Gesture Processing Library

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Spis treści

1 Exposed Functionality

1.1 gp_Main.h

1.1.1 Gesture declarations

- *gpOutputGesture_tap*   gp_TapData

- *gpOutputGesture_press*   gp_PressData

- *gpOutputGesture_flick*   gp_FlickData

- *gpOutputGesture_move*   gp_MoveData

- *gpOutputGesture_rotation*   gp_RotationData

- *gpOutputGesture_scroll*   gp_ScrollData

- *gpOutputGesture_zoom*   gp_ZoomData

- *gpOutputGesture_two_finger_scroll*   gp_TwoFingerScrollData

- *gpOutputGesture_two_finger_tap*   gp_TwoFingerTapData

1.1.2 Data structures

gpRecognizeContext

- *gpVector* finger1*   opis

- *gpVector* finger2*   opis

- *gpByte fingers*   opis

- *gpInt firstTime*   opis

1.1.3 Functions

gpVoid gpRecognize(gpMotionEvent* event)

- *gpMotionEvent* event*   opis

gpBool gpTryTap(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis

- *gpRecognizeContext* context*   opis

gpBool gpTryPress(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis

- *gpRecognizeContext* context*   opis

gpBool gpTryFlick(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

gpBool gpTryRotation(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

gpBool gpTryScroll(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

gpBool gpTryZoom(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

gpBool gpTryTwoFingerScroll(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

gpBool gpTryTowFIngerTap(gpMotionEvent* event, gpRecognizeContext* context)

- *gpMotionEvent* event*   opis
- *gpRecognizeContext* context*   opis

1.2   gp_Alloc.h

1.2.1   Constants

- *gpAlloc_MAX_MEM   1000000*   opis

1.2.2 Functions

gpVoid* gpAlloc_alloc(gpInt size)

- *gpInt size* opis

gpVoid gpAlloc_free(gpVoid* ptr)

- *gpVoid* ptr* opis

gpVoid gpAlloc_copy(gpVoid* from, gpVoid* to, gpInt size)

- *gpVoid* from* opis
- *gpVoid* to* opis
- *gpInt size* opis

1.3 gp.h

1.4 gp_bool.h

1.4.1 Constants

- *false 0* opis
- *true 1* opis

1.5 gp_point.h

1.5.1 Data structures

gpPoint

- *gpFloat x* opis
- *gpFloat y* opis

1.5.2 Functions

gpFloat gpPoint_distance(gpPoint* a, gpPoint* b)

- *gpPoint* a* opis
- *gpPoint* b* opis

gpFloat gpPoint_distance2(gpPoint* a, gpPoint* b)

- *gpPoint* a* opis

- *gpPoint* b*   opis

gpPoint gpPoint_init(gpFloat x, gpFloat y)

- *gpFloat x*   opis
- *gpFloat y*   opis

1.6   gp_printf.h

1.6.1   Constants

- *printf   __android_prinf*   opis

1.7   gp_types.h

1.7.1   Data types

- *typedef void gpVoid*
- *typedef char gpBool*
- *typedef unsigned char gpUByte*
- *typedef signed char gpByte*
- *typedef unsigned short gpUWord*
- *typedef signed short gpWord*
- *typedef unsigned long gpUInt*
- *typedef signed long gpInt*
- *typedef char gpChar*
- *typedef char* gpString*
- *typedef long gpFloat*

1.7.2   Constants

- *null   ((gpVoid*)(0))*   opis

1.8   gp_vector.h

1.8.1   Data structures

gpVector

- *gpVoid** data*   opis
- *gpInt capacity*   opis
- *gpInt size*   opis

1.8.2 Functions

gpVoid gpVector_init(gpVector* self)

- *gpVector* self*   opis

gpVoid gpVector_destroy(gpVector* self)

- *gpVector* self*   opis

gpInt gpVector_getSize(gpVector* self)

- *gpVector* self*   opis

gpVoid* gpVector_at(gpVector* self, gpInt index)

- *gpVector* self*   opis
- *gpInt index*   opis

gpVoid gpVector_clean(gpVector* sefl)

- *gpVector* sefl*   opis

gpVoid gpVector_pushBack(gpVector* self, gpVoid* what, gpInt size)

- *gpVector* self*   opis
- *gpVoid* what*   opis
- *gpInt size*   opis

gpVoid gpVector_popBack(gpVector* self, gpVoid* where, gpInt size)

- *gpVector* self*   opis
- *gpVoid* where*   opis
- *gpInt size*   opis

1.9 gp_gestures_parameters.h

1.9.1 Constants

- *GP_DEBOUNCE_TIME 5*   opis
- *GP_TAP_MAX_TIME 40*   opis
- *GP_TAP_MAX_MOVE gpMkFloat("12")*   opis

