Skip to content

:last-child

CSS Toys for Professional Web Developers

Menu

- Accessible Infographics
- Students and Jobs
- Android Accessibility – The Missing Manual
- iOS Developer Resources

Find aria-hidden with this bookmarklet

Use this bookmarklet to find aria-hidden attributes on your page. Continue Reading Find aria-hidden with this bookmarklet

I love purpose built bookmarklets that help you find problematic code. I got an email yesterday from Travis Roth about a potential vestigial aria-hidden attribute on an otherwise visible element. Unfortunately, it's not uncommon to find an element that has aria-hidden="true" on an element that is visible and should have either "false" or no aria-hidden attribute. This causes assistive technology to ignore the element.

My first reaction was to search the code for aria-hidden attributes, but this can take time and would have to be completed on each page to find the issue.

So I created the following bookmarklet that will find any element on your page that uses aria-hidden. It will force it to be visible and will display the attribute's value.

- **true**This link has aria-hidden="true". Can you see it or tab to it?
- **true**This link has aria-hidden="true" and visibility:hidden. Can you see it or tab to it?
- **true**This link has aria-hidden="true" and display:none. Can you see it or tab to it?
- **false**This link has aria-hidden="false"

To use this bookmarklet, drag the following link to your bookmark toolbar. Visit your questionable page and click the link.

aria-hidden bookmarklet
Continue Reading Find aria-hidden with this bookmarklet

Author [Ted](#)Posted on [August 1, 2017August 1, 2017](#)Categories [:none](#), [Accessibility](#), [ARIA](#), [Quick Tips](#)Tags [ARIA](#), [aria-hidden](#), [bookmarklet](#)Leave a comment on Find aria-hidden with this bookmarklet
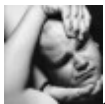
Enchanted Hills Camp for the Blind and Visually Impaired – Lighthouse SF

Intuit sets aside a week every year to give employees a chance to work with local non-profit organizations. This year, we gathered a small group to visit the [Enchanted Hills Camp](#) in Napa to help them prepare for this summer's campers. It's a fantastic organization and we loved our time there.

Here are some photographs from the event:

Powered by [flickr embed](#).

Author [Ted](#)Posted on [June 16, 2017](#)Categories [Intuit](#)Tags [blind](#), [intuitLife](#), [volunteer](#)Leave a comment on Enchanted Hills Camp for the Blind and Visually Impaired – Lighthouse SF

Google IO 2017 – Accessibility Notes

Building an accessibility team

The project champion needs to make sure training is available to all people on the team.

- Create a set of primary and secondary key work paths, i.e. put an item in a shopping cart (first) change avatar image (secondary)
- Add a checklist and try user testing

Resources and Ideas:

- Material Design: accessibility
- Web accessibility course on Udacity by Google
- Joshua Silver and his adjustable glasses

What's new in Android Accessibility

[Accessibility](#) | [Android Developers](#)

Accessibility is an important part of any app. Whether you're developing a new app or improving an existing one, ensure that components are accessible to everyone.

Why develop for accessibility

- 1 in 5 people will have a disability in their life. – 2010 census
- Designing for accessibility benefits blind, low vision, and eyes occupied (driving)

Android includes 4 types of assistive technology:

- TalkBack: Screen reader
- BrailleBack: Braille output for refreshable braille devices
- Switch Access: switch control of device
- Voice Access: control device by voice activation: "scroll up"

Android O's major focus: increase productivity for users

- new api additions for accessibility
- print disabilities (reading disabilities)

New to TalkBack

accessibilityVolume: adjust audio volumen for accessibiity independently from media. So you can watch youtube and control that separately than talkback. This is available when talkback is on.

Volume from youtube is quieted while talkback is being used. it then fades back into the foreground. There's a new accessibility volume slider

New gestures for talkback.

If there's a fingerprint sensor on the back of the device, it can be used by talkback users. The sensor has its own set of customizable gestures. For instance, swipe up on the fingerprint. These can be assigned, such as longpress action

Quickly enable/disable TalkBack

long press the volume keys to quickly turn on/off talkback.

this works on any screen, this makes it easier to test apps and turn off talkback to type information. Press both keys at the same time for a long press and eventually it will turn on/off talkback. the accessibility shortcut can be assigned to switch control, zoom, or other service.

New Text to speech engine can handle multiple languages. Use LocaleSpan to trigger language switching.

2 new APIs

Continuous Gesture API: enable motor impaired users who use head tracker to perform drag and drop, zoom, etc.

