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XUG
eXtyles User Group Meeting



5 ways eXtyles helps you create accessible content

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1. STRUCTURE YOUR STUFF

1. Structure your stuff

➤ Why?

- Accessible content starts with semantic structure!
- Well-structured content is portable and transformable

1. Structure your stuff

➤ **How?**

- Use eXtyles Paragraph Styling to apply Word paragraph styles
- Create structure and hierarchy, including
 - Heading levels
 - Table structure
- **Save accessible Word file or export accessible XML**

List Paragraph

Normal

List Paragraph

Normal

List Paragraph

Normal

List Paragraph

Normal

1. Pointy things can still be friendly!

In this section, we'll discuss things that are pointy on the outside, but fun and friendly on the inside.

a. Hedgehogs

Hedgehogs are cute and help keep your garden free of pests! How can you not love hedgehogs?

b. Echidnas, aka spiny anteaters

They're monotremes! They eat ants!!

c. Angle brackets

They help you describe your content machines can read!

List item? Really??

H1 Heading Level 1

Txt Body Text

H2 Heading Level 2

Txt Body Text

H2 Heading Level 2

Txt Body Text

1. Pointy things can still be friendly!

In this section, we'll discuss things that are pointy on the outside, but fun and friendly on the inside.

a. Hedgehogs

Hedgehogs are cute and help keep your garden free of pests! How can you not love hedgehogs?

b. Echidnas, aka spiny anteaters

They're monotremes! They eat ants!! What's not to like?



2. CORRECT YOUR CHARACTERS

2. Correct your characters

➤ Why?

- Human eyes can handle some ambiguity; **screen readers can't**
- Multi-platform publication requires consistent character rendering

2. Correct your characters

➤ How?

- Use eXtyles Font Audit to identify unsupported fonts
- Use eXtyles Auto-Redact to
 - standardize to Unicode characters
 - correct misused characters
- **XML exported from eXtyles encodes characters as Unicode entities**

eXtyle



The default font for this document is:
Times New Roman

The following fonts are used in this document:

Supported font: Calibri

Supported font: Times New Roman (as Alternate)

Supported font: Arial (as Alternate)

Supported font: SimSun (Alternate: ????'a8'ac?) (as Alternate)

Supported font: Symbol (Special Character Font)

Supported font: Calibri (as Alternate)

Supported font: Times New Roman CE (as Alternate)

Unknown font: Yu Gothic Light (as Alternate)

WARNING: 1 unknown or unsupported font(s) found. After Activation, use Compare to Baseline to ensure all characters in unknown or unsupported font(s) display correctly.

OK

The RMN system also provides algorithms that permit automatic acquisition of cardiac chamber geometry by combining 360° rotational vectoring around a central axis with gradual catheter pull-back.¶

<p>The RMN system also provides a combining 360° rotational

Not a degree symbol :-)

The RMN system also provides algorithms that permit automatic acquisition of cardiac chamber geometry by combining 360° rotational vectoring around a central axis with gradual catheter pull-back (Fig. 1).¶

<p>The RMN system also provides combining 360° rotational

Degree symbol! :-)

$$y = v_0 \sin \theta_0 \frac{R}{v_0 \cos \theta_0} - \frac{1}{2} g \left(\frac{R}{v_0 \cos \theta_0} \right)^2$$

$$gR^2 - 2v_0^2 \sin \theta_0 \cos \theta_0 R + 2v_0^2 \cos^2 \theta_0 y = 0$$

$$R = \frac{2v_0^2 \sin \theta_0 \cos \theta_0 \pm \sqrt{v_0^4 \sin^4 2\theta_0 - 8gv_0^2 \cos^2 \theta_0 y}}{2g}$$

