

Basics of Accessible Configuration and Development in Drupal

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Is my site accessible?

Is my site accessible?
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Outline

- Go somewhere else
- What Is Accessibility?
- Preparing for Development
- Configuring Entities
- Conclusions

Go Somewhere Else

Go Somewhere Else

This session is not for you

- You should know HTML very well
- You should be a YaleSites / Drupal super user
- You should use be comfortable inspecting the DOM
- You should have a strong hatred of the markup that Drupal outputs by default

```
▼ <div class="block-inner clearfix">
  <h2 class="block-title">Upcoming Training</h2>
  ▼ <div class="content clearfix">
    ▼ <div class="view view-calendar-list view-id-calendar_list view-display-id-block_2 view-dom-id-
    fe0e3faf7032a4882ea878c4e2da0d07">
      ▼ <div class="view-content">
        ▼ <div class="item-list">
          <h3>Hands-on Training</h3> = $0
          ▼ <ul>
            ▼ <li class="views-row views-row-1 views-row-odd views-row-first">
              ▼ <div class="views-field views-field-field-event-time">
                ▶ <div class="field-content">...</div>
                </div>
              ▼ <div class="views-field views-field-title">
                ▶ <span class="field-content">...</span>
                </div>
              </li>
            ▶ <li class="views-row views-row-2 views-row-even">...</li>
            ▶ <li class="views-row views-row-3 views-row-odd">...</li>
            ▶ <li class="views-row views-row-4 views-row-even">...</li>
            ▶ <li class="views-row views-row-5 views-row-odd">...</li>
            ▶ <li class="views-row views-row-6 views-row-even">...</li>
            ▶ <li class="views-row views-row-7 views-row-odd views-row-last">...</li>
          </ul>
        </div>
      <table class="view view-calendar-list view-id-calendar_list view-display-id-block_2 view-dom-id-
```

Go Somewhere Else

No seriously, this session is not for you

- I talk fast
- I go through my slides fast
- I don't stop for questions

You won't hurt
my feelings.

Go somewhere else

Other sessions happening right now

- Image Annotations Using Drupal and Mirador - 203
- YaleSites: Building for the User - 202

What Is Accessibility

What Is Accessibility

Usability for People with Disabilities

- Blindness
- Color blindness
- Low Vision
- Deafness
- Motor Disabilities
- Cognitive Disabilities

What Is Accessibility

Adherence to a Technical Standard

- Section 508
- WCAG 2.0
- ATAG 2.0 Part B

What Is Accessibility

A Civic Responsibility

- Human Rights
- Civil Rights
- Participation in Government in Civics
- Participation in Business and Commerce
- Participation in the Workforce
- Participation in Education
- Participation in Social Media

Preparing for Development

Preparing for Development

- Understanding of Accessible Development Principles
- Planning for Accessibility

The foundation of
accessibility is
semantic markup

Semantic Markup

- `div` and `span` are a last resort
- True headings (`h1`, `h2`, `h3`, `h4`, `h5`, `h6`), vs `strong`
- Semantic HTML and HTML5 (`header`, `footer`, `nav`, `aside`, `figure`)
- The difference between `a` and `button`
- The proper use of `label`
- Every `img` tag must have an `alt` attribute, but sometimes it must be null

Planning for Accessibility

- Annotate all of your designs before you begin coding
 - Focus on semantics
 - Focus on source order
 - Ignore wrappers, ids, class names, etc
- HTML prototypes are even better

Wonkblog

Economy · **Energy** · **Health Care** · **Transportation**

Trump's military spending bump could fund the Corporation for Public Broadcasting for the next 121 years

The agencies President Trump proposes eliminating represent a small fraction of the \$54 billion in savings needed to offset the defense increases he seeks.



