ACCESSIBILITECH

Solutions improving lives

ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer Innovative Solutions for the Accessibility of People with Disabilities

Deliverable 3.2.b

ACCESSIBILITECH Hackathon Summary

October 2023

Funded by the European Union

Fundación ONCE | Fundación ONCE | Inserta Innovación | DIGITALEUROPE | EASPD

European Disability Forum | Social Economy Europe | Philea | Philanthropy Europe Association

CONTENTS

Funded by
the European Union

This publication has received financial support from the European Union.

1. Purpose of the ACCESSIBILITECH Hackathon

The hackathon on inclusive and accessible technology aimed to engage the programming community in the design of improved or wider solutions and raise awareness on the importance of designing inclusive and accessible solutions to activate the ICT industry and business communities in the efforts to develop more accessible tech products and services in the EU and beyond.

Participants were encouraged to solve challenges (one per each area) that **have the potential to make technology in the areas of telework, telecare and e-learning more accessible and inclusive.**

2. Planning of the ACCESSIBILITY Hackathon

The organisation of the Hackathon was preceded by a number of meetings where the partners worked together and took the following decisions:

- DE and FONCE would organise the Hackathon with the support of EASPD.
- Hold the Hackathon in June, after students had their final examinations and before summer vacation.
- Organise the Hackathon online to open the floor to more participants from different countries.
- 24 hours duration as it was more suitable for an online format than 48 hours, which is often more suitable for in person hackathons.
- Target audience:
    - Professionals: programmers, UX/UI designers, business developers, marketing experts, project managers or similar,
    - Students with a background in IT, new media, marketing, business development, project management or similar, interested in the topic of accessible technological solutions,
    - Technology end-users with disabilities or participants with knowledge of special needs and barrier-facing by people with disability.
- Participants could apply either as an individual or as a team. In case of individual applicants, the would be organised in teams
- The suggested team's composition would be:
    - 1 Programmer
    - 1 UX designer
    - 1 Marketing or Business or Project manager
    - 1 End user
- Challenges would be design covering the 3 areas (telework, eLearning and telecare)
- Participants would be provided with material and training sessions and have access to Microsoft licences

- Due the duration and the format of the Hackathon, participants wouldn't be expected to present a prototype, but a design or mock-up made
- An independent jury would be organised especially for the Hackathon
- One winner team per challenge would be selected by the jury
- The winner teams would be awarded with 3.000€
- All participants would receive a participation certificate

3. ACCESSIBILITECH Hackathon preparations

FONCE designed the 3 challenges inspired by the gaps the had founded in the analysis of the solutions contained in the mapping tool (See Annex I)

- TELEWORK: How can people with speech difficulties participate in videoconferencing platforms?
- E-LEARNING: Design an intuitive videoconferencing platform
- TELECARE: Design a platform for patient.

Each challenge included a context use and barriers facing by certain profiles of users with disabilities, suggestions, and the specifications of the final output to be deliver to the jury.

The partners selected the members of the jury with background and knowledge on the different accessibility aspects and covering the three subject areas.

Microsoft showed interested in being part of the Hackathon, facilitating a technology to build in and volunteers' programmers. The partners considered an event powered by Microsoft would have more visibility. Microsoft Teams was used as the hosting platform of the ACCESSIBILITECH Hackathon

It was designed a landing page in DE's web site with the event's information, registration form and program.
https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/

Partners included news in their webs and ACCESSIBILITECH's web linked to the landing page and disseminated calls for participation

DE designed a communication pack (See Annex II) for dissemination and information pack for participants (See Annex III) including:

An information pack for the jury (See Annex 4) was also designed with the composition of the jury and the evaluation criteria.

The registration was opened from May 25th to June 15th.

There were 3 team applications, involving 12 members and FONCE organised 13 individual applicants in 4 teams. In total 7 teams and 25 participants.

On June 17th the teams had their participation and teams confirmed and they received the information pack.

The 20th of June a session about accessibility solutions using Microsoft technologies was delivered by a Microsoft expert. The participants also had a session about Microsoft Azure which was the platform to design with the projects.

