics()**  
void **repaint()**      boolean **contains(int x, int y)**  
void **add(PopupMenu popup)**      void **remove(MenuComponent popup)**  
Component **getComponentAt(int x, int y)**      Point **getMousePosition()**  
boolean **requestFocusInWindow()**      boolean **isFocusOwner()**  
void **transferFocus()**      void **transferFocusBackward()**  
void **add/removeComponentListener(ComponentListener l)**  
void **add/removeFocusListener(FocusListener l)**  
void **add/removeKeyListener(KeyListener l)**  
void **add/removeMouseListener(MouseListener l)**  
void **add/removeMouseMotionListener(MouseMotionListener l)**

class **Label** ext Component

static final int **LEFT, CENTER, RIGHT**  
Label()      Label(String text)      Label(String text, int alignment)  
int **getAlignment()**      void **setAlignment(int alignment)**  
String **getText()**      void **setText(String text)**

class **Button** ext Component

Button()      Button(String label)  
String **getLabel()**      void **setLabel(String label)**  
void **add/removeActionListener(ActionListener l)**

class **Canvas** ext Component

class **TextComponent** ext Component

void **setText(String t)**      String **getText()**      String **getSelectedText()**  
boolean **isEditable()**      void **setEditable(boolean b)**  
int **getSelectionStart()**      void **setSelectionStart(int selectionStart)**  
int **getSelectionEnd()**      void **setSelectionEnd(int selectionEnd)**  
void **select(int selectionStart, int selectionEnd)**      void **selectAll()**  
void **setCaretPosition(int position)**      int **getCaretPosition()**  
void **add/removeTextListener(TextListener l)**

class **TextField** ext TextComponent

TextField()      TextField(String text)  
TextField(int columns)      TextField(String text, int columns)  
int **getColumns()**      void **setColumns(int columns)**  
void **add/removeActionListener(ActionListener l)**

class **TextArea** ext TextComponent

TextArea()      TextArea(String text)      TextArea(int rows, int columns)  
TextArea(String text, int rows, int columns)      int **getRows()**  
void **insert(String str, int pos)**      void **append(String str)**  
void **replaceRange(String str, int start, int end)**      int **getColumns()**  
void **setColumns(int columns)**      void **setRows(int rows)**

interface **ItemSelectable**

Object[] **getSelectedObjects()**  
void **add/removeItemListener(ItemListener l)**

class **Checkbox** ext Component imp ItemSelectable

Checkbox()      Checkbox(String label)  
Checkbox(String label, boolean state)  
Checkbox(String label, boolean state, CheckboxGroup group)  
Checkbox(String label, CheckboxGroup group, boolean state)  
String **getLabel()**      void **setLabel(String label)**  
boolean **getState()**      void **setState(boolean state)**  
CheckboxGroup **getCheckboxGroup()**  
void **setCheckboxGroup(CheckboxGroup g)**

class **CheckboxGroup** ext Object

CheckboxGroup()      Checkbox **getSelectedCheckbox()**  
void **setSelectedCheckbox(Checkbox b)**

class **List** ext Component imp ItemSelectable

List()      List(int rows)      List(int rows, boolean multipleMode)  
int **getItemCount()**      void **removeAll()**  
String **getItem(int index)**      String[] **getItems()**  
void **add(String item)**      void **add(String item, int index)**  
void **replaceItem(String newValue, int index)**  
void **remove(String item)**      void **remove(int position)**  
int **getSelectedIndex()**      int[] **getSelectedIndexes()**  
String **getSelectedItem()**      String[] **getSelectedItems()**  
void **select(int index)**      void **deselect(int index)**  
boolean **isIndexSelected(int index)**      int **getRows()**  
boolean **isMultipleMode()**      void **setMultipleMode(boolean b)**  
void **add/removeActionListener(ActionListener l)**

class **Choice** ext Component imp ItemSelectable

Choice()      void **removeAll()**  
int **getItemCount()**      String **getItem(int index)**  
void **add(String item)**      void **insert(String item, int index)**  
void **remove(String item)**      void **remove(int position)**  
String **getSelectedItem()**      int **getSelectedIndex()**  
void **select(int pos)**      void **select(String str)**

class **Container** ext Component

Component[] **getComponents()**      Component **getComponent(int n)**  
Component **add(Component comp)**      int **getComponentCount()**  
Component **add(Component comp, int index)**      void **removeAll()**  
void **add(Component comp, Object constraints)**  
void **add(Component comp, Object constraints, int index)**  
void **remove(int index)**      void **remove(Component comp)**  
Component **findComponentAt(int x, int y)**  
Point **getMousePosition(boolean allowChildren)**  
LayoutManager **getLayout()**      void **setLayout(LayoutManager mgr)**  
void **add/removeContainerListener(ContainerListener l)**

