

## Creating Accessible Documents – Part 2

#### Agenda

We will cover the following topics with 10-minute breaks on the hour.

- Creating accessible forms
- Example PDF Remediation demonstration
- Usability testing with assistive technology (screen reader, magnification, or alternative input devices)



## **Accessible Forms**

## **Options for Forms**

- Online Forms
- Webpage
- PDF Documents
  - MS Word Source file
  - Adobe Acrobat remediation



### **Microsoft Forms**

https://forms.office.com

Accessibility Items:

- Color Contrast
- Accessible Instructions
- Themes moving content



#### Forms in MS Word

Works for simple forms but still needs some remediation in Adobe Acrobat.

- 1. Use underline
- Can use Document Accessibility Toolbar (Vision Australia)

Home Ins	ert Draw De	sign Layout	References Maili	ngs Review V	iew Helj	p Acrobat <mark>Acc</mark>	essibility			Pcc	mments	🖉 Edit	ing 🗸 🚺	🕄 Share 🕞
octitle h1 h4	\Xi Bullets 👻	H Breaks ~	Insert image	Insert table	🗋 тос	💾 Header 🛩	ab Footnote	1≣ -	⊞•	• Normal •	d)	æ 🎸	A (5)	0
tle h2 h:	i ≡ Numbering	÷	Set alt-text	E Set type	TOF	Footer 🖌	Endnote	( <b>=</b> )	$\equiv$	Century Goth ~	3			
ubtitle h3 he	1				ම Link	🎦 Page num 👻	Caption	<u>+=</u>	ΞΞ	11 -	扇	III 🗅	0	
	Structure	com to 30 than a ne If you servi Mich Billin Kindl Billin Billin Billin Billin St	image pletion of the Se days or sconer) three months di w agreement or u agree to the te cas, please have adel.lannell@abl ag Contact y provide your A g Name: g Email: g Address: and a Mailing A	rvices in a time in the unlikely ing the audit a change ord arms of this pro- this documen (360.com.) P contact infor	ly and pr event th process, er to the bosal, and t signed of mation s	oriessional man at a <u>Client</u> bec all deposits will original agreen d would like Ab and returned to	verenzes are rossial area mers unrespo be forteited a ient. Ir to execute t Michael lann ou up in our sy	r custoi nsive fo nd may he stat elli by o	mary y requ ed emaili	Design Is 15 re jire	Charts	Porms	Inspec	ct i v

#### Forms in Adobe Acrobat

Prepare Form tool – Form field auto detection is hit or miss

Manually create form fields

- 1. Enter field name
- 2. Select All Properties
- 3. Add Tooltip
- 4. Save time: Press and hold Control key and drag

Prepare	Form			k	₿	Т	T	2	۲		₽	OK	<b>A</b> i	Ē.	Ć			*	?			
C																						
D		Vo	ter Registrat	ion For	m																	
0		Requ	ired sections are in red																			_
O			Eligibility	Are you a citize	itizen of the United States of America?								Yes	1	lo							
			If you are not a U.S. citizen, or are not old enough to vote	Are you at least 16 years of age and understand that you must be 18 years of age																		
器		1	or preregister to vote, do not submit this form.	on or before election day to vote?								Yes	ſ	10								
Ø			Required.	Will you be at least 18 years of age on or before election day? If you checked "no" in response to both of these age questions, do not submit this form. You are not qualified to vote.								Yes	1	lo								
£0 ∢		2	Print your name	Last name									Suff	ix (Jr,	Sr., II	. III. P	/)					
		2	Required.	First name									Mide	die na	me							_

#### Set tab order in Adobe Acrobat

- 1. Go to Prepare Form tool
- Make sure the form fields are in the order that you want them to be
- 3. Drag up or down to correct
- 4. Notice that having relevant form names will help here



#### **Radio buttons in Adobe Acrobat**

- 1. Add radio buttons
- 2. Select all, Resize/style button
- 3. Enter Group Name
- 4. Enter Tooltip (applies to both radio buttons)
- 5. Enter Choice for each radio button

