FAST
Facilitating Accessibility
in Support of Tourism

FAST training course

Module 5: ICT - Accessibility of Digital Content for People With Disabilities

Introduction

This module is divided into **3 units**, where ATFs will learn about the importance of **digital accessibility** as a feature that allows as many people as possible to view the digital content as easily as possible.

Contents:

- Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain

- Unit 2: Preparing accessible digital content (texts, multimedia, social media posts) and accessible digital documents (Word, PDF)

- Unit 3: How to check if digital content and information is accessible

2020-1-SI01-KA202-075871

Learning goals

In this module, the ATF will learn about different types of disabilities and their related ICT needs as well as how to prepare accessible digital content (e.g. accessible documents, web content, multimedia, and social media) so that they can ensure the travellers with disabilities can have equal access to travel information as other people.Upon completion of this Module you should be able to:

- Know the relevant standards and legislation related to ensuring digital accessibility.
- Understand the basic principles and importance of digital accessibility.
- Recognize and understand the components of digital accessibility.
- Understand diverse needs of people with disabilities within the ICT domain.
- Recognise the common barriers for PWDs within the ICT domain.
- Recognise the benefits of digital accessibility for all people.
- Prepare accessible digital content (e.g. web content, multimedia, social media content).
- Prepare accessible digital documents (Word, PDF).
- Perform preliminary accessibility checks of the websites with travel information.
- Find accessible travel information online.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

3

CONTENTS

01 Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain

02 Unit 2: Preparing accessible digital content and accessible digital documents

03 Unit 3: How to check if digital content and information is accessible

CONTENTS

01 Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain

Unit 1: Introduction to digital accessibility & people with disabilities in the digital domain

This unit will focus on topics such as: i) relevant legislation and standards, ii) basic principles, components and importance of digital accessibility, iii) benefits of digital accessibility for all people, iv) diverse needs of people with disabilities in ICT domain, v) common barriers for PWDs within the ICT domain.

Learning goals:

Upon completion of this Unit participants should be able to:

· Know the relevant standards and legislation related to ensuring digital accessibility.
· Understand the basic principles and importance of digital accessibility.
· Recognize and understand the components of digital accessibility.
· Understand diverse needs of people with disabilities within the ICT domain.
· Recognise the common barriers for PWDs within the ICT domain.
· Recognise the benefits of digital accessibility for all people.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

6

What are we going to talk about in a few words?

1. What is digital accessibility and why it is important for ATF to learn how to find and how to create accessible digital content?

2. What barriers people with various disabilities face in accessing digital content and how can we remove these barriers?
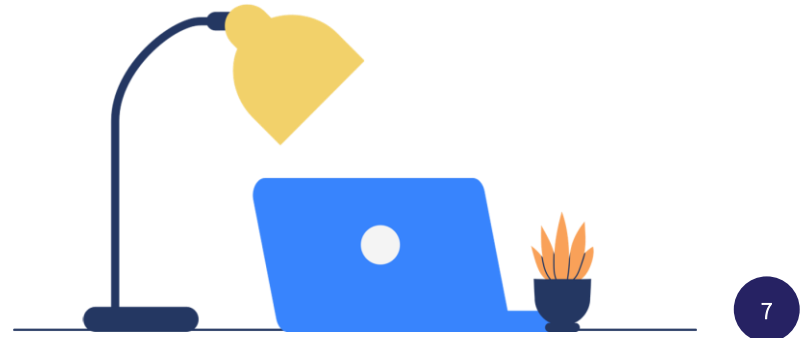
Digital accessibility

Digital Accessibility is the ability of a website, mobile application or electronic document to be easily navigated and understood by a wide range of users, including those users who have temporary or permanent visual, auditory, motor or cognitive disabilities. Making the web accessible benefits individuals, businesses, and society. It has humanitarian and ethical reasons, but it brings benefits also at the economic level.

HUMANITARIAN ASPECT

DA enables the inclusion of people that are at risk of digital exclusion, so that they can have better access to information, markets, products, services, jobs, etc.

ECOMONOMIC ASPECT

DA encourages more innovation, better brand awareness, a larger product market and more people to access services.

Why to implement digital accessibility?

- 15-20% of global population face various disabilities (diverse needs)

- Greater reach with more potential clients (leading to a more vibrant market)

- Improved user experience (for all!)

- Legislative obligation

- Ethics (inclusion)

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Because it's just right!

Why and when digital accessibility is important for ATFs?

ATFs will need to understand basic principles of how to implement digital accessibility, especially when:

- Communicating with their clients through email,

- Designing documents for clients (e.g. holiday offers, travel itineraries etc.),

- Using links to different websites to send them as additional information for their clients,

- Designing written, audio or video presentations about travels,

- Designing social media posts.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

11

Digital accessibility - Legislation

- Universal declaration of human rights;

- UN Convention on the rights of persons with disabilities (CRPD);

- European strategy for the rights of persons with disabilities 2021-2030;

- European Directive on the accessibility of the websites and mobile applications of public sector bodies

- European Accessibility Act.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

12

Digital accessibility - Standards

- EN 301 549 - Accessibility requirements for ICT products and services

- Web Content Accessibility Guidelines (WCAG)

- Authoring Tool Accessibility Guidelines (ATAG)

- User Agent Accessibility Guidelines (UAAG)

- ARIA, the Accessible Rich Internet Applications

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

13

Digital accessibility basic principles

WCAG guidelines that represent the main digital accessibility standard are designed around four basic principles of digital accessibility:

- **Perceivable;** Information and user interface components must be presentable to users in ways they can perceive.
- **Operable;** User interface components and navigation must be operable with a variety of tools.
- **Understandable;** Websites must use clear, concise language and offer functionality that is easy to comprehend.
- **Robust;** Websites should work well enough across platforms, browsers and devices to account for personal choice and user need.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Perceivable Operable Understandable Robust

14
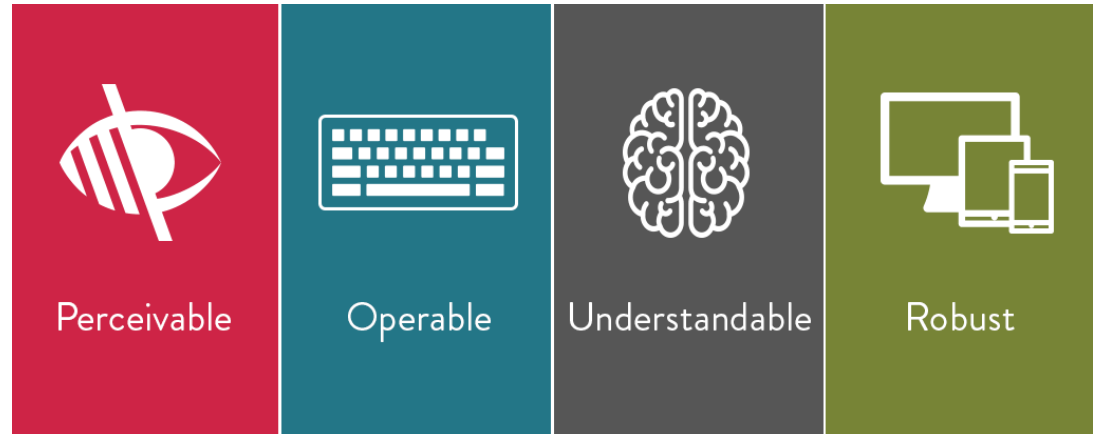
Digital accessibility components

Learning about digital accessibility requires also knowledge about components that build up the digital environment (web content, developers, users, browsers and assistive technology, authoring tools, evaluation tools). Only by understanding these components, how they are interrelated and how they interact with one another can lead us to creating digitally accessible websites, applications and documents. Digital accessibility it is not only a matter of developers, but in a large extent authors of digital content and its users.

2020-1-SI01-KA202-075871

Types of disabilities

In order to be able to make ICTs accessible, first we need to understand the needs and barriers that people with disabilities (PWDs) face in the digital domain. As we have learnt in Module 1, there are several types and degrees of severity of impairments that we may encounter in our customers:

- Hearing Loss
- Vision Loss
- Multisensory Impairment
- Sensory processing difficulty
- Cognitive impairment
- Pysical impairment

We all occasionally face barriers
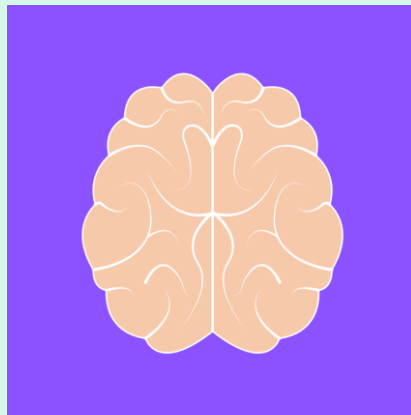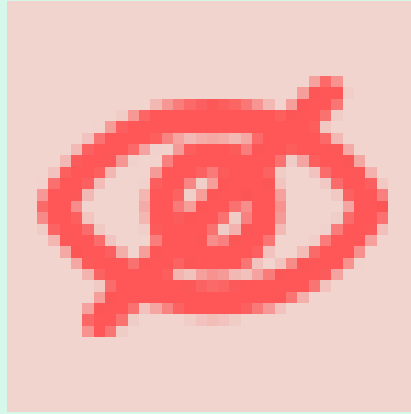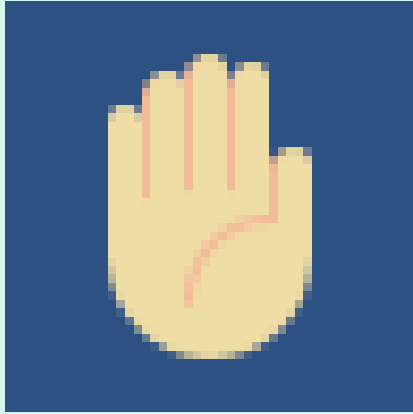
Types of barriers

Situational

Temporary

Permanent

Hearing loss & ICT barriers

What are the needs of people with hearing impairment?

