

Deciphering alerts

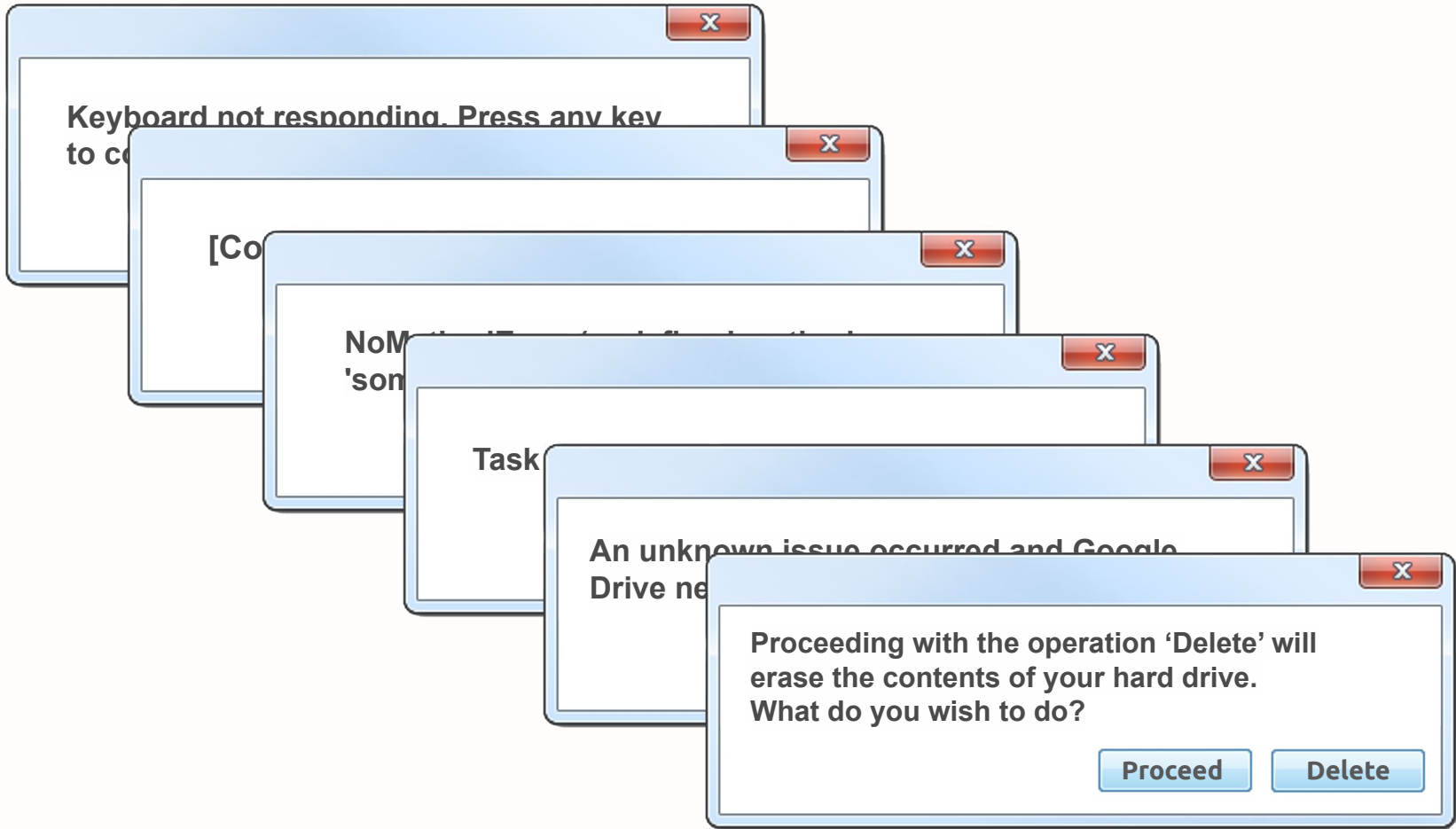
Why is it so hard to make sense?

- Lena Nyström -



WHY IS THIS SO HARD???

Why do we still get...



Keyboard not responding. Press any key to continue.

[Control] key not working.

No more space is available on the disk.

Task Scheduler error:

An unknown issue occurred and Google Drive needs to be restarted.

Proceeding with the operation 'Delete' will erase the contents of your hard drive. What do you wish to do?

Proceed

Delete

The way we write messages
shows how we **balance**
clashing priorities



Secure



Informative

Log in



You've entered wrong email address or password

Email address

lena@pejgan.se

Password

.....



Remember me

Need help to log in?

Log in

Log in

Email address

lena@pejgan.se

Password

.....



 Incorrect password format

Remember me

Need help to log in?

Log in

Too vague



Too detailed

 Windows 10 Setup

Something happened

Something happened

Microsoft Outlook Synchronization



ActiveSync cannot log on to Microsoft Outlook. Make sure Microsoft Outlook is installed and functioning correctly. You may need to restart your computer. You could have a conflict due to two folders on this computer are named C:\Program Files\Microsoft and C:\Program Files\Microsoft Office. If so, rename the C:\Program Files\Microsoft folder so that it does not contain the word "Microsoft". If this folder contains subfolders, you may need to reinstall programs in the renamed folder. For more information on renaming folders and installing programs, see Help for your operating system.













Close

Business specific
and “correct”



Accessible
for everyone

Building for screen readers
and other tools

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

Clear, precise, simple
language

User



Data &
Technology

Frontend



Database
& Beyond

Messages from different parts
of the stack have different **style**



Frontend

- + Friendly, guiding
- + “Real time”
- + Close to user
- + Sanitizing input

- Can get overwhelming
- Easy to bypass

Log in

Email address

Password 

 Please enter a password

Remember me


Need help to log in?

