

# SWIPUT API

## ***METHODS AND PARAMETERS***

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## **Overview**

This package provides an integrated and a mathematical solution to doing swipe logic. it contains set of methods that focuses on a single implementation for cross platform applications.

## **Swiping based on the Horizontal Axis**

### **Swiput.HorizontalAxis ()**

Evaluates the Swipe based on the Horizontal axis, without clamping the Horizontality of the swipe angle, the horizontality of a swipe angle is an evaluation of how close the current swipe angle is to a perfect horizontal angle, which returns a floating point value between **0** and **1**(positive swipe axis) or **-1**(negative swipe axis). As the swipe angle continuously deviates from the perfect horizontal axis at **1**(positive swipe axis) or **-1**(negative swipe axis), it becomes **0** when the current swipe is now perfectly perpendicular to the horizontal axis.

#### ***Return:***

It returns a value ranging from **1** (positive swipe axis) to **-1** (negative swipe axis).

### **Swiput.HorizontalAxisInRectTransform ()**

Does the same swipe evaluation as above [**Swiput.HorizontalAxis ()**] but only within a set **ScreenArea**.

#### ***Parameter:***

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.

#### ***Return:***

It returns a value ranging from **1** (positive swipe axis) to **-1** (negative swipe axis).

## **Swiput.HorizontalAxisRaw ()**

Evaluates the Swipe based on the Horizontal axis, by clamping the Horizontality of the swipe angle, such that the same value (**1** or **-1**) is given for every swipe made that is not perpendicular to the horizontal axis.

### ***Parameter:***

- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value (**1** or **-1**).

### ***Return:***

It returns a value of **1** (positive swipe axis), **-1** (negative swipe axis) or **0** (perpendicular axis).

## **Swiput.HorizontalAxisRawInRectTransform ()**

Does the same swipe evaluation as above [**Swiput.HorizontalAxisRaw ()**] but only within a set **ScreenArea**.

### ***Parameters:***

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.
- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value (**1** or **-1**).

### ***Return:***

It returns a value of **1** (positive swipe axis), **-1** (negative swipe axis) or **0** (perpendicular axis).

## Swiping based on the Vertical Axis

### **Swiput.VerticalAxis ()**

Evaluates the Swipe based on Vertical axis, without clamping the Verticality of the swipe angle, the Verticality of a swipe angle is an evaluation of how close the current swipe angle is to a perfect vertical angle, which returns a floating point value between **0** and **1** or **-1**. As the swipe angle is continuously deviating from the perfect vertical axis at **1**(positive swipe axis) or **-1**(negative swipe axis), it becomes **0** when the current swipe is now perfectly perpendicular to the vertical axis.

#### ***Return:***

It returns a value ranging from **1** (positive swipe axis) to **-1** (negative swipe axis).

### **Swiput.VerticalAxisInRectTransform ()**

Does the same swipe evaluation as above [**Swiput.VerticalAxis ()**] but only within a set **ScreenArea**.

#### ***Parameter:***

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.

#### ***Return:***

It returns a value ranging from **1** (positive swipe axis) to **-1** (negative swipe axis).

## Swiput.VerticalAxisRaw ()

Evaluates the Swipe based on Vertical axis, by clamping the Verticality of the swipe angle, such that the same value (**1** or **-1**) is given for every swipe made that is not perpendicular to the perfect vertical axis.

### **Parameter:**

- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value (**1** or **-1**).

### **Return:**

It returns a value of **1** (positive swipe axis), **-1** (negative swipe axis) or **0** (perpendicular axis).

## Swiput.VerticalAxisRawInRectTransform ()

Does the same swipe evaluation as above [**Swiput.VerticalAxisRaw ()**] but only within a set **ScreenArea**.

### **Parameters:**

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.
- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value (**1** or **-1**).

### **Return:**

It returns a value of **1** (positive swipe axis), **-1** (negative swipe axis) or **0** (perpendicular axis).

## Touch

### Swiput.TouchInRectTransform (Overload 1)

Checks if a pointer input (cross platform) is pressed within a ScreenArea.

#### **Parameters:**

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.
- **AxisVal (Float)**: Set the return value of your choice as this parameter.
- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value.

#### **Return:**

It returns the set value of AxisVal when pointer is pressed within the ScreenArea.

### Swiput.TouchInRectTransform (Overload 2)

Checks if a pointer input (cross platform) is pressed within a ScreenArea.

#### **Parameters:**

- **ScreenArea (RectTransform)**: Set area on screen where swipe can only happen.
- **IsTouched (Ref Bool)**: Keeps track of the pressed state of the pointer input.
- **AxisVal (Float)**: Set the return value of your choice as this parameter.
- **IsSmooth (Bool)**: Adds smoothing i.e. gradual increment from **0** to the return value.

#### **Return:**

It returns the set value of AxisVal when pointer is pressed within the ScreenArea.