

# POSEIDON

## THE POSEID-ON DASHBOARD

For Privacy and Digital Protection

**Workshop on Privacy Challenges in Public and  
Private Organizations  
IFIP Summer School on Privacy and Identity Management  
August 21, 2019 in Brugg/Windisch, Switzerland**

**Presenter:**

Paulo Silva (University of Coimbra)

**2019-08-21**

**BRUGG, SWITZERLAND**

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Framework Programme of the European Union



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INTRODUCTION



REQUIREMENTS



APPROACH



CURRENT STATE  
OF  
IMPLEMENTATION

# POSEID-ON PROJECT

## Protection and control of Secured Information by means of a privacy enhanced Dashboard

- innovative intrinsically scalable platform
- integrated and comprehensive solution aimed to safeguard the rights of data subjects
- exploiting the cutting-edge technologies of Smart Contracts and Blockchain
- support organisations in data management and processing
- ensuring GDPR compliance

# REQUIREMENTS

# BOUNDARIES

# WEB-BASED

## Only a Web Browser is needed

- Targeting the most common application platform in the world
- Reaching the largest group of users
- Open standards

Initially, the largest subset of browsers is supported.

# ACCESSIBLE AND RESPONSIVE

## Every European citizen counts

- Different languages
- Different devices
- Different levels of technology-literacy
- Different disabilities

# PERFORMANT AND SCALABLE

## Increasing user satisfaction

- Fast responses for a smooth user experience
- Scale and performance is often linked
- Scalable from a small number of users to *millions*

# SECURE

## Keeping user data safe

- Handling vast amounts of highly sensitive data
- Security in-depth, KISS approach
- Leading web security standards and best practices



# MAINTAINABLE

## Important technology infrastructure

- Easy to deploy
- Easy to support
- Easy to build upon
  
- Clean code
- Modular
- Documentation. Documentation everywhere.

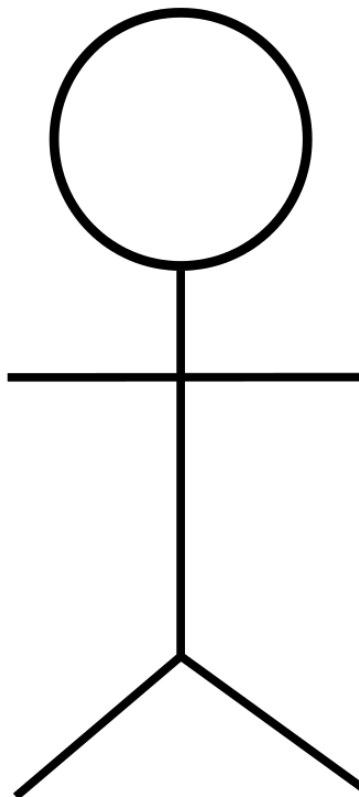
# APPROACH

# TACKLING CHALLENGES

# THE USER COMES FIRST

# NO EXCEPTIONS

# WHO IS THE USER?



# WHO IS THE USER?

## The most important question

Every European citizen, right?

# WHO IS THE USER?

**We are not the average user**

# INTRODUCING: PIERRE

## Pierre Lacroix is our user

- Pierre is not real
- Pierre has a complete backstory
- 59-year-old Electrician from Paris, France
- Enjoys the occasional barbecue with his neighbours

