

WAI – ARIA

Just Do It!

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The Paciello Group

WAI =

Web Accessibility Initiative

ARIA =

Accessible Rich

Internet Applications

What is it?

It's a **W3C Specification**,
like HTML, CSS, XML
etc.

It is close to becoming **a
recommendation**

What's it do?

It makes **sense**

out of noise

out of silence

What's it do?



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link graphic OK

What's it do?



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button OK

To activate press spacebar

What's the difference?

`>role="button"`

```
<a href="" title="OK"  
    
</a>
```

What's gained?

Correct **role** information:

“Button”

Usage **instructions**:

“To activate press
spacebar”

Couldn't this example also be achieved without using WAI - ARIA?

Yes



OK

```
<input type="image" src="ok.gif" alt="OK">
```

What's it do 2?



Highlight (off)



Highlight (on)



button
Highlight

button
Highlight
pressed

What's the difference?

`role="button" aria-pressed="false"`

```
<input type="image" src="hioff.gif"  
alt="highlight off"
```

`role="button" aria-pressed="true"`

```
<input type="image" src="hion.gif"  
alt="highlight on"
```

What's gained?

state information:

“pressed”

AJAX and WAI - ARIA?

(dynamic content updates)

Two main issues:

1. Users not having access to content changes.
2. Users not being aware of content changes.

I am presenting at Fundamentos Web

WAI – ARIA Live Regions

Solves the second problem:

“Users not being aware of content changes.”

What's it do? live regions



=

Characters left

35

Characters left

17



=

35

17

What's the difference?

```
<span id=chars_left_notice class=numeric>  
  aria-live="polite">
```

```
<strong style="color: #cccccc" id=status-field-  
char-counter>115</strong></span>
```

Live Region – being polite

- **off** - changes not announced
- **polite** - changes announced after users have completed their current activity.
- **assertive** - the user agent should interrupt the user, but it may not do so immediately.
- **rude** - the user agent should interrupt the user.

What's gained?

Access

to content changes

What's the buzz?

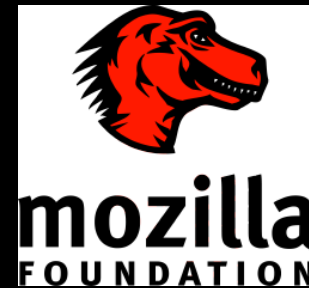
“ARIA is the most important technology to help people with disabilities since the ability for application components to expose their accessibility information”

Rich Schwerdtfeger

More buzz

- Richness of access in terms of usability and interoperability from the **desktop to the web**
- During the development of the next version of the **Section 508** standards it has allowed the merging of **web and software accessibility** guidelines
- It is **driving browser vendors** to dramatically improve their accessibility interoperability layer on multiple operating systems
- It is **forcing AT vendors** to redesign their user experience on the web for better usability
- It has brought the entire accessibility community toward thinking about **true interoperability with ATs**

Support?



ARIA and HTML

HTML 4 + ARIA =

HTML *more*

HTML5 + ARIA =

HTML *more*

ARIA and HTML

▼ **Flight Times**

Depart takeoff landing

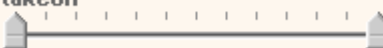
takeoff




Fri 08:30 - 16:00 [show all](#)

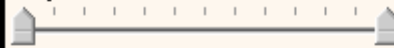
Return takeoff landing

takeoff



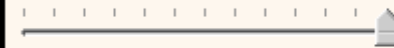
Fri 06:30 - 20:30 [show all](#)

