

API Documentation

API Documentation

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1 Package lotto

1.1 Modules

- **dialog** (*Section 2, p. 4*)
 - **show_drawing**: Das Programm hat die Creative Commons by-sa Lizenz <http://creativecommons.org/licenses/by-sa/3.0/deed.de> (*Section 3, p. 5*)
- **lotto** (*Section 4, p. 9*)
- **lotto_gui1**: The signals for the GUI (*Section 5, p. 10*)
- **lottokugeln_rc** (*Section 6, p. 16*)
- **zufallszahl**: Erzeugen einer Zufallszahl, mit Modultest beim direkten Aufruf (*Section 7, p. 17*)

1.2 Variables

| Name | Description |
|-------------|--------------------|
| __package__ | Value: None |

2 Package *lotto.dialog*

2.1 Modules

- **show__drawing:** Das Programm hat die Creative Commons by-sa Lizenz <http://creativecommons.org/licenses/by-sa/3.0/deed.de>
(Section 3, p. 5)

2.2 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

3.2.1 Methods

| |
|---|
| __init__ (self, draw_number, highest_number) |
| x.__init__(...) initializes x; see help(type(x)) for signature |
| Parameters |
| draw_number : the number of draw (type=tuple of int) |
| highest_number : the number of the PushButtons (type=int) |
| Return Value |
| none |
| Overrides: object.__init__ |

Inherited from PyQt4.QtGui.QDialog

accept(), accepted(), closeEvent(), contextMenuEvent(), done(), eventFilter(), exec_(), extension(), finished(), isSizeGripEnabled(), keyPressEvent(), minimumSizeHint(), open(), orientation(), reject(), rejected(), resizeEvent(), result(), setExtension(), setModal(), setOrientation(), setResult(), setSizeGripEnabled(), setVisible(), showEvent(), showExtension(), sizeHint()

Inherited from PyQt4.QtGui.QWidget

acceptDrops(), accessibleDescription(), accessibleName(), actionEvent(), actions(), activateWindow(), addAction(), addActions(), adjustSize(), autoFillBackground(), backgroundRole(), baseSize(), changeEvent(), childAt(), childrenRect(), childrenRegion(), clearFocus(), clearMask(), close(), contentsMargins(), contentsRect(), contextMenuPolicy(), create(), cursor(), customContextMenuRequested(), destroy(), devType(), dragEnterEvent(), dragLeaveEvent(), dragMoveEvent(), dropEvent(), effectiveWinId(), enabledChange(), ensurePolished(), enterEvent(), event(), find(), focusInEvent(), focusNextChild(), focusNextPrevChild(), focusOutEvent(), focusPolicy(), focusPreviousChild(), focusProxy(), focusWidget(), font(), fontChange(), fontInfo(), fontMetrics(), foregroundRole(), frameGeometry(), frameSize(), geometry(), getContentsMargins(), grabGesture(), grabKeyboard(), grabMouse(), grabShortcut(), graphicsEffect(), graphicsProxyWidget(), handle(), hasFocus(), hasMouseTracking(), height(), heightForWidth(), hide(), hideEvent(), inputContext(), inputMethodEvent(), inputMethodHints(), inputMethodQuery(), insertAction(), insertActions(), isActiveWindow(), isAncestorOf(), isEnabled(), isEnabledTo(), isEnabledToTLW(), isFullScreen(), isHidden(), isLeftToRight(), isMaximized(), isMinimized(), isModal(), isRightToLeft(), isTopLevel(), isVisible(), isVisibleTo(), isWindow(), isWindowModified(), keyReleaseEvent(), keyboardGrabber(), languageChange(), layout(), layoutDirection(), leaveEvent(), locale(), lower(), mapFrom(), mapFromGlobal(), mapFromParent(), mapTo(), mapToGlobal(), mapToParent(), mask(), maximumHeight(), maximumSize(), maximumWidth(), metric(), minimumHeight(),