# TOP-DOWN APPROACH

**Backwards: from user interface, to front-end, to back-end**



# TOP-DOWN APPROACH

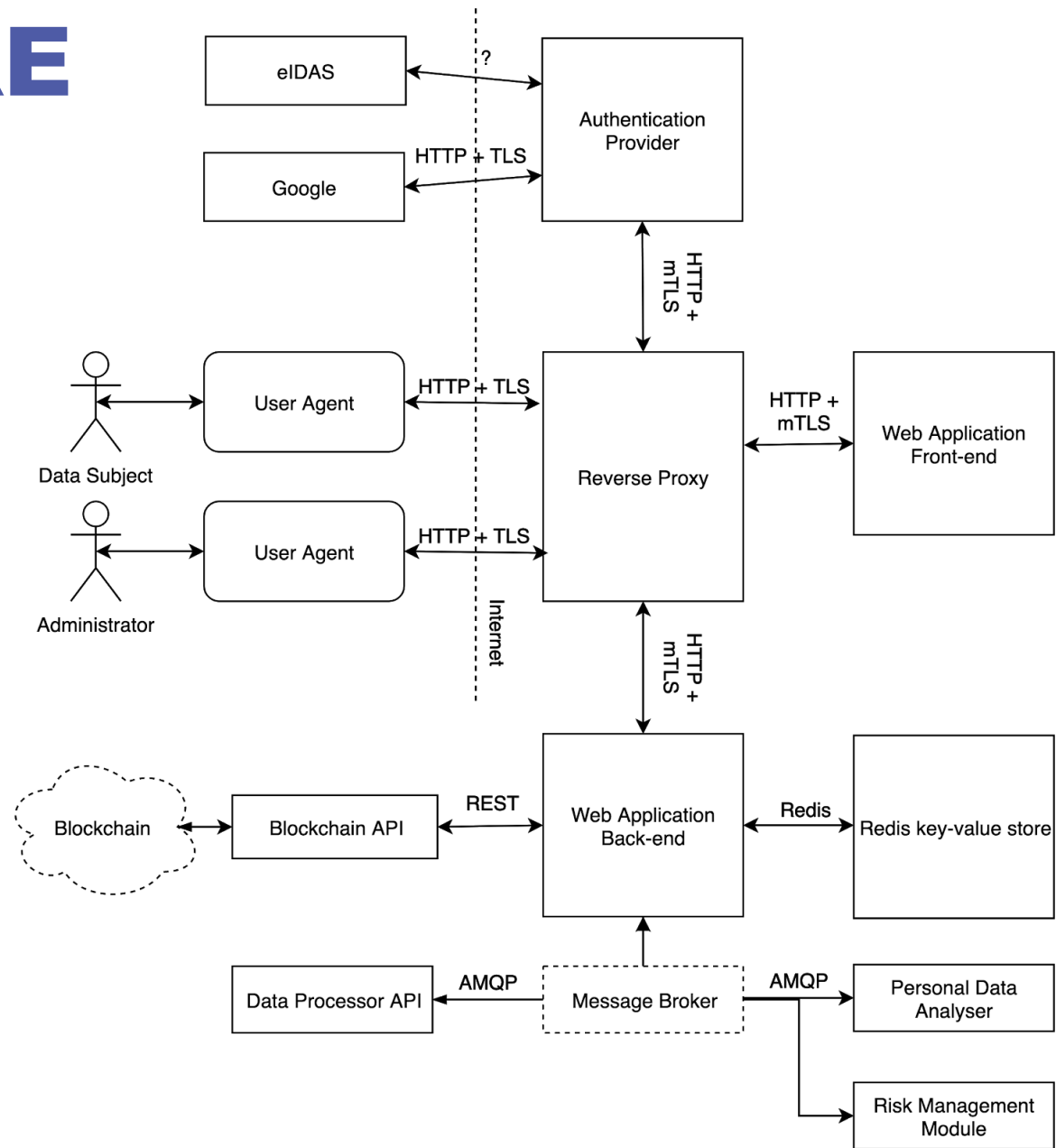
## Many benefits

- Collect user feedback at an extremely early stage
  - Feedback loop is very short
- Uncovering previously unknown requirements
- Shapes the expectations early on
  - Avoids surprises later on

