



Azure Community Conference 2021

India's largest Azure Conference



#AzConfDev

Title Sponsor



Gold Sponsor



Community Partner



#AzConfDev



Dennie Declercq

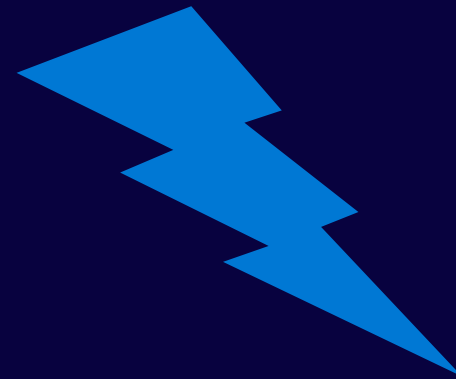
President, Developer, MVP @ DDSoft

#AzConfDev



AI for The Better (Life of People with Disabilities)

Lightning Edition

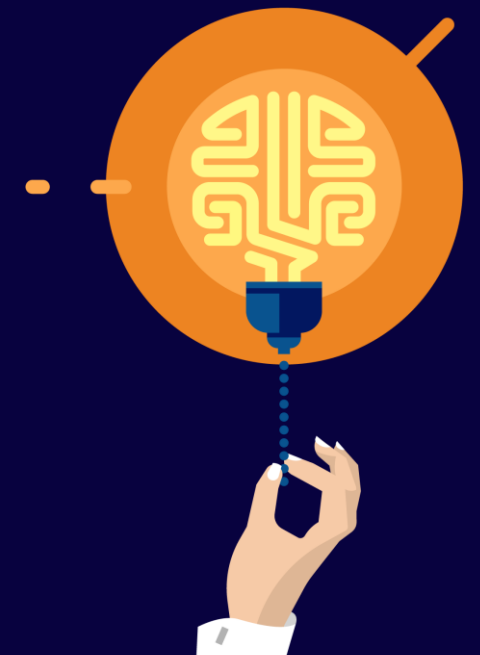


Content



- Primer into Accessibility
- Microsoft Cognitive Services API
- Problems that People With Disabilities can have
- Demo's, Demo's, Demo's!

Primer into Accessibility



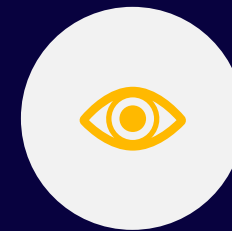
Kind of disabilities



Learning
disability



Autism



Visual



Auditory



Motoric



Much more...

Learning disability

Significant limitations in both:

- Intellectual functioning
- Adaptive behavior

Learning Disability

Intellectual Functioning

Also called intelligence

Mental capacity

IQ score between 70-75

Adaptive Behavior

Conceptual Skills

- Language/literacy
- Money
- Time/numbers

Social Skills

- Social responsibility
- Self-esteem

Practical skills

- Activities daily living
- Personal care / healthcare

Principles of Inclusion



- Same activities
- Same district
- Work Together
- Adjustments par person

Digital Difficulties for PWD.

Learning Disability

- Read
- Understand

Autism

- Understand
- See structure

Blindness or vision loss

- Decreased ability to read
- Decreased ability to navigate

Auditory disabilities

- Hearing notifications
- Following movies without audio description.



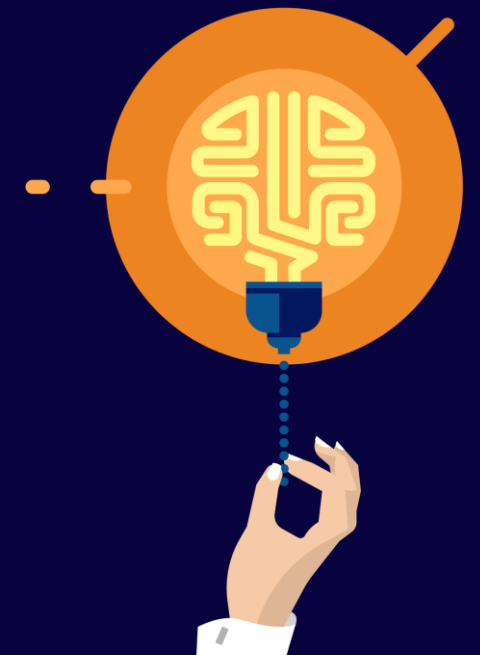
Our Focus

People with Learning
disabilities

Autism

People with mental health
situations

Microsoft Cognitive Services API's



What is Microsoft Cognitive Services?



