

API reference

Gestures

Manual gesture

Version: 2.6.0 - 2.12.0

Manual gesture

A plain gesture that has no specific activation criteria nor event data set. Its state has to be controlled manually using a <u>state manager</u>. It will not fail when all the pointers are lifted from the screen.

Config

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

Callbacks common to all continous gestures:

onUpdate(callback)

Set the callback that is being called every time the gesture receives an update while it's active.

onChange(callback)

Set the callback that is being called every time the gesture receives an update while it's active. This callback will receive information about change in value in relation to the last received event.

Event data

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.