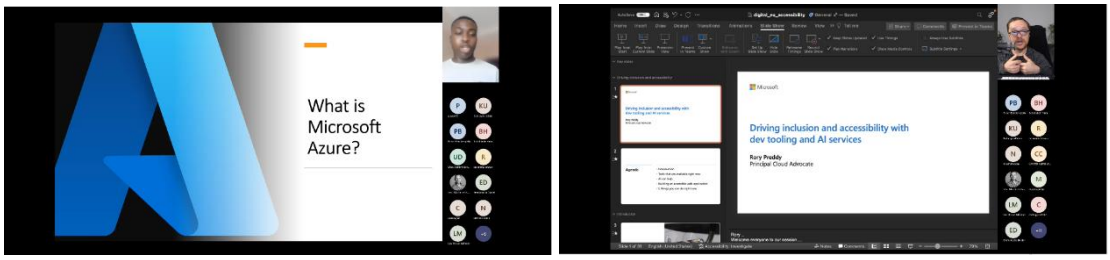

Figure 1 Training sessions by Microsoft

4. The Hackathon

The Hackathon started on June the 22nd at 10 CEST with an open ceremony that included representatives from DE, FONCE y Microsoft. After the ceremony a 30-minute session on orientation for the hackathon and introduction of the challenges was delivered to the participants.

At 11:00 the Hackathon started.

Each Team had a dedicated MS Teams channel for internal communication, meetings, document sharing, etc.

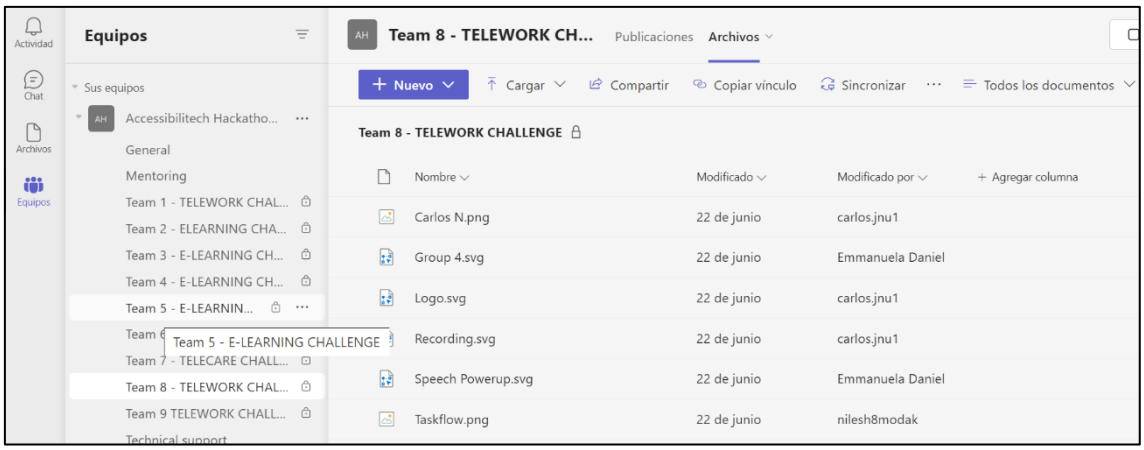

Figure 2 Participants organised in Teams

All Teams also had access to a dedicated mentoring channel with Microsoft voluntary experts, where participants were able to ask technical questions related to the challenge development as well as accessibility related inquiries. Members of DE and FONCE moderated the channels.

On June 23rd at 10:00 the Hackathon ended and for over 2 and a half hours the Teams pitches their projects to the jury.

These were the projects presented according to the challenges:

eLearning Challenge: propose a videoconferencing tool that people with limited comprehension skills can access and use with minimal or no assistance.

SIMPLIFY

A Google Chrome plugin for Microsoft Teams that includes:

- AI based meeting accessibility awareness checker

- Gesture based controls during meeting
- Complex word detection and correction
- Inclusion summary after the meeting

SIMPLIFY use Microsoft Cognitive services speech API and Microsoft computer vision services.

EASYBILITY COMUNICATION TOOL FOR EVERYBODY IN EVERYWHERE

An app focused on intellectual disability for iOS, tablets, pc, smartphone. Also, can be installed on TV.

Use AI to choose the most frequent contacts according to the most frequent emails, calls or WhatsApp send by the user. These contacts will be dividing by fields and users just have to click to the defined icons for saying what they want, calls, emails, etc.

The interaction with the device it's based on Natural Language Processing

MOBILE SOLUTION FOR ELEARNING

An application with a simple interface and basic instruction and easy login and authentication process

It allows teaches and students communicate in the same platform with added review icons.

Telecare challenge: propose a telemedicine/telehealth platform that, in addition to being accessible, allows users to enter health data generated at home, provide test results that are easy to understand and interpret, and videoconferencing tools that include captioning as well as captioned calls with health providers.