Part of Microsoft's AI platform:

No need-to-know AI

No need-to-know deep math algorithms

Just perform easy AI calls

Possibilities: REST style/ SDK Style*

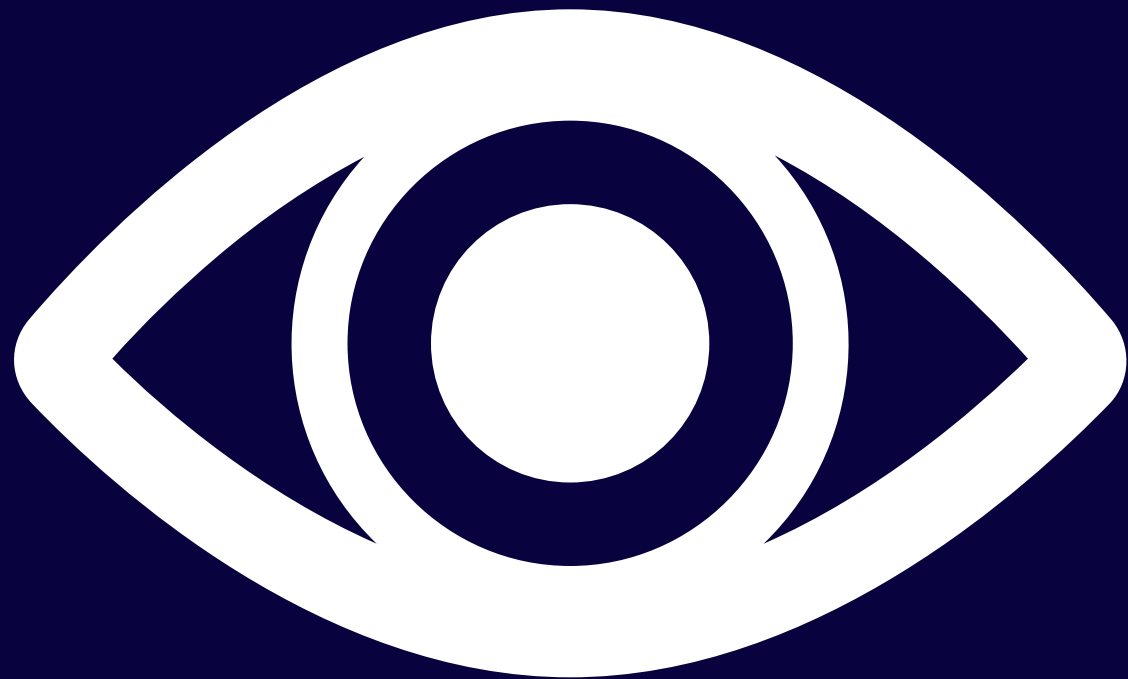
*Not for each Cognitive Service (yet)



Speech Service

Text-to-speech

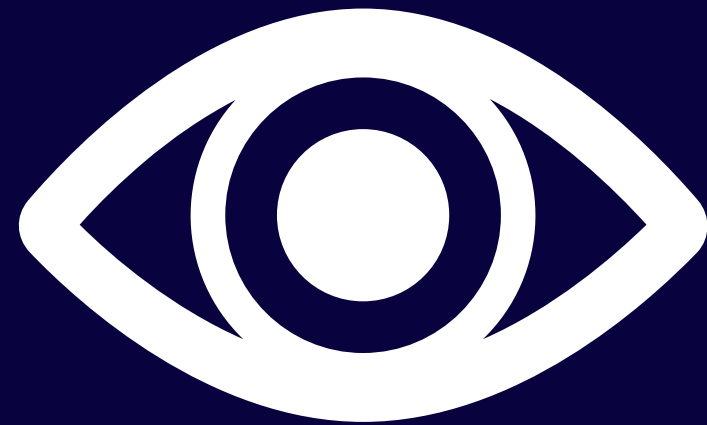
Custom Voice



Vision API

Analyzes images

Let PWD take pictures and tells what it is.



Face API

Detect Emotion

Detect Facial Hair

Detect Smile

Detect Age

BOT Service

Provide BOTs

BOTs really can assist PWD

Make clear guidelines





Immersive Reader

Accessibility features like:

