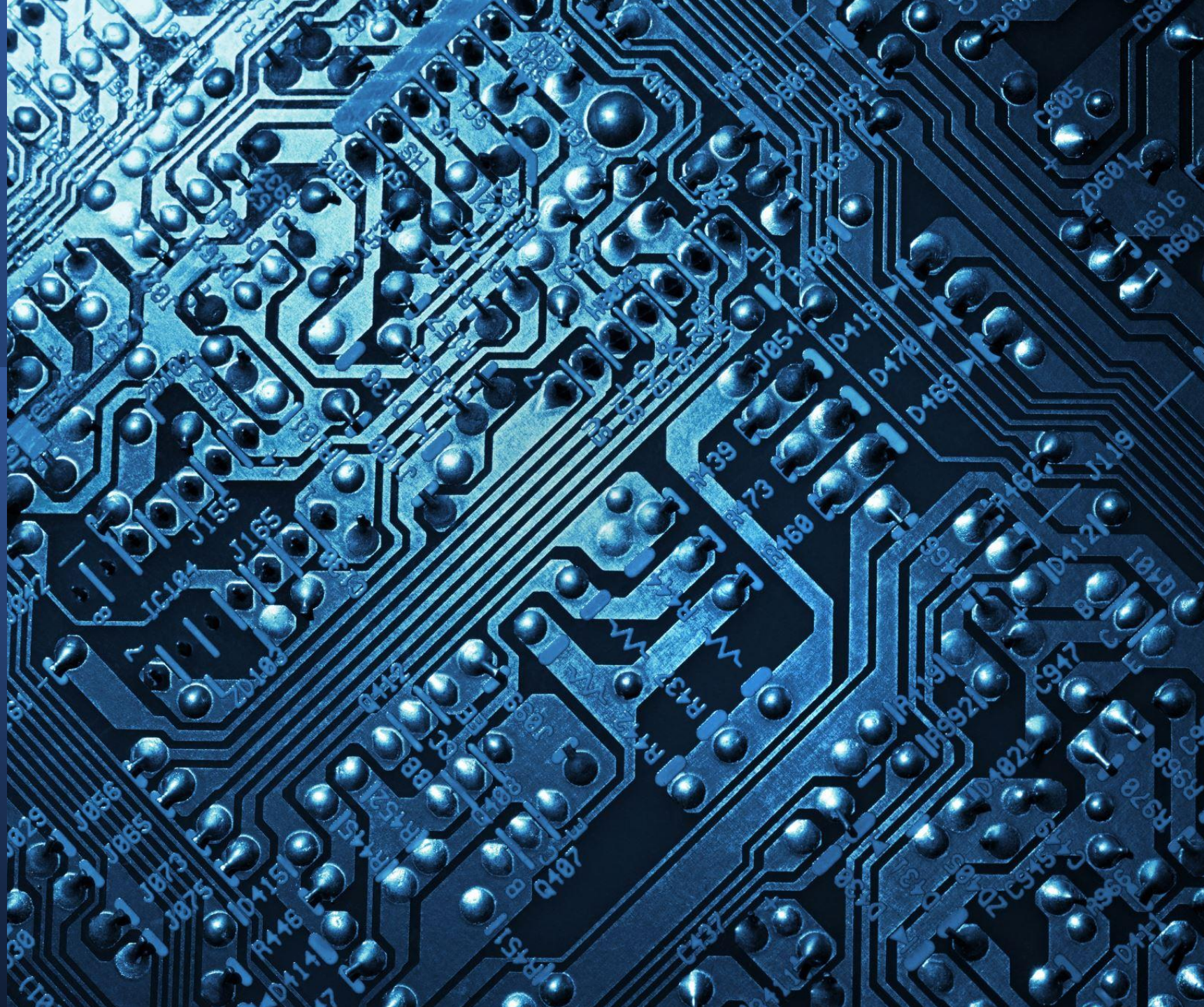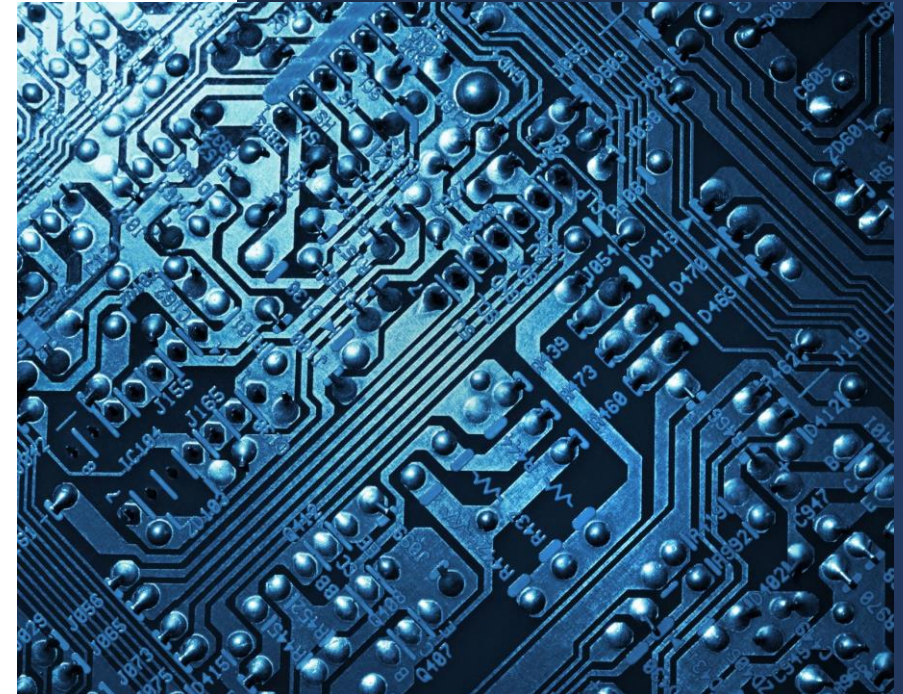# Autism in Tech