ACCESSHEALTH YOUR ACCESSIBLE HEALTH PARTNER

A platform with a desktop application for medical staff and smartphone app for patients.

It enables multichannel communication doctor-patient by mail, chat, phone call.

The interface for smartphone is simple, includes navigation instructions, live access to health services and instant contact with the medical provider

ACCESSIBLE PLARTFORM FOR TELECARE

The platform enables accessible features for:

- Motor impairment: prioritizing tapping over scrolling, big tapping areas,
- Visual impairment: high contrast, text enlargement and accessible fonts
- Cognitive impairment: predictable layout and navigation, clear explanations, captions for audio, avoid to many elements on the screen

Telework Challenge: Propose a component for videoconferencing platforms that solves the interaction problems for people with speech disabilities.

TROISI (TELEWORK RESEARCH ON INTELLIGENT SPEECH INTERFACE)

They propose to create and inclusive environment composed of:

- An intelligent caption generator based on AI algorithms
- An intelligent feedback system to make the user aware about speech intelligibility
- A text-to-speech module able to emulate emotions
- Sign language transcription

SPEECH POWER-UP

It's an add-on-module to MS Teams for users with speech fluency disorders to overcome the barriers to an interruption-free & misinterpretation-free telework session.

The system notifies other participants that the user with speech fluency disability is speaking and sends it back in the user's own voice for the participants to listen after a 2-3 second delay.

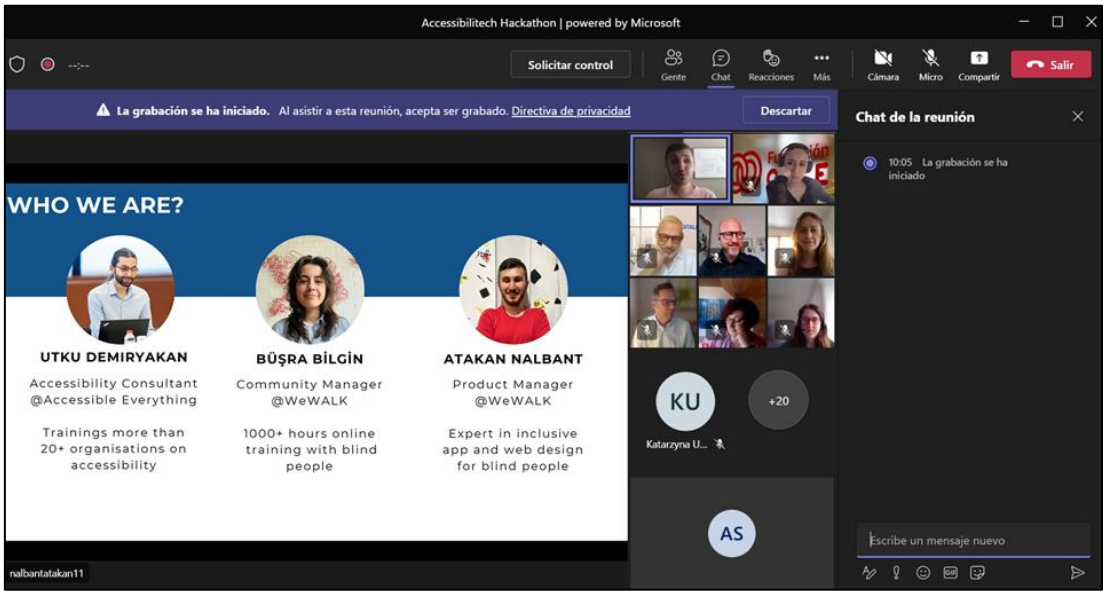

Figure 3 A team pitching its project to the jury

From 14:00 to 16:00 the Jury held an online meeting to assess all presented projects.

After the jury's deliberation and voting, the following teams were selected as the winners:

Telework challenge: Speech Power-up

Telecare challenge: Accessible platform for telecare

eLearning challenge: SIMPLIFY

At 17.00 The Closing Ceremony started.

The winners were announced and a representative from each winner Team had a short speech. The ceremony was closed by Inmaculada Placencia Senior Expert in the Unit for Inclusion of Persons with Disabilities in the European Commission

Annex I Challenges

Solutions improving lives

ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer
Innovative Solutions for the Accessibility of People with Disabilities

ACCESSIBILITECH Hackathon

powered by Microsoft

Challenges

Funded by
the European Union

1. TELEWORK

Challenge: How can people with speech difficulties participate in videoconferencing platforms?