`minimumSize()`, `minimumWidth()`, `mouseDoubleClickEvent()`, `mouseGrabber()`, `mouseMoveEvent()`, `mousePressEvent()`, `mouseReleaseEvent()`, `move()`, `moveEvent()`, `nativeParentWidget()`, `nextInFocusChain()`, `normalGeometry()`, `overrideWindowFlags()`, `overrideWindowState()`, `paintEngine()`, `paintEvent()`, `palette()`, `paletteChange()`, `parentWidget()`, `pos()`, `previousInFocusChain()`, `raise_()`, `rect()`, `releaseKeyboard()`, `releaseMouse()`, `releaseShortcut()`, `removeAction()`, `render()`, `repaint()`, `resetInputContext()`, `resize()`, `restoreGeometry()`, `saveGeometry()`, `scroll()`, `setAcceptDrops()`, `setAccessibleDescription()`, `setAccessibleName()`, `setAttribute()`, `setAutoFillBackground()`, `setBackgroundRole()`, `setBaseSize()`, `setContentsMargins()`, `setContextMenuPolicy()`, `setCursor()`, `setDisabled()`, `setEnabled()`, `setFixedHeight()`, `setFixedSize()`, `setFixedWidth()`, `setFocus()`, `setFocusPolicy()`, `setFocusProxy()`, `setFont()`, `setForegroundRole()`, `setGeometry()`, `setGraphicsEffect()`, `setHidden()`, `setInputContext()`, `setInputMethodHints()`, `setLayout()`, `setLayoutDirection()`, `setLocale()`, `setMask()`, `setMaximumHeight()`, `setMaximumSize()`, `setMaximumWidth()`, `setMinimumHeight()`, `setMinimumSize()`, `setMinimumWidth()`, `setMouseTracking()`, `setPalette()`, `setParent()`, `setShortcutAutoRepeat()`, `setShortcutEnabled()`, `setShown()`, `setSizeIncrement()`, `setSizePolicy()`, `setStatusTip()`, `setStyle()`, `setStyleSheet()`, `setTabOrder()`, `setToolTip()`, `setUpdatesEnabled()`, `setWhatsThis()`, `setWindowFilePath()`, `setWindowFlags()`, `setWindowIcon()`, `setWindowIconText()`, `setWindowModality()`, `setWindowModified()`, `setWindowOpacity()`, `setWindowRole()`, `setWindowState()`, `setWindowTitle()`, `show()`, `showFullScreen()`, `showMaximized()`, `showMinimized()`, `showNormal()`, `size()`, `sizeIncrement()`, `sizePolicy()`, `stackUnder()`, `statusTip()`, `style()`, `stylesheet()`, `tabletEvent()`, `testAttribute()`, `toolTip()`, `topLevelWidget()`, `underMouse()`, `ungrabGesture()`, `unsetCursor()`, `unsetLayoutDirection()`, `unsetLocale()`, `update()`, `updateGeometry()`, `updateMicroFocus()`, `updatesEnabled()`, `visibleRegion()`, `whatsThis()`, `wheelEvent()`, `width()`, `winId()`, `window()`, `windowActivationChange()`, `windowFilePath()`, `windowFlags()`, `windowIcon()`, `windowIconText()`, `windowModality()`, `windowOpacity()`, `windowRole()`, `windowState()`, `windowTitle()`, `windowType()`, `x()`, `x11Info()`, `x11PictureHandle()`, `y()`

Inherited from `PyQt4.QtCore.QObject`

`__getattr__()`, `blockSignals()`, `childEvent()`, `children()`, `connect()`, `connectNotify()`, `customEvent()`, `deleteLater()`, `destroyed()`, `disconnect()`, `disconnectNotify()`, `dumpObjectInfo()`, `dumpObjectTree()`, `dynamicPropertyNames()`, `emit()`, `findChild()`, `findChildren()`, `inherits()`, `installEventFilter()`, `isWidgetType()`, `killTimer()`, `metaObject()`, `moveToThread()`, `objectName()`, `parent()`, `property()`, `pyqtConfigure()`, `receivers()`, `removeEventFilter()`, `sender()`, `senderSignalIndex()`, `setObjectName()`, `setProperty()`, `signalsBlocked()`, `startTimer()`, `thread()`, `timerEvent()`, `tr()`, `trUtf8()`