Accessibility Button:

A new accessibility button is located in the navigation bar. This allow users to quickly invoke context dependent accessibility features. This sits in the row with back and home buttons

Print disabilities

People with dyslexia, low vision, learning new language… They can now use select to speak. part of talkback 5.2. Select element on screen and talkback will read it. It has a floating action button to enable.

In android o. read whole page, and advanced controls, word level highlighting, set up wizard.

Testing

manual testing: try your app with TalkBack and SwitchAccess.

- if it is ok in talkback, it should be good for brailleback and select to speak
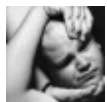- if it works with switch access, it should also work with voice access.

[Accessibility Scanner](#), free app to download on play store.

This analyzes the current screen and provides an audit that can be shared.

The accessibility test framework is still requiring espresso and/or robolectric

Android Accessibility Documentation

Android has a new [developer hub for understanding accessibility](#). There's a page for [Android testing](#).

Author [Ted](#)Posted on [May 24, 2017](#)Categories [Accessibility](#), [Android](#)Tags [a11y](#), [Accessibility](#), [Android](#), [automated testing](#), [google io](#), [io17](#), [testing](#)Leave a comment on Google IO 2017 – Accessibility Notes

Google IO 2017 – Android 0, Studio, and Things Notes

Android Things

Use Android Things with AI to create smart devices: [Do it Yourself](#) AI kit

IOT Security with Android Things

- [Android Things](#)
- [Android Developer](#)
- [Android Things SDK](#)

Android Things – System on Module architecture. Developer console

Security features are built in: on by default, easy to maintain, infrastructure by Google.

Feature features: OS Hardening, updates verified boot, hardware backed keys, attestation

The main problem in IOT secuirty is economics. the cost of building in security vs. cost of risking security. smaller, lower cost devices may not build in security. Exploits have become their own market

How much is the cost to an engineer to create an attack?

- Time
- Money
- Skill
- Grit

attack ROI:

How valuable is it?

Pervasive

Can this attack scale enough to be valuable? WiFi injection may be effective, but it doesn't scale if you have to be near the router. A default credential, i.e. security cams, can be attacked by the thousands.

Privileged

Does the attack give the person privilege to the hardware, accounts?

Persistant

Does the attack give the engineer significant persistance? Can it survive a device reboot?

Security Cost: not every company has the resources to build and maintain security features and infrastructure.

Android Things goal: raise attack costs, reduce ROI, and reduce security costs.

OS Hardening: All of Android's hardening is enabled in Android Things. Permissions, app sandbox, mandatory access control (Selinux), kernel syscall filtering, full ASLR, FORTIFY, stack-protector-strong…

Developer Action: Declare permissions only as needed, split out privileged code.

All Android Things devices will get infrastructure updates directly from Google. This reduces attack persistance and drives down the attack ROI. Updates can be controlled during critical operations, like a drone is flying. Developers can also test updates and request an update to be stopped

Android Things Keystore

Attestation: Authentication for devices. Attests to what? Authnetic Android Thing Device, product info, device identity, device state (verified boot state), key attributes (allowed modes,…)

Building for Billions

Building for Billions is Androids best practices for low cost/bandwidth devices. Best practices on how to optimize Android apps for low- and no-bandwidth and low-cost devices.

Kotlin

- [Kotlin](#) is now a first-class language for Android.
- Kotlin Programming Language
- Kotlin is a statically typed programming language for the JVM, Android and the browser, 100% interoperable with Java.
- There's no change in support for Java or C++.
- Comparable to Swift and Objective C.

Watch Google IO talks for more info on using Kotlin

- [Introduction to Kotlin](#)
- [Life is great… Kotlin is here](#)

[Android Studio 3.0](#) canary is available today.

Watch for unified network profiler. It is interactive, you can go into functions and dive into specific code.

Android Architecture Components

A [new collection of libraries](#) that help you design robust, testable, and maintainable apps. Start with classes for managing your UI component lifecycle and handling data persistence.

Android is going to have a device catalog, find out the specifics of different phones and devices.

Android Instant Apps

[Android Instant Apps](#) available to everyone

They allow Android users to run your apps instantly, without installation. Android users experience what they love about apps—fast and beautiful user interfaces, high performance, and great capabilities—with just a tap.

Android Instant Apps is now open to all developers, so anyone can build and publish an instant app today.