Speech disorders are complex and encompass many difficulties, that affect people in different ways. Some of the most common speech disorders are the following:

- Speech fluency: conditions such as stuttering, or cluttering affect the fluency of speech. A person who stutters may involuntarily repeat words or parts of a word, making it hard to be understood. A person who clutters tends to speak too fast which can result in an inconsistent speech rhythm, lack of syntax or grammar.
- Motor planning and motor tone: people with motor speech disabilities have trouble making voluntary movements when trying to speak (apraxia) or using the speech muscles to form the sounds of a word. It can result in slow speech, mumbling, hoarse or breathy voice (dysarthria).
- Sound disorders: it includes articulation difficulties making it hard for a person to produce speech sounds. As a result, they can omit certain sounds or substitute them for others. Some people with sound disorders have trouble distinguishing speech sounds in languages. This can be due to hearing disabilities.
- Inability to speak: it is also known as muteness

Videoconferencing can pose a huge challenge to people with speech disorders. Most of the available platforms do not offer modes of interaction that are accessible to them.

Persons with speech disorders often share the following barriers in accessing videoconferencing platforms:

- The information does not adequately reach the interlocutor.
- They need more time than usual to express themselves, or they speak too fast.
- They may not be interpreted correctly by the subtitling system.
- They generate sounds that are not words, which the subtitling should be able to differentiate and leave out.
- Pronunciation problems, word order changes, etc., which would still affect both the subtitling and the listeners´ comprehension.

The challenge for this topic is to propose a component for videoconferencing platforms that solves the interaction problems for people with speech disabilities.

Suggestions/proposals:

- Accessible interface that includes specific modes of interaction for people with speech disabilities.
- Techniques (automatic or manual) to improve speech recognition to provide better and quality captioning.
- Alternative modes of interaction, e.g., predefined texts, predictive text for people with aphasia.

What to deliver to the jury:

- Document that explains the idea, the concept, the module proposed to solve the challenge and justification of why it is technically achievable to carry it out. In this challenge, it is important to explain the aspects related to the technology used, the programming language (if considered) and all the technical details that are considered necessary, to explain how the proposed module would work internally and for the user.
- Material used to present the final work to the jury: Power Point, Google presentations or any other appropriate slide software.
- **OPTIONAL:** Design the wireframes or interface in high quality of the module or component created to solve the challenge for people with speech disabilities.

2. E-LEARNING

Challenge: Design an intuitive videoconferencing platform.

Available videoconferencing platforms are often not accessible for the elderly and for students with intellectual or cognitive disabilities, or with poor comprehension skills due to a language barrier or limited schooling.

They may have trouble understanding technical jargon or complex words, solving problems, finding information, knowing the purpose of features, and activating them, among other issues. This situation can force them to rely on others for assistance or to avoid using videoconferencing platforms altogether.

These groups often share the following barriers in accessing videoconferencing platforms:

- Enabling or disabling microphones and cameras can be a difficult task.
- Instructions and supporting messages are not easy to understand
- The icons and words used may not be easy to understand for people unfamiliar with the technologies.
- There are a lot of features that are more complex and not needed for basic use.
- The steps and terms used to access, log in and use the platforms change from one platform to another.

- The way to access instructional help, tutorials and support people is complex.

The challenge for this topic is to propose a videoconferencing tool that people with limited comprehension skills can access and use with minimal or no assistance.

Suggestions/proposals:

- User-friendly interface with accessibility features
- An interface that allows for the activation of a simple mode:
  - Contextual texts
  - Icons and supporting images
  - Include a tutorial with basic elements
  - Filtered functionality, with option to add new/advanced features
  - Text simplifier
  - Help in camera focus for blind people
  - Interface that is easy to use and to navigate
  - Interactive tutorials
  - Help desk with technical support

What to deliver to the jury:

- URL to the design or mock-up made in Adobe XD, Figma or other software that is considered appropriate.

  NOTE: The mock-up can be submitted in either wireframes or in a high-quality interface. Submitting one or the other will be considered by the jury.

- Document that explains the idea, the concept, the design proposed to solve the challenge and justification of why it is technically achievable to carry it out.
- Material used to present the final work to the jury: Power Point, Google presentations or any other appropriate slide software.

3. TELECARE

Challenge: Design a platform for patients

There are various telemedicine/ telehealth platforms that allow people to manage information regarding their health. There are web pages and applications where users can request appointments with their doctors, manage their medications and even consult test results.

However, these services are not always accessible or provide information in language that is easy to understand and interpret. In addition, they do not allow patients to enter data such as glucose levels or blood pressure measurements taken at home.

