

Accessible Form Templates (Word)

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Accessible Form Templates (Word) (Slide 1)

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The Basics (Slide 2)

Create a well-structured document using the tools in Word to create an accessible Word document.

The Word document will be the template for the PDF form.

It will also be an alternate format for the PDF form if requested.

Save the finalized Word document as a tagged PDF!

Do not start with an untagged PDF form.

When the PDF opens, do a quality assurance check.

Everything that needs a Tag, has a Tag, the Tags are correct for the content, and the form content is in a logical reading order.

Microsoft Form Controls (Slide3)

Just say no! They are not accessible in Word and don't convert to tagged PDF.

Do NOT use Word Form Controls (Slide 4)

This includes:

Content Controls.

ActiveX form controls.

“Legacy “form controls

Even if you are trying to create an accessible Word form not to be converted, avoid using these form controls.

Figure 1 Word Activex or Legacy form control (left) and Content Control (Right).



Inaccessible Word Forms (Slide 5)

Content Controls do not provide ToolTips that are accessible/

Screen reader users hear “Edit” instead of “Type your name”

They are still keyboard traps.

We are not notified when we enter or exit them.

ActiveX and Legacy form controls are only accessible if you protect the areas of the document that are not form controls.

This means the adaptive technology does NOT have access to informative text or instructions.

In the past few years, these types of forms seem to crash the adaptive technology and or Word.

Why Doesn't Microsoft “Fix” this? (Slide 6)

Even Adobe has a separate tool/application for designing PDF forms.

Acrobat is only used when you have an existing form template.

Microsoft would have to fund the development of an entirely new application that would be just for form design.

There is Microsoft Forms but it is limited in some of the form controls that it includes (no country list).application that

Remember, Adobe's solution to this type of scenario was to buy LiveCycle Designer and then use it to create Form Designer...a separate application designed just for creating forms.

Content Control in Word – 1 (Slide 7)

Figure 2 Form created using a Content Control.



Figure 3 Table of Contents created using Content Controls from the Tables of Content Gallery.

| Contents | |
|------------------------------|---|
| Introduction | 1 |
| Background..... | 1 |
| Historical Perspectives..... | 1 |
| Ontario | 2 |
| Toronto..... | 2 |
| Ottawa | 2 |

Content Control Example in Word – 2 (Slide 8)

Figure 4 Content control in a Word document with text spanning multiple pages (XFA form control).

Multiline Text Form Control Sample

Please share your experience using adaptive technology with PDF documents (maximum 1000 characters).

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme.

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Save time in Word with new buttons that show up where you need them. To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign.

Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device.

Accessible Form Basics (Slide 9)

Use Unicode Fonts! (Slide 10)

Start the design process by using Unicode fonts.

Aria and Times New Roman are PostScript fonts.

Microsoft Calibri (sans-serif) and Cambria (serif) are Unicode fonts.

Microsoft has introduced new fonts: Atpos (sand-serif) and Atpos Serif (serif) font which are also Unicode fonts.

Noto from Google, is a Unicode Google font that includes multilingual character sets.

Unicode font sets typically have more characters and meet ISO standards for Unicode fonts.

Document Properties (Slide 11)

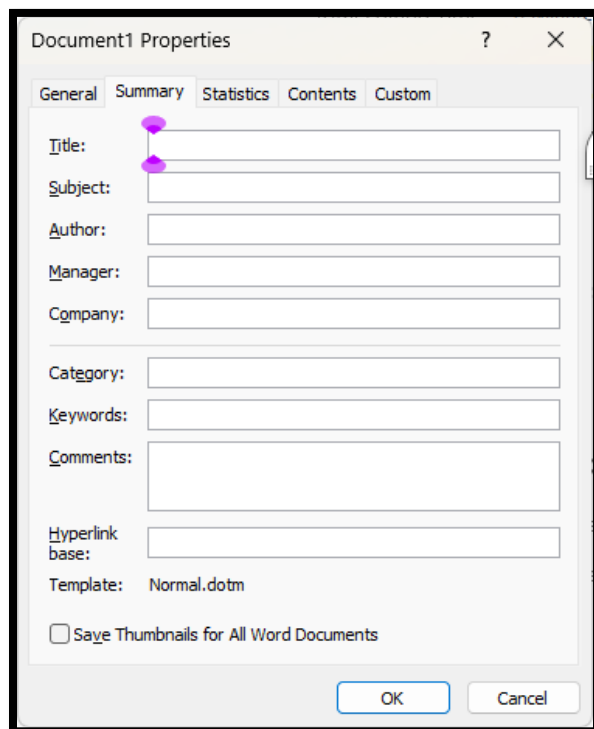
Alt + F, letter I, Q, S to add the document Properties.