		Radio Button Propert	ies	×
STATE VOTER REGISTRATION APPLICATION (fields in r	ed text are required) 06w			
Indicate whether you are qualified to vote or preregister to vote b	based on U.S. citizenship and age.			
Are you a citizen of the United IF YOU CHECKED "NO" IN RESPONSE TO THIS <u>CITIZENSHIP</u> QUESTION, DO	d States of America? NOT SUBMIT THIS FORM. YOU ARE <u>NOT</u> QUALIFIED TO VOTE.	General Appearance	e Position Options Actions	
Will you be at least 18 years of age of	on or before election day? Yes No			
Are you at least 16 years of age and understand that you must IF YOU CHECKED "'NO" IN RESPONSE TO <u>BOTH</u> OF THESE YOU ARE <u>NOT</u> QUALIFIED TO REGISTER	be 18 years of age on or before election day to vote? <u>AGE</u> QUESTIONS, DO NOT SUBMIT THIS FORM. TOR PREREGISTER TO VOTE. Yes No	Name:	U.S. Citizen	
2 Provide your full legal name.	Provide your date of birth and identification information.		1	
Last Name Suffix	Date of Birth (MM/DD/YYY) State or Country of Birth		has you a citizen of the United Sta	top of Amorica 7
Last Namo Suffir	Dat / und / undofi State or Country of F	Tooltip:	are you a citizen of the United Sta	ites of America ?
Eirct Namo	NC Driver License or NC DMV ID Number Last 4 Digits of Social Security Number			
Middle Name	Check if you do not have State Voter Registration Number (Optional: To			
Middle Name	Social Security number.			
A Provide your residential address - where you physically live. Do not enter a P.O. Box or a mail drap location.	5 Provide a mailing address.			
Address Number Street Name and Type	Do you receive mail Mailing Address Line 1			
Address N. Street Name and Type	address? Mailing Address Line 1			
Address Line 2 (e.g., apartment, lot or unit number)	Yes No Mailing Address Line 2			
City State Zip Code	a mailing address. Line 3			
City Sta Zip Codo	Mailing Addross Line 3			
County Have you lived at this address If "No", date moved? for 30 or more days?	City State Zip Code			
No Physical Address? If you do not have an address, use the space to the right to illustrate where you normally live or sleep. Write in				
the names of the nearest crossroads (or streets). Draw an X on the map to show where you live or usually sleep.	o Physical Address If you do not have an addr			
IMPORTANT: You should also provide a valid mailing address		Common Proper	ties	
above to permit the board of elections to send you a voter card.	7 periode serve shall a fer entitle internet addition			
Male African American/Black	Provide your choice for political party affiliation.	Form Field:	Visible ~	Read Only
Gender Female	Constitution Party Republican Party			
Not Hispanic/Latino Race Asian Multiracial	Green Party Unaffiliated If you select a party that is not recognized in State,		0 14	Dequired
Ethnicity Hspanic/Latino White Other	you will be registered as Unaffiliated.	Orientation:	o degrees	
Complete if you are currently registered to vote in another NC cou (This information will be used to cancel your previous voter registration in s	unty or in another state. the other county or state.)			
First Name Used in Last Registration Middle Name Used in Last Registration	on Last Name Used in Last Registration Suffix			
Circt Name Used in Middle Name Used	d Last Namo Llood in Last Dogic Cuffiv			
Addross Whore You Ware Last Pour City	State Zip Code of Last E County of Last Pagis	Lockod		
9 Provide your contact information (optional). 1 (This information is helpful if we need to contact you concerning your vote.	r registration. Your contact information may be disclosed as a public record.)	LOCKED		Close
Area Code Phone Number Email Address	Would you like to be contacted to be a poll worker?			
	1 1122 1 1192			

#### **Preview Form in Adobe Acrobat**

- 1. Use Preview button to test out form
- 2. To clear out your entries when you go back to Edit, Select the More Dropdown
- 3. Select Clear Form

▶ 🔁 T 🖽 💌 🐨 🔐		Proview			
Red "no" in response to both of these age questions, do in the level of the second description o	Image: Superior of the set of the s				
irth (mm/dd/yyyy)	III         IIII         IIII         IIIII         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
not P.O. Box)	Zip County	団 Last Name 団 First Name 団 Suffix 団 Middle Name			
as above		III Street 1 III Street 2			

#### Form Tags in Adobe Acrobat

- 1. <Form>
- 2. Field name OBJR
- Nest them appropriately within the tag structure – usually same paragraph tag as the text that corresponds with the field



#### Accessibility Scan in Adobe Acrobat

- 1. Go to Accessibility tool run scan
- 2. Notice that manually created form fields will not be tagged and will have errors in Tagged Annotations and Forms
- Two ways to tag Reading order panel, select Form Field (manual can be slow) OR Find > Select Unmarked Annotations > Find (will highlight element) > Tag Element (faster, but have to create Form tag)

