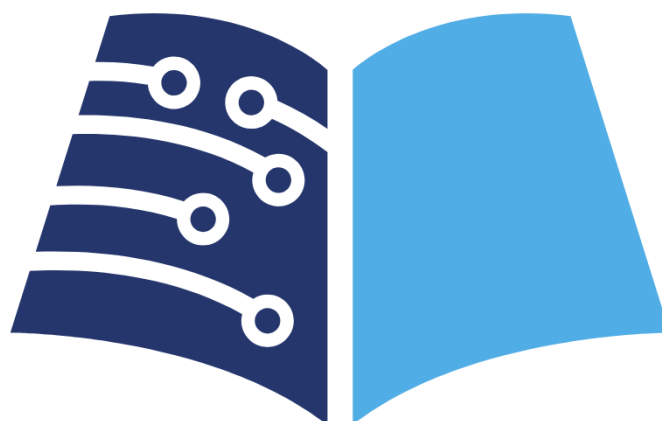




DIGITABILITY

**PROMOTING PEOPLE WITH DISABILITIES' EMPLOYMENT
BY ENHANCING THEIR DIGITAL SKILLS AND COMPETENCES TO SUPPORT
A REMOTE WORKING SCHEME**

Module on: Accessing information online



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A. Accessing information online

Introduction

The development of digital literacy involves as much knowledge of the logic of how the Web works - such as the use of search engines and links - as it does the use of a cognitive component that disregards the fact that one is using an online channel to satisfy one's information need, but at the same time cannot disregard the fact that the abundance of information found online makes the cognitive process itself more complex.

That is why a person mastering a skill such as digital literacy should:

- be familiar with the places online where information can be found;
- be able to use the right keywords to pursue their research;
- make use of tools that deal with the collection of materials from different sources;
- be able to assess the validity of a source, paying particular attention to the phenomenon known as "fake news."

Knowing the main dynamics typical of the web is therefore fundamental, and the functioning of search engines is certainly among them. A user, in fact, cannot consider himself "digitally literate" if he does not know, even at a minimal level, the mechanism behind the generation of search results of a tool such as Google, since the information he can access (based on the keywords entered) depends precisely on the logic behind the so-called "online indexing."

Search engines, therefore, can certainly be considered as the primary online environment in which information can be found. But they are certainly not the only one: from the various wikis, to Quora, passing through Google Scholar, ResearchGate, ScienceDirect without forgetting the TED repository, the tools available to users are really many.

Just as many are also the solutions that allow users not to go in search of content, but to make sure that content reaches users directly: tools such as Feedly, thanks to the ability of users to identify the most authoritative and interesting information sources, facilitate, and not a little, those who are never satiated with learning about and delving into new topics.

Finally, it is interesting to note that today we find ourselves in the same situation as the first generations who had to learn how to apply grammar and syntax appropriately: just as today this is no longer considered a complex task to complete, neither will "using the Internet and information technologies to access, manage, integrate and evaluate information from a wide range of sources accessible through a variety of technological devices" be so in a few years.

In other words, digital literacy is a digital soft skill (for a more in-depth discussion of (digital) skills, please refer to the article *The (digital) skills in the context of digital transformation*) that has now been assimilated into a real basic skill as inescapable as writing, reading and counting: so much so that it is now a curricular skill even in schools.

Digital literacy is now also a skill of great importance in the life of organizations. To succeed in bringing innovation, it is increasingly common to make use of projects aimed at generating Open Innovation, a process through which sources, partners and opportunities for external "contamination" are sought that can inspire and innovate the activities that the organization carries out. With this in mind, knowing how to act a critical and structured reading of information and sources is a basic requirement for each of us.

What is Web Accessibility

Web accessibility means that websites, tools, and technologies are designed and developed so that people with disabilities can use them. More specifically, people can: perceive, understand, navigate, and interact with the Web contribute to the Web

Web accessibility encompasses all disabilities that affect access to the Web, including:

- auditory
- cognitive
- neurological
- physical
- speech
- visual

Web accessibility also benefits people without disabilities, for example:

people using mobile phones, smart watches, smart TVs, and other devices with small screens, different input modes, etc.

older people with changing abilities due to ageing people with "temporary disabilities" such as a broken arm or lost glasses;

people with "situational limitations" such as in bright sunlight or in an environment where they cannot listen to audio;

people using a slow Internet connection, or who have limited or expensive bandwidth.