Add Keywords for optimal searchability.

If you are working within an organization, the organization or department is the author.

Avoid using the area in the Info tab, it doesn't always convert and the Advanced Properties dialog has more options.

Figure 5 Document Properties dialog in Word.



Title of the Form (Slide 12)

Use the Title Style for the title of the form.

The title of the form can be in a Page Header or Footer but must also be in the main body of the form.

Same with a logo: it can be in the page Header or Footer but validating text must be in the main body of the form.

Figure 6 Form title with logo and text verifying authenticity.



Sequential use of Headings (Slide 13)

Structure the form by major topics/Headings.

Use the same guidance as for any other accessible document.

Heading 1 to Heading 2 and not Heading 1 to Heading 3.

Decide whether to use the Title Style for the document title or H1.

Be consistent throughout the department or organization.!

Figure 7 Part of a form with heading.

A graphic showing a portion of a form. It is enclosed in a black rectangular border. At the top left, the heading "Contact Information." is written in a bold, serif font. Below the heading, there are several labels for form fields, arranged in two columns. The left column contains: "First and Last Name:", "Street Address:", "City: Province:", "Postal Code:", "Home Phone:", and "Word Phone:". The right column contains: "Province:", "Cell Phone:", and "E-mail Address:". The labels are in a regular serif font.

Note: Avoid adding periods after Heading text; I accidentally did this in the preceding graphic.

Logical Arrangement of Information (Slide 14)

Don't arrange questions in terms of space on the page.

Look at what you are asking for and ensure the information is in a logical order.

For example, don't put a suite/apartment number after street address.

Figure 8 Illogical order of information requested.

| | |
|-------------------|---------------------------------|
| Last Name: _____ | First Name: _____ |
| Address: _____ | |
| City: _____ | Postal Code: _____ Apt #: _____ |
| Home Phone: _____ | Work Phone: _____ |
| Email: _____ | |

Accessible Date Format (Slide 15)

With print forms, it was necessary to separate days, months and years.

This is not true in forms.

Make sure that the request for dates (and phone numbers) provides the format in the question.

Figure 9 Poorly laid out birth date area of a form.

| | | |
|------------------|----------|----------|
| Birthdate | | |
| | | |
| Y | M | D |

Figure 10 Poor contrast identifying date format.

| | | |
|----|---|----|
| MM | / | YY |
|----|---|----|

Figure 11 More accessible/usable date layout.

Date (MM/DD/YY):

Phone Number Format (Slide 16)

Provide the format for the date as part of the question.

You can't include it in a ToolTip if it is not in the text label for the question.

Figure 12 Oddly formatted phone number question.

Phone number: () ____/____/____

Figure 13 More accessible/usable phone number format.

Phone number (1-800-555-5555):

Yes/No Questions: Dropdown List (Slide 17)

Ensure that there is enough room to add radio buttons.

Unless you want to use a dropdown list.

If the question is written with Y/N at the end, you **MUST** use a dropdown list, not radio buttons.

Figure 14 Confusing questions with single choice answer.

Sample Confusing Question
This question should be Radio Buttons but the design of the form means you have to use Text form controls.