@DennieDeclercq

Java Forum Stuttgart // 2022

Content

- Who am I?

- I am different

- The Autist' Brain

- Myths & Beyond

- Autism in Tech:
    - Executive Functioning in Tech
    - Central Coherence in Tech
    - Theory of Mind in Tech
    - Sensory deficiencies in Tech
    - Anxiety & Stress in Tech

- What works for me?
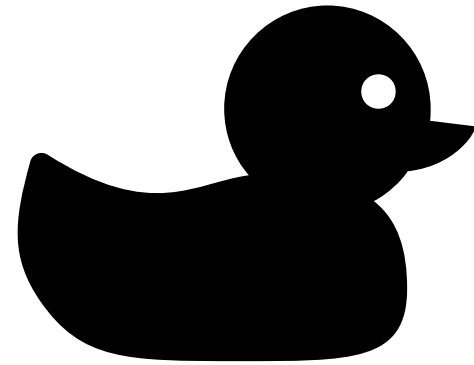
- Wrap up

- Thanks // Q&A

Who am I?

- Dennie Declercq
- DDSoft
- President / Developer
- @DennieDeclercq
- Mr. #DreamingIsBelieving

I am different

Autistic

- Different since I was a child
- Autism diagnose at age of 13
- No university college

Without a paid job

- 2008 – 2011: Tried some jobs
- No science degree
- Factory for people with disabilities
- Tech / development in after hours
- Ended on a sickness benefit

How did I roll into tech world?