Accessibility is Important for Individuals, Businesses, Society

The Web is an increasingly important resource in many aspects of life: education, employment, government, commerce, health care, recreation, and more. It is essential

that the Web be accessible in order to provide equal access and equal opportunity to people with diverse abilities. Access to information and communications technologies, including the Web, is defined as a basic human right in the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD).

The Web offers the possibility of unprecedented access to information and interaction for many people with disabilities. That is, the accessibility barriers to print, audio, and visual media can be much more easily overcome through web technologies.

Accessibility supports social inclusion for people with disabilities as well as others, such as:

- older people
- people in rural areas
- people in developing countries

There is also a strong business case for accessibility. As shown in the previous section, accessible design improves overall user experience and satisfaction, especially in a variety of situations, across different devices, and for older users. Accessibility can enhance your brand, drive innovation, and extend your market reach.

1.1 The Learning Objectives Covered by Topic

In completing this Topic, the learner will be able to:

Learn how to access information online:

MS Edge

Google chrome

Safari

Firefox

Opera

Search Engines Accessibility Management:

Google

Activate and enable accessibility features related to each specific impairment

2. Accessibility for People with Hearing Impairments

Digital accessibility is a key pillar in the design of modern technologies, with the goal of ensuring that every individual, regardless of ability, can take full advantage of the digital resources available to them. People with hearing impairment face specific challenges in this context, and Microsoft Edge has made a distinct commitment to creating an inclusive digital environment through several accessibility features designed specifically to meet their needs.

Subtitles and Transcripts: A Text Bridge for Multimedia Content.

Among the many features that make Microsoft Edge a cutting-edge browser in terms of accessibility for people with hearing impairments, subtitles and transcripts emerge as a key resource. The ability to integrate real-time subtitles and access full transcripts while viewing online audiovisual content is a significant step forward. This not only enables people who are deaf or hard of hearing to fully enjoy video and other multimedia content, but also provides critical support for those who prefer a text-based approach to information.

Automatic Subtitle Translation: Overcoming Language Barriers

The innovative automatic subtitle translation feature further expands accessibility. This tool not only facilitates comprehension for those who may have difficulty with the original language of the video, but also extends the benefit to users with hearing impairment and limited language skills. The ability to customize the language of subtitles according to individual preferences opens new doors to access previously inaccessible content.

Visual Feedback: A Multisensory Approach.

Online browsing can involve a range of sounds that, while crucial to a complete experience, may elude people with hearing impairment. In response to this challenge, Microsoft Edge offers a visual feedback system, which signals important sound events through distinct visual cues. This feature aims to ensure that users with hearing impairment do not miss relevant information and can fully participate in interactive Web experiences.

Volume Adjustment and Visual Indicators: Hearing Experience Personalization.

Personalization of the auditory experience is another crucial aspect of accessibility offered by Microsoft Edge. The ability to adjust volume in detail to suit individual needs, along with visual indicators that provide clear information about the current sound level, helps create a navigation environment tailored to users with hearing devices and personal preferences.

Support for Assistive Technologies: An Accessible Ecosystem.

Seamless integration with a wide range of assistive technologies positions Microsoft Edge as a reliable partner for those using devices as screen readers. The browser is designed to ensure that online information is easily accessible to all people, regardless of their hearing abilities.

2.1 Exercises:

Windows lets you convert stereo sound into a single channel so you can hear everything, even if you're using just one headphone. Select the Start button, then select Settings > Accessibility > Audio, and then switch on the Mono audio toggle.

Display audio alerts visually

If you have trouble hearing audio alerts, you can have your PC display them visually. Select the Start button, then select Settings > Accessibility > Audio .

Under Flash my screen during audio notifications, choose how you want audio alerts displayed. You can choose to have the title bar of the active window, the active window, or the entire screen flash when a notification arrives, instead of relying on sound alone.

Make notifications stick around longer

By default, Windows notifications disappear five seconds after they appear. If you want more time to read them, you can increase how long they're displayed.

Select the Start button, then select Settings > Accessibility > Visual effects. Then, under Dismiss notifications after this amount of time, choose the amount of time you want.

Captions

Windows lets you customize things like the color, size, and background of closed captions. Select the Start button, then select Settings > Accessibility > Captions . Then, under Caption style, choose how you want captions to be displayed.

Change caption settings

Captions let you read the words spoken in the audio portion of a video, TV show, or movie. To define how the captions appear in Windows and some Windows apps, you can select one of the predefined caption options or customize an option to better suit your needs.