People with hearing impairment have difficulties grasping on information that are provided in audible form. Hence, they need information to be provided in a **visual** (e.g. text, images, sign language, light signals) and/or **haptic form** (e.g. tactile clues, such as vibration signal, touch). Hard of hearing people may also benefit from using induction loops that help them intensify the sound around them.

Situational barriers	Temporary barriers	Permanent barriers
· Loud room · Quiet room · Public	· Ear infection	· Partial hearing loss · Deafness

19

85% of Facebook videos are viewed without sound!

Closed captions

Transcripts

Web Accessibility Perspectives: Video Captions

Auto scroll ☑

Video isn't just about pictures, it's also about sound. Without the audio you would have to guess what this film is about. Frustrating, isn't it? Not knowing what's going on. That's the situation for everyone who can't hear. Captions make videos accessible. Which is also handy for people who want to watch video in loud environments. Or where you need to be very, very quiet. Web accessibility: Essential for some, useful for all.

That's the situation for everyone who can't hear.

0:21 / 0:47   Speed: 1x   *Playing*

00:06   00:25

Hearing loss & ICT barriers

How can we improve accessibility for people with hearing impairment in a digital world?

· Audio content → add transcript.

· Audio and video content → add transcript, closed captions and content description in sign language.

LEARNING ACTIVITIES

Activity 1 – Understanding hearing barriers

Work in teams

1. Turn off the speakers on your computer and watch the video here: https://vimeo.com/127940467. Discuss what you understood from the video.
2. Then watch the same video again at this link: https://youtu.be/8Ik_LHmZx8Y. The speakers should still be turned off, but this time turn on Closed Caption (CC button) in case they don't turn on already.
3. After watching both videos, discuss again in a group how much you understood and compare your experience with the first time you watched the video.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

24

Visual impairment & ICT barriers

What are the needs of people with visual impairment?

People with visual impairment have difficulties grasping on information that are provided in a visual form. Hence, they need information to be transformed into an **audible** (audio description, alt text, screen readers, audio response signals) and/or **haptic form** (keyboard navigation, braille display, tactile navigation and orientation systems and maps, tactile response signals, vibration etc.). Partially sighted people will also find useful magnifier glasses and loops, good lighting, contrast colours, clear structure and layout.

Situational barriers	Temporary barriers	Permanent barriers
· Sunlight/light reflection · Damaged screen	· Forgotten/lost glasses · Temporary injury · Temporary illness	· Colour blindness · Shortsightedness · Cataract · Glaucoma/Tunnel vision · Blindness

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Normal vision

Complete color blindness

Myopia / Cataract

Reflection of the sun

Tunnel vision / Glaukom
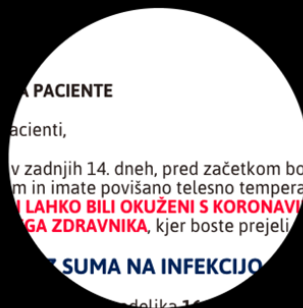
Blindness / Screen reader

Visual impairment & ICT barriers

How can we improve accessibility for people with visual impairment in a digital world?

· Avoid giving **meaning to text** using only colours

· Use **meaningful and unique wording** when naming pages

· Structure content using **meaningful titles and subtitles**

· Use **meaningful ALT-text** descriptions

· Use **informative name for links**

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism
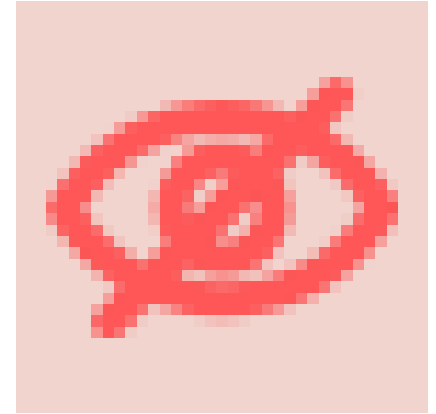
ALT text + LINKS

Facebook
Instagram
LinkedIn

BOX S
HDMI-kabel
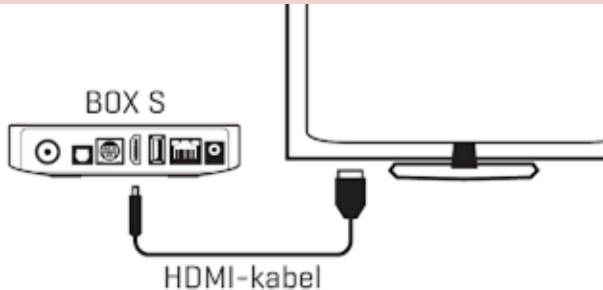
TRISAT – Nanosatellite space mission

After more than a decade of research and development in cooperation with the Slovene company SkyLabs, we have successfully sent TRISAT, the first Slovene satellite entirely designed, produced and assembled in Slovenia, into space.

Read the story ›

Research and development of new metamaterials

In the last decade, cellular structures are receiving significant attention in the engineering and scientific community due to numerous special properties (energy absorption, effective damping, a high level of deformation, durability, high thermal and sound insulation, etc.) at low weight.

Read the story ›

LEARNING ACTIVITIES
Activity 2 – Understanding visual barriers
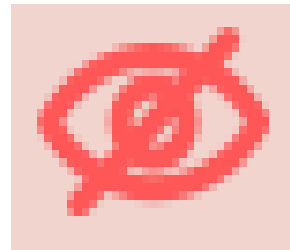
Work in teams
1. Download and install on the computer Web Disability Simulator (a Google Chrome Extension; link: shorturl.at/fBDFS)
2. Open the website of your choice, click on the Web Disability Simulator icon and try out the different disability simulations in the »Sight« category.
3. Try out the simulator on different websites (for example, the websites of your organisations, tourism organisations in your area, or different tourism information websites).
4. Discuss how each website could be improved to make it more accessible. Consider also the advice given in the Web Disability Simulator.
5. You can also download and install on the computer Skilltde Disability Simulator for web that includes also Screen Reader simulation (a Google Chrome Extension; link: https://chrome.google.com/webstore/detail/silktide-website-accessib/okcpiimdfkpkjcbihbmhppldhiebhhaf).
6. After installation, explore different websites also with Screen reader simulator to better understand the way and the barriers blind people face when navigating the websites in search for the needed information online.
7. For starting click on the Skilltide Disability Simulator icon and select »Blindness« category on the top of the frame.
8. Try out the screen reader simulator on different website and discuss the experience in the group.

Cognitive impairment & ICT barriers

What are the needs of people with cognitive impairment?

People with cognitive impairment may have trouble remembering, learning new things, concentrating, or making decisions that affect their everyday life. They require information provided in an easy-to-read and easy-to-understand form with well thought layout and structure, simple language, pictograms and visuals to support or replace the written information.

Situational barriers	Temporary barriers	Permanent barriers
· Distraction · A child crying	· Anxiety · Tiredness · Stress · Illness	· Dyslexia · Foreign language · Low-level literacy · ADHD · Alzheimer's disease

How do dyslex see digital content?

Erasmus+

EU pramgorme rof edtaucion, trinniag, youth nda sport

| Home | About Eraumss+ ▼ | Opptroitinues ▼ | Proamrgme Guide | Reroucses dan tools ▼ | Ne |

oYu aer here: Eramsus+

Erumsas+ Enciihrng lievs, opnieng minds

Teh wne Eramsus+ strats here

Exolpre eth world fo Erumsas+

What about when concentration is reduced?

Depending on what part of the programme you are applying for, you will need to fill out a specific application form.

For the **decentralised** activities managed by National Agencies please apply using the Erasmus+ and European Solidarity Corps page ☑ .

For the **centralised** activities managed by the European Education and Culture Executive Agency, please visit the Executive Agency's How to get a grant page ☑ .

Which is which?

I have to get back to work soon...

See who manages which action and where to apply

Don't forget

Make sure that you have already registered your organisation before you start your application.

Read about registering

Applying with a project partner

The partner search on the EU's Funding and Tenders portal helps you search for potential partners for your proposal.

Documents and guidelines

Registering your organisation

How to apply ▲

Application guidance

Where to apply

Web forms application process

Completing the application form

Mobility and learning agreements ▼

Erasmus Charter for Higher Education

Erasmus+ Student Charter

Online Linguistic Support

Distance Calculator

Factsheets, statistics, evaluations ▼

Cognitive impairment & ICT barriers

How can we improve accessibility for people with cognitive impairment in a digital world?

To support people with cognitive impairment, we need to think simple. Basic guidelines would be to use:

- **Clear and simple language** (avoid non-necessary words, foreign words, professional terminology, jargon)
- **Simple structure and layout** (split content to smaller parts to be more manageable when reading, use short paragraphs, titles and subtitles, use lists and pictures for easier comprehension of text)
- **Add visuals** (images, pictograms etc.) to support other types of information.
- **No flashing objects** or highly intense colours.
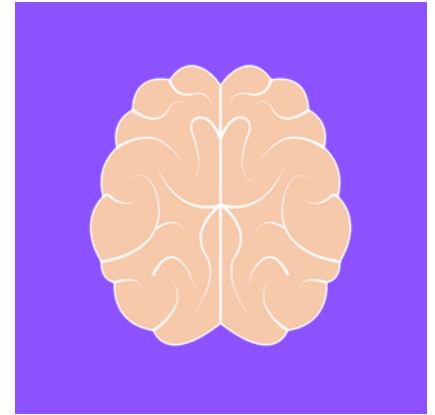
Cognitive impairment & ICT barriers

⊗ Unnecessarily complex

CPP: In the event of a vehicular collision, a company assigned representative will seek to ascertain the extent and cause of damages to property belonging to all parties involved. Once our representative obtains information that allows us to understand the causality, we may or may not assign appropriate monetary compensation. The resulting decision may occasion one of the following options: the claim is not approved and is assigned a rejected status, the status of the claim is ambiguous and will require additional information before further processing can occur, the claim is partially approved and reduced payment is assigned and issued, or claim is fully approved and total claim payment is assigned and issued.

