# **Accessibility**

Familiar web accessibility APIs in a platform-agnostic form.

Accessibility in React Native for Web combines several separate web APIs into a cohesive system. Assistive technologies (e.g., VoiceOver, TalkBack screen readers) derive useful information about the structure, purpose, and interactivity of web apps from their <a href="https://example.com/html/html">httml</a>. attributes, and <a href="https://example.com/html/html">ARIA in HTML</a>.

## **Accessibility Props API**

React Native for Web includes APIs for making accessible apps. (Note that the React Native-specific accessibility\* props are deprecated in favor of aria-\* props).

aria-activedescendant: ?string

Equivalent to aria-activedescendant.

aria-atomic: ?boolean

Equivalent to <u>aria-atomic</u>.

aria-autocomplete: ?string

Equivalent to <u>aria-autocomplete</u>.

aria-busy: ?boolean

Equivalent to <u>aria-busy</u>.

aria-checked: ?(boolean | "mixed")

Equivalent to <u>aria-checked</u>.

aria-colcount: ?number

Equivalent to aria-colcount.

aria-colindex: ?number

Equivalent to <u>aria-colindex</u>.

aria-colspan: ?number

Equivalent to <u>aria-colspan</u>.

aria-controls: ?string

Equivalent to <u>aria-controls</u>.

aria-current: ?(boolean | "page" | "step" | "location" | "date" | "time")

Equivalent to aria-current.

aria-describedby: ?string

Equivalent to <u>aria-describedby</u>.

aria-details: ?string

Equivalent to aria-details.

aria-disabled: ?boolean

Equivalent to <u>aria-disabled</u>.

aria-errormessage: ?string

Equivalent to aria-errormessage.

aria-expanded: ?boolean

Equivalent to aria-expanded.

aria-flowto: ?string

Equivalent to aria-flowto.

aria-haspopup: ?string

Equivalent to aria-haspopup.

aria-hidden: ?boolean

Equivalent to aria-hidden.

aria-invalid: ?boolean

Equivalent to aria-invalid.

aria-keyshortcuts: ?string

Equivalent to aria-keyshortcuts.

aria-label: ?string

Equivalent to aria-label.

aria-labelledby: ?string

Equivalent to aria-labelledby.

aria-level: ?number

Equivalent to aria-level.

aria-live: ?("assertive" | "off" | "polite")

Equivalent to aria-live.

aria-modal: ?boolean

Equivalent to aria-modal.

aria-multiline: ?boolean

Equivalent to aria-multiline.

aria-multiselectable: ?boolean

Equivalent to aria-multiselectable.

aria-orientation: ?("horizontal" | "vertical")

Equivalent to <u>aria-orientation</u>.

aria-owns: ?string

Equivalent to aria-owns.

aria-placeholder: ?string

Equivalent to aria-placeholder.

aria-posinset: ?number

Equivalent to aria-posinset.

aria-pressed: ?boolean

Equivalent to <u>aria-pressed</u>.

aria-readonly: ?boolean

Equivalent to <u>aria-readonly</u>.

aria-required: ?boolean

Equivalent to aria-required.

role: ?string

Equivalent to role.

aria-roledescription: ?string

Equivalent to <u>aria-roledescription</u>.

aria-rowcount: ?number

Equivalent to aria-rowcount.

aria-rowindex: ?number

Equivalent to aria-rowindex.

aria-rowspan: ?number

Equivalent to aria-rowspan.

aria-selected: ?boolean

Equivalent to <u>aria-selected</u>.

aria-setsize: ?number

Equivalent to aria-setsize.

aria-sort: ?("ascending" | "descending" | "none" | "other")

Equivalent to aria-sort.

aria-valuemax: ?number

Equivalent to aria-valuemax.

aria-valuemin: ?number

Equivalent to aria-valuemin.

aria-valuenow: ?number

Equivalent to aria-valuenow.

aria-valuetext: ?string

Equivalent to aria-valuetext.

## **Accessibility patterns**

#### Links

The **Text** and **View** components can be rendered as links. If the **href** prop is set, the element will render **<a>** tags without altering the presentation of the element.

```
<Text href="/" />
// <a href="/" ></a>
```

The hrefAttrs prop sets link-related attributes.

```
const hrefAttrs = { download: true, rel: "nofollow", target: "blank" };

<Text
   href="/document.pdf"
   hrefAttrs={hrefAttrs}

/>
// <a download href="/document.pdf" rel="nofollow" target="_blank"></a></a>
```

### **Keyboard focus**

The **tabIndex** prop determines whether a component is user-focusable and appears in the keyboard tab flow. This prop should be used instead of the **accessible** (or **focusable** prop) found in React Native for Android/iOS, which is not implemented by React Native for Web/Windows/macOS.

```
<View tabindex={0} />
// <div tabindex="0"></div>
<Text tabindex={-1} href="/" />
// <a href="/" tabindex="-1"></a>
```

**Did you know?** Any element (including elements not in the keyboard tab flow) can be programmatically focused via **UIManager.focus(viewRef.current)**.

#### **Accessible HTML**

React Native for Web components express semantics exclusively via the aria-\* props.

```
<View
    aria-label="..."
    aria-pressed={false}
    id="abc"
    role="menuitem"

/>
/*
<div
    aria-label="..."
    aria-pressed="false"
    id="abc"
    role="menuitem"

/>
*/
```

### **Semantic HTML**

The value of the **role** prop is used to infer an <u>analogous HTML element</u> where appropriate. This is done to rely on well-supported native mechanisms for encoding semantics and accessibility information.

If the "heading" role is combined with an aria-level, the equivalent HTML heading element is rendered. Otherwise, it is rendered as <h1>.

```
<Text role="heading" /> /* <h1> */
<Text role="heading" aria-level={2} /> /* <h2> */
```

Note: Avoid changing role values over time or after user actions. Generally, accessibility APIs do not provide a means of notifying assistive technologies if a role changes.

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