- Reading aloud websites

- Linking pictographs to websites

- Text appearance options



Translator Service

Translation

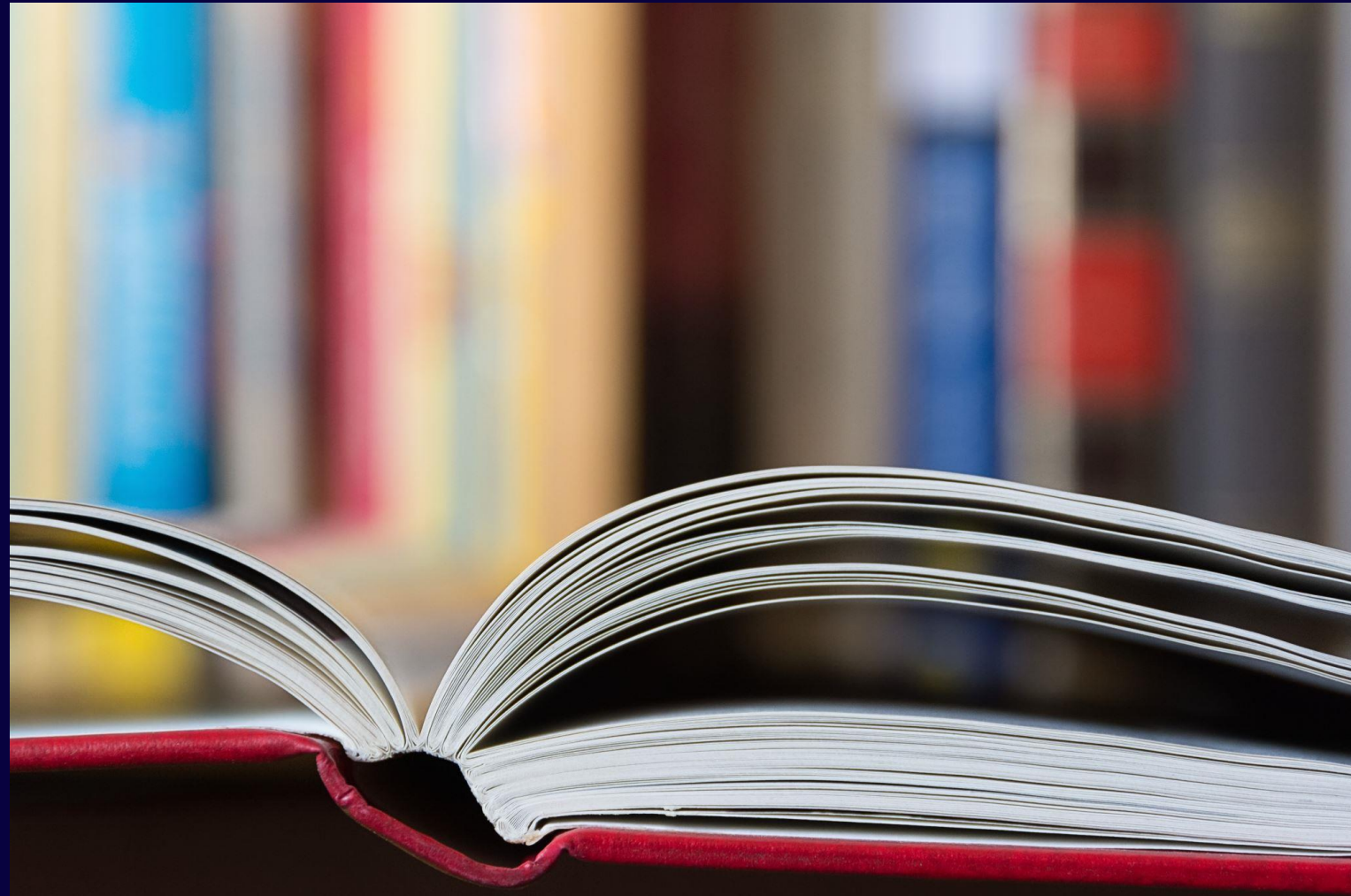
Language Detection

Problems that People With Disabilities can have



Literacy

Reading information
Understanding written text
Recognizing money
Math



Executive Functioning

Planning 'simple' tasks
Making choices
Concentration



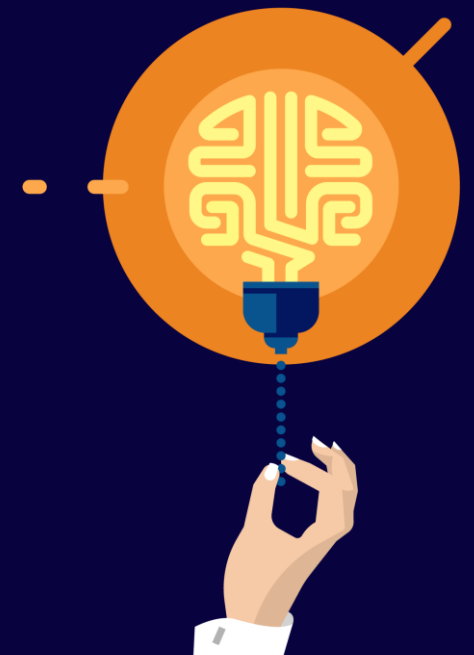
Trust & Self-Trust

Self-trust can be hard
Can I really do this?
Will this really work?