Gender (M/F)

Have you attended other webinars offered by Karlen Communications? (Y/N)

Yes/No Questions: Radio Buttons (18)

Figure 15 Sample of a Yes/No question with Yes and No separated for radio buttons.

| | | |
|---|-----|----|
| I have previously attended this conference. | Yes | No |
|---|-----|----|

Checkboxes and Radio Buttons (Slide 19)

Do not use symbols to represent either check boxes or radio buttons.

People without disabilities will try to click on them.

People using adaptive technology will hear graphic.

You'll have to make them Artifacts in the PDF form.

Check boxes allow multiple answers.

Radio buttons can only have one answer.

Radio buttons are in a group.

Microsoft Content Controls do not have the capability for radio buttons.

Consistent Placement of Form Controls (Slide 20)

Design the options so that radio buttons or check boxes are consistently placed either before or after the text label for the option.

Choose the shortest path. Avoid staggering form controls for the same question.

Figure 16 Check boxes with an image of a check box to the left of them.

| |
|--|
| Sample Check Box Form Control |
| Please check all areas where you access PDF documents: |
| <input type="checkbox"/> Work. |
| <input type="checkbox"/> Home. |
| <input type="checkbox"/> Education (both formal and informal). |
| <input type="checkbox"/> Leisure. |

Figure 17 Check boxes with indent and no symbol or image of check boxes to the left.

Sample Check Box Form Control

Please check all areas where you access PDF documents:

Work.

Home.

Education (both formal and informal).

Leisure.

Avoid Symbols Representing Form Controls (Slide 21)

Symbols can confuse the PDF remediator.

Symbols can be flagged as graphics needing Alt text.

If the form is printed, someone may try clicking on them.

The PDF remediator must cover up all parts of the symbol.

Figure 18 Visual representation of check boxes that really should be radio buttons.

Which Type of Form Control would You Use?

Which bus stop do you want to be picked up at?

| | | | |
|------------|--------------------------|------------|--------------------------|
| Bus stop A | <input type="checkbox"/> | Bus stop F | <input type="checkbox"/> |
| Bus stop B | <input type="checkbox"/> | Bus stop G | <input type="checkbox"/> |
| Bus stop C | <input type="checkbox"/> | Bus stop H | <input type="checkbox"/> |
| Bus stop D | <input type="checkbox"/> | Bus stop I | <input type="checkbox"/> |
| Bus stop E | <input type="checkbox"/> | Bus stop J | <input type="checkbox"/> |

Avoid Symbols and Underline for Form Controls (Slide22)

Another good argument against using symbols relates to the creativity of the form template author.

Consider what someone should do with the blue dot representing a radio button.

Figure 19 Poorly designed two part answer form.

| | | | | |
|-------------|--------------------------|--|--|--|
| | | | | |
| Vision Loss | <input type="checkbox"/> | | | |
| | | | | |

Two-Part Questions – 1 (Slide 23)

Make sure that two-part questions are clear to the person filling in the form.

Add text asking for the second piece of information.

Don't leave it to the "psychic abilities" of the end-user.

Add the underline in the PDF Editor.

Two Part Questions – 2 (Slide 24)

Figure 20 Poorly designed two part answer form.

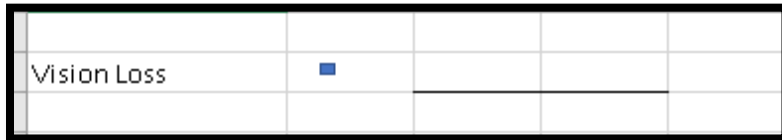
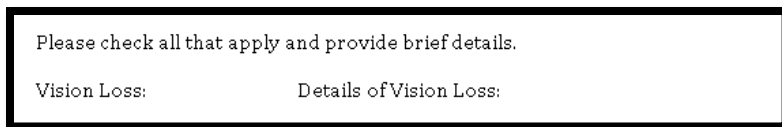


Figure 21 More accessible/usable two part question layout.



Complications to using Underline (Slide 25)

One of the problems with using an underline for visual formatting cues is that they often end up in the Tags Tree and Accessibility Full Checks.