Inherited from `PyQt4.QtGui.QPaintDevice`

`colorCount()`, `depth()`, `heightMM()`, `logicalDpiX()`, `logicalDpiY()`, `numColors()`, `paintingActive()`, `physicalDpiX()`, `physicalDpiY()`, `widthMM()`

Inherited from `sip.simplewrapper`

__new__()

Inherited from object

__delattr__(), __format__(), __getattr__(), __hash__(), __reduce__(),
__reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __sub-
classhook__()

3.2.2 Properties

| Name | Description |
|------------------------------|-------------|
| <i>Inherited from object</i> | |
| __class__ | |

3.2.3 Class Variables

| Name | Description |
|--|-------------|
| <i>Inherited from PyQt4.QtGui.QDialog</i> | |
| Accepted, Rejected | |
| <i>Inherited from PyQt4.QtGui.QWidget</i> | |
| DrawChildren, DrawWindowBackground, IgnoreMask | |
| <i>Inherited from PyQt4.QtCore.QObject</i> | |
| staticMetaObject | |
| <i>Inherited from PyQt4.QtGui.QPaintDevice</i> | |
| PdmDepth, PdmDpiX, PdmDpiY, PdmHeight, PdmHeightMM, PdmNumColors, PdmPhysicalDpiX, PdmPhysicalDpiY, PdmWidth, PdmWidthMM | |

4 Module `lotto.lotto`

4.1 Variables

| Name | Description |
|--------------------------|------------------------------------|
| <code>__package__</code> | Value: <code>'lotto'</code> |

4.2 Class `Ui_MainWindow`

object └─ `lotto.lotto.Ui_MainWindow`

Known Subclasses: `lotto.lotto_gui1.MeinDialog`

4.2.1 Methods

| |
|--|
| <code>retranslateUi(self, MainWindow)</code> |
|--|

| |
|--|
| <code>setupUi(self, MainWindow)</code> |
|--|

Inherited from object

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__init__()`,
`__new__()`, `__reduce__()`, `__reduce_ex__()`, `__repr__()`, `__setattr__()`,
`__sizeof__()`, `__str__()`, `__subclasshook__()`

4.2.2 Properties

| Name | Description |
|------------------------------|-------------|
| <i>Inherited from object</i> | |
| <code>__class__</code> | |