⊘ Easier to understand

Claims Processing Procedure (CPP): If you have a car accident, our agent will investigate. Findings will determine any claim payment. This could result in:

- Approved claim - full payment
- Partially approved claim - reduced payment
- Undetermined claim - more information needed
- Rejected claim - no payment

(https://www.w3.org/WAI/tips/writing/)

LEARNING ACTIVITIES

Activity 3 – Understanding cognitive barriers

Work in teams
1. Download and install on the computer Web Disability Simulator (a Google Chrome Extension; link: shorturl.at/fBDFS) – *If downloaded before, ignore this line!*
2. Open the website of your choice, click on the Web Disability Simulator icon 🔘 and try out the different disability simulations in the »Read and Write« and »Concentration« categories.
3. Try out the simulator on different websites (for example, the websites of your organisations, tourism organisations in your area, or different tourism information websites).
4. Discuss how each website could be improved to make it more accessible. Consider also the advice given in the Web Disability Simulator.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism
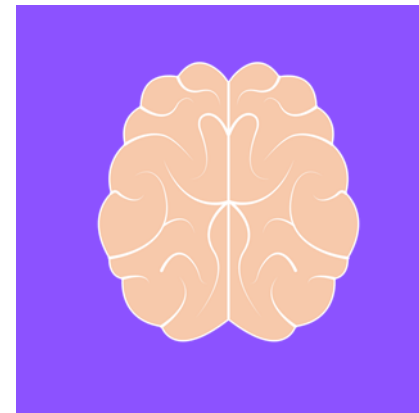
Physical impairment & ICT barriers

What are the needs of people with physical impairment?

People with physical impairment face barriers in their physical environment. They require barrier-free physical space, adapted equipment and first aids, as well as a comprehensive set of accessibility information about the space, equipment and physical aids. But also when using a digital device they may be limited and need a possibility to use only a TAB function to navigate the website.

Situational barriers	Temporary barriers	Permanent barriers
· Traveling with luggage · Traveling with a baby stroller · Multitasking	· Upper or lower limb injury · Temporary illness	· Upper limb impairment · Lower limb impairment · Parkinson's disease · Multiple sclerosis · Cerebral palsy · Paralysis

2020-1-SI01-KA202-075871

Multitasking as a situational barrier
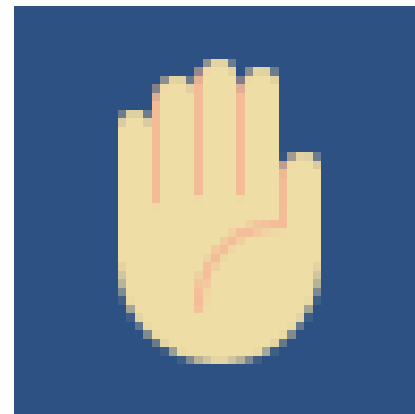
2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Temporary or permanent physical barriers
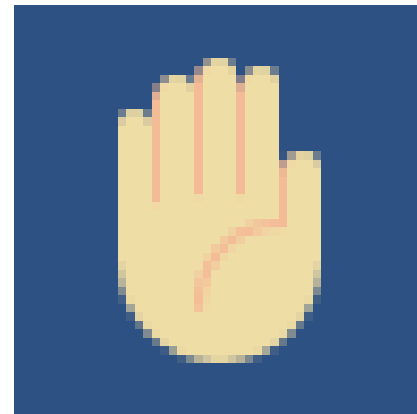
How do people with Parkinson's disease access digital content?
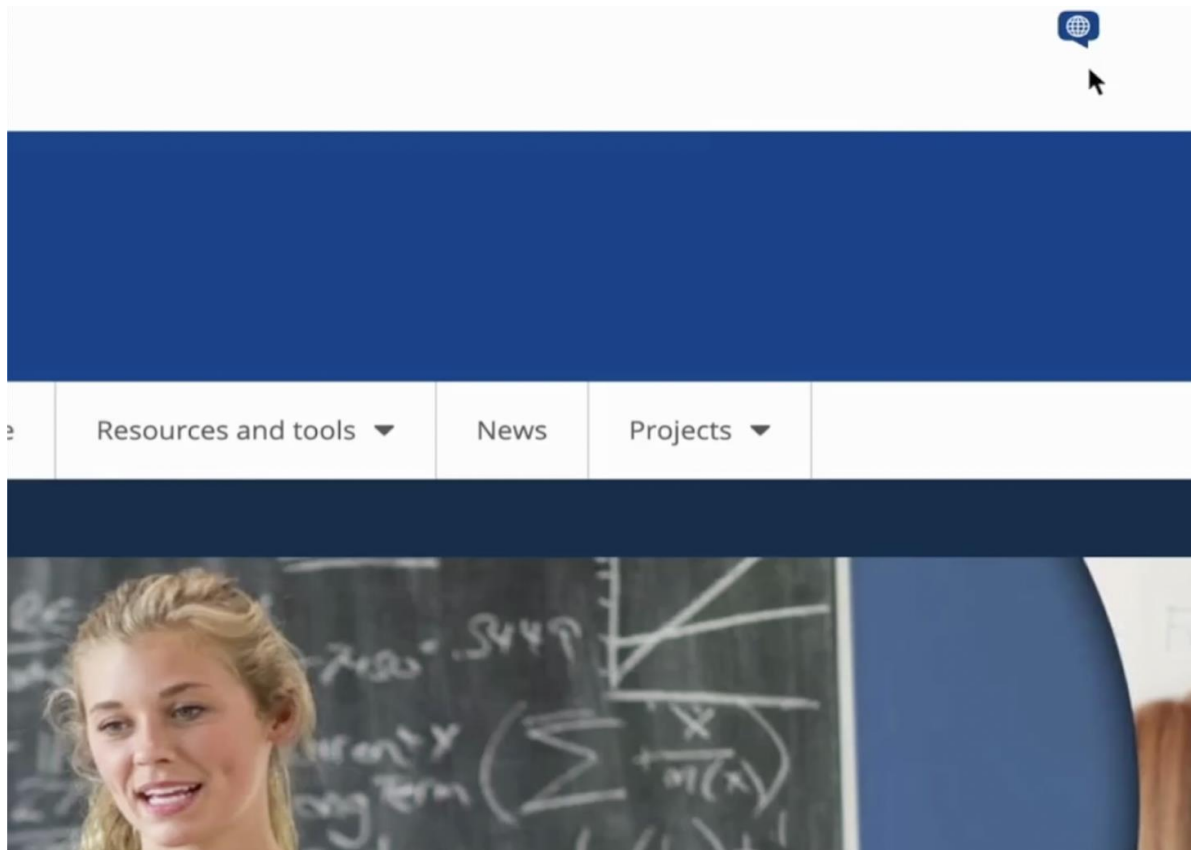
Moving around website with the use of TAB function

Physical impairment & ICT barriers

How can we improve accessibility for people with physical impairment in a digital world?

Ensuring accessibility for the physically impaired is primarily a task for developers!

To check if a website is accessible for people with physical disability:

· Check access to website with TAB button
· Check if buttons are large enough to be able to click on them easily
· Check website response at different devices (avoid 2D slider)

2020-1-SI01-KA202-075871

44
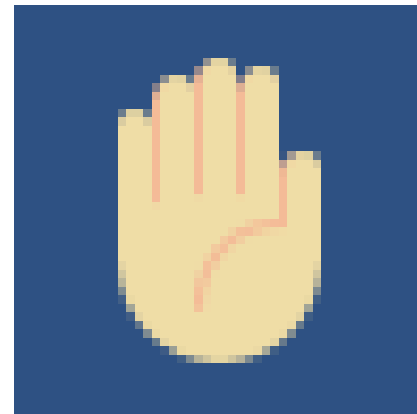
LEARNING ACTIVITIES

Activity 4 – Understanding physical barriers

Work in teams
1. Open the website of your choice, click on the Web Disability Simulator icon and try out the disability simulations in the »Mobility« category.
2. Try out the simulator on different websites (for example, the websites of your organisations, tourism organisations in your area, or different tourism information websites).
3. Discuss how each website could be improved to make it more accessible. Consider also the advice given in the Web Disability Simulator.
4. Think about which elements of the web pages you accessed in the simulator were the most difficult to access.
5. Next, try to navigate the same web pages without a mouse, using only the keyboard (TAB, SPACE, up, down, left and right arrows).
6. Discuss your findings based on your exploration with the keyboard navigation. Which websites were the most accessible? Were there any areas where you had access problems and were unable to reach a particular item? Consider also how you could improve the accessibility of individual pages.
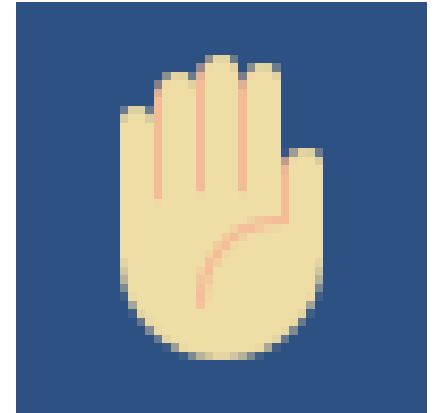
Unit 1: Introduction to digital accessibility and people with disabilities in the digital domain

References and material recommended for further study:

- Universal declaration of human rights

- UN Convention on the rights of persons with disabilities (CRPD)

- European strategy fort he rights of persons with disabilities 2021-2030

- European Directive on the accessibility of the websites and mobile applications of public sector bodies

- EN 301 549 - Accessibility requirements for ICT products and services

- European Accessibility Act

- W3C Accessibility Standards Overview

- Web Content Accessibility Guidelines (WCAG)

- Authoring Tool Accessibility Guidelines (ATAG)

- User Agent Accessibility Guidelines (UAAG)

- ARIA, the Accessible Rich Internet Applications

- Understanding the four principles of accessibility

- Essential Components of Web Accessibility

- Make your website more accessible to people with disabilities

- Diverse Abilities and Barriers

- Disability and Health Promotion – Disability Barriers to Inclusion

CONTENTS

02 Unit 2: Preparing accessible digital content and accessible digital documents

Unit 2: Preparing accessible digital content and accessible digital documents

This unit will focus on topics such as:

1) creating accessible digital structure and layout,

2) creating readable and understandable web content,

3) preparing accessible multimedia (images, videos, tables)

4) creating accessible social media posts,

5) preparing accessible documents (Word, PDF) and checking their accessibility.

