

API reference

Gestures

Long press gesture

Version: 2.6.0 - 2.12.0

Long press gesture

A discrete gesture that activates when the corresponding view is pressed for a sufficiently long time. This gesture's state will turn into <u>END</u> immediately after the finger is released. The gesture will fail to recognize a touch event if the finger is lifted before the <u>minimum required time</u> or if the finger is moved further than the allowable distance.

Config

Properties specific to LongPressGesture:

minDuration(value: number)

Minimum time, expressed in milliseconds, that a finger must remain pressed on the corresponding view. The default value is 500.

maxDistance(value: number)

Maximum distance, expressed in points, that defines how far the finger is allowed to travel during a long press gesture. If the finger travels further than the defined distance and the gesture hasn't yet <u>activated</u>, it will fail to recognize the gesture. The default value is 10.

Properties common to all gestures:

enabled(value: boolean)

Indicates whether the given handler should be analyzing stream of touch events or not. When set to false we can be sure that the handler's state will **never** become ACTIVE. If the value gets updated while the handler already started recognizing a gesture, then the handler's state it will immediately change to FAILED or CANCELLED (depending on its current state). Default value is true.

shouldCancelWhenOutside(value: boolean)

When true the handler will <u>cancel</u> or <u>fail</u> recognition (depending on its current state) whenever the finger leaves the area of the connected view. Default value of this property is different depending on the handler type. Most handlers' <u>shouldCancelWhenOutside</u> property defaults to <u>false</u> except for the <u>LongPressGesture</u> and <u>TapGesture</u> which default to <u>true</u>.

hitSlop(settings)

This parameter enables control over what part of the connected view area can be used to <u>begin</u> recognizing the gesture. When a negative number is provided the bounds of the view will reduce the area by the given number of points in each of the sides evenly.

Instead you can pass an object to specify how each boundary side should be reduced by providing different number of points for left, right, top or bottom sides. You can alternatively provide horizontal or vertical instead of specifying directly left, right or top and bottom. Finally, the object can also take width and height attributes. When width is set it is only allow to specify one of the sides right or left. Similarly when height is provided only top or bottom can be set. Specifying width or height is useful if we only want the gesture to activate on the edge of the view. In which case for example we can set left: 0 and width: 20 which would make it possible for the gesture to be recognize when started no more than 20 points from the left edge.

IMPORTANT: Note that this parameter is primarily designed to reduce the area where gesture can activate. Hence it is only supported for all the values (except width and height) to be non positive (0 or lower). Although on Android it is supported for the values to also be positive and therefore allow to expand beyond view bounds but not further than the parent view bounds. To achieve this effect on both platforms you can use React Native's View hitSlop property.

withRef(ref)

Sets a ref to the gesture object, allowing for interoperability with the old API.

withTestId(testID)

Sets a testID property for gesture object, allowing for querying for it in tests.

cancelsTouchesInView(value) (iOS only)

Accepts a boolean value. When true, the gesture will cancel touches for native UI components (UIButton, UISwitch, etc) it's attached to when it becomes ACTIVE. Default value is true.

runOnJS(value: boolean)

When react-native-reanimated is installed, the callbacks passed to the gestures are automatically workletized and run on the UI thread when called. This option allows for changing this behavior: when true, all the callbacks will be run on the JS thread instead of the UI thread, regardless of whether they are worklets or not. Defaults to false.

```
simultaneousWithExternalGesture(otherGesture1, otherGesture2, ...)
```

Adds a gesture that should be recognized simultaneously with this one.

IMPORTANT: Note that this method only marks the relation between gestures, without <u>composing</u> them. <u>GestureDetector</u> will not recognize the <u>otherGestures</u> and it needs to be added to another detector in order to be recognized.

```
requireExternalGestureToFail(otherGesture1, otherGesture2, ...)
```

Adds a relation requiring another gesture to fail, before this one can activate.

IMPORTANT: Note that this method only marks the relation between gestures, without <u>composing</u> them. <u>GestureDetector</u> will not recognize the <u>otherGestures</u> and it needs to be added to another detector in order to be recognized.

Callbacks

Callbacks common to all gestures:

onBegin(callback)

Set the callback that is being called when given gesture handler starts receiving touches. At the moment of this callback the handler is not yet in an active state and we don't know yet if it will recognize the gesture at all.

onStart(callback)

Set the callback that is being called when the gesture is recognized by the handler and it transitions to the active state.

onEnd(callback)

Set the callback that is being called when the gesture that was recognized by the handler finishes. It will be called only if the handler was previously in the active state.

onFinalize(callback)

Set the callback that is being called when the handler finalizes handling gesture - the gesture was recognized and has finished or it failed to recognize.

onTouchesDown(callback)

Set the onTouchesDown callback which is called every time a finger is placed on the screen.

onTouchesMove(callback)

Set the onTouchesMove callback which is called every time a finger is moved on the screen.

onTouchesUp(callback)

Set the onTouchesUp callback which is called every time a finger is lifted from the screen.

onTouchesCancelled(callback)

Set the <code>onTouchesCancelled</code> callback which is called every time a finger stops being tracked, for example when the gesture finishes.

Event data

Event attributes specific to LongPressGesture:

X

X coordinate, expressed in points, of the current position of the pointer (finger or a leading pointer when there are multiple fingers placed) relative to the view attached to the GestureDetector.



Y coordinate, expressed in points, of the current position of the pointer (finger or a leading pointer when there are multiple fingers placed) relative to the view attached to the <u>GestureDetector</u>.

absoluteX

X coordinate, expressed in points, of the current position of the pointer (finger or a leading pointer when there are multiple fingers placed) relative to the window. It is recommended to use absoluteX instead of \underline{x} in cases when the view attached to the $\underline{GestureDetector}$ can be transformed as an effect of the gesture.

absoluteY

Y coordinate, expressed in points, of the current position of the pointer (finger or a leading pointer when there are multiple fingers placed) relative to the window. It is recommended to use absoluteY instead of y in cases when the view attached to the GestureDetector can be transformed as an effect of the gesture.

duration

Duration of the long press (time since the start of the gesture), expressed in milliseconds.

Event attributes common to all gestures:

state

Current <u>state</u> of the handler. Expressed as one of the constants exported under <u>state</u> object by the library.

numberOfPointers

Represents the number of pointers (fingers) currently placed on the screen.

Example

```
const longPressGesture = Gesture.LongPress().onEnd((e, success) => {
  if (success) {
    Alert.alert(`Long pressed for ${e.duration} ms!`);
}
```