They do not allow for an integrated management that enables the collection of information by the hardware and integrates various functionalities (pill-dispensers, meters...), interaction with medical staff and monitoring by the patient themselves.

Patients often find the following barriers in accessing telemedicine/telehealth platforms:

- Difficulties in handling the hardware and directly sending of information to the platform.
- Difficulties in intuitive use of the platform and comprehension of information included in the platform.
- Information accessible from different devices and with different forms of interaction.
- Lack of accessible communication channels with medical staff.
- Lack of possibility of integration with different types of devices, etc.

The challenge for this topic is to propose a telemedicine/telehealth platform that, in addition to being accessible, allows users to enter health data generated at home, provide test results that are easy to understand and interpret, and videoconferencing tools that include captioning as well as captioned calls with health providers.

Suggestions/proposals:

- Collect parameters from measuring devices
- Allow customization based on pathologies
- Can be used independently (no relatives, no doctors)
- Must be accessible
- User friendly interface so that information can be easily understood
- Access to support in the use of devices
- Make accessible the interaction with non-accessible devices
- Helpdesk
- Include tutorial with basic elements
- Include daily medication routines
- Personalised recommendations based on monitoring of the individual

What to deliver to the jury:

- URL to the design or mock-up made in Adobe XD, Figma or other software that is considered appropriate.

  NOTE: The mock-up can be submitted in either wireframes or in a high-quality interface.

- Document that explains the idea, the concept, the design proposed to solve the challenge and justification of why it is technically achievable to carry it out.

NOTE: In this challenge there is a lot of interaction of different measurement systems and different hardware, detail how the integration of all these elements would be. Use of APIs, connections among other options.

Material used to present the final work to the jury: Power Point, Google presentations or any other appropriate slide software.

Annex II Communication Pack

ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer
Innovative Solutions for the Accessibility of People with Disabilities

ACCESSIBILITECH Hackathon

powered by Microsoft

Communication Pack

Key information

Event name: ACCESSIBILITECH Hackathon | powered by Microsoft

Date: 22 June 2022, 10:00 AM (CEST) – 23 June 2022, 5:00 PM (CEST)

Format: online

Event page: https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/

Registration: Individual applicants **|** Teams

Tags and hashtags for social media:

- Twitter: @DIGITALEUROPE | @Fundacion_ONCE | @MicrosoftEU
- LinkedIn: DIGITALEUROPE | Fundación ONCE / Inserta | Microsoft
- #ACCESSIBILITECHHackathon

Social media copies

1. Great opportunity alert! @DIGITALEUROPE & @FONCE are organising the #ACCESSIBILITECHHackathon powered by @Microsoft. Join the event, compete in exciting challenges, and design forward-looking, inclusive technology.
   Find out more: https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/
2. Are you passionate about accessibility? Put your skills and knowledge to good use – join the #ACCESSIBILITECHHackathon and work with your team to create tangible, truly inclusive tech solutions. Sign up: https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/
3. Calling all techies and inclusion enthusiasts! Are you thinking of ways to make technology more accessible? The #ACCESSIBILITECHHachathon is your opportunity to turn that vision into reality.
   Learn more and register:
   https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/
4. In a digitalising world, we cannot leave anyone behind. Take part in the #ACCESSIBILITECHHackathon and contribute to designing truly inclusive tech solutions.
   Find out more and register:
   https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/
5. Can technology become more accessible? Put your creativity and technical skills to good use, and take part in the #ACCESSIBILITECHHackthon, solving solving forward-looking challenges of the in the areas of **telework, telecare and e-learning**:
   https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/

External newsletter

In a continuously digitalising world, we cannot leave anyone behind and must strive to make technology available to all.

Embarking on this mission, DIGITALEUROPE and Fundación ONCE have partnered up with Microsoft to create the **ACCESSIBILITECH Hackathon**: a highly interactive event which, in the scope of the ACCESSIBILITECH project, aims to raise awareness of inclusive technologies and promote accessible tech solutions to citizens and organisations across Europe. Moreover, its goal is to activate the ICT industry and business communities in the efforts to develop more accessible tech products and services in the EU and beyond.