STATE VOTER REGISTRATION APPLICATION (fields in	red text are required)	06w	> Document (2 issues)	6
1 Indicate whether you are qualified to vote or preregister to vote	e based on U.S. citizenship and age.		,	G
Are you a citizen of the Unit if you checked "NO" IN RESPONSE TO THIS CITIZENSHIP QUESTION, I	Ned States of America? SO NOT SUBART THIS FORM, YOU ARE NOT QUALIFIED TO VOTI	res Sto	> Page Content (2 issues)	C.
Will you be at least 18 years of ag	e on or before election day?	Yes So	<ul> <li>Forms (1 issue)</li> </ul>	~
Are you at least 16 years of age and understand that you mu If you CHECKED "NO" IN RESPONSE TO BOTH OF THE YOU ARE NOT QUALIFIED TO REGIST	st be 15 years of age on or before election day to vote? IE AGE QUESTIONS, DO NOT SUBMIT THIS FORM. ER OR MIEREGISTER TO VOTE.	Tes Se	Magged form fields - Failed	()
2 Provide your full legal name.	S Provide your date of birth and identification in	formation.	-	G
ast Name Suffix	Date of Bath (MM/DD/YYY) State or County	ry of Birth	Field 1	
Srg5 Reama	NC Driver License or NC DMV ID Number Last 4 Digits of	Social Security Number	Field 2	6
Kéfa Inana			Field 3	
	Check if you do not have State voter Registration N	Rumber (Optional: 70		4
	Social Security number.		Field 4	
Provide your residential address - where you physically live.     Do not enter a P.O. Box or a mail door location.	Provide a mailing address		Field 5	
oldress Number Street Name and Type	Do you receive mail siteling Address Line 1			
	address?		Field 6	
obress une z (e.g., apartment, lot or unit number)	Yes No Making Address Line 2		Field 7	
Ry State Zp.Code	required to provide analing address Line 3			
			Field 8	
County Have you lived at this address of "No", date move for 30 or more days?	d? City State	2p Code	Field 9	
		NO.5711 .	the second second second second second	



# Usability Testing with Assistive Technology

#### Step 6: Use a screen reader to check

This is an advanced step but provides the end user experience.

Can provide additional screen reader training.

STATE VOTER REGISTRATION APPLICATION (fields in re	ed text are required)	2020.01 06W	/
1 Indicate whether you are qualified to vote or preregister to vote b	ased on U.S. citizenship and age.		
Are you a citizen of the United IF YOU CHECKED "NO" IN RESPONSE TO THIS <u>CITIZENSHIP</u> QUESTION, DO	Yes No		
Will you be at least 18 years of age of	on or before election day?	Yes No	📧 NVDA Speech Viewer 🛛 🕹
Are you at least 16 years of age and understand that you must IF YOU CHECKED "NO" IN RESPONSE TO <u>BOTH</u> OF THESE <u>/</u> YOU ARE <u>NOT</u> QUALIFIED TO REGISTER	Yes No	graphic age. Are you a citizen of the United States of	
2 Provide your full legal name.	Provide your date of birth and identification informat	tion.	araphic
Last Name Suffix	Date of Birth (MM/DD/YYYY) State or Country of Bir	th	Last Name edit blank Provide your choice for political party affiliation: Choice7
First Name "	NC Driver License or NC DMV ID Number Last 4 Digits of Social 5	iecurity Number	radio button not checked 7 of 7 Last Name edit blank
Middle Name	Check if you do not have State Voter Registration Number a driver license or Social Security number.	(Optional: To ww.NCSBE.gov.)	First Name edit blank Middle Name edit blank Suffix edit blank
4 Provide your <u>residential address</u> - where you <u>physically</u> live. Do not enter a P.O. Box or a mail drop location.	5 Provide a mailing address.		unknown
Address Number Street Name and Type Address Line 2 (e.g., apartment, lot or unit number)	Do you receive mail Mailing Address Line 1 at your residential address? Vest No. Mailing Address Line 2		Quick tools tool bar
	If "No", you are		

#### **Creating a Keyboard Shortcut**

			Open
Google	NV	•	Move to OneDrive
Chrome			Open file location
		•	Run as administrator
	<u>dia</u>	S	Share with Skype
		(1)	Scan for threats
Firefox	Hand		Troubleshoot compatibility
			Pin to Start
			Pin to taskbar
2	zo Z		Restore previous versions
VLC media player	Zo		Send to
			Cut
			Сору
त	a		Create shortcut
FSReader 3.0	Ade		Delete
	Acro		Rename
PDF			Propenties