Log in

Backend

- + Formal, authoritative
- + On submit
- + Close to the business
- + Protecting against bad data
- Requires translation
- Breaks the flow
- Duplicated validation

Log in

 '\$(\$User.email)' is not a valid E-mail address

Email address

lena@pejgan.se

Password

.....



Remember me

Need help to log in?

Log in

Data storage

- + Technical jargon
- + On save/update/delete
- + Last line of defence
- + Data integrity and quality

- Hard to understand
- Most of the context lost
- Domino effect

Log in



Unique constraint or index violation; table:
USER column: EMAIL

Email address

lena@pejgan.se

Password

.....



Remember me

Need help to log in?

Log in

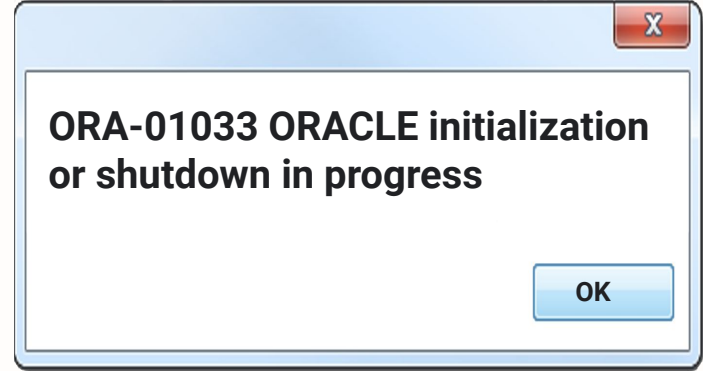
The Ecosystem

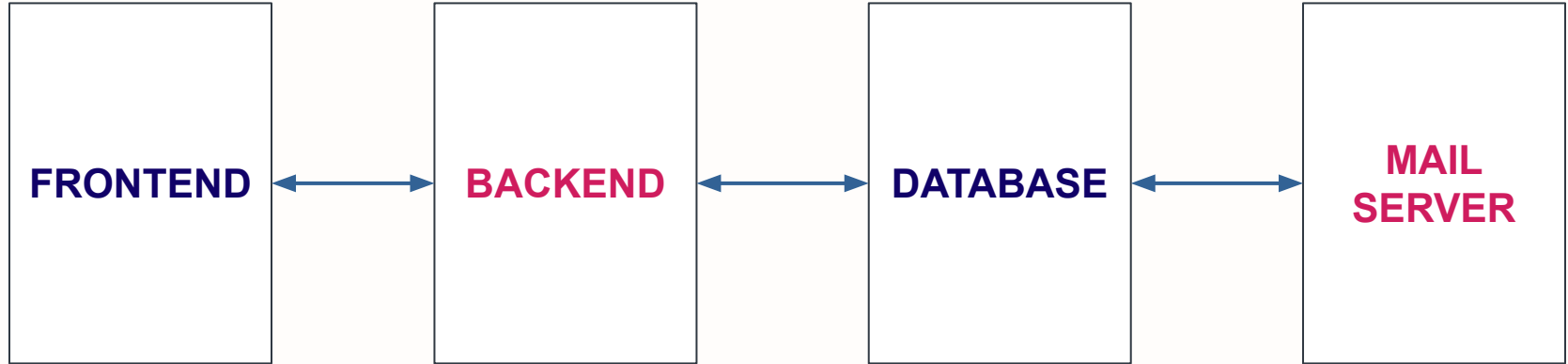
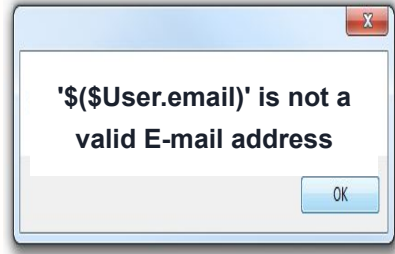
Servers

Operating system

Network & Infrastructure

External services






What looks like gibberish
is really a cipher

You just need to learn to crack
the code!



Availability

 The server is unreachable at the moment


Authentication

401 - Unauthorized: Access is denied due to invalid credentials.

Bad Input

 **Error!** Invalid date format. Please enter the date in the format "d/MMM/yy". 

Unhandled

 The exception unknown software exception (0xe0434352) occurred in the application at location 0x0000000076CAB5B2.

 **Best practise** 

 ~~Best practise~~ 

It's all a matter of **choice**

Ask Questions!

How important is this feature?

How often does this happen?

Is this standard feature or unique?

Who are our users?

What's the potential profit & cost?



Call for Action!

Challenge your default



Thank you!



lena-pejgan-nystrom



<http://www.pejgan.se/>



Good resources

https://en.wikipedia.org/wiki/List_of_HTTP_status_codes

[Falsehood programmers believe...](#)

<https://www.scaler.com/topics/types-of-errors-in-javascript/>

<https://dotnethow.net/exception-handling-in-csharp/>

<https://blog.hubspot.com/website/api-errors>

<https://www.smashingmagazine.com/2022/09/inline-validation-web-forms-ux/>

<https://en.wikipedia.org/wiki/SQLSTATE>

https://en.wikipedia.org/wiki/List_of_HTTP_status_codes

Good resources

Accessibility

<https://www.w3.org/> (especially [the parts dealing with errors](#))

<https://lsnrae.medium.com/accessible-form-validation-9fa637ddb0fc>

UX/Guiding users

<https://uxplanet.org/how-to-write-good-error-messages-858e4551cd4>

https://developer.mozilla.org/en-US/docs/Learn/Forms/Form_validation

Security

<https://owasp.org/> (especially [the parts dealing with errors](#))