# IMPLEMENTATION

# CURRENT STATE

# ARCHITECTURE

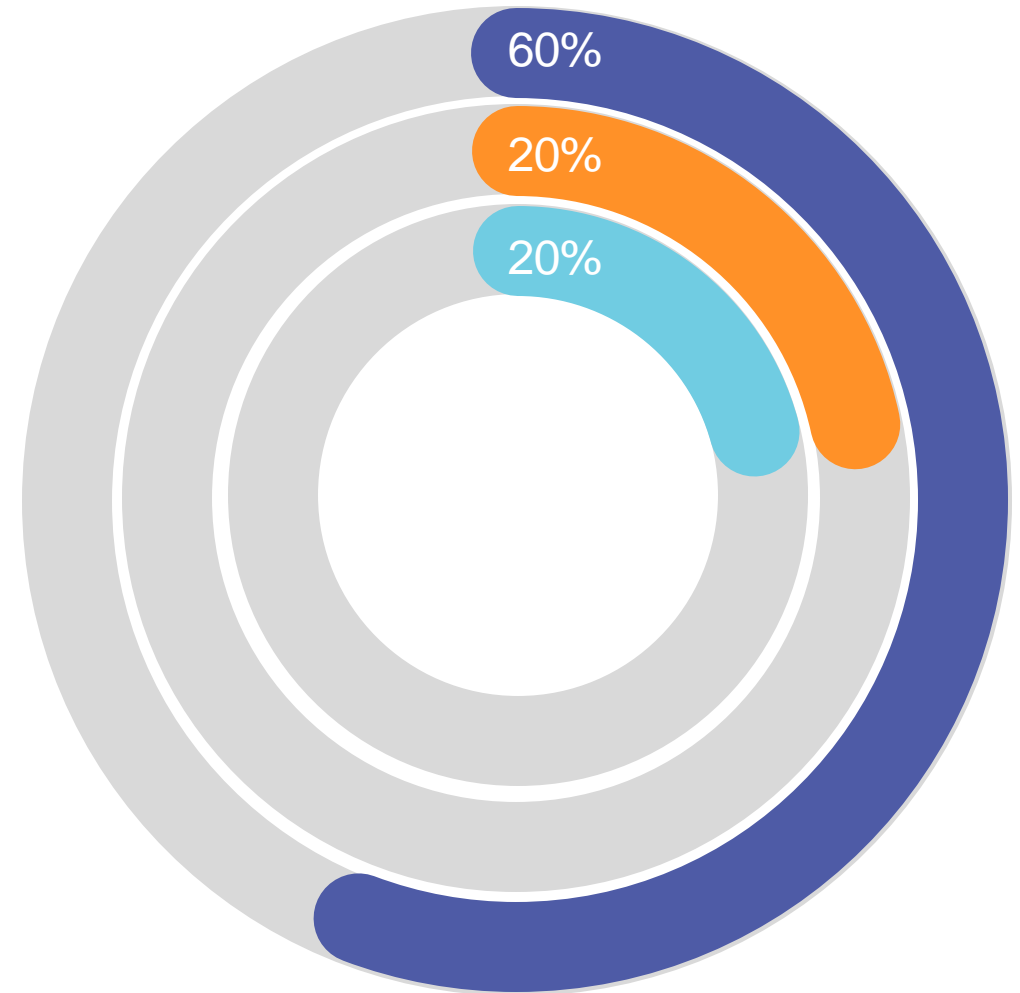


# PROGRESS

Integration

Front-end

Back-end





Dashboard

 Messages 11

Data Processors

Help

## Summary

62 →

Data Requests

420 ↗

Data Processors

62 ↘

Permissions  
Granted

## Exchange Reports

ING			<b>Personal information update</b> <span>NEW</span>	10:37   07.04.2019	
ING			<b>Credit card renewal</b> <span>NEW</span>	14:23   07.04.2019	
			<b>Address update</b>	11:45   06.04.2019	
LCL		ING	<b>Personal code confiramtion request</b>	12:03   06.04.2019	
			<b>Credit card renewal</b>	16:48   06.04.2019	
ING		ING	<b>Credit card renewal notification</b>	09:22   05.04.2019	



Dashboard

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Messages 11

ING Bank

10:37 | 07.04.2019

Lorem ipsum dolor sit amet, co...



Service-Public.fr

11:23 | 07.04.2019

Lorem ipsum dolor sit amet, co...



lcl.fr

14:25 | 07.04.2019

Lorem ipsum dolor sit amet, co...



Service-Public.fr

12:54 | 07.04.2019

Lorem ipsum dolor sit amet, co...



lcl.fr

08:40 | 07.04.2019

Lorem ipsum dolor sit amet, co...



Service-Public.fr

11:23 | 07.04.2019

Lorem ipsum dolor sit amet, co...



lcl.fr

14:25 | 07.04.2019

Lorem ipsum dolor sit amet, co...



Service-Public.fr

12:54 | 07.04.2019

Lorem ipsum dolor sit amet, co...



lcl.fr

08:40 | 07.04.2019

Lorem ipsum dolor sit amet, co...



## ING Bank

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec volutpat tincidunt nisi, a aliquet purus sagittis id. Phasellus sit amet convallis dolor.

Sed pellentesque nisi ut turpis mollis tristique. Pellentesque dui mauris, malesuada a augue ut, sodales porta felis. Aliquam auctor feugiat nunc sit amet finibus.

Nulla enim eros, fringilla eu tempor sed, convallis nec ipsum. Nam suscipit risus quis ante elementum pulvinar.