class **Panel** ext Container

Panel()      Panel(LayoutManager layout)

class **Window** ext Container

void **pack()**      void **dispose()**      void **toFront()**      void **toBack()**  
final boolean **isAlwaysOnTop()**      boolean **isActive()**  
void **setLocationRelativeTo(Component c)**      boolean **isFocused()**  
void **add/removeWindowListener(WindowListener l)**

class **Frame** ext Window

static final int **NORMAL, ICONIFIED, MAXIMIZED\_HORIZ, MAXIMIZED\_VERT, MAXIMIZED\_BOTH**  
Frame()      Frame(String title)      String **getTitle()**  
void **setTitle(String title)**      MenuBar **getMenuBar()**  
void **setMenuBar(MenuBar mb)**      void **remove(MenuComponent m)**  
boolean **isResizable()**      void **setResizable(boolean resizable)**  
void **setState(int state)**      void **setExtendedState(int state)**  
int **getState()**      int **getExtendedState()**

class **Dialog** ext Window

Dialog(Frame owner)      Dialog(Frame owner, String title)  
Dialog(Frame owner, boolean modal)      void **setModal(boolean b)**  
Dialog(Frame owner, String title, boolean modal)      boolean **isModal()**  
String **getTitle()**      void **setTitle(String title)**  
boolean **isResizable()**      void **setResizable(boolean resizable)**

class **Applet** ext Panel

Applet()      boolean **isActive()**      String **getParameter(String name)**  
void **init()**      void **start()**      void **stop()**      void **destroy()**

class **MenuShortcut** ext Object

MenuShortcut(int key)      boolean **usesShiftModifier()**  
MenuShortcut(int key, boolean useShiftModifier)      int **getKey()**

interface **MenuContainer**

void **remove(MenuComponent comp)**

abst class **MenuComponent** ext Object

MenuComponent()      MenuContainer **getParent()**      String **getName()**  
void **setName(String name)**      Font **getFont()**      void **setFont(Font f)**

class **MenuBar** ext MenuComponent imp MenuContainer

MenuBar()      Menu **add(Menu m)**  
void **remove(int index)**      void **remove(MenuComponent m)**  
int **getMenuCount()**      Menu **getMenu(int i)**

```

class MenuItem ext MenuComponent
MenuItem() MenuItem(String label, MenuShortcut s)
MenuItem(String label) void deleteShortcut()
String getLabel() void setLabel(String label)
boolean isEnabled() void setEnabled(boolean b)
MenuShortcut getShortcut() void setShortcut(MenuShortcut s)
void add/removeActionListener(ActionListener l)

```

```

class CheckboxMenuItem ext MenuItem imp ItemSelectable
CheckboxMenuItem() CheckboxMenuItem(String label)
CheckboxMenuItem(String label, boolean state)
boolean getState() void setState(boolean b)

```

```

class Menu ext MenuItem imp MenuContainer
Menu() Menu(String label)
int getItemCount() MenuItem getItem(int index)
MenuItem add(MenuItem mi) void removeAll()
void insert(MenuItem mi, int index)
void add(String label) void insert(String label, int index)
void addSeparator() void insertSeparator(int index)
void remove(int index) void remove(MenuComponent item)

```

```

class PopupMenu ext Menu
PopupMenu() PopupMenu(String label)
void show(Component origin, int x, int y)

```

```

class FlowLayout ext Object imp LayoutManager
static final int LEFT, CENTER, RIGHT, LEADING, TRAILING
FlowLayout() FlowLayout(int align, int hgap, int vgap)
FlowLayout(int align) void setAlignment(int align)
void setHgap(int hgap) void setVgap(int vgap)
int getAlignment() int getHgap() int getVgap()

```

```

class GridLayout ext Object imp LayoutManager
GridLayout() GridLayout(int rows, int cols)
GridLayout(int rows, int cols, int hgap, int vgap)
int getRows() int getColumns() int getHgap() int getVgap()
void setRows(int rows) void setColumns(int cols)
void setHgap(int hgap) void setVgap(int vgap)

```

```

class BorderLayout ext Object imp LayoutManager
static final String NORTH, SOUTH, EAST, WEST, CENTER
BorderLayout() BorderLayout(int hgap, int vgap) int getHgap()
int getVgap() void setHgap(int hgap) void setVgap(int vgap)