Unit 2: Preparing accessible digital content and accessible digital documents

Learning goals:

Upon completion of this Unit participants should be able to:

- Prepare accessible digital content (e.g. web content, multimedia, social media content).
- Establish an accessible structure of the digital content (appropriate headings, titles, links, colours, and contrasts).
- Prepare easy-to-read texts that are readable and understandable.
- Prepare accessible images, multimedia, and tables (writing appropriate alt-text, transcripts, captions, etc.).
- Prepare accessible social media content and posts.
- Prepare accessible digital documents in Word and use accessibility checker.
- Prepare accessible digital documents in PDF and check their accessibility.

1. ACCESSIBLE STRUCTURE AND LAYOUT

Why does the website/document need accessible structure?

- **People with cognitive and learning disabilities** find it easier to find and sort content on a page.

- **People with visual impairment** that use screen readers can directly access the main content and navigate to the desired sections.

- **Keyboard users** can browse pages and their sections more efficiently. People with visual impairments have tips on page and content orientation.

- An additional advantage of a well-structured site is also **a better search engine content indexing (SEO)**

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

How to create an accessible structure?

For making structure accessible, texts should be divided into headings, paragraphs, lists, tables etc. (Figure 1).

Sections are properly defined and there is a clear hierarchy of titles and subtitles (Figure 2). It is crucial that

structure is not only visually laid out but that styles are applied. Properly selected and styled headings add

structure to the webpage or the document.
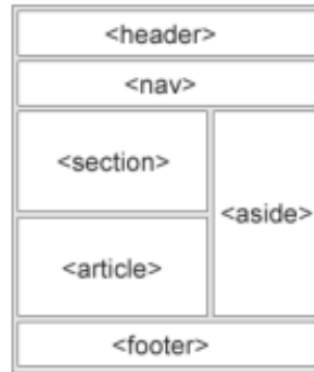
Figure 1: Sections and subsections are properly defined
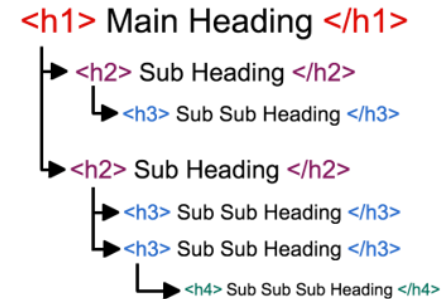
Figure 2: Titles and subtitles hierarchy

52

A quick check list for accessible structure:

- **Title** - Always add the title of the page / document. This must be descriptive and related to the content of the website / document.

- **Styles** - Provide an outline of the page. This allows users to understand how the page is structured and how the parts relate to each other.

- **Paragraphs** - Paragraphs divide the content into meaningful parts. This makes it easier to read, skip parts of the text, find the information we are looking for, and so on.

- **Lists** - If lists are created as lists, screen readers can notify their users that they have landed on the list, but they can also get additional information such as the number of items in the list. This is very useful information for users when deciding whether to continue reading or not.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 1 – Discussion on accessible structure

Discuss the following questions in groups and prepare a brief report:

- Why is the structure of the website / document important?

- How can we make the structure accessible?

- What should we consider when preparing content and documents for the web?

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 2 – Adding accessible structure to the text

Save the following text document to your computer and add structure to the text

and present the results to the group:

- add title,

- add styles,

- add paragraphs,

- add lists.

2020-1-SI01-KA202-075871

Why does the website/document need accessible layout?

- **People with cognitive and learning disabilities** find it easier to find and sort content on a page.

- **People with visual impairment** (e.g. screen magnifier users that can see only a part of the screen at the same time, colour blind people) can find the desired content with more ease.

- **First time visitors** are able to orientate themselves on a website with more ease.

- **Mobile phone and tablet users** are also able to orientate themselves with more ease.

56

How to create an accessible layout?

An accessible layout of website or web content includes:

- Clear and easily accessible **navigation menus**,

- Clear and easily accessible **texts and other elements**,

- Clear and easily accessible **links**.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

How to create an accessible layout?

Special attention should be given to the following elements:

- Font (font selection, font size, style, capitalization, size of all elements),

- Spacing (line spacing, letter spacing, word spacing, line length, border and border, element spacing),

- Brightness and colour (brightness in general, contrast of text and other elements, colour coding is not enough),

- Accessible links.
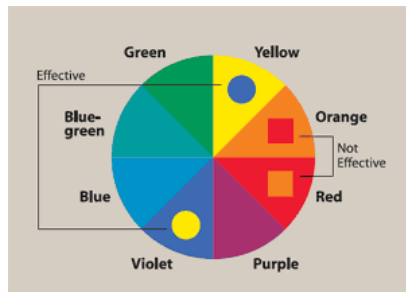
Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

58

How to create an accessible layout?

Special attention should also be given to **links**. See examples of incorrect and correct use of links:

INCORRECT:

- Here you can find more information about digital accessibility: http://digital-accessibility.eu/learn/course/view.php?id=3

- Read more

CORRECT:

- Managing digital accessiblity module

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessiblity
in Support of Tourism

59

A quick check list for accessible <u>layout</u>:

1. FONTS

- Arial, Calibri, Verdana, Tahoma, Century Gothic or Trebuchet

- Writing for dyslexic people: https://opendyslexic.org/

- Minimum 12px font size

- Bold, italics, underlined form to emphasize the relevance of the text is not enough!

- Only colours to emphasize the relevance or meaning of the text is not enough!

A quick check list for accessible <u>layout</u>:

2. SPACING

- Line spacing, letter spacing, and word spacing

- Alignment (left, not double sided)

- Edges and borders

- Spaces between elements

    o Line height (line spacing): at least 1.5 times the font size

    o Paragraph spacing: at least 2 x font size

    o Letter spacing: at least 0.12 times font size

    o Word spacing: at least 0.16 times font size

FAST
Facilitating Accessibility
in Support of Tourism

61

A quick check list for accessible layout:

3. COLOURS AND CONTRAST

- The contrast between the text and the background is at least 4.5: 1- AA

- The contrast between text and background is at least 7: 1- AAA

- High contrast between non-text parts and background

  o You can check the colour contrast on various websites, where you can also check if the specified

   colour contrast is in accordance with the WCAG guidelines: Contrast Viewer 1 & Contrast Viewer 2

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

62

LEARNING ACTIVITIES

Activity 3 – Adding accessible layout to the text

In the text document to which you have already added a structure, now change the formatting elements so that it is accessible. Present the results to the group.

- Use an accessible font.

- Set the appropriate spacing (between lines, letters, and words) and the appropriate alignment.

- Add accessible links.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

2. READABLE AND UNDERSTANDABLE CONTENT

Why does a website/document need a readable and understandable text?

We all have different reading levels. It is important to prepare easy to understand reading content, especially if it is intended for everyone. Even though it is intended only for a specific audience (e. g. scientific article) it is advisable to add at least a short easy-to-read summary.

Why does a website/document need a readable and understandable text?

Readable and understandable text will benefit many people, especially:

- **People who use assistive technology** (e.g. screen readers will pronounce the text correctly).

- **People who have difficulty understanding** complex sentences and vocabulary for any reason (e.g. cognitive impairment, language and learning impairment, temporary exposure to stress, anxiety, time constraints to read).

- **Foreigners** (even if they know the language, they may have difficulty understanding complex content).

- **People with hearing impairments** (they may know sign language, but sometimes have problems with their mother tongue).

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

How to create a readable and understandable text?

It is important to ensure that the text is readable and understandable to the widest array of readers. For this purpose, the sentences and vocabulary need to be short and simple (easy-to-read alternative is welcome). Additionally, a help section and/or any guidelines for navigating the website will be available. Visitors will also be able to find a list of definitions and any abbreviations used in the text.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

A quick checklist for readable and understandable text

- Clearly specify the primary language of the website/document,

- Specify the language of text parts, phrases, etc. that differ from the primary language of the website / document.

- Provide definitions (in the form of a dictionary or something similar) for any unusual words, phrases, idioms.

- Provide a complete interpretation of abbreviations.

- Provide assistance and guidance.

- Use clear and simple language (or at least an easy-to-read alternative version).

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

68

LEARNING ACTIVITIES

Activity 4 – Preparing an easy-to-read text

In a text document to which you have already added a structure and accessible layout, now also work on the text to be easy to read and understand. Present the results to the group.

- Set the language of the document and parts of the text.

- Prepare a dictionary for unusual words.

- Add at least one accessible abbreviation.

- Try to adapt the text to the appropriate reading level where you deem it necessary.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

69

3. ACCESSIBLE MULTIMEDIA

Why do we need accessible multimedia?

Adding multimedia, such as **images, tables, audio and video recordings,** can add value for most of the users. Some of them, e. g. people who access web content with screen readers, will not have an option to access the content. If we want that everyone can access all the content, we should provide an alternative.