Christopher Ingraham · **Data visualization, Economy** · 3 hours ago

```
<article>
  <h2><a>Trump's military spending...</a></h2>
  <img alt /> <!-- NULL ALT ATTRIBUTE -->
  <p>The agencies president trump proposes... </p>
  <footer>
    <ul>
      <li><a>Christopher Ingraham</a></li>
      <li><a>Data visualization</a>, <a>Economy</a>
      <li>3 hours ago</li>
    </ul>
  </footer>
</article>
```

The agencies President Trump proposes eliminating represent a small fraction of the \$54 billion in savings needed to offset the defense increases he seeks.



Christopher Ingraham · **Data visualization, Economy** · 3 hours ago

Configuring Drupal Modules

Configuring Default Field Output

Default Field Output:

1. Field Wrapper
2. Field Label
3. Field Items Wrapper
4. Field Item Wrapper

Configuring Default Field Output

```
<div class="field field-name-field-myfield">  
  <div class="field-label">My field Label</div>  
  <div class="field-items">  
    <div class="field-item">My input</div>  
  </div>  
</div>
```


User login

Username *

Password *

- [Create new account](#)
- [Request new password](#)

Log in

Michael's Favorite Foods

Favorite Foods:

Pulled Pork

Mac and Cheese

Sweet Tea

```
<div class="field field-name-field-favorite-foods">
  <div class="field-label">Favorite Foods</div>
  <div class="field-items">
    <div class="field-item">Pulled Pork</div>
    <div class="field-item">Mac and Cheese</div>
    <div class="field-item">Sweet Tea</div>
  </div>
</div>
```

```
<div class="field field-name-field-favorite-foods">
  <div class="field-label">Favorite Foods</div>
  <div class="field">
    <div class="field-item">
      <div class="field-item">
        <div class="field-item">Cheese</div>
        <div class="field-item">Sweet Tea</div>
      </div>
    </div>
  </div>
</div>
```

**NOT
SEMANTIC**

```
<h2>Favorite Foods</h2>
```

```
<ul>
```

```
  <li>Pulled Pork</li>
```

```
  <li>Mac and Cheese</li>
```

```
  <li>Sweet Tea</li>
```

```
</ul>
```

```
<h2>Favorite Foods</h2>
```

```
<ul>
```

```
<li>Pulled Pork</li>
```

```
<li>Mac and Cheese</li>
```

```
<li>Sweet Tea</li>
```

```
</ul>
```

HOOORAY

Configuring Default Field Output

Needed Configuration

- Display Suite Module
- Display Suite Extras Module
- Display Suite UI Module
- Structure > Display Suite > Display Suite Extras > Enable Field Templates

Configuring Field Groups

What if I need to wrap one or more fields in a custom wrapper?

E.g. image field + caption field = `<fieldgroup>`

User login

Username *

Password *

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- [Request new password](#)

Log in

Michael at Versailles



Michael's girlfriend thinks Versailles is more interesting than he is


```
<div class="field field-name-field-img">
  <div class="field-items">
    <div class="field-item"></div>
  </div>
</div>
```

```
<div class="field field-name-field-image-caption">
  <div class="field-items">
    <div class="field-item"><b>Michael's girlfriend thinks
Versailles is more interesting than he is</b></div>
  </div>
</div>
```



```
<figure>
```

```
  
```

```
  <figcaption>Michael's girlfriend thinks Versailles is  
more interesting than he is</figcaption>
```

```
</figure>
```

```
<figure>
```

```
  
```

```
  <figcaption>Michael's girlfriend thinks Versailles is  
more interesting than he does.</figcaption>
```

```
</figure>
```

HOOORAY

Configuring Default Field Output

Needed Configuration

- All of the earlier Display Suite stuff
- Fieldgroups

In Conclusion

- The foundation of accessibility is semantic markup
- Display suite extras + custom field templates!
- Display suite can also be used for field collections, paragraphs, users, taxonomy terms, ... any entity!
- Field groups to add custom wrappers to multiple fields

Go Further

- Theme functions
- Field formatters
- Preprocess functions
- tpl.php files

Questions?

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