Select (Start) > Settings > Accessibility > Captions.

In Caption style, expand the menu, select one of the predefined options, and see how it appears in the preview.

To customize the selected predefined option, select Edit and then modify the option details to your liking.

Hear all sounds in one channel

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Watch instead of listening

Use text or visual alternative to sounds

You can get visual cues instead of sound alerts in Windows by changing your settings.

Here's how.

Select (Start) > Settings > Accessibility > Audio.

Expand the Flash my screen during audio notifications dropdown menu and select the option you want.

Autogenerate captions for videos

Get Microsoft Stream: <https://www.microsoft.com/en-us/microsoft-365/microsoft-stream?rtc=1>

Generate automatic captions and a transcript for your Microsoft Stream videos:

<https://learn.microsoft.com/en-us/stream/portal-autogenerate-captions>

3. Google Chrome Accessibility for Individuals with Hearing Impairments

Google Chrome is committed to providing an inclusive browsing experience, particularly for individuals with hearing impairments. This chapter explores key features and functionalities designed to meet the needs of users with hearing challenges.

Compliance with Accessibility Standards:

Google Chrome adheres to the Web Content Accessibility Guidelines (WCAG), ensuring that online content is accessible to all users, regardless of their hearing abilities.

Automatic Subtitle Generation:

One prominent feature of Google Chrome benefiting individuals with hearing impairments is its ability to generate automatic subtitles for videos. When watching a video with audio on a webpage, Chrome can automatically create real-time subtitles, enhancing accessibility for those with hearing difficulties.

Compatibility with Assistive Technologies:

Google Chrome provides advanced support for assistive technologies such as screen readers and text enlargement software. These tools enable effective web content access

for individuals with hearing impairments. The browser is designed to seamlessly interact with assistive technologies, ensuring smooth and intuitive navigation.

Accessibility Extensions:

Users can further customize their experience by integrating accessibility extensions. By visiting the Chrome Web Store and searching for "accessibility," users can find extensions tailored to their specific needs. The installation process is straightforward, allowing users to adapt the browser to their unique requirements.

Keyboard Navigation and Voice Commands:

Google Chrome facilitates a more accessible browsing experience by offering features for keyboard navigation and voice commands. These options allow individuals with hearing impairments to interact with the browser without relying solely on audio input.

Text Display Customization:

Chrome provides options to customize text display, including the ability to enlarge text for easier reading. These features cater to individuals with both visual and hearing impairments, ensuring a more versatile and accommodating user interface.

In conclusion, Google Chrome is dedicated to delivering an inclusive web browsing experience, implementing a range of features and functionalities to meet the needs of individuals with hearing impairments. The addition of custom extensions through the Chrome Web Store further amplifies accessibility, enabling users to tailor the browser to their specific needs.

3.1 Exercises:

Exercise 1: Enabling Automatic Subtitles

Visit a platform offering videos with audio, such as YouTube.

Play a video.

During playback, click on the video settings icon.

In the subtitle section, enable the "Automatic subtitles" option if not already active.

Observe how subtitles are automatically generated in real-time.

Exercise 2: Exploring Accessibility Extensions

Visit the Chrome Web Store.

Use the search bar and enter "accessibility."

Examine various accessibility extensions, such as those enhancing text readability or providing sound feedback.

Choose an extension that seems suitable for your needs.

Click on "Add to Chrome" and confirm the installation.

Test using the extension on a webpage of your choice.

Exercise 3: Keyboard Navigation

Choose a website and navigate using only the keyboard, avoiding mouse interaction.

Use the "Tab" key to move between interactive elements on the page.

Experiment with using "Enter" to select a link.

Use keyboard shortcuts like "Ctrl + T" to open a new tab and "Ctrl + W" to close it.

Exercise 4: Voice Commands

Enable Chrome's voice recognition feature.

4. Safari for people with hearing impairments

Accessibility features serve as valuable tools, facilitating easy technology use for individuals with disabilities. Notable examples include text-to-speech software, sequential heading structures, and image alt text.

The Web Content Accessibility Guidelines (WCAG), developed by the World Wide Web Consortium's Web Accessibility Initiative (WAI), offer recommendations for enhancing web content accessibility for individuals with disabilities.

The Americans with Disabilities Act (ADA) mandates web content accessibility, and Safari, as Apple's default browser, incorporates numerous features, such as text and image enlargement, page reading, and built-in accessibility tools like screen readers, ensuring full compliance.