- 15yo: I wanted to be a developer
- Microsoft Office at school
- Mike was a programmer
- 2007: Programming as 'escape'
- 2012: Volunteer developer
- Belgian community
- 2014: DDSoft
- 2017: Started as conference speaker
- 2019: Microsoft MVP
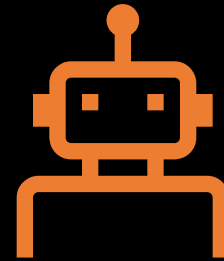
Autistic logic & Developers logic

Developers Logic

A Boolean is true or false

It's good to declare variables, what type it's expected

If you program a loop, the exit scenario should be clear

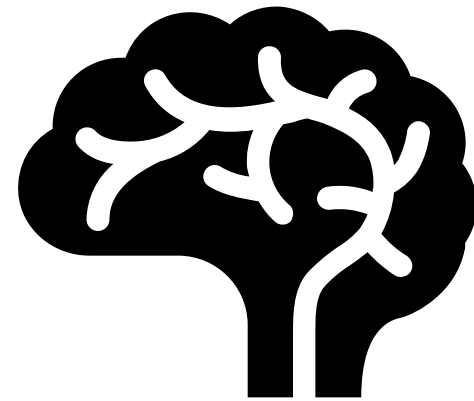It's very structured

Autistic Logic

A fact is only true or false

It's very nice that every circumstance is declared

If there's a path to follow, auti's like it's clear and clean

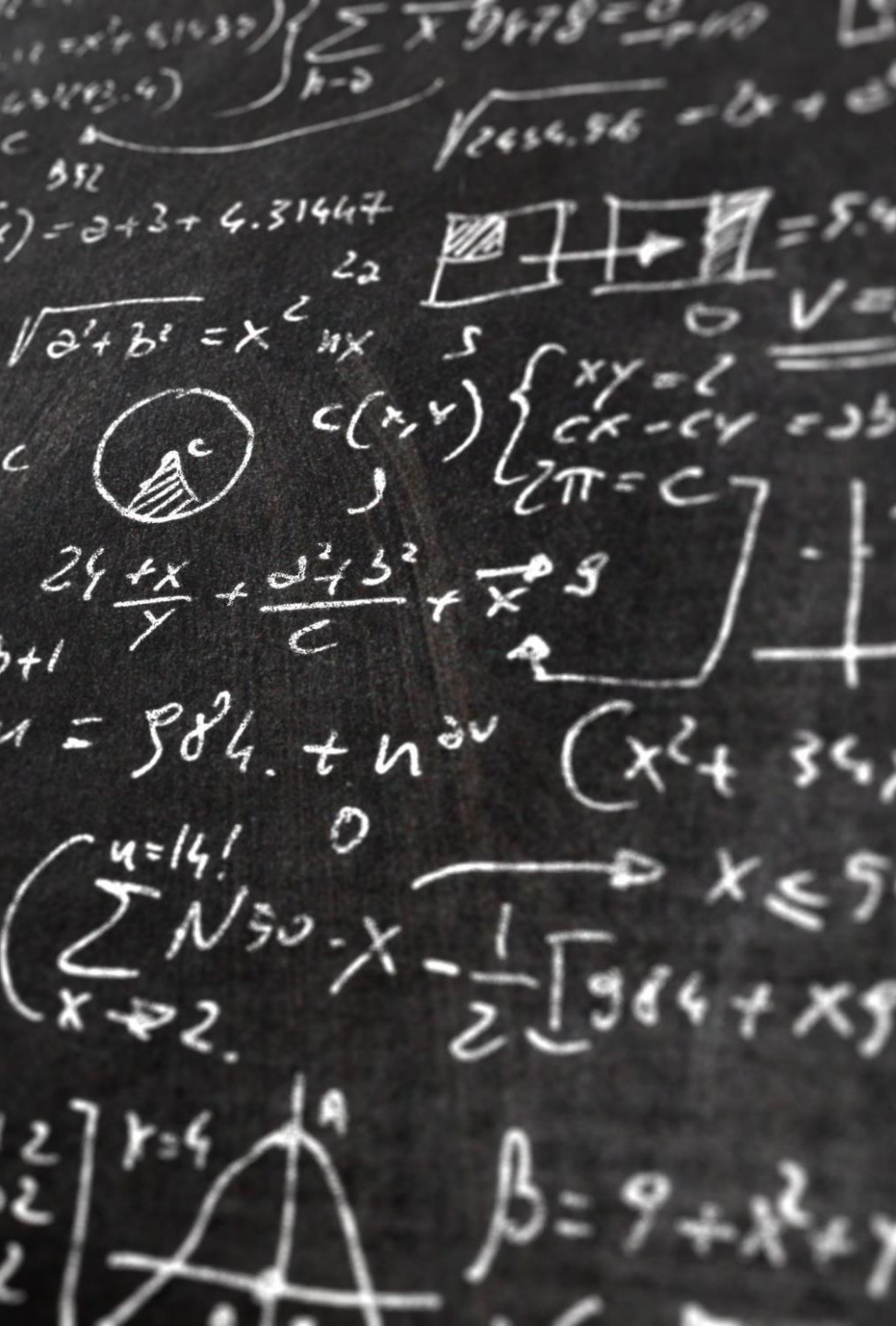Most of them are very structured

The Autist' Brain

Theory of Mind

- Understanding the WHY
- Seeing which behavior causes which outcome
- Seeing logical steps

Executive Functioning

- Everything that you need in daily living or in a working environment
- Examples:
  - Planning a timeslot
  - Planning what to wear at a conference, meeting