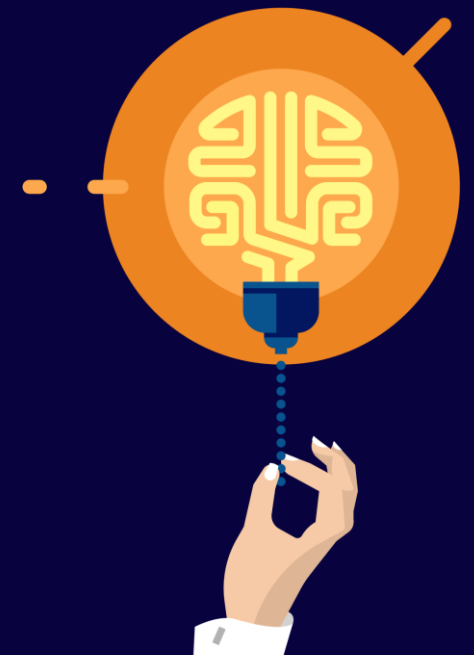
Demo's

#AzConfDev



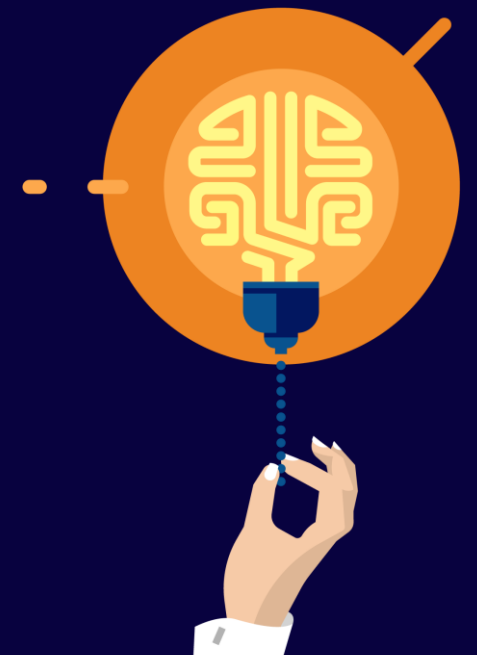
DEMO: Creating a Cognitive Speech Service