- *GP_ROTATION_MAX_MOVE gpMkFloat("20")*   opis

- *GP_TAP_PRESS_MOVE gpMkFloat("10")*   opis

- *GP_SCROLL_MIN_LEN gpMkFloat("20")*   opis

- *GP_FLICK_MIN_LEN gpMkFloat("15")*   opis

- *GP_TWO_FINGER_TAP_MAX_DIST gpMkFloat("60")*   opis

- *GP_ZOOM_MIN_CHANGE gpMkFloat("10")*   opis

1.10   gp_gestures_results.h

1.10.1   Constants

- *GP_SCROLL_DOWN true*   opis

- *GP_SCROLL_UP false*   opis

- *GP_FLICK_LEFT false*   opis

- *GP_FLICK_RIGHT true*   opis

- *GP_ZOOM_IN true*   opis

- *GP_ZOOM_OUT false*   opis

1.11   gp_MotionEvent.h

1.11.1   Constants

- *GP_ME_ACTION_CANCEL 3*   opis

- *GP_ME_ACTION_DOWN 0*   opis

- *GP_ME_ACTION_HOVER_ENTER 9*   opis

- *GP_ME_ACTION_HOVER_EXIT 10*   opis

- *GP_ME_ACTION_HOVER_MOVE 7*   opis

- *GP_ME_ACTION_MOVE 2*   opis

- *GP_ME_ACTION_POINTER_1_DOWN 5*   opis

- *GP_ME_ACTION_POINTER_1_UP 6*   opis

- *GP_ME_ACTION_POINTER_2_DOWN 261*   opis

- *GP_ME_ACTION_POINTER_2_UP 262*   opis

- *GP_ME_ACTION_POINTER_DOWN 5*   opis

- *GP_ME_ACTION_POINTER_UP 6*   opis

- *GP_ME_ACTION_SCROLL 8*   opis

- *GP_ME_ACTION_UP 1*   opis

1.12 gp_OutputGesture.h

1.12.1 Data structures

gpOutputGesture_two_finger_scroll

- *gpFloat x*   opis
- *gpFloat y*   opis
- *gpBool direction*   opis

gpOutputGesture_zoom

- *gpBool direction*   opis
- *gpFloat magnification*   opis

gpOutputGesture_scroll

- *gpFloat x*   opis
- *gpFloat y*   opis
- *gpBool direction*   opis

gpOutputGesture_flick

- *gpFloat x*   opis
- *gpFloat y*   opis
- *gpBool direction*   opis

gpOutputGesture_rotation

- *gpBool direction*   opis
- *gpFloat angle*   opis

gpOutputGesture_move

- *gpFloat x*   opis
- *gpFloat y*   opis
- *gpFloat begx*   opis
- *gpFloat begy*   opis

gpOutputGesture_press

- *gpFloat x*   opis

- *gpFloat y*   opis

gpOutputGesture_tap

- *gpFloat x*   opis

- *gpFloat y*   opis

gpOutputGesture_two_finger_tap

- *gpFloat x*   opis

- *gpFloat y*   opis

1.13   gp_Math.h

1.13.1   Constants

- *GP_FLOAT_BASE   10000*   opis

- *gpMath_EPSILION   10*   opis

- *gpMath_PI   31416*   opis

- *gpMath_2PI   62832*   opis

- *gpMath_PI2   15708*   opis

- *gpMath_PI4   7854*   opis

- *gpMath_PI6   5236*   opis

- *gpMath_E   27183*   opis

- *gpMath_1   10000*   opis

- *gpMath_2   20000*   opis

- *gpMath_3   30000*   opis

- *gpMath_SINPI4   7071*   opis

- *gpMath_0   0*   opis

1.13.2 Functions

gpFloat gpMul(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpFloat gpDiv(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpFloat gpSub(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpFloat gpAdd(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpFloat gpNeg(gpFloat a)

- *gpFloat a*   opis

gpInt gpMath_MinInt()

gpByte gpMath_Sign(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_Abs(gpFloat a)

- *gpFloat a*   opis

gpFloat gpMath_Square(gpFloat a)

- *gpFloat a*   opis

gpFloat gpMath_Sqrt(gpFloat a)

- *gpFloat a*   opis

gpFloat gpMath_Exp(gpFloat a)

- *gpFloat a*   opis

gpFloat gpMath_PowI(gpFloat base, gpInt exp)

- *gpFloat base*   opis
- *gpInt exp*   opis

gpFloat gpMath_Sin(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_Cos(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_Tan(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_ATan2(gpFloat x, gpFloat y)

- *gpFloat x*   opis
- *gpFloat y*   opis

gpFloat gpMath_ASin(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_ACos(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_ATan(gpFloat x)

- *gpFloat x*   opis

gpFloat gpMath_MinFloat(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpFloat gpMath_MaxFloat(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpBool gpMath_Equals(gpFloat a, gpFloat b)

- *gpFloat a*   opis
- *gpFloat b*   opis

gpInt gpMath_Int(gpFloat a)

- *gpFloat a*   opis

gpFloat gpMath_FloatI(gpInt a)

- *gpInt a*   opis

gpFloat gpMath_AngleToAzimut(gpPoint a, gpPoint b)

- *gpPoint a*   opis
- *gpPoint b*   opis

gpFloat gpMkFloat(gpString x)

- *gpString x*   opis

2   File location

- *gp_Main.h*   project_c\BaseProject\Include
- *gp_Alloc.h*   project_c\BaseProject\Include\Alloc
- *gp.h*   project_c\BaseProject\Include\Base
- *gp_bool.h*   project_c\BaseProject\Include\Base
- *gp_point.h*   project_c\BaseProject\Include\Base
- *gp_printf.h*   project_c\BaseProject\Include\Base
- *gp_types.h*   project_c\BaseProject\Include\Base
- *gp_vector.h*   project_c\BaseProject\Include\Base
- *gp_gestures_parameters.h*   project_c\BaseProject\Include\Gestures
- *gp_gestures_results.h*   project_c\BaseProject\Include\Gestures
- *gp_MotionEvent.h*   project_c\BaseProject\Include\InOut
- *gp_OutputGesture.h*   project_c\BaseProject\Include\InOut
- *gp_Math.h*   project_c\BaseProject\Include\Math