  - Planning which sessions, you want to see

Central Coherence

- Coherence of situations, things, tasks, words
- Seeing the global picture

Context Blindness

- Understanding the context of something
- 'One incentive has one meaning'
- Problems with 'use of the same words' for other meanings

Sensory deficiencies

- Sensory Overload
- The need for additional sensory stimulation
- Sensory deficiencies can cause difficulties at the job

Extra: STRESS! Anxiety! Depression! ADHD! (Mental Health)

- Additional Mental Health conditions
- Can trigger more difficulties
- Can trigger 'Being more autistic' ➔ At least behaving more different

Basic solution

- Explaining, Explaining & Explaining
- Trying to understand
- Trying to figure out
- Trying to Adjust

Myths & Beyond

Autism / ASD: Disability or Neurodiversity?

- Thought leadership on autism changed
- People with autism / Asperger's are superpowers
- Good for inclusion
- People with autism need to know their self very good
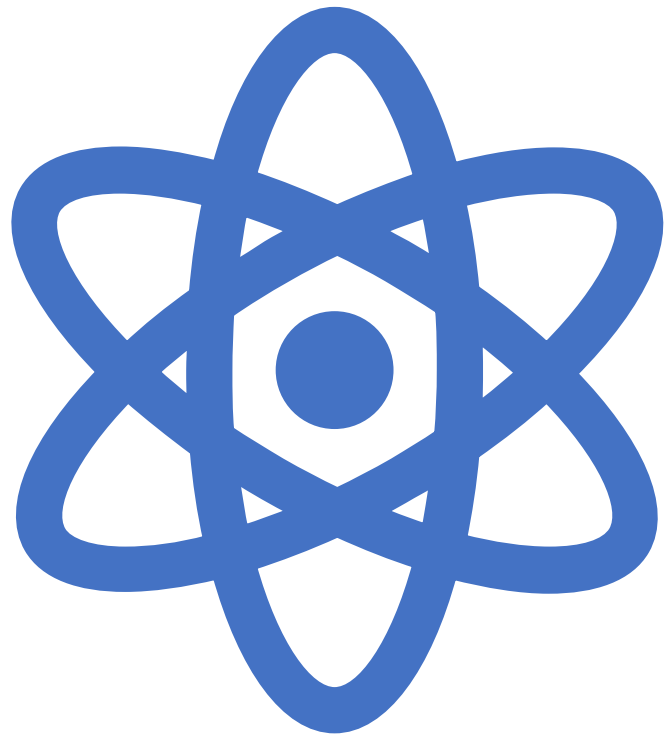- Example: Greta Thunberg

Paid job or volunteer job?

