

A Deep Dive into Email Accessibility

Mark Robbins

REBEL

@M_J_Robbins @GoRebel

#LitmusLive

Why care about accessibility?

1. Legal requirement
2. Accessing a larger market
- 3.

Don't be a dick



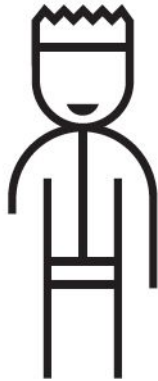
#LitmusLive

@M_J_Robbins

@GoRebel

Everyone benefits from better accessibility

Permanent
Amputee



Temporary
Broken arm



Situational
Holding a baby



Quick recap

[#LitmusLive](#)

[@M_J_Robbins](#) [@GoRebel](#)

Quick recap - Tables

- Use `role="presentation none"` on all layout tables
- Use ghost tables as webmail can remove `role` attributes
- And stop using so many tables, try and limit yourself to about 5-10
- Only add a table when you want to;
 - Constrain the width of a section
 - Change background
 - Add a border
 - Use multiple columns

Quick recap - Semantic code

- Use `<h1>`-`<h6>` elements for headings.
These are landmarks that help navigate your content

- Remember a subtitle is not a heading

A Deep Dive into Email Accessibility

A talk by Mark Robbins

- Paragraphs should be in `<p>` set a margin for consistent rendering
- Lists should be `` elements in a `` or ``
Don't set a margin on it add that to a wrapper `<div>`

Quick recap- Language

- Place a `lang=""` attribute on the `<html lang="en">` tag
- Also add a `lang=""` to a wrapping element inside the `<body><div lang="en">`
- And add one to any content where the language changes
- Screen readers will read in a different accent depending on the lang that is set.

Common mistakes and misconceptions

- Everything should be a link, including; text, images and whitespace
- It's fine to use images of text if you have alt text
- Responsive is only for mobile
- Insensitive - alt="Download images to view email"

**Some cool new
experimental stuff**

#LitmusLive

@M_J_Robbins @GoRebel

Accessibility for dynamic images

Your image will change, your alt text won't

- Use generic alt text, from default image
- alt="Offer ends at 14.20 on 21st August 2018"
- alt="Prices available on the website"
- alt="" aria-hidden="true"

Accessibility for dynamic images

Dynamic images with
dynamic CSS - *concept*

```
<figure
style="margin:0;display:none;">
  <div role="img"
class="dynamic-img1"
aria-labelledby="alt1"></div>
  <figcaption id="alt1"></figcaption>
</figure>
```

```
figure{
  display:inline !important;
}
.dynamic-img1{
  width:300px;
  height:200px;
  background:url(https://image1.jpg);
}
#alt1::after{
  content:'dynamic alt text';
  opacity:0;
  display:block;
  max-height:0;}
```

Accessibility for user settings

Px units don't change with user settings.

The easiest way is to convert px to rem units - **px ÷ 16**

Outlook doesn't support rem so we need to add a fallback

```
<p style="font-size:16px; font-size:1rem"></p>  
<p style="font-size:20px; font-size:1.25rem"></p>  
<p style="font-size:10px; font-size:0.625rem"></p>
```

One can also use em or % units, these are supported by Outlook but remember these are dependant on the parent font-size

Accessibility for user settings

In iOS and Apple Mail you can detect some user preferences and change your code accordingly

```
@media (colors-inverted){  
  img, video{  
    filter:invert(100%);  
  }  
}
```

```
@media (prefers-reduced-motion: reduce){  
  #body *{  
    animation:none !important;  
  }  
}
```

Accessibility for interactive email

Interactive CSS isn't accessible by default.

- A `<label>` isn't focusable or clickable without a mouse.
- There is no context for screen readers to announce what is happening.
- This is normally fixed with JavaScript but that doesn't work in email.

Accessibility for interactive email

Interactive CSS accessibility

No added accessibility

I like CSS

With CSS accessibility

I like CSS

Accessibility for interactive email

```
<label aria-live="polite">
  <input type="checkbox" style="display:none">

  <div class="faux-checkbox" role="button" tabindex="0" aria-label="tick box"
  aria-describedby="checkbox-label status"></div>

  <span id="checkbox-label">I like CSS</span>

  <div class="visually-hidden" id="status">
    <span class="checked">checked</span>
    <span class="unchecked">unchecked</span>
  </div>
</label>
```

View it online: https://codepen.io/M_J_Robbins/pen/aVJBXd

Accessibility for interactive email

Interactive CSS accessibility

No added accessibility

I like CSS

With CSS accessibility

I like CSS

Testing tools

- Accessibility settings in Android, iOS, OSX and Windows
 - Android: Settings > Accessibility
 - iOS: Settings > General > Accessibility
 - Mac: System preferences > Accessibility
 - Windows 10: Settings > Ease of Access
 - Windows 7 & 8: Control Panel > Ease of Access
- Funkify simulator - funkify.org
- WAVE - wave.webaim.org
- AXE - axe-core.org

Further Resources

goo.gl/QQyG7f

Curated by @wilbertheinen

email.geeks.chat

Slack group with an email-accessibility channel

#LitmusLive

@M_J_Robbins @GoRebel

Thank you

Mark Robbins

REBEL

@M_J_Robbins @GoRebel

#LitmusLive