[Update My details](#)

Terms &amp; Conditions

10:37 | 07.04.2019



Privacy policy



Settings



Dashboard



Messages

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Data Processors



Help

## Data Processors

34

A-Z

By type

Filter3

Filter4



ING Bank

Last interaction | 10:37 | 07.04.2019

Documents

2

Data Types

3

Storage

3



Request for new data

Settings &gt;&gt;



Ministère de l'action et des compte ...

Last interaction | 14:25 | 11.03.2019

Documents

1

Data Types

5

Storage

8

Settings &gt;&gt;



Service-Public.fr

Last interaction | 14:11 | 11.03.2019

Documents

4

Data Types

12

Storage

40



Data confirmation request!

Settings &gt;&gt;



lcl.fr

Last interaction | 10:37 | 07.04.2019

Documents

0

Data Types

7

Storage

21

Settings &gt;&gt;



ING Bank

Last interaction | 10:37 | 07.04.2019

Documents

2

Data Types

3

Storage

3



Request for new data

Settings &gt;&gt;



Ministère de l'action et des compte ...

Documents

Data Types

Storage

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## Data Processors &gt; ING Bank

## General info



## ING Bank

Last interaction | 10:37 | 07.04.2019

Request for new data

[Update My details](#)

## Latest Activity

## Personal information update

10:37 | 07.04.2019

## Credit card renewal

10:35 | 07.04.2019

Info   Personal Data List (13)   File   Source   Expire   Shared

By default ▾   **Active (6)** ▾   **Requests (1)** ▾   Inactive (6) ▾

	Name and Surname	TXT	Service-Public.fr	11/05/2019	
	Address	TXT	Personal input	02/25/2019	
	Personal Code	TXT	Service-Public.fr		
	Phone Number	TXT	Personal input	06/11/2019	
	Pasport copy	PNG		06/11/2019	
	Agreement 11.02	PDF		06/11/2019	





Dashboard



Messages

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Data Processors



Help

## Data Processors &gt; ING Bank

General info

**ING Bank**

Last interaction | 10:37 | 07.04.2019



Request for new data

[Update My details](#)

Latest Activity

**Personal information update**

10:37 | 07.04.2019

**Credit card renewal**

10:35 | 07.04.2019

Info

Personal Data List (13)

File

Source

Expire

Shared

By default

Active (6)

**Requests (1)**

Inactive (6)

**Financial Information**

TXT

ING Bank

[Update now](#)

11/05/2019





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Help

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## Chapter 2

## Rights of the data subject

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## Chapter 3

## General Provisions

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## Chapter 4

## General Provisions

Art 1 - 4



## Chapter 5

## General Provisions

Art 1 - 4



# General Data Protection Regulation

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to using 'Content here, content here', making it look like readable English. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem ipsum' will uncover many web sites still in their infancy. Various versions have evolved over the years, sometimes by accident, sometimes on purpose (injected humour and the like).

## Chapter 1

## General Provisions

### Art 1. Subject-matter and objectives

1. Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.
2. Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown

## Chapter 2

## Rights of the data subject



# CONCLUSION

## TOP-DOWN APPROACH

The user comes first

## ACCESS AND USABILITY

Web browser

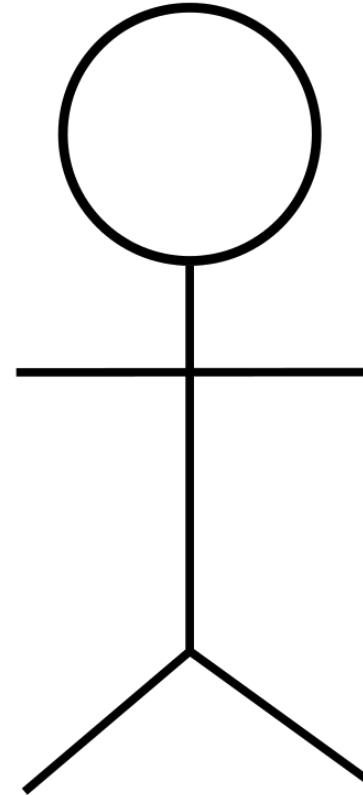
Inclusiveness

## SECURITY, PRIVACY AND PERFORMANCE

Leading security standards

Privacy-oriented design and development

Maintainability and scalability



# THANK YOU

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