In the PDF Editor, you will need to go to the Content Panel and make them Artifacts...without making any of the text Artifacts.

This is time consuming and adds to the cost of remediation.

Samples of Underline Headaches (Slide 26)

Figure 22 Underline as part of a paragraph in the Tags Tree.

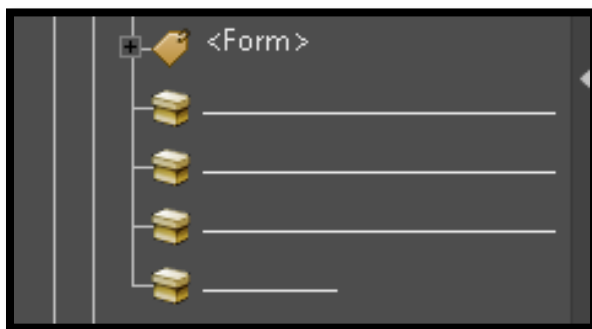
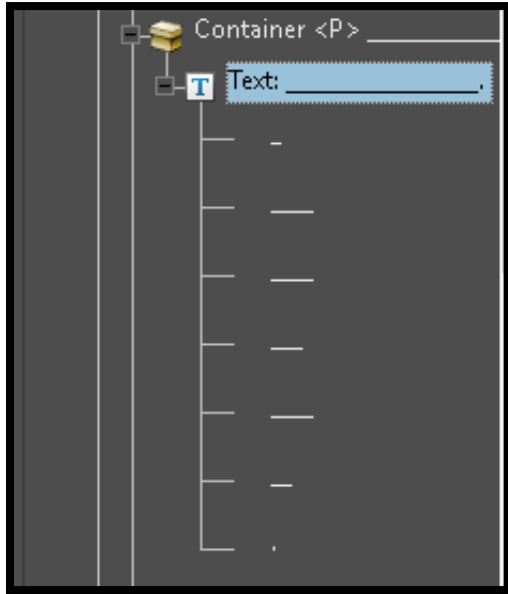


Figure 23 Underline as a paragraph in the Content Panel.



Avoid Tables for Design Layout (Slide 27)

The information in the image on this slide could have easily been reproduced in Word using Styles.

This is information in a table.

When this gets tagged, you will have to remediate the entire page to remove it from the table, make sure that paragraphs have a <P> Tag and lists are constructed correctly.

Right now this is a series of blobs of text.

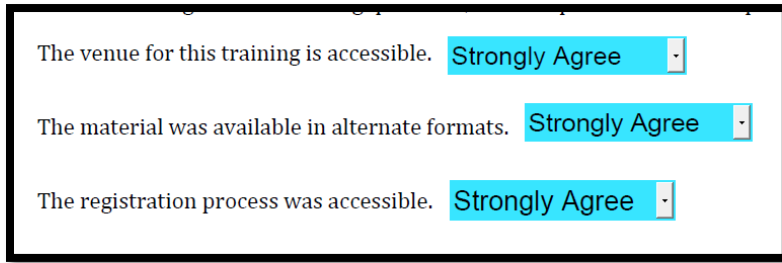
Tables for Rating Question (Slide 28)

Figure 24 Sample of a table used for rating question.

| Question | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| The venue for this training is accessible | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Material was available in alternate formats | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The registration process was accessible. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Rating Questions as Dropdown List (Slide 29)

Figure 25 Rating questions structured as Dropdown lists.



The venue for this training is accessible. Strongly Agree

The material was available in alternate formats. Strongly Agree

The registration process was accessible. Strongly Agree

Tables for “Checklist” (Slide 30)

Must have text in the first column to use as row title/Table Header.

Also must have column titles/Table Headers.