5 Module *lotto.lotto_gui1*

The signals for the GUI

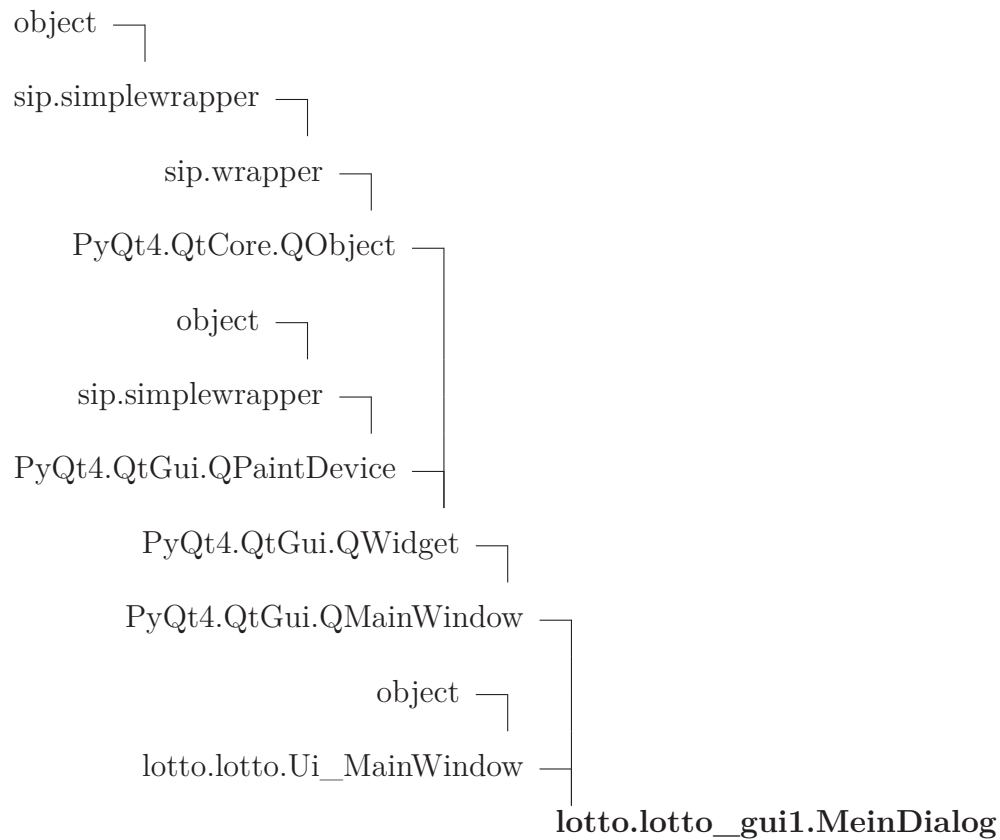
5.1 Functions

| |
|--------------|
| gui() |
| open the GUI |

5.2 Variables

| Name | Description |
|--------------------------|---|
| <code>__doc__</code> | Value: "The signals for the GUI" |
| <code>__package__</code> | Value: 'lotto' |

5.3 Class MeinDialog



the GUI

5.3.1 Methods

| |
|--|
| __init__ (<i>self</i>) |
| x. __init__ (...) initializes x; see help(type(x)) for signature |
| Overrides: object. __init__ exitit (inherited documentation) |

| |
|--------------------------------|
| ontimer (<i>self</i>) |
| start time to show a number |

| |
|-------------------------------------|
| NaechsteZahl (<i>self</i>) |
| Display the draw |

onbtn_start(*self*)

start simulation with the first drawing init timer with the valve from the Scrollbar the next drawing starts with the timer event

actionLottosim(*self*)

Changing the layout for simulation or generation Move the textedit and change the visible

onZufallsgenerator(*self*)

Show the output from the random number generator

onAusfeldLeeren(*self*)

clear the TextEdit

onInfo(*self*)

Infoscreen

Inherited from PyQt4.QtGui.QMainWindow

addDockWidget(), addToolBar(), addToolBarBreak(), centralWidget(), contextMenuEvent(), corner(), createPopupMenu(), dockOptions(), dockWidgetArea(), documentMode(), event(), iconSize(), iconSizeChanged(), insertToolBar(), insertToolBarBreak(), isAnimated(), isDockNestingEnabled(), isSeparator(), menuBar(), menuWidget(), removeDockWidget(), removeToolBar(), removeToolBarBreak(), restoreDockWidget(), restoreState(), saveState(), setAnimated(), setCentralWidget(), setCorner(), setDockNestingEnabled(), setDockOptions(), setDocumentMode(), setIconSize(), setMenuBar(), setMenuWidget(), setStatusbar(), setTabPosition(), setTabShape(), setToolButtonStyle(), setUnifiedTitleAndToolBarOnMac(), splitDockWidget(), statusBar(), tabPosition(), tabShape(), tabifiedDockWidgets(), tabifyDockWidget(), toolbarArea(), toolbarBreak(), toolButtonStyle(), toolButtonStyleChanged(), unifiedTitleAndToolBarOnMac()

Inherited from PyQt4.QtGui.QWidget

acceptDrops(), accessibleDescription(), accessibleName(), actionEvent(), actions(), activateWindow(), addAction(), addActions(), adjustSize(), autoFillBackground(), backgroundRole(), baseSize(), changeEvent(), childAt(), childrenRect(), childrenRegion(), clearFocus(), clearMask(), close(), closeEvent(), contentsMargins(), contentsRect(), contextMenuPolicy(), create(), cursor(), customContextMenuRequested(), destroy(), devType(), dragEnterEvent(), dragLeaveEvent(), dragMoveEvent(), dropEvent(), effectiveWinId(), enabledChange(), ensurePolished(), enterEvent(), find(), focusInEvent(), focusNextChild(), focusNextPrevChild(), focusOutEvent(), focusPolicy(), focusPreviousChild(), focusProxy(), focusWidget(), font(), fontChange(), fontInfo(),