NVDA Prope	rties						
Security General	De	tails Shortcut	Previou	is Versions ompatibility			
	/DA						
Target type:	Application						
Target location:	NVDA						
Target:	Files (x86)	NVDA\nvd	a_slave.exe"	aunchNVDA -r			
Start in:	n: "C:\Program Files (x86)\NVDA"						
Shortcut key:	Ctrl + Alt +	N					
Run:	Normal wir	ndow		$\sim$			
Comment:							
Open File L	ocation	Change le	con	Advanced			
		Ж	Cancel	Apply			

## **Turning NVDA Off**



Preferences	>
Tools	>
<u>H</u> elp	>
Configuration profiles	
Revert to saved configuration	
Reset configuration to factory defaults	
Save configuration	
Donate	
E <u>x</u> it	

#### Turn off with Ctrl + N **Shortcut** = NVDA Key + Q (for Quit)

#### **Initial Set Up**

Welcome to NVDA	×
Welcome to NVDA!	
Most commands for controlling NVDA require you to hold down the NV By default, the numpad Insert and main Insert keys may both be used as You can also configure NVDA to use the CapsLock as the NVDA key. Press NVDA+n at any time to activate the NVDA menu. From this menu, you can configure NVDA, get help and access other NV Options Keyboard layout: desktop	DA key while pressing other keys. the NVDA key. DA functions.
Use CapsLock as an NVDA modifier key	
Start NVDA after I sign in	
∑how this dialog when NVDA starts	
	ОК

- Activate the CapsLock key to be your NVDA Modifier Key
- Referred to as NVDA
   Key in Commands list

### **Turning NVDA On**





Turn on with Ctrl + Alt + N or double clicking the NVDA icon

#### Customizing Settings – Voice and Speech Rate

Preferences	>	<u>S</u> ettings
Tools	>	Speech dictionaries
<u>H</u> elp	>	Punctuation/symbol pronunciation
Configuration profiles		I <u>n</u> put gestures
<u>R</u> evert to saved configuration		
Reset configuration to factory defaults		
Save configuration		
Donate		
E <u>x</u> it		

NVDA Settings: Speech (normal configuration)				×
<u>C</u> ategories:				
General Speech Braile Vision Keyboard Mouse Review Cursor Input Composition Object Presentation Browse Mode Document Formatting Document Navigation Windows OCR Advanced	Synthesizer         Windows OneCore voices         Change         Voice <ul> <li>Automatic Language switching (when supported)</li> <li>Automatic dialect switching (when supported)</li> <li>Automatic dialect switching (when supported)</li> <li>Punctuation/symbol level: none </li> <li>Include Unicode Consortium data (including empi) when processing characters and symbols</li> <li>Include Unicode Consortium data (including empi) when processing characters and symbols</li> <li>Delayed descriptions for characters on cursor movement</li> <li>Capital pitch change percentage</li> <li>Image: Say cap before capitals</li> <li>Beep for capitals</li> <li>Use spelling functionality if supported</li> </ul>			
	ОК	Cancel	App	ly

#### **Customizing Settings - Mouse**

	Preferences	>	<u>S</u> ettings
	Tools	>	Speech <u>d</u> ictionaries
	Help	>	Punctuation/symbol pronunciation
	Configuration profiles		l <u>n</u> put gestures
	Revert to saved configuration		
	Reset configuration to factory defaults		
	Save configuration		
	Donate		
	E <u>x</u> it		

NVDA Settings: Mouse (normal configuration)			$\times$		
<u>C</u> ategories:					
General       Report mouse shape changes         Speech       Image: Enable mouse tracking         Braille       Image: Enable mouse tracking         Vision       Text unit resolution: paragraph ✓         Keyboard       Report role when mouse enters object         Mouse       Play audio coordinates when mouse moves         Review Cursor       Brightness controls audio coordinates volume         Object Presentation       Brightness controls audio coordinates volume         Document Formatting       Ignore mouse input from other applications         Windows OCR       Advanced					
OF	Cancel	App	oly		

#### **Enable Speech Viewer**

<u>P</u> references	>	
Tools	>	View log
Help	>	Speech viewer
Configuration profiles		Braille viewer
Revert to saved configuration		Python console
Reset configuration to factory defau	lts	Manage <u>a</u> dd-ons
Save configuration		Create portable copy
Donato		Run COM Registration Fixing tool
Donate		Reload plugins
E <u>x</u> it		