Use the same code to generate the instant app, use feature modules to define what can be included/removed for instant apps. Look for modularize feature in android studio. They also will have [optimization tools](#) to make these features faster.

What's new in Android O keynote…

Picture in picture is coming to Android O. similar to the way YouTube will let the video reduce to a thumbnail while you scroll other videos in a search. Only now the video can be a thumbnail while you open evernote and write notes

[Android O color management](#) will allow colors to be more consistent across devices.

Multi-display. user can choose to send information to multiple displays.

Look for ActivityOptions

```
$adb shell dumpsys display
getMetrics() on mediaPlayer, mediaRecorder…
```

You can now use an arbitrary number of audio/video tracks.

WebView allows Google Safe Browsing API.

```
<meta-data
    android:name="andorid.webkit.webview.enableSafeBrowsing"
    android:value="true" />
```

Web view safe browsing goes back to lollipop

Seek within videos

```
animatorSet setCurrentPlayTiem (long); – seek within
```

Reverse

you can now reverse: reverse();

AutoFill

You can now get user name/password and other from Chrome. https://youtu.be/1N9KveJ-FU8?t=9m17s

This will make logging into apps much easier.

Autofill will be included in basic form inputs: text view, edit text.. no extra work required

You can use hints to the auto-fill api to define data types. Autofill apis for custom veiws and opaque hierarchies

Fonts

Text Stuff: font files can be added to font directory. Downloadable fonts: declare font to be downloaded and cached. Font provider in Google play services v1. There is a beta version available. Access to all 800 google fonts

Auto-sizing Text Views

Fonts with auto-resize will change font size as you resize their container. In the past, the container may grow, but the fonts stay the same size. Now they can grow with the container.

AccessibilityService Utilities

Language detection, accessibility button, separate volume controls, finger print

FindViewById update

Current:

```
View.java: public View findViewById (int id);
TextView tv = (TextView) findViewbyId(R.id.mytextview);
```

Android O

```
View.java: public <T extends view> findViewById(int id)
TextView tv = findViewById (R.id.mytextview);
```

Adaptive Icons.

We will need to worry about [Adaptive Icons](#) with future releases. Developers provide background + foreground * mask for multiple devices.

Pin request.

Ask people to pin our app to desktop. ShortcutManager and appWidgetManager. requestPinAppWidget…

Notifications

Notifications are getting more power in O. The user should always be in control. Users and developers want ability to tweak notifications from an app. Notification channels give developers and users fine grain control. Apps can define channels, assign notifications to channels, post notifications

Note: Once you target O. You must use channels or notifications will be dropped!

Strict Mode

Thread policy. unbuffered i/o, VM policy

Media file access

Seekable file descriptors from custom document provider. useful for large remote sources. Cached data. statey below the quota to avoid aggressive deletion. Use storage manager

```
getCacheQuoteBytes()
allocateBytes()
setCacheBehaviorTombstone()
```

Security

Privacy ANDROID_ID is now different for every app,user

net.hostname is empty

[Google Play Protect](), scans apps on user's phone. now they are making it obvious by giving the user a notification when it scans and lets them know the state.

Android Studio 3.0

Kotlin available today.

- You can copy java and paste within kotlin file and it will automatically convert to kotlin code.
- Java: new packages for java.time, java.nio.file, java.lang.invoke
- Runtime: Concurrent -copying collector.
- Smaller heap, faster allocations, faster collections
- v26 has emojiCompat – bundled or updatable.

Animation

Physics animation: velocity, springs, force. This simplifies the process. It is more natural, interactive, interruptible.

Look at ChainedSpringDemo

Architecture components:

easier android development. lifecycle

Background apps:

- location is only going to get coarse grained location info
- wakelocks for cached apps – wakelock is released
- background execution limits

Alert windows

TYPE_APPLICATION_OVERLAY must be used

Author TedPosted on May 24, 2017May 24, 2017Categories Android, VideoTags Android, android studio, android things, google io, io17Leave a comment on Google IO 2017 – Android 0, Studio, and Things Notes

Google IO 17 – Home, Assistant, and Actions Notes

Actions built for Google Home are now available for Google Assistant on phone

New interfaces for actions:

- Tap
- Voice
- Typing

Purchases are also built in via google wallet. Google facilitated Payments.

New app directory for google actions. Shortcuts will allow you to more easily market the action.

Actions console on Google

Google Home

[Google Home can now do phone calls](#) to any number in US and Canada. The number is generic, but you can use your personal #.