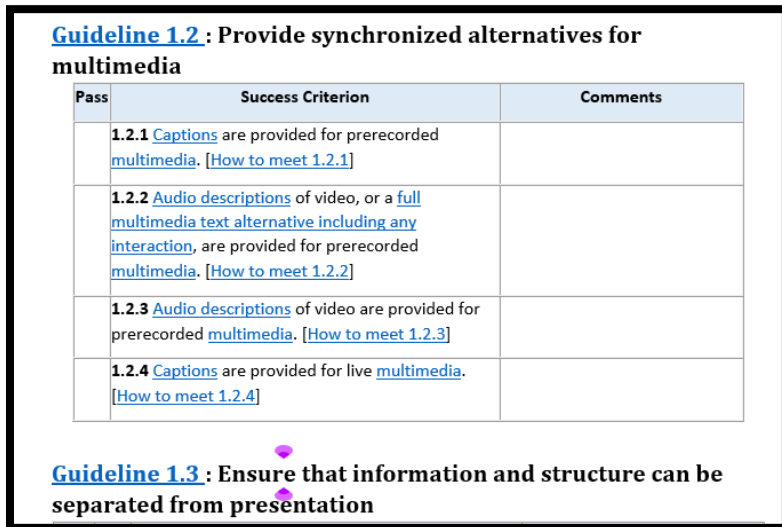
Someone using a screen reader must be able to know what they are filling out.

Also supports those using Text-to-Speech.

Divide content into smaller tables, not one large table.

Bad Example of Table used for Checklist (Slide 31)

Figure 26 Bad example of table with no row titles



Guideline 1.2: Provide synchronized alternatives for multimedia

| Pass | Success Criterion | Comments |
|------|--|----------|
| | 1.2.1 Captions are provided for prerecorded multimedia . [How to meet 1.2.1] | |
| | 1.2.2 Audio descriptions of video, or a full multimedia text alternative including any interaction , are provided for prerecorded multimedia . [How to meet 1.2.2] | |
| | 1.2.3 Audio descriptions of video are provided for prerecorded multimedia . [How to meet 1.2.3] | |
| | 1.2.4 Captions are provided for live multimedia . [How to meet 1.2.4] | |

Guideline 1.3: Ensure that information and structure can be separated from presentation

Good Example of Table used for Checklist (Slide 32)

Figure 27 Table used for WCAG checklist and comments.

| WCAG Success Criteria | Pass/Fail/NA | Comments |
|--|--------------|----------|
| Success Criterion 1.1.1 Non-text Content | Pass | |
| Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded) | Pass | |
| Success Criterion 1.2.2 Captions (Prerecorded) | Pass | |
| Success Criterion 1.2.3 Audio Description or Media Alternative (Prerecorded) | Pass | |

Dropdown List used for Checklist (Slide 33)

Figure 28 A checklist structured as Dropdown List and Text form control for comments.

Success Criterion 1.1.1 Non-text Content. Pass

Comment for Success Criterion 1.1.1 Non-text Content.

Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded). Pass

Comment for Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded).

Cells and Symbols = Disaster! (Slide 34)

Avoid putting symbols representing form controls in table cells.

Keep in mind the spacing, visual accessibility and ability to add form controls!

Figure 29 Symbols used in a single table cell to identify Check Boxes.

Yes No

Yes No

Symbols in Table Cells (Slide 35)

This example is from a form created in Excel and all of this information is in ONE CELL!

To remediate, zoom in Acrobat had to be set at about 800 times

The checkboxes were difficult to visually target ...unless you used the Zoom Tool or screen magnification.

Each is required, making these Y/N form controls, not checkboxes

Figure 30 Poor form design using symbols in a table cell.

Dec: 26*, 27*, 28, 29, 30
Jan: 2*, 3, 4, 5, 6

Use Columns Instead of Tables (Slide 36)

Figure 31 Radio buttons for bus stop question in PDF form.

Which Type of Form Control would You Use?
Which bus stop do you want to be picked up at?

Bus stop A Bus stop F
Bus stop B Bus stop G
Bus stop C Bus stop H
Bus stop D Bus stop I
Bus stop E Bus stop J

Multiline Form Controls (Slide 37)

Figure 32 Multiline text form control in Acrobat after using the auto form detect tool.