During the event, the participants will have the chance to put their curiosity, creativity and professional skills to good use, solving forward-looking challenges that have the potential to make technology in the areas of **telework, telecare and e-learning** more accessible and inclusive. Find out more and register.
You can download supporting images for dissemination here.
Contact details

Should you have any questions, please reach out to:

- **Jose Martinez-Usero**, Senior Project Manager at DIGITALEUROPE jose.martinez-usero@digitaleurope.org
- **Katarzyna Udała,** Project Manager at DIGITALEUROPE katarzyna.udala@digitaleurope.org

Annex III Information Pack for Participants

Solutions improving lives

ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer
Innovative Solutions for the Accessibility of People with Disabilities

ACCESSIBILITECH Hackathon

powered by Microsoft

Information Pack for Participants

DIGITALEUROPE

Fundación ONCE

Microsoft

Key information

Event name: ACCESSIBILITECH Hackathon | powered by Microsoft
Date: 22 June 2022, 10:00 AM (CEST) – 23 June 2022, 5:00 PM (CEST)
Format: online
Event page: https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/
Tags and hashtags for social media:

- Twitter: @DIGITALEUROPE | @Fundacion_ONCE | @MicrosoftEU
- LinkedIn: DIGITALEUROPE | Fundación ONCE / Inserta | Microsoft
- #ACCESSIBILITECHHackathon

Agenda

22 June 2022

10:00-10:30 – Opening Ceremony (DIGITALEROPE, Fundación ONCE & Microsoft)

10:30-11:00 – Orientation for the Hackathon, introduction of the challenges

11:00 – Start of the Hackathon (24h)

23 June 2022

10:00 – end of the Hackathon

10:00-12:30 – pitches to the Jury

12:30-14:00 – *lunch break*

14:00-16:00 – Jury meeting

16:00-17:00 – Closing Ceremony & Hackathon results announcement

Hackathon Digital Space

MS Teams Environment

Microsoft Teams will be used as the hosting platform of the ACCESSIBILITECH Hackathon – please download the MS Teams desktop application

Team space

Each group participating in the Hackathon will have dedicated MS Teams channel for internal communication, meetings, document sharing, etc.

Connecting with the mentors

All groups will also have access to a dedicated mentoring channel with Microsoft mentors, where participants will be able to ask technical questions related to the challenge development as well as pose accessibility-related inquiries.

Moderation

All channels will be moderated by the ACCESSIBILITECH consortium, following the ethical principles of the partner organizations.

Hackathon Training

Learning is a significant component of the ACCESSIBILITECH Hackathon. For up-to-date knowledge on accessibility, you can use the training resources shared in Annex II.

To support you with using technical solutions selected for the Hackathon, two training sessions will also be delivered by Microsoft experts in advance to the event:

Session 1: Accessibility solutions using Microsoft technologies

Date: Monday, 20 June 2022, 17:00-18:00 CEST

Speaker:

Rory Preddy works in the Developer Relations team at Microsoft as a Principal Cloud Advocate. Cloud Advocates use their deep research skills to help professional cloud developers discover and successfully use Microsoft's platforms. A seasoned speaker whose talks are both meaningful and humorous, Rory speaks around the world empowering developers to achieve more.

Session abstract:

Building accessibility into the planning stages of programming can eliminate barriers for participation and create an inclusive environment for people with disabilities. Programming for diversity serves as an unquestionable indicator that your software embraces the diversity of your users and cares about their safety and comfort.

Session II: Setting up Azure for Student and M365 Developer accounts

Date: Monday, 20 June 2022, 18:00-19:00 CEST

Speakers:

Precious Uzochukwu is a Software Engineer, Microsoft Learn Student Ambassador and an AI enthusiast. She studied Computer Science at Landmark University. She currently works as a software engineer at a financial technology company building solutions for the everyday person. When she isn't trying to increase her rank on Call of Duty, you can find her researching on how to make the web and internet accessible for everyone.

Japhlet Nwamu is passionate about empowering and supporting the next generation of developers on their journey in tech. As a Cloud Advocate, he focuses on upskilling students and educators with relations to Artificial Intelligence, Microsoft 365, and Power Platform. Before joining Microsoft, he was a Gold Microsoft Learn Student Ambassador where he had the opportunity of guiding students across the globe by hosting sessions on different Microsoft technologies. He was also the Student Relations Lead for Azure Nigeria Community.

Session abstract:

Interested in building reliable solutions that improves and enhances e-inclusion and e-accessibility? Microsoft Azure is a reliable, secure, and trusted cloud service that offers you free credits to host your solution. Plus, Microsoft 365 Developer Program gives you access to 25 user licenses to build and deploy your solutions. Best part is your subscription remains active if you're regularly developing and deploying solutions. In this session, we walk you through how to create an Azure for Students account, Microsoft 365 Developer account, and a Power Apps Community Plan.