Making multimedia accessible requires some skills (e.g. what are alternatives for multimedia and tables; how to prepare descriptive and useful alternatives; how to write alternative text descriptions to images and concise transcripts and captions to multimedia, how to prepare accessible tables).

In the next slides, you will learn some **basic rules for each of these categories**.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

IMAGES – Types of images

There are different types of images:

- informative images,

- decorative images,

- functional images,

- images of text,

- complex images,

- groups of images,

- and image maps.

2020-1-SI01-KA202-075871
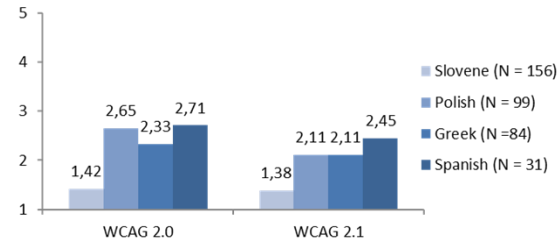
"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect." – Tim Berners-Lee

INFORMATIVE IMAGES (alt="text")

- Images that **indicate different information**

- Images to **complement other information**

- Images that **convey concise information**

- Images that **convey an impression or emotion**

- Images that **convey file format**

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

73
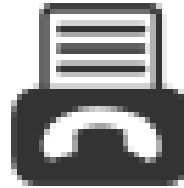
DECORATIVE IMAGES (alt="")

- Image as a **design element** on the page

- Decorative image **related to the text**

- Image **with adjacent text**

- Image used **as ambience**

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

74

FUCNTIONAL IMAGES (alt=”name or function of the link”)

- Image **LINK** (e.g. logo)

- Image of an **ICON** that conveys information in the

  link text

- Stand alone images **ICONS with function**

- Images used in **buttons**

2020-1-SI01-KA202-075871

IMAGES OF TEXT (alt="text from the image")

- **Stylized text** (e.g. slogan)

- **Other text images** (e.g. various banners)

- **Mathematical expressions**

76
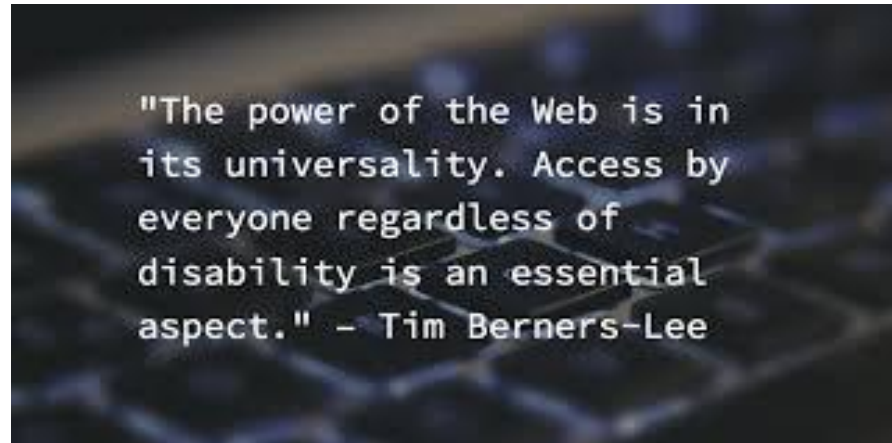
COMPLEX IMAGES

They contain essential information – more than can be conveyed in a short sentence. These are usually:

- **Diagrams and charts** (e.g. data charts, flowcharts, organizational charts)

- **Illustrative displays** where the page text is based on the user being able to understand the image

- **Maps** showing locations or other information such as weather systems

77
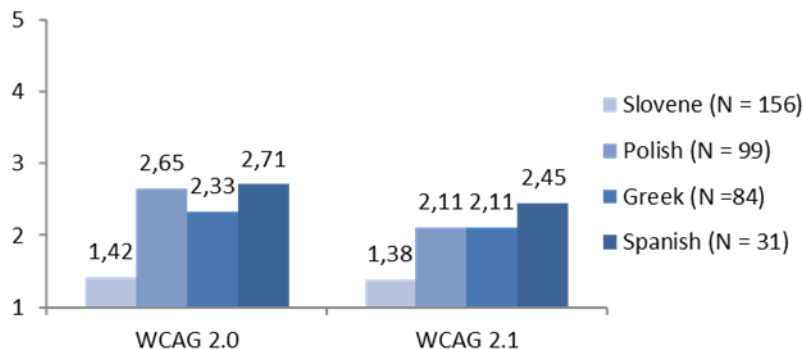
COMPLEX IMAGES - How to design *alt* text for complex images?

There are situations where the composition of an image is important and needs to be provided in the long description. There are several approaches for complex images with long description:

- **Approach 1:** Short description in *alt*, long description next to the image

- **Approach 2:** Short description in *alt*, text link to long description next to image

- **Approach 3:** Short description in *alt*, long description in *longdesc*

- **Approach 4:** Short description in *alt*, link to long description in *longdesc*

Guidelines for complex images.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

78
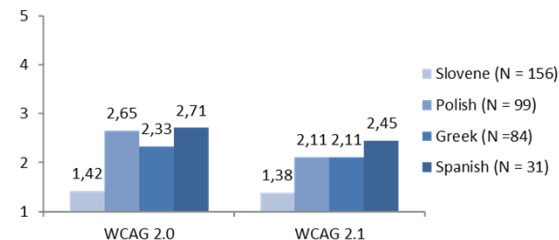
COMPLEX IMAGES

Approach 1: Short description in alt, long description next to the image

Moški je na kroni kovinsko modre barve, perje glave je kratko in zvito. Greben v obliki ventilatorja na glavi je izdelan iz perja z golimi črnimi gredmi in z rumenkasto zelenimi trakovi. Golo belo kožo tvori bel trak nad očesom in bel madež v obliki polmeseca pod očesom. Strani glave imajo mavrično zelenkasto modro perje. Na hrbtu je luskasto bronasto-zeleno perje s črnimi in bakrenimi oznakami.

COMPLEX IMAGES

Approach 2: Short description in alt, text link to long description next to image

2014 First Quarter Visitors to example.com Websites
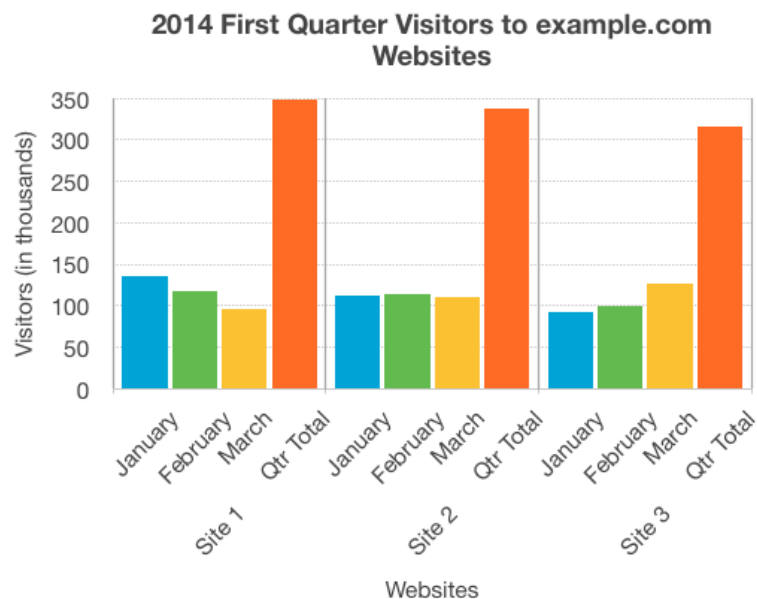
Long description

Site visitors for example.com   SHARE

Overview   SHARE

The chart shows the website hits for the first quarter of 2014. It shows that Site 1 has more visitors than either of the other sites, but the number of visitors is decreasing. Site 2 has a fairly constant number of visitors, while for Site 3 page hits are increasing month on month.

Values   SHARE

Numerical values presented on the image:

2014 First Quarter visitors per site
(in thousands)

Period	Site 1	Site 2	Site 3
Jan	135	112	92
Feb	117	114	99
March	96	111	126
Qtr total	348	337	308

                                                                           SHARE

Presentation

The bar chart represents both the number of visitors per month for each website, and the total number of visitors per website for the entire quarter. Website visitors for each month are represented using columns lined up horizontally, with heights indicating the number of visitors. A fourth column is provided for each

Opis slike

80

GROUP OF IMAGES

- More images that convey one single information

→ Alt = „information", alt=„"

- A collection of related images

→ using HTML5 <figure> and <figcaption> elements to add captions to each of the images in the collection

Ocena: ★★★⯪☆

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

GROUP OF IMAGES

For example Organizational chart with links to individual pages

→ Alt text for the whole image + for individual parts/links

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism
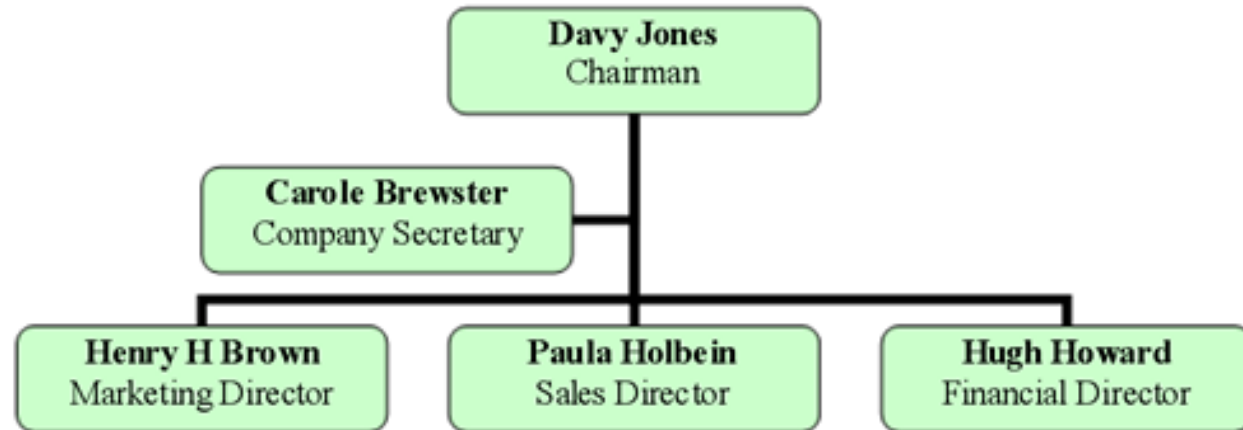
IMAGES – Accessible images

There is a difference when preparing alt-text for every type of image. **Alternative text is a text alternative for the content of the images and tables.** When choosing alt text, it's important to ensure that it tells viewers as much as possible about the image, using as few words as possible.