fontMetrics(), foregroundRole(), frameGeometry(), frameSize(), geometry(), getContentsMargins(), grabGesture(), grabKeyboard(), grabMouse(), grabShortcut(), graphicsEffect(), graphicsProxyWidget(), handle(), hasFocus(), hasMouseTracking(), height(), heightForWidth(), hide(), hideEvent(), inputContext(), inputMethodEvent(), inputMethodHints(), inputMethodQuery(), insertAction(), insertActions(), isActiveWindow(), isAncestorOf(), isEnabled(), isEnabledTo(), isEnabledToTLW(), isFullScreen(), isHidden(), isLeftToRight(), isMaximized(), isMinimized(), isModal(), isRightToLeft(), isTopLevel(), isVisible(), isVisibleTo(), isWindow(), isWindowModified(), keyPressEvent(), keyReleaseEvent(), keyboardGrabber(), languageChange(), layout(), layoutDirection(), leaveEvent(), locale(), lower(), mapFrom(), mapFromGlobal(), mapFromParent(), mapTo(), mapToGlobal(), mapToParent(), mask(), maximumHeight(), maximumSize(), maximumWidth(), metric(), minimumHeight(), minimumSize(), minimumSizeHint(), minimumWidth(), mouseDoubleClickEvent(), mouseGrabber(), mouseMoveEvent(), mousePressEvent(), mouseReleaseEvent(), move(), moveEvent(), nativeParentWidget(), nextInFocusChain(), normalGeometry(), overrideWindowFlags(), overrideWindowState(), paintEngine(), paintEvent(), palette(), paletteChange(), parentWidget(), pos(), previousInFocusChain(), raise_(), rect(), releaseKeyboard(), releaseMouse(), releaseShortcut(), removeAction(), render(), repaint(), resetInputContext(), resize(), resizeEvent(), restoreGeometry(), saveGeometry(), scroll(), setAcceptDrops(), setAccessibleDescription(), setAccessibleName(), setAttribute(), setAutoFillBackground(), setBackgroundRole(), setBaseSize(), setContentsMargins(), setContextMenuPolicy(), setCursor(), setDisabled(), setEnabled(), setFixedHeight(), setFixedSize(), setFixedWidth(), setFocus(), setFocusPolicy(), setFocusProxy(), setFont(), setForegroundRole(), setGeometry(), setGraphicsEffect(), setHidden(), setInputContext(), setInputMethodHints(), setLayout(), setLayoutDirection(), setLocale(), setMask(), setMaximumHeight(), setMaximumSize(), setMaximumWidth(), setMinimumHeight(), setMinimumSize(), setMinimumWidth(), setMouseTracking(), setPalette(), setParent(), setShortcutAutoRepeat(), setShortcutEnabled(), setShown(), setSizeIncrement(), setSizePolicy(), setStatusTip(), setStyle(), setStyleSheet(), setTabOrder(), setToolTip(), setUpdatesEnabled(), setVisible(), setWhatsThis(), setWindowFilePath(), setWindowFlags(), setWindowIcon(), setWindowIconText(), setWindowModality(), setWindowModified(), setWindowOpacity(), setWindowRole(), setWindowState(), setWindowTitle(), show(), showEvent(), showFullScreen(), showMaximized(), showMinimized(), showNormal(), size(), sizeHint(), sizeIncrement(), sizePolicy(), stackUnder(), statusTip(), style(), stylesheet(), tabletEvent(), testAttribute(), toolTip(), topLevelWidget(), underMouse(), ungrabGesture(), unsetCursor(), unsetLayoutDirection(), unsetLocale(), update(), updateGeometry(), updateMicroFocus(), updatesEnabled(), visibleRegion(), whatsThis(), wheelEvent(), width(), winId(), window(), windowActivationChange(), windowFilePath(), windowFlags(), windowIcon(), windowIconText(), windowModality(), windowOpacity(), windowRole(), windowState(), windowTitle(), windowType(), x(), x11Info(), x11PictureHandle(), y()