Software to be installed for the Hackathon

- All participants are encouraged to download the MS Teams desktop application available for Windows and iOS: https://www.microsoft.com/en-ww/microsoft-teams/download-app
- All students will get access to Azure for Student: http://aka.ms/azure4student
- Additional resources are all available at: http://aka.ms/learnstudent

Presentation of hacked solutions

Each team participating in the ACCESSIBILITECH Hackathon should submit a presentation (ppt or similar format) to the dedicated submissions folder by 10:00 AM CEST on 23 June. This presentation will be also used for the pitches to the Jury starting on 23 June at 10:00 AM CEST.

Contact details

Should you have any questions, please reach out to:

- **Jose Martinez-Usero**, Senior Project Manager at DIGITALEUROPE jose.martinez-usero@digitaleurope.org
- **Katarzyna Udała,** Project Manager at DIGITALEUROPE katarzyna.udala@digitaleurope.org

Learning resources

Microsoft technical resources

- Microsoft Learn Resources for Student
- Accessibility Basics – Microsoft Learn Learning Pathways
- Microsoft Cognitive Services
- Microsoft Bot Framework
- Microsoft Power Virtual Agents

- Power App Maker for Figma
- Power App from Figma Design
- Microsoft Accessibility
- Accessibility by Design
- Accessibility Standards
- Microsoft UX Guidelines
- Microsoft Azure Communication Services
- Microsoft Teams
- Microsoft Documentation
- Microsoft Learn
- Accessibility overview for Teams

Accessibility and assistive technology

Source: Publications Office of the European Union

- Introduction to accessibility
- Assistive technology: What AT is and how it improves the lives of many people.
- Assistive technology and accessibility features of main Operating Systems
- Screen readers: Characteristics and main OS's screen readers
- Accessible Fonts, sizes and colours
- How to design accessible alternative text.
- Accessibility solutions designed to support people with auditory impairments: Text transcripts, captions and sign language
- Basic rules to create plain language

User cases

- Videos showing how people with disabilities interact with technology in different situations and how accessible technologies help them. (Source: ACCESSIBILITECH)

- Videos showing some users with visual disabilities interacting with digital publications, challenges they face and solutions Source: Publications Office of the European Union)

Accessibility in telework, elearning and telecare

(Source: ACCESSIBILITECH)

- Workshop “Telecare accessible online care services for all”
- Workshop “Accessibility: the key for inclusive telework”
- Workshop “The accessibility of e-learning solutions in crisis times”

Web accessibility

Source: W3C

- Introduction to Web Accessibility
- Accessibility Principles: Introduction to some of the web accessibility requirements for websites, web applications, browsers, and other tools
- Easy Checks – A First Review of Web Accessibility
- Tutorials showing how to develop web content that is accessible to people with disabilities
- How People with Disabilities Use the Web
- Abilities and web accessibility barriers that people commonly experience because of inaccessible websites and web tools
- Techniques and tools that people with disabilities use to interact with the web — web browser settings, text-to-speech, voice recognition, and many more
- The impact of accessibility and the benefits for everyone in a variety of situations: Video Captions, Keyboard Compatibility, Speech Recognition, Clear Layout and Design
- Making Audio and Video Media Accessible

Accessibility in documents

- Accessibility in MS Office (Source Microsoft):
  - Make your Word documents accessible
  - Make your Excel documents accessible
  - Make your PowerPoint presentations accessible

- Accessibility requirements for EPUB and PDF publications. Video (Source: Publications Office of the European Union)
- Create and verify PDF accessibility (Source: Adobe)
- Webinar Recordings and Materials on Creating Accessible PDFs (Source: Adobe)

Accessibility resources

- Accessibility resources: Guides with information and tips for using accessibility tools and features in Microsoft products to meet specific needs (Source: Microsoft)
- Carbon Design System Accessibility (Source: IBM)

Design for all methodologies

- The field guide to human-centered design (Source: IDEO.org)
- The Inclusive Design Guide (Source: Inclusive Design Research Centre)
- Inclusive Design (Source: Microsoft)

Accessible user interfaces

- iOS Human Interface Guidelines: Accessibility
- Android Material Design System – Accessibility
- Windows App Development – Accessibility

Accessibility in software engineering

- Accessible software development in Android | iOS
- GPII – Developer space: resources and components

Annex IV Information Pack for the Jury

Solutions improving lives

ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer
Innovative Solutions for the Accessibility of People with Disabilities

ACCESSIBILITECH Hackathon

powered by Microsoft

Information pack for the Jury members

DIGITALEUROPE

Proposal for the composition of the jury

DIGITALEUROPE in close coordination with ACCESSIBILITECH partners and Microsofft has carried out a selection of potential candidates to be invited to be part of the Hackathon jury, considering a number of complementary criteria:

- Background and knowledge on the different accessibility aspects
- Representation of the three subject areas covered by the project: elearning, telework and telecare.
- Geographic distribution
- Complementarity of the whole team

After several rounds of invitations, the final list of members of the ACCESSIBILITECH Hackathon can be found below.