Understanding accessibility basics enables companies to contribute to inclusivity.

Keyboard accessibility is crucial for those reliant on keyboard navigation, emphasizing the need for consistent navigation formats across websites. Image alt text, text-to-speech

readers, and accessible hyperlinks play pivotal roles in enhancing the web experience for visually impaired or dyslexic users.

Sequential heading structures ensure organized content presentation, while Autofill in Safari streamlines form completion. Screenshot accessibility through AssistiveTouch simplifies the process for taking screenshots with one hand.

Various web browsers, including Firefox and Google Chrome, are available, but Safari offers specific accessibility options for Mac OS X and iOS users. Users can magnify their screens with simple keyboard commands and customize font styles and colors in Safari for improved readability.

1.

4.1 Exercises

Screenshot Accessibility

AssistiveTouch can help take screenshots by tapping on the screen (using one hand).

Turn on AssistiveTouch by going to Settings > General > Accessibility > AssistiveTouch.

Tap on Customise Top Level Menu... > tap on the Custom (star) icon > tap on Screenshot > tap on Done (upper-right).

Then take a screenshot at any time: tap on the floating menu button > tap on Screenshot.

There are multiple web browsers that are available for use, such as firefox, google chrome, and Safari. The Safari browser for Mac OS X and apple iOS offers a couple of specific accessibility options for those with disabilities. Let's take a step-by-step look at each one. **Magnify Your Screen**

This accessibility feature allows the user to increase and decrease the size of text and images on the screen for better visibility. Here are basic instructions for how to magnify the screen while using Safari:

Press and hold the COMMAND key on the keyboard.

While holding down the COMMAND key:

Press the “+” key to enlarge the text and images or

Press the “-” key to decrease the size of the text and images.

Continue to press the “+” or “-” keys while holding down COMMAND until the desired size is reached. Choose Colors and Fonts on Web Pages

By customizing the colors and fonts on web pages, those with visual sensitivities, impairments or dyslexia can select the colors and fonts that are easy for them to read.

Here are basic instructions on how to change the type of font, size and color of the font, and the background color on the Safari browser:

Select the Safari Menu

Select “Preferences”

Select “Appearance,” the second option to the right.

Under the “Standard Font” tab, choose the “Select” button.

Choose the preferred font style, size, and color from the available options.

Click “OK” on the Preferences Screen Here are basic instructions on how to set the minimum font size for all web pages:

Select the Safari Menu

Select “Preferences”

Select “Advanced,” the option on the far right.

Under the “Universal Access” tab, find the “Never use font sizes smaller than” dropdown box and select the preferred font size from the dropdown menu.

Click “OK” on the Preferences Screen

5. Safari for people with hearing impaired people

The Apple Safari user experience has been thoughtfully crafted to enhance accessibility and meet the needs of individuals with hearing impairments. The following features aim to facilitate interaction with the device and improve connectivity without relying on auditory cues.

1. Live Captions

Real-time captions serve as a crucial support for the deaf or hard of hearing. This feature provides on-device-generated transcriptions during conversations, phone calls, FaceTime, and web browsing. Live Captions can be customized for size, placement, fonts, and colors to suit individual preferences.

Available on: iPhone, iPad, Mac

2. Personalized Audio for AirPods Pro

Audio innovations for AirPods Pro enhance the overall audio experience in noisy environments. Conversation Boost focuses on the voice of the person in front of you, making face-to-face conversations clearer. Personalized Volume uses machine learning to optimize the media experience based on environmental conditions and listening preferences.

Available on: iPhone, iPad, AirPods Pro

3. Made for iPhone Hearing Devices

Apple has collaborated with leading manufacturers to create hearing aids, cochlear implants, and sound processors specifically designed for Apple devices. These devices

offer excellent sound quality, useful features, and are as easy to set up and use as any other Bluetooth device.

Available on: iPhone, iPad, Mac

4. Headphone Accommodations

Customize audio for headphones based on individual hearing needs. Amplify soft sounds and adjust frequencies according to preferences. Headphone Accommodations also allows users to go through listening tests to create up to nine unique profiles.

Available on: iPhone, iPad, AirPods Max, AirPods Pro, AirPods, EarPods, Powerbeats, Powerbeats Pro, Beats Solo Pro

5. Sound Recognition

Sound Recognition listens for specific sounds and notifies users when detected. This feature recognizes 15 different sounds or can be trained to listen for unique electronic sounds in the user's environment. Users receive notifications when a particular sound or alert is detected.