3. MARK UP YOUR MATH

3. Mark up your math

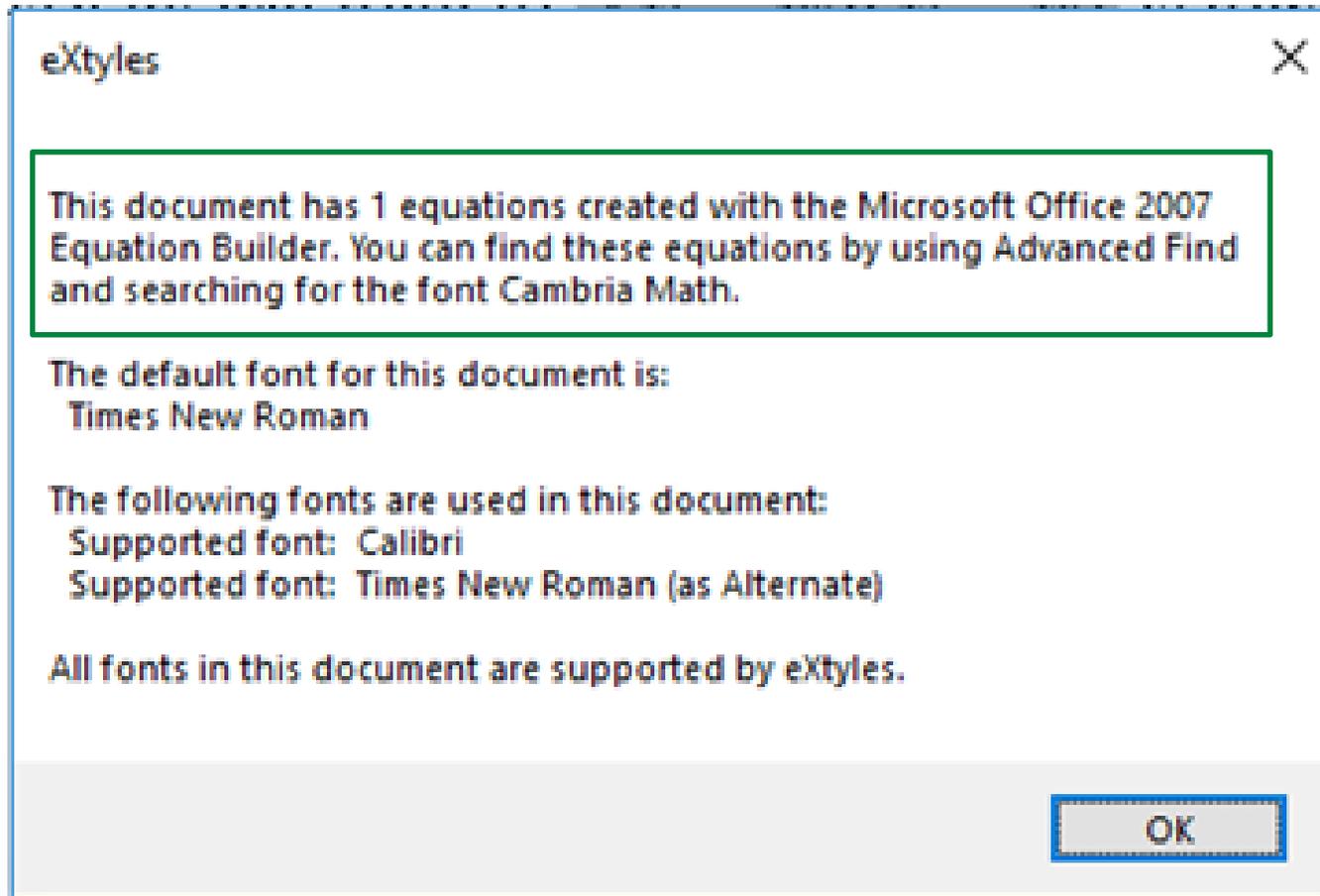
➤ Why?

- Equations and formulae stored as MathML or OMMML are
 - Machine-readable
 - Transformable
 - Interpretable by screen readers
 - Discoverable and searchable
- **Images of them are not**

3. Mark up your math

➤ How?

- Use eXtyles Font Audit to identify Equation Builder equations
 - Use eXtyles Cleanup to de-table equations as needed
 - Use MathType to standardize equation formats
 - Convert Equation Builder to MathType
 - And vice versa
 - Use eXtyles Paragraph Styling to apply appropriate paragraph styles
- **XML exported from eXtyles stores equations as machine-readable MathML or OMML**