Inherited from PyQt4.QtCore.QObject

`__getattr__()`, `blockSignals()`, `childEvent()`, `children()`, `connect()`, `connectNotify()`, `customEvent()`, `deleteLater()`, `destroyed()`, `disconnect()`, `disconnectNotify()`, `dumpObjectInfo()`, `dumpObjectTree()`, `dynamicPropertyNames()`, `emit()`, `eventFilter()`, `findChild()`, `findChildren()`, `inherits()`, `installEventFilter()`, `isWidgetType()`, `killTimer()`, `metaObject()`, `moveToThread()`, `objectName()`, `parent()`, `property()`, `pyqtConfigure()`, `receivers()`, `removeEventFilter()`, `sender()`, `senderSignalIndex()`, `setObjectName()`, `setProperty()`, `signalsBlocked()`, `startTimer()`, `thread()`, `timerEvent()`, `tr()`, `trUtf8()`

Inherited from PyQt4.QtGui.QPaintDevice

`colorCount()`, `depth()`, `heightMM()`, `logicalDpiX()`, `logicalDpiY()`, `numColors()`, `paintingActive()`, `physicalDpiX()`, `physicalDpiY()`, `widthMM()`

Inherited from sip.simplewrapper

`__new__()`

Inherited from lotto.lotto.Ui_MainWindow(Section 4.2)

`retranslateUi()`, `setupUi()`

Inherited from object

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__reduce__()`, `__reduce_ex__()`, `__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

5.3.2 Properties

| Name | Description |
|------------------------------|-------------|
| <i>Inherited from object</i> | |
| <code>__class__</code> | |

5.3.3 Class Variables

| Name | Description |
|---|-------------|
| <i>Inherited from PyQt4.QtGui.QMainWindow</i> | |
| AllowNestedDocks, AllowTabbedDocks, AnimatedDocks, ForceTabbedDocks, VerticalTabs | |
| <i>Inherited from PyQt4.QtGui.QWidget</i> | |
| DrawChildren, DrawWindowBackground, IgnoreMask | |
| <i>Inherited from PyQt4.QtCore.QObject</i> | |
| staticMetaObject | |

continued on next page

| Name | Description |
|--|-------------|
| <i>Inherited from PyQt4.QtGui.QPaintDevice</i> PdmDepth, PdmDpiX, PdmDpiY, PdmHeight, PdmHeightMM, PdmNumColors, PdmPhysicalDpiX, PdmPhysicalDpiY, PdmWidth, PdmWidthMM | |

6 Module `lotto.lottokugeln_rc`

6.1 Functions

| |
|-------------------------------|
| <code>qInitResources()</code> |
|-------------------------------|

| |
|----------------------------------|
| <code>qCleanupResources()</code> |
|----------------------------------|

6.2 Variables

| Name | Description |
|---------------------------------|---|
| <code>qt_resource_data</code> | Value: '\x00\x01\x94\x94\x89PNG\r\n\x1a\n\x00\x00\x00\rIHDR\x00\. |
| <code>qt_resource_name</code> | Value: '\x00\x0e\x00\xc9\x8e\xe7\x001\x00o\x00t\x00t\x00o\x00k\x. |
| <code>qt_resource_struct</code> | Value: '\x00\x00\x00\x00\x00\x02\x00\x00\x00\x01\x00\x00\x00\x01. |
| <code>__package__</code> | Value: 'lotto' |

7 Module `lotto.zufallszahl`

Erzeugen einer Zufallszahl, mit Modultest beim direkten Aufruf

7.1 Functions

`zufallszahlen(anzahl, maxwert)`

Parameters

`anzahl`: Gibt die Anzahl der Ausgabewerte an.

(*type=int*)

`maxwert`: Gibt den höchsten Zahlenwert an

(*type=int*)

Return Value

Gibt Zufallszahlen zurueck.

```
>>> zufallszahlen(16, 15)
Traceback (most recent call last):
ValueError: sample larger than population
>>> zufallszahlen(16, -15)
Traceback (most recent call last):
ValueError: sample larger than population
>>> zufallszahlen(-16, 15)
Traceback (most recent call last):
ValueError: sample larger than population
>>> zufallszahlen(1, 1)
[1]
>>> zufallszahlen(1, 1.7)
Traceback (most recent call last):
TypeError: integer argument expected, got float
>>> sorted(zufallszahlen(3, 3))
[1, 2, 3]
```

7.2 Variables

| Name | Description |
|--------------------------|----------------|
| <code>__package__</code> | Value: 'lotto' |

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