Available on: iPhone, iPad

6. FaceTime

FaceTime provides an excellent platform for communication in sign language with high-quality video and a fast frame rate. The feature detects sign language use in Group FaceTime calls, automatically highlighting the user. Live Captions in FaceTime transcribe speech in one-on-one and group calls with speaker attribution.

Available on: iPhone, iPad, Mac, Apple TV

7. Live Listen

Live Listen is an assistive listening feature facilitating conversations in noisy places. By turning on the feature, the device picks up audio through the microphone and sends it to wireless headphones or Made for iPhone hearing devices, improving clarity.

Available on: iPhone, iPad, AirPods Max, AirPods Pro, AirPods, Powerbeats Pro, Beats Fit Pro, Made for iPhone hearing devices

8. Sensory Alerts

Visual or vibrating alerts for incoming calls, FaceTime, new text messages, emails, and calendar events. Users can choose LED light flash for incoming calls or have the device display a photo of the caller.

Available on: iPhone, iPad, Mac, Apple Watch

9. Real-Time Text (RTT)

Make and receive RTT calls directly on the device. RTT provides instant transmission of a message as it is being composed, and Live Captions can be used to display captions during phone calls.

Available on: iPhone, iPad, Mac, Apple Watch

10. Mono Audio

Balance stereo audio by playing both audio channels in both ears. Adjust the balance for greater volume in either ear.

Available on: iPhone, iPad, Mac, Apple Watch, Apple TV

11. Closed Captions

Customizable captions for movies, TV shows, and podcasts. Closed captions transcribe speech and capture nonverbal communication, music, and sound effects. Customize captions with different styles and fonts.

Available on: iPhone, iPad, Mac, Apple TV

12. Messages

Messages offer multiple communication modes, including transcribed audio messages, allowing users to send messages without hearing them. Expressive communication options include photos, videos, memoji, and stickers.

Available on: iPhone, iPad, Mac, Apple Watch

13. Noise App

The Noise app tracks ambient sound decibel levels, helping identify when sound levels could negatively affect hearing. Control Center on Apple Watch shows if sounds playing through headphones reach unsafe levels.

Available on: Apple Watch

14. Siri

Siri, the digital assistant, can assist through the keyboard. Type to Siri makes it easy to get help using the keyboard on Apple Watch. Siri can also announce notifications for iPhone and iPad through Made for iPhone hearing devices.

5.1 Exercises

Exercise 1: Enable Subtitles on a Video

Open Safari:

Click on the Safari icon on your home screen or in the dock of your device.

Navigate to YouTube:

Use the Safari search bar to find a video on YouTube.

Select a Video:

Click on the title of a video to open it.

Activate Subtitles:

Look for the subtitles icon in the video area and click on it.

Verify if the subtitles are enabled and experiment with turning them on and off.

Exercise 2: Customize Safari Audio Settings

Open Safari:

Launch Safari on your device.

Visit a Webpage with Multimedia Content:

Find a webpage with audio or video content.

Adjust the Volume:

Locate the volume control on the side or bottom of the screen and adjust it.

Experiment with increasing and decreasing the volume.

Modify Audio Settings:

In Safari settings, look for the option to modify audio settings.

Change the pitch or other parameters according to your preferences.

Exercise 3: Use Safari's Visual Indicators

Open Safari:

Start Safari on your device.

Open Multiple Webpages:

Open several tabs or windows in Safari.

Observe Visual Indicators:

Note the visual indicators when a page is fully loaded.

Try temporarily disconnecting from the network to see connection error indicators.

Exercise 4: Connect with Hearing Assistance Devices

Open Device Settings:

Access the settings on your device.

Enable Bluetooth Connection:

Ensure that Bluetooth is enabled.

Search for Hearing Assistance Devices:

In the settings, look for the section dedicated to Bluetooth devices and search for your hearing assistance devices.

Connect the Devices:

Connect your hearing assistance devices to your device and ensure Safari properly transmits the audio.

Exercise 5: Explore Safari's Interactive Guides

Open Safari:

Launch Safari on your device.

Search for an Interactive Guide:

Use the Safari search engine to find interactive guides on using the browser.

Follow the Instructions:

Follow the instructions displayed on the interactive guide to learn how to navigate Safari without relying on audio explanations.