A sentence $A(c_1 \dots c_n)$ is a logical truth iff $\forall x_1 \dots x_n A(x_1 \dots x_n)$ is true. ¶

$$A(c_1 \dots c_n) \cdot \text{¶}$$

```

<p>A sentence ? is a logical truth iff <inline-formula><mml:math display="inline" id="m1">
<mml:mrow>
  <mml:mo>⋆;</mml:mo><mml:mi>x</mml:mi><mml:mn>1</mml:mn><mml:mo>⋆;</mml:mo><mml:mi>x</mml:
  mi><mml:mi>n</mml:mi><mml:mi>A</mml:mi><mml:mo stretchy="false">( </mml:mo><mml:mi>x</mml:mi><mml:mn>1<
  /mml:mn><mml:mo>⋆;</mml:mo><mml:mi>x</mml:mi><mml:mi>n</mml:mi><mml:mo stretchy="false">)</mml:
  mo></mml:mrow>
</mml:math></inline-formula> is true.</p>
<disp-formula id="e"><mml:math id="m2"><mml:mi>A</mml:mi><mml:mo>( </mml:mo><mml:msub><mml:mrow><mml:mi>c
</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:mo>⋆;</mml:mo><mml:msub
><mml:mrow><mml:mi>c</mml:mi></mml:mrow><mml:mrow><mml:mi>n</mml:mi></mml:mrow></mml:msub><mml:mo>)</mml
:mo></mml:math> </disp-formula>
  
```



4. INTERPRET YOUR IMAGES

4. Interpret your images

➤ Why?

- Descriptions and alt text make images
 - Machine readable, searchable, discoverable
 - Accessible to those who can't see them
 - More intelligible to those who can

4. Interpret your images

➤ How?

- Create a paragraph style to use for alt text and descriptions
 - Use resources like those we're sharing in the chat to write effective descriptive text
 - Use eXtyles to apply styles for figure titles/captions, alt text, and image descriptions
-
- **XML exported from eXtyles includes alt text in figure groups**

BodyText

The RMN system also provides algorithms that permit automatic acquisition of cardiac chamber geometry by combining 360° rotational vectoring around a central axis with gradual catheter pull-back (Fig. 1).

Figure_Title

■ Figure 1 This is the title of the figure.

Figure_Alt_Text

This is the alternative text paragraph that includes the accessibility caption.

```
<p>The RMN system also provides algorithms that permit automatic acquisition of cardiac chamber geometry by combining 360° rotational vectoring around a central axis with gradual catheter pull-back (<xref ref-type="fig" rid="f1">Fig. 1</xref>).</p>
<fig id="f1" position="float" fig-type="figure"><label>Figure 1</label><caption><p>This is the title of the figure</p></caption>
<long-desc>This is the alternative text paragraph that includes the accessibility caption.</long-desc><
graphic xlink:href="1111-f1"></graphic></fig>
```

Lifft i blatfform 1
a Ffordd allan

Lift to platform 1
and way out



5. LABEL YOUR LANGUAGES

5. Label your languages

➤ Why?

- Humans can deduce code switches via context
- Machines need explicit instructions
- Specifying text language allows correct interpretation
 - Is the word “train” pronounced ['treɪn] or [tʁɛ̃]? *That depends!*

5. Label your languages



5. Label your languages

➤ How?

- Create language-specific paragraph styles
 - E.g., Abstract-Eng, Abstract-Fr, Abstract-Ger
- Use eXtyles to apply styles in Word

➤ **XML exported from eXtyles includes `@xml:lang` attributes**

| | | |
|--|-----------------|--|
| <p>Abstract - EN Head</p> <p>Abstract - EN</p> | <p>English</p> | <p>Abstract¶¶</p> <p>I studied Old English poetry and French Enlightenment drama at university¶¶ so how did I end up explaining XML for a living?¶¶</p> |
| <p>Abstract - FR Head</p> <p>Abstract - FR</p> | <p>Français</p> | <p>Résumé¶¶</p> <p>A l'université, j'ai étudié la poésie anglo-saxonne et le théâtre de l'Age des lumières. Alors comment arrive-t-il que je gagne ma vie en expliquant l'XML?¶¶</p> |

```

39
40 <abstract xml:lang="en">
41 <title>Abstract</title>
42 <p>I studied Old English poetry and French Enlightenment drama at university¶¶ so how did I end up
43 explaining XML for a living?</p>
44 </abstract>
45 <abstract xml:lang="fr">
46 <title>Résumé;sum</title>
47 <p>A l'université, j'ai étudié la poésie anglo-saxonne et le théâtre de l'Age des lumières. Alors comment arrive-t-il que je gagne ma vie en
expliquant l'XML?</p>
48 </abstract>

```

Please read me in English!

Lisez-moi en français svp!

QUESTIONS?