Sample Multiline Text Form Control
Please share your experience using adaptive technology with PDF documents.

1
2
3
4
5
6

Figure 33 Multiline form control using a table to provide writing guides.

Sample Multiline Text Form Control
Please share your experience using adaptive technology with PDF documents.

| |
|--|
| |
| |
| |
| |
| |
| |

Correct Layout for Multiline Text (Slide 38)

Whether you do add the writing guides or not (preferable), you use one form control that spans the entire answer range.

Set the form control to auto-size with the amount of content.

Barrier = have to write, interrupt thoughts, press Tab, write, interrupt thoughts, press Tab.

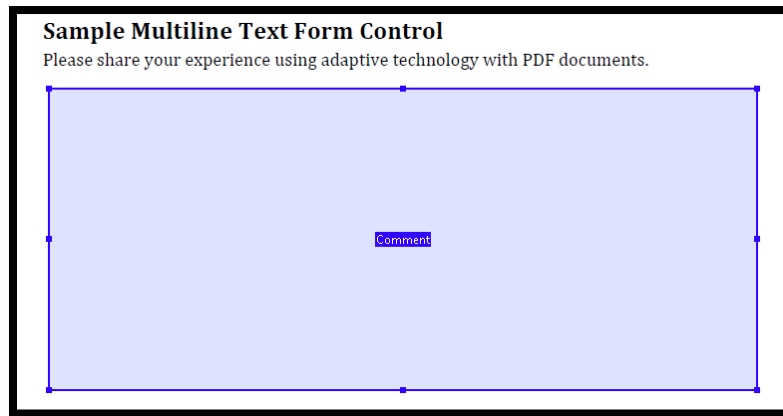
Figure 34 One text form control to add comments as a multiline text entry.

Sample Multiline Text Form Control
Please share your experience using adaptive technology with PDF documents.

| |
|--|
| |
| |
| |
| |
| |

Better Example of Multiline Text (Slide 39)

Figure 35 Accessible multiline text form control.



Use Word Count to Figure Spacing (Slide 40)

Alt + R, W for Review Ribbon, Word Count dialog.

Acrobat text form controls work with characters not words so take note of the two character counts:

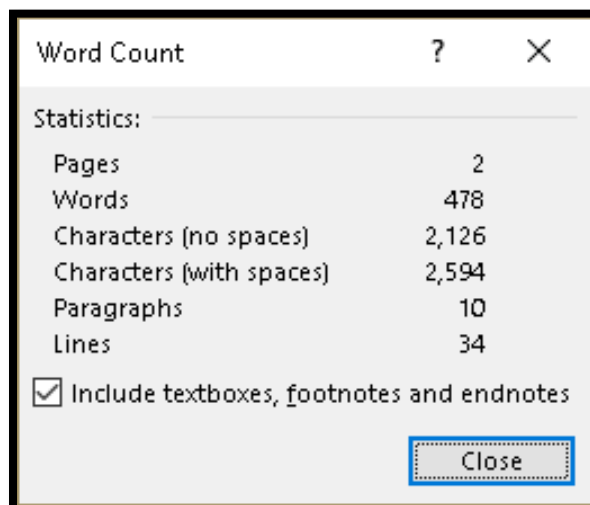
With spaces.

Without spaces.

Let the user know which one you are using.

This image shows the character count for the 10 paragraphs of text or about one page of text..

Figure 36 Word count dialog



Long Answer – 1 (Slide41)

Figure 37 Long answer question with sandbox text.

Please provide the details of your experience in X field.

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme.

Save time in Word with new buttons that show up where you need them. To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign.

Long Answer – 2 (slide 42)

Figure 38 Long answer question broken into two questions with space for answers.

Please provide the details of your experience in X field (500 characters).