Exercise 6: Collaborate with Automatic Transcription Services

Find a Video with Audio:

Search for a video with audio content on Safari.

Activate Automatic Transcription:

Use an automatic transcription service of your choice to convert the audio of the video into text.

Verify Accuracy:

Check the automatic transcription to ensure it accurately reflects the audio content of the video.

6. Accessibility for People with Hearing Impairments

Accessibility is a core consideration in the development of digital tools, and FireFox is dedicated to providing an inclusive web browsing experience for users with various abilities. For individuals with hearing impairments, FireFox implements features and tools that enhance accessibility, ensuring that everyone can engage with online content effectively.

Caption Support for Videos

One essential feature for users with hearing impairments is the availability of captions for videos. FireFox strives to support and display captions accurately, allowing users to read text transcriptions of spoken content. This ensures that individuals who are deaf or hard of hearing can fully comprehend and enjoy multimedia content.

Visual Alerts and Notifications

To accommodate users who may not rely on auditory cues, FireFox incorporates visual alerts and notifications. These visual indicators notify users about events such as new messages, downloads, or updates, ensuring that important information is conveyed through multiple sensory channels.

Customizable Visual Alerts

Recognizing the diversity of hearing impairments, FireFox allows users to customize visual alerts further. This includes adjusting the size, color, and duration of visual notifications, providing flexibility to match individual preferences and needs.

Tactile Feedback for WebRTC Calls

For users who may use WebRTC (Web Real-Time Communication) for video or voice calls, FireFox enhances the experience with tactile feedback. This feature allows users to receive vibrations or other tactile signals during incoming calls, providing an additional way to be alerted when sound may not be effective.

Subtitle Options for Audio Content

In addition to video captions, FireFox offers subtitle options for audio content. This feature enables users to access text transcriptions for podcasts, interviews, or other audio-based content, enhancing the understanding and enjoyment of auditory information.

6.1 Exercises

Exercise 1: Enable and Verify Video Captions

Objective: Learn to enable and verify video captions in FireFox.

Open FireFox:

Launch FireFox and navigate to a video platform, such as YouTube.

Select a Video:

Choose a video of your preference.

Enable Captions:

Look for the captions or settings icon within the video player.

Enable captions or subtitles for the video.

Verify Caption Accuracy:

Ensure that the captions are displayed accurately and synchronized with the spoken content.

Pay attention to how FireFox handles various caption formats.

Exercise 2: Customize Visual Alerts

Objective: Customize visual alerts to accommodate individual preferences for users with hearing impairments.

Access FireFox Settings:

Open the FireFox menu and navigate to "Settings" or "Preferences."

Find Visual Alert Options:

Look for options related to visual alerts or notifications.

Customize Visual Alerts:

Adjust settings such as size, color, and duration of visual alerts.

Save the changes.

Test Visual Alerts:

Trigger a test notification (e.g., open a new tab) to observe the customized visual alerts in action.

Exercise 3: Explore Subtitles for Audio Content

Objective: Explore subtitle options for audio content to enhance accessibility.

Visit an Audio Content Platform:

Go to a platform that provides audio content, such as a podcast website.

Select Audio Content:

Choose an audio file, podcast episode, or other audio-based content.

Enable Subtitles or Transcriptions:

Look for options to enable subtitles, transcriptions, or text alternatives for the audio content.

Verify Subtitle Accuracy:

Ensure that subtitles are accurate and synchronized with the audio content.

Evaluate the effectiveness of FireFox in providing accessible alternatives for audio-based information.

7. Opera Accessibility for People with Hearing Impairments

Opera, a versatile web browser, is dedicated to providing an accessible and inclusive online experience for users of all abilities. For individuals with hearing impairments, Opera incorporates various features and functionalities aimed at enhancing accessibility and ensuring a seamless browsing experience.

Visual Indicators for Sound Alerts

Recognizing the importance of visual cues for users with hearing impairments, Opera integrates visual indicators for sound alerts. This ensures that users are alerted to important events, such as new messages or notifications, through visible signals, enhancing the overall browsing experience.

Subtitle Support for Multimedia Content

Opera understands the significance of subtitles for users with hearing impairments and strives to support multimedia content with clear and accurate subtitles. Users can enable subtitles for videos and other multimedia elements, allowing them to access information presented in auditory formats.