A decision tree can help recognize a type of image and design a corresponding alt-text.

2020-1-SI01-KA202-075871
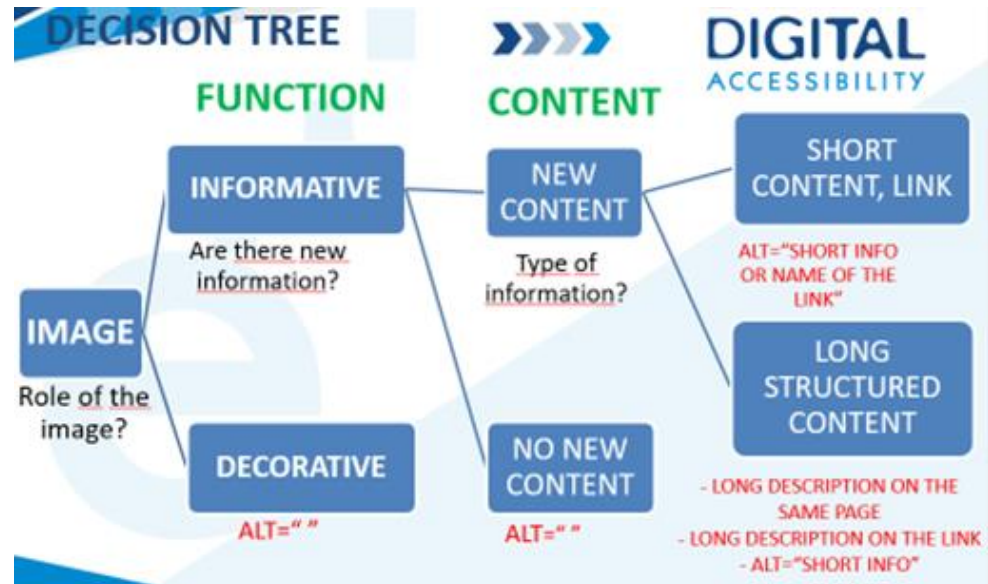
IMAGES - A quick checklist for accessible images (and inserted tables)

- Create descriptive ALT tags (Describe the image, and be specific).

- Keep it short (if possible fewer than 135 characters).

- Don't start alt text with "picture of..." or "Image of".

- Provide appropriate text alternative based on the purpose of the picture.

- Use decision tree to help yourself.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

84
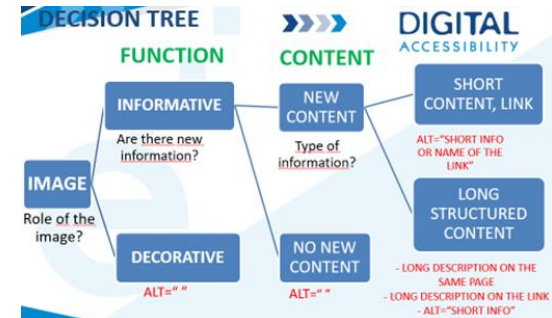
LEARNING ACTIVITIES

Activity 5 – Preparing accessible images

Work in groups following the instructions below. Present results to other groups.

• Choose 3 images from the web.

• Recognize the type of the image and prepare alt text if needed using a quick checklist above.
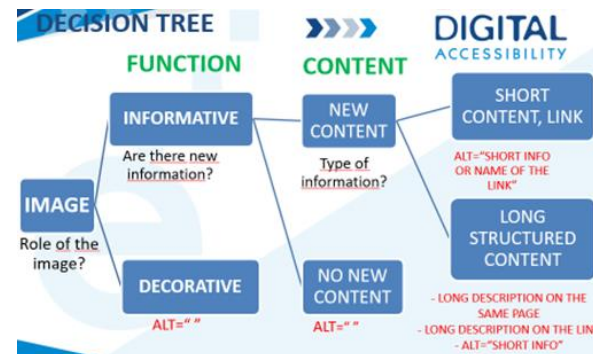
VIDEOS AND AUDIO RECORDINGS – Basic rules

Basic rules for videos and audio recordings would be as follows:

- For audio content we need to add transcript.

- For audio and video content we need to add transcript, closed captions and content description in sign language (depending on the level of accordance with WCAG standard!).

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

VIDEOS AND AUDIO RECORDINGS – WCAG level of accordance

LEVEL A:

- **Audio:** Transcript of important content

- **Video without sound:** Transcript or audio description of important content

- **Video with sound:** Closed captions

2020-1-SI01-KA202-075871

VIDEOS AND AUDIO RECORDINGS – WCAG level of accordance

LEVEL AA:

- **Live sound shows:** Closed captions

- **Video:** Audio descriptions in case there is visual content that is not presented in audio form; Addionally, the use of descriptive transcripts is recommended.

VIDEOS AND AUDIO RECORDINGS – WCAG level of accordance

LEVEL AAA:

- **Video:** Translation into sign language

- **Video:** Extended audio descriptions in the substitute video if sound descriptions cannot be added to the

  initial video due to time constraints.

- **Video:** Transcripts.

- **Live sound recordings:** Transcripts.

VIDEOS AND AUDIO RECORDINGS – Transcript and Captions

Transcript is a transcripted audio and video content.

Captions are text alternatives of the audio content, synchronized with the video.

Although captions take a form of subtitles, you should not confuse them with subtitles. Subtitles are a straightforward translation of the video's dialogue. Watch a video for more information on why is it important.

TRANSCRIPT OR CLOSED CAPTIONS ≠ SUBTITLES!

2020-1-SI01-KA202-075871

VIDEOS AND AUDIO RECORDINGS – Transcript and Captions

A **transcript** or **closed captions** is a text version of your video or audio. It should include:

- what is spoken,

- other sounds,

- description of actions

- important information on-screen.

TRANSCRIPT OR CLOSED CAPTIONS ≠ SUBTITLES!

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

VIDEOS AND AUDIO RECORDINGS – What are Closed captions?

Let's see an example.

Accessibility Fundamentals

Introduction to Accessibility

Foundations Online Course

Components of Web Accessibility

Accessibility Principles

Perspectives Videos

Keyboard Compatibility

Colors with Good Contrast

Clear Layout and Design

Text to Speech

Large Links, Buttons, and Controls

Video Captions

Customizable Text

Speech Recognition

Understandable Content

Notifications and Feedback

Video Captions

Web accessibility is essential for people with disabilities and useful for all. Learn about the impact of accessibility and the benefits for everyone in a variety of situations.

Without the audio you would have to guess what this film is about.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

92
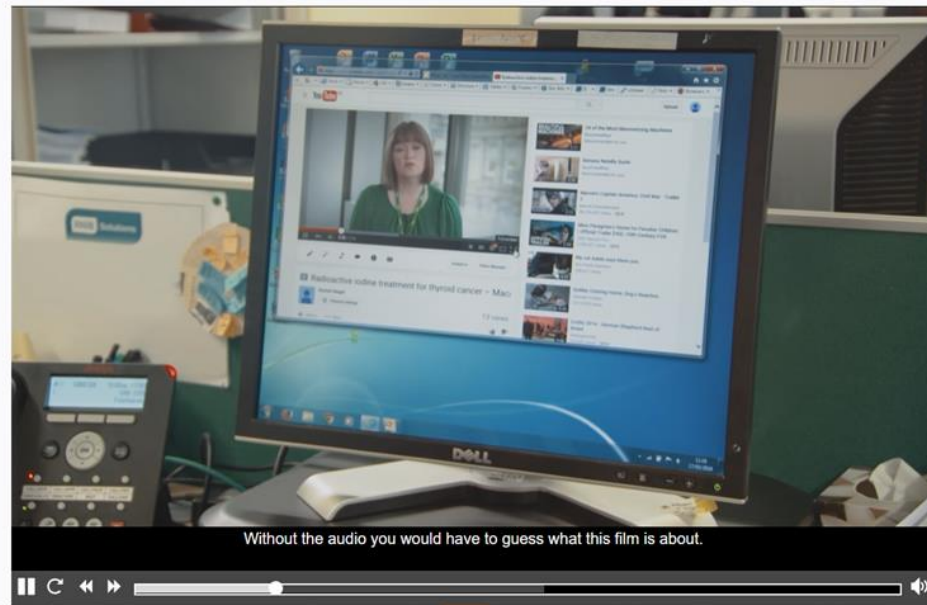
VIDEOS AND AUDIO RECORDINGS – A quick checklist for accessible videos

A checklist and steps for creating accessible videos:

- Create **accessible video content**

- Choose a **current video format** for the web

- Choose an **accessible video player**

- **Add captions** to your video

- **Add a transcript** to your video (optional)

- **Include an audio description** if needed.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

93

LEARNING ACTIVITIES

Activity 6 – Preparing an accessible video

See Web accessibility video and work in groups to answer the following questions. Present your findings

other groups.