Stopover Duration 




0h 30m to 7h 45m

▼ **Trip Duration**



1h 40m to 11h 20m

▼ **Price**



£110 to £1490

``

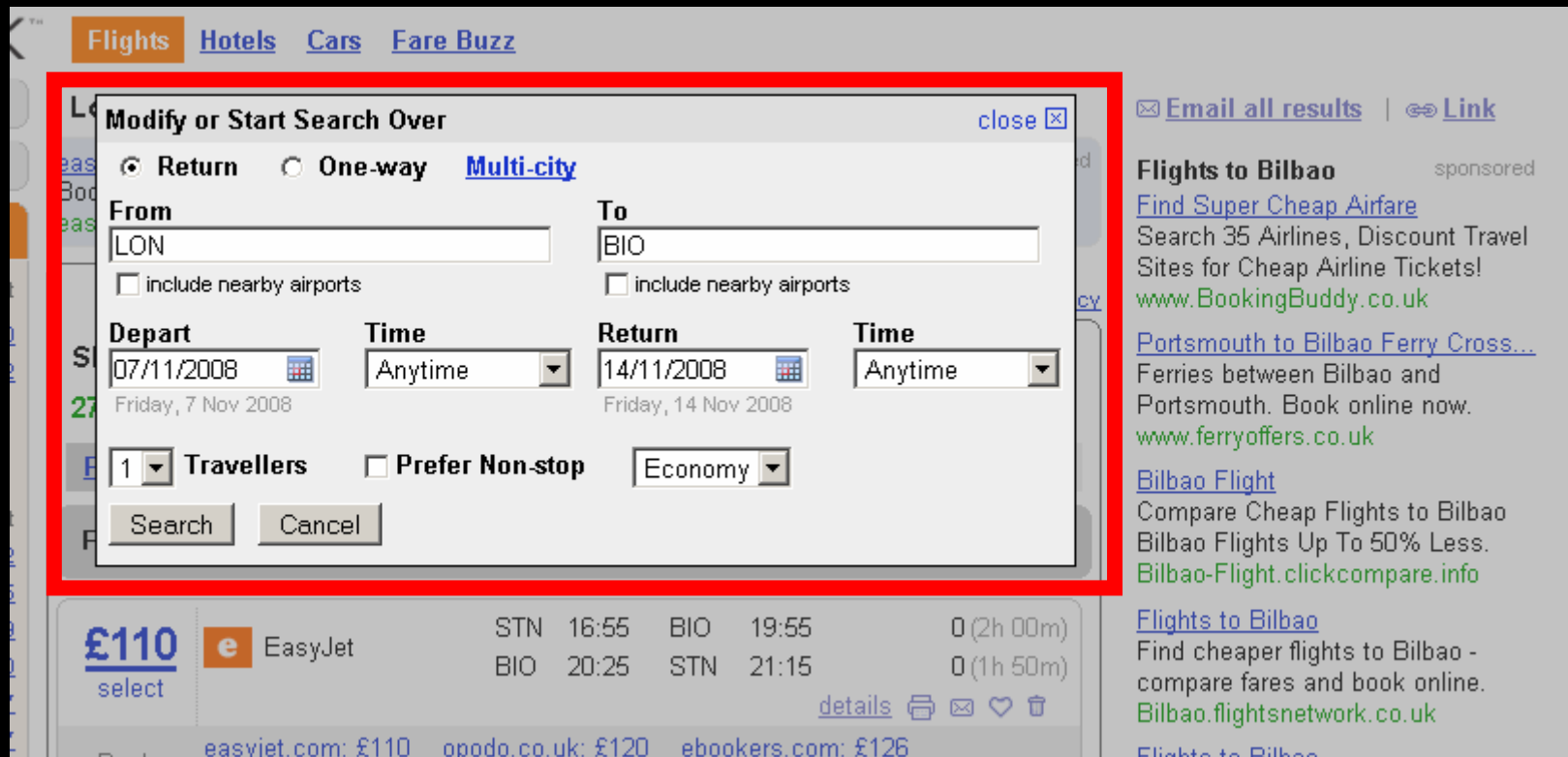
ARIA and HTML



The screenshot shows a flight search results page. At the top, there are three view tabs: "List View", "Matrix View", and "Chart View". The "Matrix View" and "Chart View" tabs are highlighted with a red box. To the right of the tabs is a currency selector showing "£ (GBP)" and a link to "change currency". Below the tabs, the text "Showing Roundtrips or [Select Departures First](#)" is displayed. A pagination bar shows "161 of 336 shown" and a "show all" link. Below the pagination bar are columns for "Price", "Airline", "Take-off", "Landing", and "Stops (Duration)". A "Filters Applied" section shows "Flight Times" and "Depart/Return, same airports" with close buttons. The first flight result is from Iberia, priced at £147, with a "select" button. Below the flight details are links for "details", "print", "email", "heart", and "trash". At the bottom, there are links to book on "iberia.com: £147", "ebookers.com: £152", and "opodo.co.uk: £152".

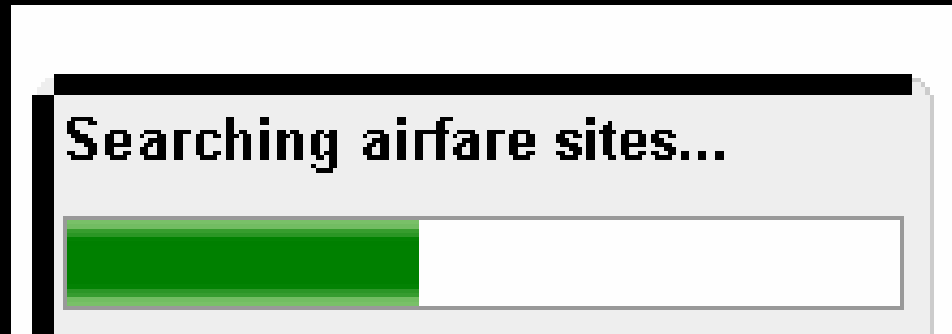
``

ARIA and HTML



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ARIA and HTML



```
<span role="progressbar">
```

ARIA and HTML



``

ARIA and HTML

The screenshot shows the KAYAK website interface for a flight search from London, United Kingdom to New York, NY, United States, dated Fri 7 Nov 2008 – Fri 14 Nov 2008. The page includes navigation links for Flights, Hotels, Cars, and Fare Buzz, along with options to sign in or register. A search bar shows the route and dates. Below the search bar, there are filters for Stops (non-stop, 1 stop, 2+ stops) and Airlines (All, Aer Lingus, Air Canada, Air France, Air India, American Airlines). A flight result for Virgin-Atlantic.com is highlighted, showing a price of £279 and a flight duration of 11h 36m. A yellow alert box with the text "Updating results..." is overlaid on the search results, indicating a dynamic update. The alert box is highlighted with a red border.

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ARIA Resources

WAI-ARIA Overview

<http://www.w3.org/WAI/intro/aria>

ARIA: Relationship to HTML FAQ

http://developer.mozilla.org/en/docs/ARIA:_Accessible_Rich_Internet_Applications/Relationship_to_HTML_FAQ

Thanks to



Gez Lemon



Hans Hillen



Rich Schwerdtfeger

Demonstration time

- **Slider**
- **Tree**