

**First Rule of ARIA:**  
**Don't Use ARIA**  
**No seriously, don't**

# What is ARIA?

## W3C/WAI Standard

**What is ARIA?**

**Acronym**

**What is ARIA?**

**"Polyfill for HTML  
semantics"**

**- Sara Soueidan**

# What is ARIA?

# Context

**What is ARIA?**

**Role, Relationship  
& State**

**Role**

# HTML elements

**Role**

**Abstract**



**Role**

**Widgets**

- **button**
- **checkbox**
- **gridcell**
- **link**
- **menuitem**
- **menuitemcheckbox**
- **menuitemradio**
- **option**
- **progressbar**
- **radio**
- **scrollbar**
- **searchbox**
- **separator**
- **slider**
- **spinbutton**
- **switch**
- **tab**
- **tabpanel**
- **textbox**
- **treeitem**
- **combobox**
- **grid**
- **listbox**
- **menu**
- **menubar**
- **radiogroup**
- **tablist**
- **tree**
- **treegrid**

**Role**

# Document Structure

- **application**
- **article**
- **cell**
- **columnheader**
- **definition**
- **directory**
- **document**
- **feed**
- **figure**
- **heading**
- **img**
- **list**
- **listitem**
- **math**
- **none**
- **note**
- **presentation**
- **group**
- **row**
- **rowgroup**
- **rowheader**
- **separator**
- **table**
- **term**
- **toolbar**
- **tooltip**

**Role**

**Landmark**

- **banner**
- **complementary**
- **contentinfo**
- **form**
- **main**
- **navigation**
- **region**
- **search**

**Role**

**Live Region**

# Signup

Given Name:

Surname:

Email Address:

Password:

Cancel

Save

1



Your account has been created. Please check your email for access information.





**Role**

**Live Region**

- **alert**
- **log**
- **marquee**
- **status**
- **timer**

# Role Window

- **alertdialog**
- **dialog**

**Relationship**

**Owner, sibling,  
child, parent**

- **aria-activedescendant**
- **aria-controls**
- **aria-describedby**
- **aria-labelledby**
- **aria-owns**

**State**

**Dynamic**

- **aria-busy**
- **aria-checked**
- **aria-disabled**
- **aria-expanded**
- **aria-grabbed**
- **aria-hidden**
- **aria-invalid**
- **aria-pressed**
- **aria-selected**








# ARIA Rules

## #1: Don't



## CONTROLS

ELEMENT	CRITERIA					
⊕ <a href="#">search</a> input	Accessibly supported	✓	✓	✓	○	✓
⊕ <a href="#">tel</a> input	Accessibly supported	✓	✓	✓	○	✓
⊕ <a href="#">url</a> input	Accessibly supported	✓	✓	✓	○	✓
⊕ <a href="#">email</a> input	Accessibly supported	✓	✓	✓	○	✓
⊕ <a href="#">datetime-local</a> input	Accessibly supported	✓	✓	—	—	—
⊕ <a href="#">date</a> input	Accessibly supported	✓	✓	—	—	—
⊕ <a href="#">month</a> input	Accessibly supported	✓	✓	—	—	—
⊕ <a href="#">week</a> input	Accessibly supported	○	✓	—	—	—
⊕ <a href="#">time</a> input	Accessibly supported	○	✓	—	—	—

# ARIA Rules

# #1: Don't\*

# ARIA Rules

**#2: Don't do that  
either**

<h2 role="tab">Tab 1</h2>

<h2 role="tab">Tab 2</h2>

```
<div role="tab">  
  <h2>Tab 1</h2>  
</div>
```

```
<div role="tab">  
  <h2>Tab 2</h2>  
</div>
```

# ARIA Rules

## #3: Keyboards exist

# ARIA Rules

## #4: Focus



```
<table role="presentation">  
  <tr><td>Row 1, Col 1</td></tr>  
  <tr><td>  
    <button>My Button</button>  
  </td></tr>  
</table>
```

```
<button aria-hidden="true">
```

Spoon

```
</button>
```

```
<div aria-hidden="true">
```

```
<button>Spoon 2</button>
```

```
</div>
```

# ARIA Rules

## #5: Names matter

<label for="userName">

User Name:

</label>

<input type="text" id="userName" />

```
<label> User Name:  
  <input type="text" />  
</label>
```

```
<label> User Name:  
  <div></div>  
</label>
```



```
<input type="text"  
aria-label="User Name:" />
```

```
<button aria-label="Save">  
</button>
```

- **input (\*not hidden)**
- **button**
- **select**
- **textarea**
- **output**
- **meter**
- **progress**

```
<div id="userName">
```

User Name:

```
</div>
```

```
<input type="text"  
aria-labelledby="userName" />
```



# Recap

# ARIA == Context

# Recap

# Role, Relationship & State

# Recap

- 1. Use native elements, not ARIA**
- 2. Leave default semantics alone**
- 3. Consider keyboard navigation**
- 4. Don't hide focusable elements**
- 5. Accessible names for all**

# First rule of ARIA

# Why?

**First rule of ARIA**

**26.7 more errors  
with ARIA**

**First rule of ARIA**

**More ARIA than  
elements**

**I'M NOT EVEN MAD**



**THAT'S AMAZING**

# Resources & Tools

- ARIA Validator by Rick Brown
- Visual ARIA Bookmarklet from WhatSock
- Landmarks by Matthew Tylee Atkinson
- WAI-ARIA and its true impact on assistive technologies by Tor-Martin Storsletten
- What a Year of Learning and Teaching Accessibility Taught Me by Sara Soueidan
- The WebAIM Million study & Higher Ed 4k Project



# Resources & Tools

- [POURing Over Your Website: An Introduction to Digital Accessibility](#) Code Magazine article
- [Accessibility Guidelines and Tools: How Do I Know My Website Is Accessible?](#) Code Magazine article
- [Digital Accessibility Resources & Tools](#) gist
- [Easy Accessibility Wins](#) gist

# AMA!



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