Tactile Feedback for Notifications

To cater to individuals who may benefit from tactile feedback, Opera incorporates features that provide vibrations or other tactile signals during notifications. This additional layer of feedback ensures that users with hearing impairments can be alerted to important events without relying solely on auditory cues.

Customizable Visual Alerts

Opera offers customizable visual alerts to accommodate the diverse needs and preferences of users with hearing impairments. Users can tailor the size, color, and duration of visual alerts, providing a personalized experience that aligns with their unique requirements.

Speech-to-Text Functionality

Understanding the importance of facilitating communication, Opera incorporates speech-to-text functionality. Users can utilize this feature to convert spoken words into text, enhancing the accessibility of voice-based interactions within the browser.

7.1 Exercises:

Exercise 1: Enable Visual Indicators for Sound Alerts

Open Opera and navigate to the browser settings.

Locate the section related to sound alerts or notifications.

Enable visual indicators for sound alerts.

Test the functionality by triggering a test notification and observing the visual indicator.

Exercise 2: Enable and Verify Subtitles for Multimedia Content

Visit a website with multimedia content that supports subtitles (e.g., a video streaming platform).

Enable subtitles within the multimedia player settings.

Verify that subtitles are displayed accurately and synchronized with the content.

Exercise 3: Customize Visual Alerts for Accessibility

Access Opera's settings and find the section related to visual alerts.

Customize visual alert preferences, such as size, color, and duration.

Trigger a test notification to ensure the customized visual alerts are effective.

Exercise 4: Explore Tactile Feedback Options

Access Opera's settings and navigate to the section related to tactile feedback.

Explore options for enabling tactile feedback during notifications.

Test the functionality by triggering a test notification and feeling the tactile feedback.

Exercise 5: Utilize Speech-to-Text Functionality

Enable speech-to-text functionality in Opera's settings.

Use the speech-to-text feature to convert spoken words into text.

Experiment with different voice inputs and observe the accuracy of the text conversion.

B. Search Engines Accessibility Management

1. Accessibility for People with Hearing Impairments

Google is committed to providing an inclusive online experience for users with diverse abilities, including those with hearing impairments. This chapter explores features and functionalities within Google designed to enhance accessibility for individuals facing hearing challenges. By addressing specific needs, Google aims to create a more inclusive digital environment for everyone.

Captioning Support for Videos

Google ensures comprehensive captioning support for videos across its platforms, including YouTube. Users with hearing impairments can enable captions to access textual transcriptions of spoken content, enhancing their understanding and enjoyment of multimedia content.

Visual Alerts and Notifications

To accommodate users who may not rely on auditory cues, Google incorporates visual alerts and notifications. Visual indicators notify users about events such as new messages, updates, or alerts, ensuring that important information is conveyed through multiple sensory channels.

Customizable Visual Alerts

Recognizing the diversity of hearing impairments, Google allows users to customize visual alerts further. This includes adjusting the size, color, and duration of visual notifications, providing flexibility to match individual preferences and needs.

Tactile Feedback for Video Calls

For users who engage in video calls, Google enhances the experience with tactile feedback. This feature allows users to receive vibrations or other tactile signals during

incoming calls, providing an additional way to be alerted when sound may not be effective.

Subtitle Options for Audio Content

In addition to video captions, Google offers subtitle options for audio content. This feature enables users to access text transcriptions for podcasts, interviews, or other audio-based content, enhancing the understanding and enjoyment of auditory information.

2.

1.1 Exercises

Exercise 1: Enable and Verify Video Captions

Open YouTube and play a video.

Enable captions in the video player settings.

Verify that captions are displayed accurately and synchronized with the spoken content.

Exercise 2: Customize Visual Alerts

Access Google settings on your device.

Navigate to the section related to visual alerts or notifications.

Customize the visual alert preferences, such as size, color, and duration.

Trigger a test notification to ensure the customized visual alerts are effective.

Exercise 3: Explore Subtitles for Audio Content

Visit a podcast platform or audio content website.

Locate audio content with available subtitles or transcriptions.

Enable subtitles and verify their accuracy and relevance to the audio content.

10. Resources

[Use the APA citation style – see <https://www.library.cornell.edu/research/citation/apa> for details]

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DIGITABILITY



DIGITABILITY

**PROMOTING PEOPLE WITH DISABILITIES' EMPLOYMENT
BY ENHANCING THEIR DIGITAL SKILLS AND COMPETENCES TO SUPPORT
A REMOTE WORKING SCHEME**



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