- Paid job is sometimes possible
- Not always
- Advice: Start with QoL "Quality of Life" and Basic comfortable feeling

Executive functioning in Tech

Different energy and
new technologies

Code Style

- People with autism think straight forward
  - My way of the highway
  - Can be sure they use the best classes, procedures
- Difficult to change code style
  - New possibilities with new versions
  - Difficult to adapt some patterns.

```javascript
(function () {
    window.blazorFocus = {
        set: (element) => { element.focus(); }
    };
})();
```

Structure

- Day Structure
  - Huge change of different day structure
  - More breaks during day
- Project timeframe

Central Coherance in Tech

Cross – software solutions

st.cshtml ✕

OSoft > Projects > Blazor > Bethanys > 02 > demos > Demos > End > Bethany

```
@page "/"
@namespace BethanysPieShopHRM.Server.Pages
@addTagHelper *, Microsoft.AspNetCore.Mvc.TagHelpers

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, in
    <title>BethanysPieShopHRM.Server</title>
    <base href="~/" />
    <link rel="stylesheet" href="css/bootstrap/bootstrap.
    <link href="css/site.css" rel="stylesheet" />
    <script src="https://kit.fontawesome.com/273d0585ea.j
```
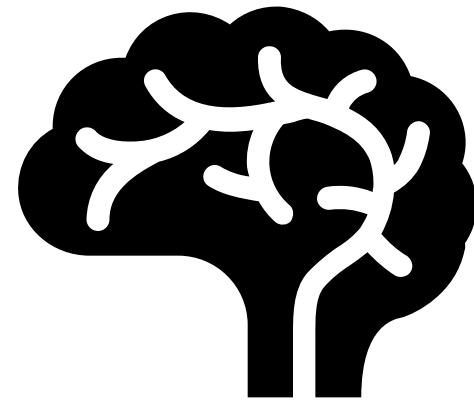
Colors and IDE's

Theory of Mind in Tech

Being fanatic & user groups and conferences

- Can be an issue
- More difficult at conferences
  - Variety of topics / speakers

User groups & conferences and different communication

- Talking too much or too little

- Problems with eye contact

- Different non-verbal communication
  - Example: being excited but can't show

Being fanatic in tech

- Pro Microsoft / Apple / Linux?
  - Difficult to use both
    - C# / Java / C++
    - ASP.NET or PHP
- Biased in apps / libraries

Stack Exchange Q&A communities are different. Here's how:

Expert communities.
Each of our 174 communities is built by people passionate about a focused topic.

36

The right answer. Right on top.
Experts like you can vote on posts, so the most helpful answers are easy to find.

+200

Share knowledge. Earn trust.
Earn reputation and additional privileges for posts others find helpful.

Learn more

Forums and communication

- Difficult if you are fanatic
- Forum expect knowledge and DIY
- Was difficult in the beginning

DM's and communication

Big mismatch in communication

Code reviews

Difficult if you have a different code style

Contributing OSS

- Can be a reason for not contributing to OSS.

- Being afraid to be different

- Afraid from criticism

Special topics of interest

- Can be very fanatic for an investment
  - Invest in:
    - Technology nobody cares about
    - Time in specific nice side project

Sensory Deficiencies in Tech

Music & Headphones

- Being more productive with music
- Having auditory distractions
  - People talking

Office Space

- Being distracted
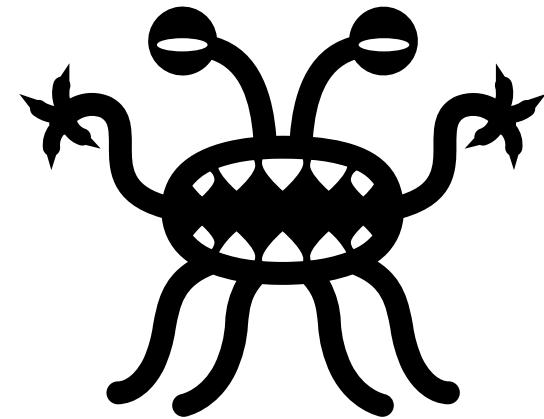 - People passing by
- Stimming
- Meltdowns