ACCESSIBILITECH Hackathon jury composition

	Name	Background and justification	Country	Contact
1	Maddalena Illario (PhD)	Innovation manager at Regione Campania. Director at Reference Sites Collaborative Network.	IT	illario@unina.it
2	Maite Ferrando (PhD)	Director at Kveloce	ES	mferrando@kveloce.com
3	Martina Piazza	Officer for Digital Technology & Innovation Policy. Coordinator of the DE WG on eInclusion	BE	Martina.Piazza@digitaleurope.org
4	Hector Minto	Lead Accessibility Evangelist (Director) at Microsoft	UK	Hector.Minto@microsoft.com
5	Sasha Leone	Knowledge and eLearning Officer at EASPD	BE	sasha.leone@easpd.eu
6	Alejandro Rodriguez (PhD)	Researcher and Teacher at UNED	ES	arascaso@dia.uned.es
7	Jesica Rivero	Senior Accessibility Expert at FONCE.	ES	jrivero@fundacionONCE.es

List of external advisors to the Jury

These are members of the Hackathon organisation team that will support to the Jury regarding project management aspects, logistics and rules as well as technical aspects:

- Antonio Ingelmo. FONCE. Coordinator of the ACCESSIBILITECH project. Adviser for aspects related to the project itself.
- Jose Martinez-Usero. DIGITALEUROPE. Responsible for the Hackathon organization, procedure and logistics. Adviser for aspects related to procedures and logistic.

Logistic information for the Jury members

The Jury members will receive two Teams invites for connecting to

- the Open ceremony and Closing ceremony, as well as the Pitches from Hackathon groups to the Jury
- the Jury meeting, to discuss about the hacked solutions and take decisions regarding the 3 awards.

See detailed agenda at: https://www.digitaleurope.org/events/accessiblitech-hackathon-powered-by-microsoft/

Procedure to evaluate the pitches of the groups

The suggested evaluation criteria for the ACCESSIBILITECH Hackathon are:

1. Does this have business value?

While not all hackathons require a viable product or feature, tool, etc., the winning team's idea needs to contribute to something. If it's not a solution to the problem, it needs to be a means to eventually getting there.

Examine and evaluate the teams and map it against the market. Is this idea going to make money, or at least contribute to the solution that will?

Is there a potential to grow the idea into something profitable?

2. Will it make an impact?

One of the most key criteria when judging a hackathon comes down to how original the idea is.

A great hackathon idea should wow both the judges *and* other hackers, and while it may be unrealistic to strictly expect a brand new, never-heard-before masterpiece idea (although that happens), you should at least be seeing a fresh approach to an old problem. That can be just as impressive as a completely novel idea.

So, how much edge does the idea have?
Is it original and cleverly thought out?

3. Is it realistic?

A team's product can be cool and original enough to completely knock your socks off, *but is it realistic?*

Judging an idea against how realistic it is to execute is often where some judges trip up—after all, a hackathon is a crazy hectic event where some of the digital world's most whacky ideas get cooked up. So it depends entirely on what you want from your hackathon. If you're looking for original viable products with potential for market value, judge against how realistic the idea is.

Is the idea and the solution realistic?
It is addressing concrete market needs?
Is it possible to sell it cross-border?

4. How innovative the hacked solution is?

Judges, this is what you want. While an idea may be original and/or impressive, it doesn't necessarily mean it's an innovative one.

Could this product be used as a stepping stone for even better products?
Is it a real solution to a problem?
Has it confronted a new problem?
Does the final product have a sustainable lifecycle?
Are there opportunities for collaboration?

Hackathon awards

There are 3 awards for the winning solutions*

- 3 x EUR 3.000 per team for the winning solutions

Funded by
the European Union

This project has received funding from the European Union's Rights, Equality and Citizenship Programme (2014-2020). The information contained in this publication does not necessarily reflect the official position of the European Commission