- Is this video accessible? Why?

- If your answer is NO, how could you make it accessible?

- What challenges will you face in the process of making it accessible?

2020-1-SI01-KA202-075871

TABLES

immediately if we are to have a successful 4th Quarter and meet our projections.

Table 1: Actual Treat Consumption (3rd Quarter)

Rawhide	Meaty Snacks	Dry Biscuits	Others	
Rawhide bones (25)	Real meat leftovers (4)	Dental bone biscuits (22)	Table scraps (22)	
Rawhide sticks (38)	Low quality 'meat food	Cheesy flavored bites	Grass (2)	
Rawhide flat		ts (8)	Cat food (stolen) (1)	Cat food (discarded) (2)

Split cells are not accessible in MS Word. Convert the file to an accessible format

Table 2: Projected Treat Consumption (4th Quarter)

	High Desirability		Low Desirability	
	Rawhide	Meaty Snacks	Biscuits	Others
Low Volume	Rawhide bones (25)	Real mea lefto	l bone its (10)	Grass (5)
High Volume	Rawhide sticks (50)		y flavored tes (80)	Table scraps (30)
Variable	Ra	Quality eefy sticks (60)	Milk bone biscuits (50)	Cat food (stolen) (10)
Totals		380	140	45
	460		185	

Merged cells are not accessible in MS Word either.

From this point on we will be adding new volume categories for managing our treat acquisition processes (Table 2, above).

TABLES – Main features

The main features of accessible tables are:

- They have **logical structure** (moving with the 'TAB' key)

- They have **title line** (and column)

- They do **not have split, merged or nested cells**

- They have **'Alt' description**

- They are created with **'Add table' option**

- Complex tables are **divided into several simple tables**

2020-1-SI01-KA202-075871

4. ACCESSIBLE SOCIAL MEDIA CONTENT

How to create accessible social media content?

The same accessibility rules that were presented for digital content apply for social media content. Social media content needs to have accessible layout and structure, readable and easy-to-understand text, and accessible multimedia. However, as there are certain specifics (such as the use of hashtags and emojis) and due to the fact that social media are prone to constant changes, one needs to stay up to date and follow social media specific accessibility guidelines.

A quick checklist for accessible social media

- Follow the rules for accessible layout and structure

- Create easy-to-understand and readable text

- Add accessibility elements to multimedia (e.g. alt text for images and tables, transcript for audio and video content, closed captions and content description in sign language for videos)

- Write your hashtags in camelCase e.g. #WriteYourHastageLikeThis

- Use emojis sparingly (one or not at all)

- Include trigger warnings e.g. "TRIGGER WARNING"

Accessible social media content.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

99

5. ACCESSIBLE DOCUMENTS (WORD, PDF)

Why do documents need to be accessible?

Documents are widely used to convey information across all areas of life, be it private or public, formal or informal. All people use them, including people with diverse disabilities. The two most commonly used applications for documents are Microsoft Word and PDF.

- **Microsoft Word** is a commonly-used application among individuals with a variety of disabilities, and is reasonably accessible. The text within Word documents can be read by assistive technologies such as screen readers and Braille devices. **However, Word documents will not be accessible by default! We need to make sure that we follow a list of core accessibility principle.**

- **PDF** can also be made accessible. The easiest way is to transform an accessible Word document to an accessible PDF. The second option requires a special software (Adobe Acrobat Pro DC) and skills.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

How to make Word documents accessible? (1)

When designing accessible Word document, a list of core principles need to be followed:

- **Add STRUCTURE** (add title, use headings, lists, index, style)

- **Add ACCESSIBLE FORMAT** (pay attention to selection of font and font size, spacing, choice of colours and contrast, left-alignment, meaningful and accessible hyperlinks, do not use colour alone to convey information, check if the text can zoom up to 200%, check the contrast colour ratio),

- **Make CONTENT READABLE AND UNDERSTANDABLE** (identify/set document language, use of dictionary, meaning of abbreviations, help and instructions, clear and easy to understand language),

- **Add ALT TEXT** (images, tables),

- **Add ACCESSIBLE TABLES** (make tables accessible, use them wisely),

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

How to make Word documents accessible? (2)
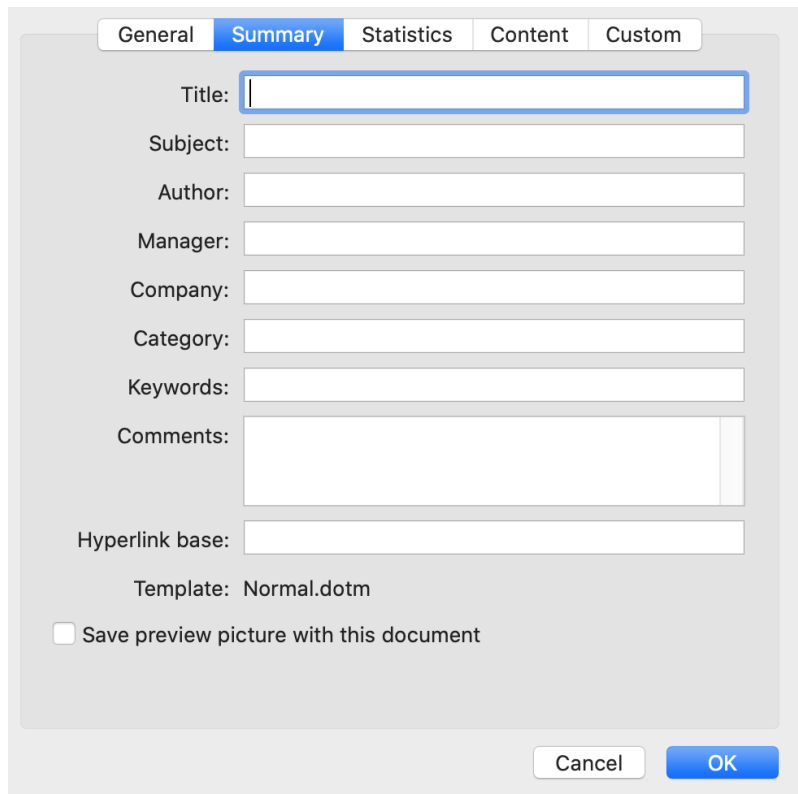
When designing accessible Word document, a list of core principles need to be followed:

- **Add METADATA** (Document title, author, language, subject of the document, key words)

- **Use ACCESSIBILITY CHECKER** (use accessibility checker to detect accessibility issues of existing documents),

- **Pay attention to EXPORTING PRINCIPLES** (Learn how to export e.g. to PDF and at the same time preserve Accessibility).

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

103

Adding METADATA to Word

FILE → PROPERTIES

General	**Summary**	Statistics	Content	Custom

Title:

Subject:

Author:

Manager:

Company:

Category:

Keywords:

Comments:

Hyperlink base:

Template: Normal.dotm

☐ Save preview picture with this document

Cancel   OK

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

104

Checking accessibility in Word

Guidelines for using Accessibility checker

105
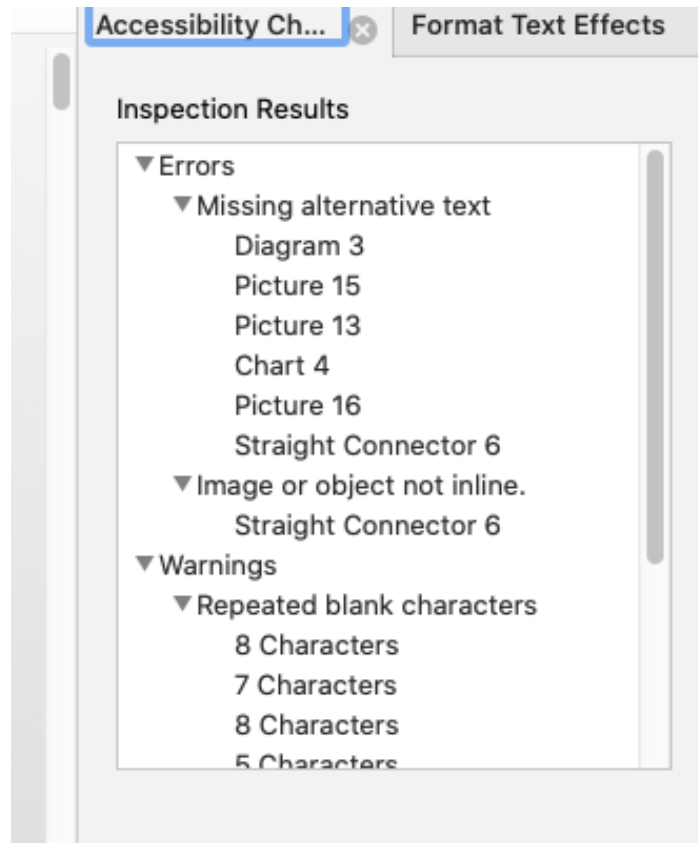
LEARNING ACTIVITIES

Activity 7 – Preparing an accessible Word document

Prepare an accessible Word document. Use an existing Word document that you download to your computer. To complete the task, follow these instructions:

- Add structure and layout.

- Ensure readability of the text.

- Add alt texts (at least a few)

- Add metadata

- Finally, check accessibility of your document.

2020-1-SI01-KA202-075871

106

How to make PDF documents accessible?

NEW PDF DOCUMENT:

→ Start with accessible Word.