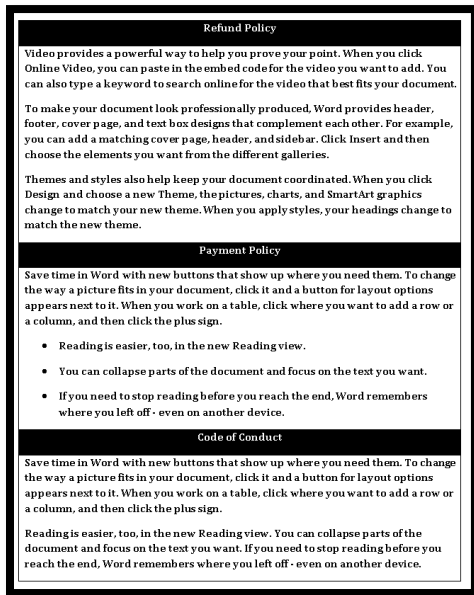
Please provide additional details on why you would make a good candidate for this opportunity (500 characters).

Problem with Using Excel (Slide 43)

Do Not use Excel to design/layout forms.

The entire form will be a Table.

Figure 39 Instructional text in a table.



Digital Signatures (Slide 43)

If you use a Digital Signature/Digital ID, people will need to purchase these certificates; not everyone can afford them.

The “free” Digital IDs are regional and may not be acceptable as a real Digital Signature.

Many people do not have printers!

Figure 40 Two types of digital signature in a form sample.

The form sample shows two options for digital signatures. The first is a signature field with the text 'Signature (print and sign or digitally sign.)' and a blue rectangular input area. The second is a confirming checkbox with the text 'I certify that I have answered all questions accurately (Required)'. Below this is a text field with the text 'By typing your name in this field, you confirm that the information in this document is true (Required)' and another blue rectangular input area.

Calculated Form Controls (Slide 44)

Think carefully about what information you need.

Taxes, number of items versus number of items.

Plan, plan, plan!

Use alignment, ability to have some form controls read only/for example, totals.

Need to use “simple” JavaScript and formulae.

Figure 41 Two types of digital signature in a form sample.

Signature (print and sign or digitally sign.)

As an alternative to a digital signature, you can have a confirming check box and a text field identifying that typing your name is equal to signing the document.

I certify that I have answered all questions accurately (Required).

By typing your name in this field, you confirm that the information in this document is true (Required).

Calculated Form Control Sample – 1 (Slide 46)

Figure 42 Calculated form sample in a table representing an invoice or purchase order.

Calculated Form Sample – Invoice

This is a sample of an invoice where a table has been used for design layout...BUT...only for the area of the form with calculations.

| Item | Quantity | Total Dollar |
|---------------------|----------------------|--------------|
| T-shirt (\$15 CAD) | <input type="text"/> | \$ 0.00 |
| Jacket (\$40 CAD) | <input type="text"/> | \$ 0.00 |
| HST | 13% | \$ 0.00 |
| Total Amount | | \$ 0.00 |

Additional information might appear below the area of calculation in this type of form.

Calculated Form Control Sample – 2 (Slide 47)

Figure 43 Calculated form in Prepare Form mode in Acrobat.

| Item | Quantity | Total Dollar |
|---------------------|--|--|
| T-shirt (\$15 CAD) | <input type="text" value="ShirtQuantity"/> | <input type="text" value="ShirtsTotalDollar \$ 0.00"/> |
| Jacket (\$40 CAD) | <input type="text" value="JacketsQuantity"/> | <input type="text" value="JacketTotalDollar \$ 0.00"/> |
| HST | 13% | <input type="text" value="HST \$ 0.00"/> |
| Total Amount | | <input type="text" value="TotalAmount \$ 0.00"/> |

Resources (Slide 48)

Contact Karen (Slide 49)

Digital Accessibility Consultant and Educator (Microsoft 365, PDFs and PDF forms).

info@karlencommunications.com

Main website:

<http://www.karlencommunications.com>

Self-paced online courses

<https://karen-mccall.teachable.com/>

Accessibilityconsulting.ca:

<https://accessibilityconsulting.ca/>