Actions on Google development platform.

Now available on [Android and iOS](#). Includes transactions.

[Google.ai](#) is the new hub for artificial intelligence at Google. IO17

Designing for Voice Interactions: value of voice interactions: speed, simplicity, ubiquity

Design strategies

- Keep people comfortable

- Ask questions that are easy to answer
- Structure information in a way that supports easy recall
- Capabilities: recognize what users say. understand what they mean.

People have higher expectations for voice accuracy. spend extra time planning for exceptions. make it really easy to get back on track. leverage techniques used in everyday conversations.

[Conversation UI](#) and why it matters.

Author [Ted](#)Posted on [May 24, 2017](#)Categories [Developers](#), [Mobile](#), [Online Resource](#)Tags [conversant ui](#), [google actions](#), [google home](#), [google io](#), [intuitLife](#), [io17](#)Leave a comment on [Google IO 17 – Home, Assistant, and Actions Notes](#)

Posts navigation

Page 1 [Page 2](#) … [Page 44](#) [Next page](#)
Search for: [Search ...] [Search]

Latest Posts

- [Find aria-hidden with this bookmarklet](#)
- [Enchanted Hills Camp for the Blind and Visually Impaired – Lighthouse SF](#)
- [Google IO 2017 – Accessibility Notes](#)
- [Google IO 2017 – Android 0, Studio, and Things Notes](#)
- [Google IO 17 – Home, Assistant, and Actions Notes](#)
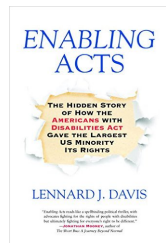
Pages

- [Accessible Infographics](#)
  - [Connect with aria-describedby](#)
  - [Connect with aria-labelledby](#)
  - [CSUN 2013 Presentation](#)
  - [Include the transcript](#)
  - [Include the Transcript – Hidden](#)
  - [Include the Transcript – Toggle Visibility](#)
  - [Link to the Transcript](#)
  - [The longdesc attribute](#)

Ted's Tweets

- It's not too late to sign up for the Baltimore-DC [#a11y](#) Bootcamp with [@karlgroves](#): [https://t.co/GeqPqqQEuT](#) on October 10,11. [about 21 hours ago](#)
- RT [@IntuitIN](#): .@IntuitIN named winner of [@ncpedp_india](#) - Mphasis [#UniversalDesign](#) Awards 2017. Read more - [https://t.co/Pk8A9yrlX6](#) [#access](#)… [07:59:47 AM September 07, 2017](#)
- Congratulations to [@IntuitVijay](#) for receiving the Bill Campbell Coach's Award for excellent leadership. His impact is tremendous. [@intuitIN](#) [12:45:58 PM September 06, 2017](#)
- RT [@BleacherReport](#): Long snapper Jake Olson made his debut for USC today. He's been blind since age 12. 🙏 [https://t.co/ppg0ARDX3M](#) [11:42:03 AM September 03, 2017](#)
- Google' "Implementing Accessibility" course for [#Android](#). 20 minute read to get you started. [#a11y](#) [https://t.co/rIK0Tj3ZB9](#) [07:52:45 AM September 03, 2017](#)
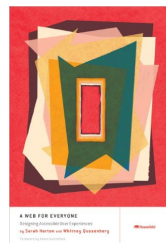
[🐦 Follow @ted_drake](#) 1,550 followers

Current Reading List

- [Enabling Acts: The Hidden Story of How the Americans with Disabilities Act Gave the Largest US Minority Its Rights](#)
- [Apps For All: Coding Accessible Web Applications](#)
- [A Web for Everyone: Designing Accessible User Experiences](#)
- [The Elements of Typographic Style](#)

- [Toggle High Contrast](#)
- [Toggle Font size](#)

Elsewhere on the Web

- [Resume](#)
- [YouTube](#)
- [Linked In](#)
- [Slideshare](#)
- [Lanyrd](#)

About

This site features helpful hints, in-depth exercises, and book reviews. It's the site that I'd want to have handy to remember how to do something and what to look out for.

I am an accessibility engineer at Intuit and was a web developer at Yahoo!. This site often reflects what I am working on at the moment. Lately it has been less CSS oriented and more Accessibility and API based.

- [Accessible Infographics](#)
- [Students and Jobs](#)
- [Android Accessibility – The Missing Manual](#)
- [iOS Developer Resources](#)

[:last-child](#) [Proudly powered by WordPress](#)