```

```

abst class Graphics ext Object
void translate(int x, int y)
void setClip(int x, int y, int w, int h) void setPaintMode()
void drawString(String str, int x, int y) Color getColor()
void drawLine(int x1, int y1, int x2, int y2) void setColor(Color c)
void draw/fillRect(int x, int y, int w, int h) Font getFont()
void clearRect(int x, int y, int w, int h) void setFont(Font font)
void draw/fillRoundRect(int x, int y, int w, int h, int arcW, int arcH)
void draw/fillOval(int x, int y, int width, int height)
void draw/fillArc(int x, int y, int w, int h, int startAngle, int arcAngle)
void draw/fillPolygon(int[] xPoints, int[] yPoints, int nPoints)
void drawPolyline(int[] xPoints, int[] yPoints, int nPoints)

```

```

class Color ext Object
static final Color WHITE, LIGHT_GRAY, GRAY, DARK_GRAY, BLACK,
RED, PINK, ORANGE, YELLOW, GREEN, MAGENTA, CYAN,
BLUE
Color(int r, int g, int b) Color(int rgb) Color(float r, float g, float b)
int getRed() int getGreen() int getBlue() int getRGB()
Color brighter() Color darker()

```

```

class Font ext Object
static final int PLAIN, BOLD, ITALIC
Font(String name, int style, int size)
String getName() int getStyle() int getSize()
boolean isPlain() boolean isBold() boolean isItalic()
boolean canDisplay(char c) boolean canDisplay(int codePoint)

```

```

class Point ext Point2D (ext Object)
int x, y Point() Point(Point p) Point(int x, int y)
double getX() double getY() Point getLocation()
void setLocation(Point p) void setLocation(int x, int y)
void setLocation(double x, double y) void move(int x, int y)
void translate(int dx, int dy)

```

```

class Rectangle ext Rectangle2D (ext Object)
int x, y, width, height Rectangle()
Rectangle(int x, int y, int w, int h) Rectangle(int w, int h)
boolean contains(Point p) boolean contains(Rectangle r)

```

```

package java.awt.event

```

```

interface ActionListener ext java.util.EventListener
void actionPerformed(ActionEvent e)

```

```

interface ComponentListener ext EventListener
void componentResized/Moved/Shown/Hidden(ComponentEvent e)

```

```

interface ContainerListener ext EventListener
void componentAdded/Removed(ContainerEvent e)

```

```

interface FocusListener ext EventListener
void focusGained/Lost(FocusEvent e)

```

```

interface ItemListener ext EventListener
void itemStateChanged(ItemEvent e)

```

```

interface KeyListener ext EventListener
void keyTyped/Pressed/Released(KeyEvent e)

```

```

interface MouseListener ext EventListener
void mouseClicked/Pressed/Released/Entered/Exited
(MouseEvent e)

```

```

interface MouseMotionListener ext EventListener
void mouseDragged/Moved(MouseEvent e)

```

```

interface TextListener ext EventListener
void textValueChanged(TextEvent e)

```

```

interface WindowListener ext EventListener
void windowOpened/Closing/Closed/Iconified/Deiconified/
Activated/Deactivated(WindowEvent e)

```

```

class java.util.EventObject ext Object
Object getSource()

```

```

abst class AWTEvent ext EventObject

```

```

class ActionEvent ext AWTEvent
static final int SHIFT_MASK, CTRL_MASK, META_MASK, ALT_MASK
long getWhen() int getModifiers()

```

```

class ComponentEvent ext AWTEvent
Component getComponent()

```

```

class ContainerEvent ext ComponentEvent
Container getContainer() Component getChild()

```

```

class FocusEvent ext ComponentEvent
boolean isTemporary() Component getOppositeComponent()

```

```

abst class InputEvent ext ComponentEvent
boolean isShiftDown() boolean isControlDown()
boolean isMetaDown() boolean isAltDown()
boolean isAltGraphDown()

```

```

class ItemEvent ext AWTEvent
static final int SELECTED, DESELECTED
Object getItem() int getStateChange()

```

```

class KeyEvent ext InputEvent
static final int VK_ENTER, VK_BACK_SPACE, VK_TAB, VK_CANCEL,
VK_CLEAR, VK_SHIFT, VK_CONTROL, VK_ALT, VK_PAUSE,
VK_CAPS_LOCK, VK_ESCAPE, VK_SPACE, VK_PAGE_UP,
VK_PAGE_DOWN, VK_END, VK_HOME, VK_LEFT, VK_UP,
VK_RIGHT, VK_DOWN, ...
int getKeyCode() char getKeyChar()

```

```

class MouseEvent ext InputEvent
static final int NOBUTTON, BUTTON1, BUTTON2, BUTTON3
int getX() int getY() int getClickCount() int getButton()

```

```

class TextEvent ext AWTEvent

```

```

class WindowEvent ext ComponentEvent
Window getWindow() Window getOppositeWindow()
int getOldState() int getNewState()

```