→ Transform into accessible PDF (<u>Guidelines</u>)

EXISTING PDF DOCUMENT:

→ Accessibility features should be added with Adobe Acrobat Pro DC (<u>Guidelines</u>)

If possible, when designing an accessible PDF, we start with an accessible source document (e.g. in Microsoft Word) and export this to an accessible PDF. This way, if the document is edited later, the document's accessibility features will still be intact; and when the document is exported again to PDF, the accessibility features will again be passed to the PDF. However, if the original source document is not available, accessibility features can be added to the PDF using for instance Adobe Acrobat Pro DC. There are checklists available to check a PDF for its accessibility.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

PDF

Accessible WORD → Accessible PDF

WINDOWS:

→ FILE > SAVE AS > PDF

→ Chose OPTIONS and select „Document structure tags for accessibility" (Example)

MAC:

→ FILE > SAVE AS > PDF

→ Chose „Best for electronic distribution and accessibility" (Example)

LEARNING ACTIVITIES

Activity 8 – Preparing an accessible PDF document

Prepare an accessible PDF document. Use the Word document that you prepared during previous activity.

To complete the task, follow these instructions:

- Save the document as an accessible PDF

- Check accessibility of the PDF with the tool Pave.

- Is your PDF accessible? Would you be able to improve it?

2020-1-SI01-KA202-075871

Unit 2: Preparing accessible digital content and accessible digital documents

References and material recommended for further study:

- Digital accessibility course

- Writing tips

- Media

- Contrast Viewer 1

- Contrast Viewer 2

- Images

- Images – a decision tree

- Guidelines for complex images.

- A checklist for creating accessible videos

- Video captions

- Web accessibility video

- Social media user's guide – Ensuring accessibility

- Federal social media accessibility toolkit

- Make your social media more accessible

- Inclusive design – social media

- How to make Microsoft Word documents accessible

- Creating Accessible Documents

- Creating Accessible Documents in Microsoft Word

- Creating Accessible PDF

- Creating Accessible PDFs from Microsoft Word

- Guidelines for using Accessibility checker

- Pave

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism
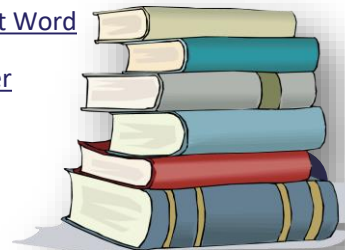
CONTENTS

03 Unit 3: How to check if digital content and information are accessible

Unit 3: How to check if digital content and information are accessible

This unit will focus on i.) accessibility evaluation, requirements, procedures and tools; ii.) preliminary check with automatic tools; iii.) manual evaluation with one's own judgement.

Learning goals:

Upon completion of this Unit participants should be able to:

·   Perform preliminary accessibility checks of the websites with automatic tools.

·   Perform manual accessibility checks of the websites.

·   Understand accessibility problems of reviewed websites.

·   Find and recommend accessible online travel information to clients.

1. ACCESSIBILITY EVALUATION REQUIREMENTS, PROCEDURES AND GUIDELINES

Accessibility evaluation requirements, procedures and tools

Digital accessibility is a complex process that is dependent on a range of factors, including accessibility evaluation. In this process, we can turn to WCAG standard which sets guidelines on how to make digital content accessible to diverse groups of people with disabilities.

Accessibility evaluation allows us to determine the level of conformance with the WCAG standards and/or the minimum requirements for accessibility of website according to the real users' needs.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Accessibility evaluation requirements, procedures and tools

Digital accessibility has become legally binding for all public institutions and a recommendation for private ones. According to EU Directive, all websites and mobile applications of public sector bodies in Europe should comply with **WCAG standard, level AA**.

Additionally, they should **publish an accessibility statement**, which describes the level of accessibility and lists all content that is not accessible; **provide a feedback mechanism** that allows users to indicate accessibility issues or request information that is provided in an inaccessible format; **conduct accessibility evaluation** on a regular basis.

Accessibility evaluation requirements, procedures and tools

Knowing how to conduct a **preliminary check is also important for ATFs**, so that they are able to check whether the online information that they want to share with clients is accessible. While a comprehensive evaluation should be done by website owners and managers, ATF needs to be acquainted with **preliminary check using automatic tools** and **manual check using one's own judgement**.

Thus, ATF needs to know how to carry out:

- A preliminary check with automatic tools;

- A manual evaluation of results from preliminary check with tools;

- A manual evaluation of content that automatic tools cannot check (alt-texts, links, table descriptions etc.).

116

Accessibility evaluation requirements, procedures and tools

For conducting preliminary check, there are plenty **of** automated evaluation tools, screen readers and check-lists available online. However, conducting evaluation only using automatic tools is not sufficient. **Preliminary check should always consist of both, using automatic tools, as well as manual check!!**

Automatic tools cannot detect all accessibility issues. Therefore, conducting a manual check with the aim to revise the results and recognize additional accessibility issues, is an integral part of any preliminary check.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

Accessibility evaluation requirements, procedures and tools

A few tips that ATF can follow when conducting accessibility evaluation:

- Use **screen reader** to evaluate any accessibility issues related to navigation;
- Select **two evaluation tools** to be able to compare the results;
- Conduct **preliminary check** with both evaluation tools;
- **Manually revise** all the identified errors having your target group in mind;
- **Manually revise** elements such as images for appropriate alt-text, links, audio-video recordings for appropriate captions or transcripts;
- **Provide solutions** for identified errors where possible (e.g. alt-text, transcripts);
- **Inform web owners** about mayor accessibility issues;
- **Invite people with disabilities** to provide feedback and support the evaluation process.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

118

LEARNING ACTIVITIES

Activity 1 – Getting acquainted with automatic tools for preliminary check

Work in teams

1. Get acquainted with Web Accessibility Evaluation Tools List. You can test one or two just to see, how they work and get ready for the next exercise.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 2 – Getting acquainted with screen readers for preliminary check

Work in teams

1. Get acquainted with the way Screen readers work. Think how you could use a screen reader to detect accessibility issues of a website. Which issues are you able to detect? Discuss in groups. (10 mins)

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 3 – Getting acquainted with TAB button for preliminary check

Work in teams

1. Chose a website and try to use a TAB button only to navigate through the website. What have you noticed? Discuss in groups. (10 mins)

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

2. PRELIMINARY CHECK WITH AUTOMATIC TOOLS

2020-1-SI01-KA202-075871

Preliminary check with automatic tools

Preliminary checks can give an ATF an indication of the overall accessibility of tourist information online.

The W3 WAI's guidelines may be used as a first check-list to conduct a quick and easy preliminary evaluation of any website, reviewing potential accessibility issues. This can be done using freely available automatic evaluation tools, such as WAVE.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

123

Preliminary check with automatic tools

Conducting a preliminary check using one of the automated Web Accessibility Evaluation Tools in combination with screen readers can greatly enhance the understanding of accessibility barriers of a specific website.

Nevertheless, such an initial evaluation is only one part of the web accessibility. In order to provide accessible information to their clients, ATF will need to conduct also manual check going step by step through the errors identified with evaluation tools.

As not all accessibility issues may be identified by these tools (e.g. appropriateness of image alt-texts), ATFs will need to know how to apply their own judgement. ATF can also consult people with disabilities to make sure that the itineraries are as accessible as possible.

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 4 – Conducting preliminary check using automatic tools

Work in teams

1. Chose two automated evaluation tools from the Web Accessibility Evaluation Tools List. Conduct the preliminary check of a website by your choice with each of the two tools. Compare the results and take notes. What differences have you noticed? Discuss the results in groups.

2020-1-SI01-KA202-075871

3. MANUAL CHECK WITH ONE'S OWN JUDGEMENT

Manual check using one's own judgement

Manual check should always be complementary to any preliminary check using automated evaluation tools!

Firstly, because not all accessibility issues may be identified by these tools (e.g. appropriateness of image alt-texts). Secondly, because there are differences between the tools which may also bring differences in results.

Results need to be carefully revised in order to:

- Understand the identified errors and how they influence accessibility for different types of users;
- Recognize errors that automated tools were not able to;
- Provide alternative solutions (e.g. prepare alt-text, transcripts to video content, description of tables etc.).

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

127

Manual check using one's own judgement

Manual check can also be used with the aim to get the first impression on the accessibility of a website. Accessibility of a website depends on many factors, some of which are more complex than others to an untrained eye. Some of the accessibility issues can be noticed even without using any specialized tools - you just have to know what to look for. Thus, manual check can be conducted as a quick evaluation without the use of any specialized tool, for instance:

- Checking the adequacy of a website structure;
- Checking navigability of a website using a screen reader (including navigation through keyboard only);
- Checking the adequacy of the customization of user experience;
- Checking accessibility of text and its alternatives to all non-text content e.g. images, audio and video recordings;
- Providing transcript for video and/or captions for audio content;
- Checking accessibility of images and recognizing appropriate alt-text for images;
- Providing appropriate alt-text for different types of images.

2020-1-SI01-KA202-075871

Co-funded by the
Erasmus+ Programme
of the European Union

FAST
Facilitating Accessibility
in Support of Tourism

LEARNING ACTIVITIES

Activity 5 – Getting acquainted with automatic tools for preliminary check

Work in teams

Now conduct a manual check of the same website as in Activity 4. Revise the identified errors again. Discuss the results in groups through the following questions:

- Which types of the users will have most difficulties accessing and using the website?
- What alternatives could you provide?
- Are there any errors that might need to be eliminated by the website owner?
- Check if the website has a feedback option. If they do, provide them with accessibility issues related feedback.
- Have you noticed any issue that the tools have not pointed out?

Unit 3: How to check if digital content and information are accessible

References and material recommended for further study:

- EU Directive on the accessibility of the websites and mobile applications of public sector bodies
- WCAG
- Hot to meet WCAG (Quick reference)
- Guidelines for using Accessibility checker
- Easy Checks - A First Review of Web Accessibility
- Web Accessibility Evaluation Tools
- Web Accessibility Evaluation Tools List
- Screen readers
- Using Combined Expertise to Evaluate Web Accessibility
- Conformance Level to Accessibility Standards

2020-1-SI01-KA202-075871

FAST

Facilitating Accessibility
in Support of Tourism