NVDA Speech viewei	$\sim$
łow to Test with NVDA in Windows.pptx - PowerPoint lide 4 (Enable Speech Viewer) - Slide view	^
	~

#### **Important Commands**

- Silence Speech = CTRL
- Navigate Active Elements = Tab or Shift + Tab
- Back to Top of Page = CTRL + Home
- Read page = up/down arrow
- Select currently focused element = Enter (or Space)

#### Navigating a Page

### Helpful Shortcuts include, skip by:

- Heading = H or Shift + H
- Link = K or Shift + K
- Button = B or Shift + B
- Landmark = D or Shift + D
- Table = T or Shift + T
- List = L or Shift + L
- Graphic = G or Shift + G

## **NVDA Resources**

- NVDA Quick Start Guide
- NVDA User Manual
- <u>Screen Reader Basics</u> NVDA (YouTube) is an older video, but parts are still valuable.

#### **Enabling VoiceOver Mac**





#### **Turn VoiceOver ON or OFF**

Triple tap top right button



Fn + ₩ + F5

#### Turn VoiceOver ON or OFF (Mac)



#### VoiceOver Keys to Activate Commands



VO = Control + Option pressed together  VO + arrows = navigate screen

٠

- VO + SPACE = Open
- VO + Shift + down/up arrow = interact with content
- VO + Command + H

   Navigate by
   heading
- Control = stop speech

### Navigating with the Rotor (Mac)



	0	Tables	5	
oogle Inc. column: column: column:	2 columns, 17 main Portals navig	rows	Landmarks	
	Google nav Alphabet In Links to rela	Hide Commons	Links	
	Navbox na Personal to Namespac Views navi search banner Navigation Interaction Tools navig Print/expor	Wiki Lo Page sa navigat search Google Google Google Google Google Google Google	Headings 1: Google 2: Contents 2: History 3: Financing, 1998 and initial public offering, 2004 3: Growth 3: 2013 onward 3: Acquisitions and partnerships 4: 2000–2009 4: 2010–2012 4: 2014–2016 3: Google data centers 3: Alphabet 2: Products and services 3: Advertising 4: Search engine	

#### **Enabling VoiceOver iDevices**

Settings				
	Notifications	>		
<b>(</b> ()	Sounds & Haptics	>		
C	Focus	>		
X	Screen Time	>		
$\otimes$	General	>		
	Control Center	>		
AA	Display & Brightness	>		
	Home Screen	>		
Ť	Accessibility	>		
*	Wallpaper	>		
	Siri & Search	>		



Accessibility VoiceOver		
VoiceOver	$\bigcirc \circ$	
VoiceOver speaks items on the screen: • Tap once to select an item. • Double-tap to activate the selected item Learn more		
	8	
Speech	>	
Braille	>	
Verbosity	>	
Audio	>	
Commands	>	
Activities	>	
Rotor	>	
Rotor Actions	>	

#### Done VoiceOver Commands VoiceOver speaks items on the screen and provides helpful hints. You can control VoiceOver using a simple set of gestures. Interaction • Tap once to select an item. • Double-tap to activate the selected item.

Swipe three fingers to scroll.

#### **Basic Navigation**

#### To go Home

 Slide one finger up from the bottom edge until you feel the first vibration then lift your finger.

#### To use the App Switcher

 Slide up farther from the bottom until you feel a second vibration then lift your finger.

#### **To use Control Center**

• Slide one finger down from the top edge until you feel the first vibration then lift your finger.

#### **To use Notification Center**

 Slide down farther from the top until you feel a second vibration then lift your finger.



Use VoiceOver gestures to perform actions such as navigating and interacting with items on the screen.

- Touch screen or drag finger read screen
- Flick right/left next/previous item
- **Double tap** select currently focused item
- Two finger scrub back and forth escape
- Two finger tap pause/resume speech
- Three finger triple tap screen curtain

#### Navigating with the Rotor





## **VoiceOver Resources**

- VoiceOver User Guide
- <u>VoiceOver Standard Gestures</u>
- <u>Screen Reader Basics (YouTube)</u>
- Navigating iPhone/iPad with VoiceOver
- <u>Turn on and Practice VoiceOver</u>

## Get in touch

# **Thank You!**

#### Ablr

<u>Web: www.ablr360.com</u> Call: 833-294-2257 Email: <u>kim.casey@ablr360.com</u>