Smell & Food

- Heavy sensory reactions to smells like:
  - Perfume
  - Food
  - Body smell (Yeah.. Maybe taboo to say)

Anxiety & Stress in Tech

Working on updates
11% complete
Don't turn off your computer

Anxiety in tech

- Being afraid to change from tool stack
- Windows update
- Being afraid to ask questions in fora
- Being afraid to use public transport (too little time in the community)
- Cloud changes
- Being afraid of losing friends & Being fanatic
- Afraid of losing your job & own vision

Example: Moving from Azure IaaS to PaaS

Moving From
Azure IaaS to PaaS,
my own story

———

@Dennie Declercq – Azure Lowlands
2020

Customers and Separation Anxiety

- Stress & Anxiety with:
  - Customer demands
  - Pricing (asking too little)
  - Borders & Limits by specific questions

DEADlines

- Afraid for not getting the deadline.

- Working even slower due to the stress

What works for Me?

Being vulnerable... (WIP)

————

- Anxiety & Separation Anxiety
  - Still an ongoing process
  - It is what it is? ☺

Bookmark Share

Welcome back, Dennie Declercq

Master core concepts at your speed and on your schedule. Whether you've got 15 minutes or an hour, you can develop practical skills through interactive modules and paths.

LEARNING PATHS
Learn on your own schedule
Explore a topic in-depth through guided paths or

CERTIFICATIONS
Become Microsoft certified
Jump-start your career and demonstrate your

LEARN TV
Watch live and recorded events
View streaming technical content about Microsoft products from the experts that build

Code style

- Community Leaders
- Interest
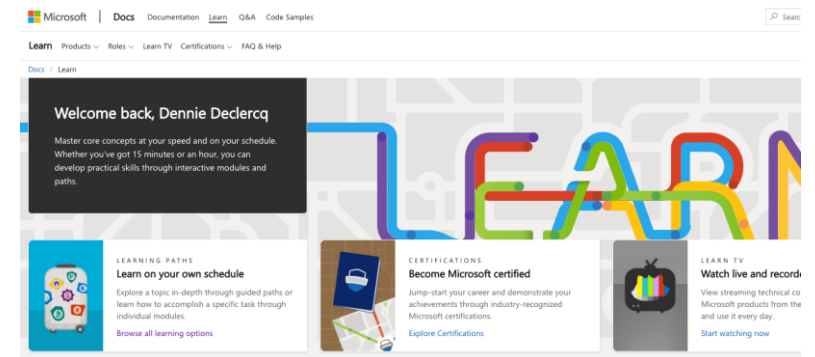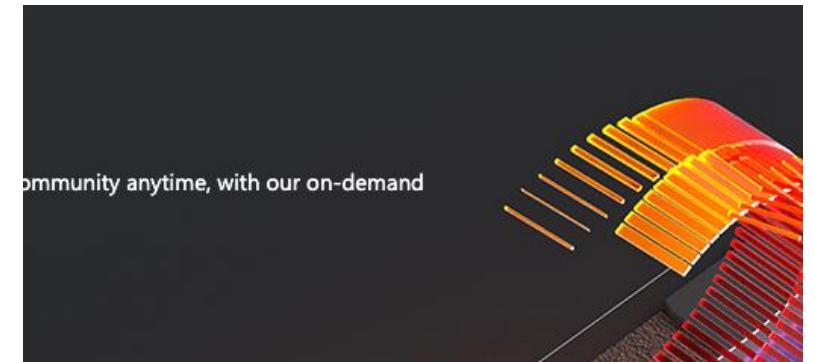- Microsoft Learn
- Conference talks
- Pluralsight

Colors

- The need and the urge
- The broad possibilities

New Technologies

- Focusing on interest
- The love of conferences
- The joy of being inspired
- Microsoft Learn

Windows / Mac

- The need and the urge
- Web versions look the same!
- Thank Microsoft for Edge

Wrap up

Thanks! Q&A

- Dennie Declercq
- @DennieDeclercq
- #DreamingIsBelieving
- dennie@ddsoft.be