<https://go.ddsoft.be/texthelp>



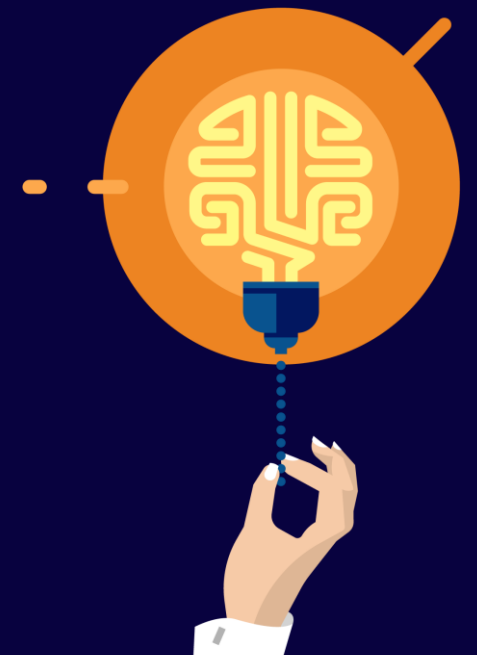
DEMO: Speech Service in Action

<https://go.ddsoft.be/texthelp>

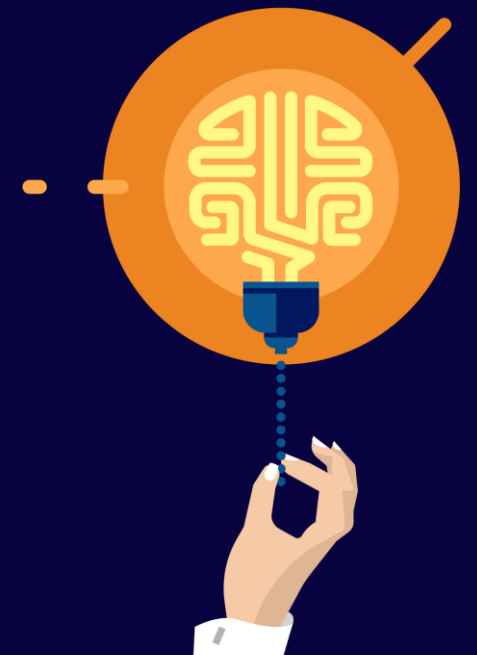


DEMO: Translate Service in Action

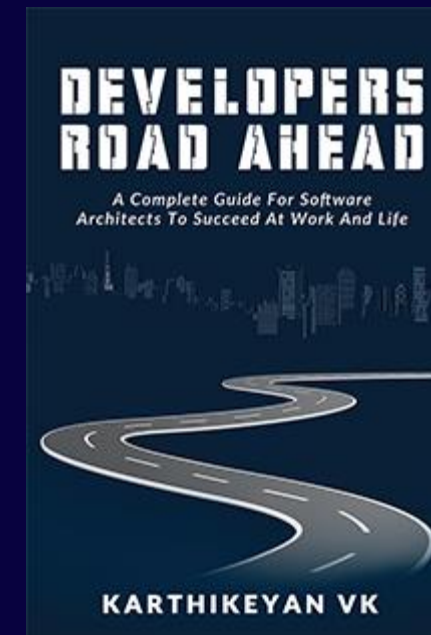
<https://go.ddsoft.be/texthelp>



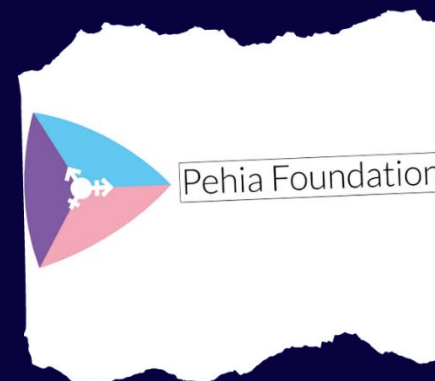
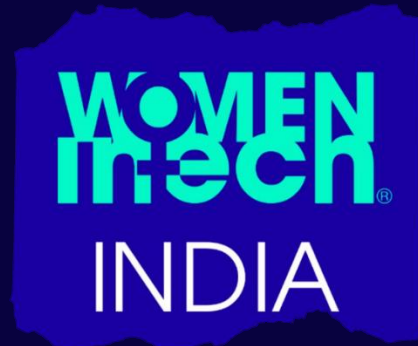
DEMO: The Future of Web Accessibility



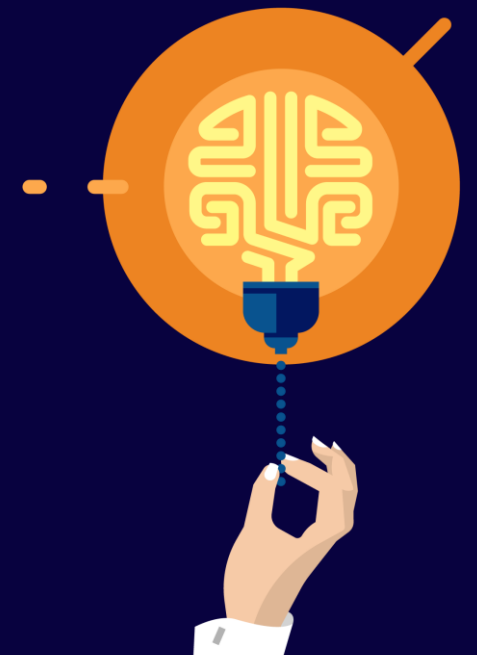
Our Partners



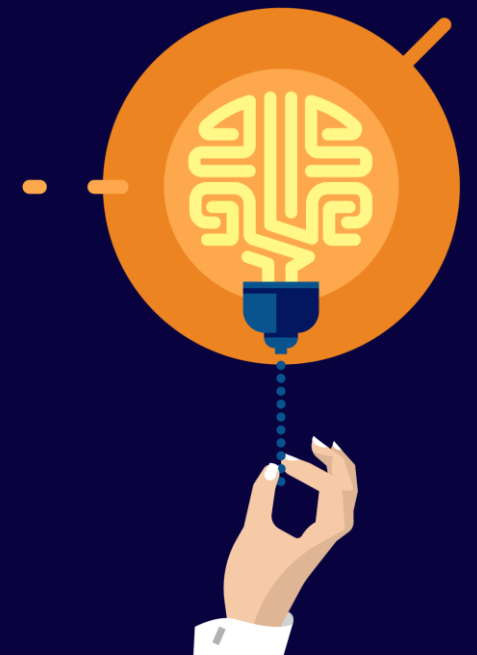
Communities



Q & A



Feedback



THANK YOU!



Dennie Declercq
@DennieDeclercq
#DreamingIsBelieving



#AzConfDev