

Hi, my name is Lúcio Ferrão

Good Morning. Thank you for being here.

I'm here today to tell you a story,

how to bring software development to a wider audience.

Who is OutSystems?

Maker of the Agile Platform

agileplatform™

Since 2001

20.900 Installations Worldwide

6.100 Community Members

200 Customers


59 Partners

700 Projects

But let me start by presenting myself

I'm one of the OutSystems founders,

I've spent the last 10 years with my team building a platform
In the hope to reduce the number of custom build frameworks...

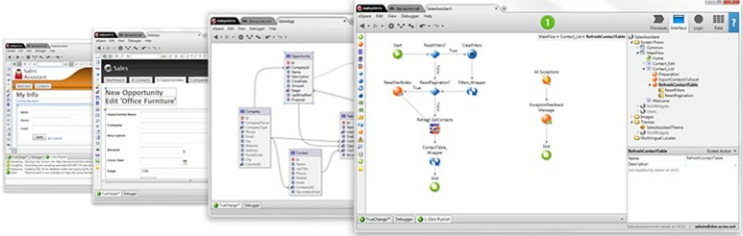


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Deliver custom enterprise web apps, the better way.

Overview


- Fast Development and Change
- Enterprise Grade Platform
- Standard Architecture
- Fit to Your IT Process
- Get Started!**
- Editions and Pricing
- Free Download
- Tutorials and How-tos




The Agile Platform™ allows you to develop and change enterprise web apps faster, on a standard .Net or Java architecture, without locking you into proprietary technology.




Develop and change applications very fast with minimal training



Develop rock solid and secure apps easily, and deploy them in minutes



Integrate and extend your apps using your technology standards



Manage the entire life cycle of your apps using one unified environment

Our ‘Platform’ is focused on the “Custom Enterprise Web Apps”.

That means traditional software,
Where you have a database model,
Web user interfaces,
Collaborative workflows
And integrations with existing systems.

Technically speaking, not a very thrilling environment

But then again, the challenge is not building thrilling environments

The Challenge

- More Business Value from IT
- Lack of Developers

The challenge is building business value
Without resorting to expensive external developers...

And let me get this straight,
This is much more than a technical problem.

It starts with the problem of attracting skilled developers

Attracting Skilled Developers

- Tech Savvy Business Users
- Developers of Outdated Technologies
- Developers more focused on business

And if we look for them, we can find very skilled developers for this specific domain

- Tech Savvy Business Users
- Developers that are using old technologies
- Developers that normally prefer to invest their time in business instead of coding

These are not illiterate persons,
on the contrary,
sometimes they are your most valuable resources.

Now, what do all these people have in common?
They want their job done, as fast and simple as possible,
and they don't like solving all their problems using java and Javascript

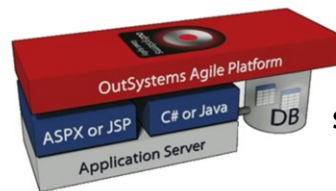
Let me show you how we do this,
I don't expect to surprise you with a silver bullet,
this is basically common sense.

agileplatform

Development Tool (service studio)



Operational Console (service center)

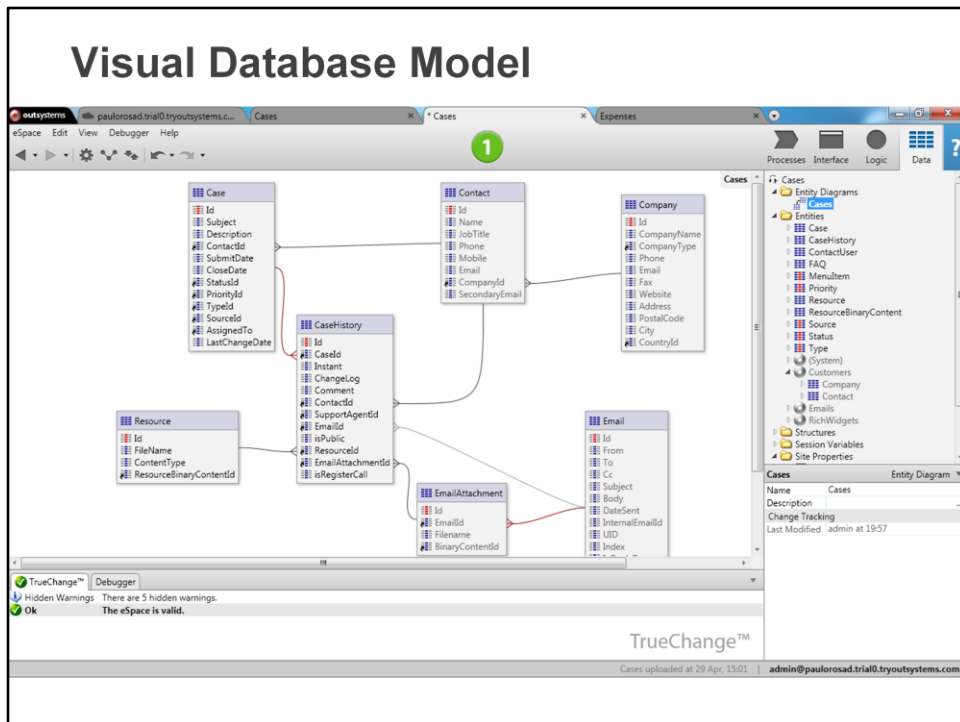


Cloud-Ready Server Platform (agile platform v6)

But enough talk, let's look at platform

We have a DSL that is modeled inside a Development Tool
Once ready, the end result is transported to the server
where it is compiled into in a plain standard .Net or Java application

And there is also a tool to help monitor and manage your running your server.

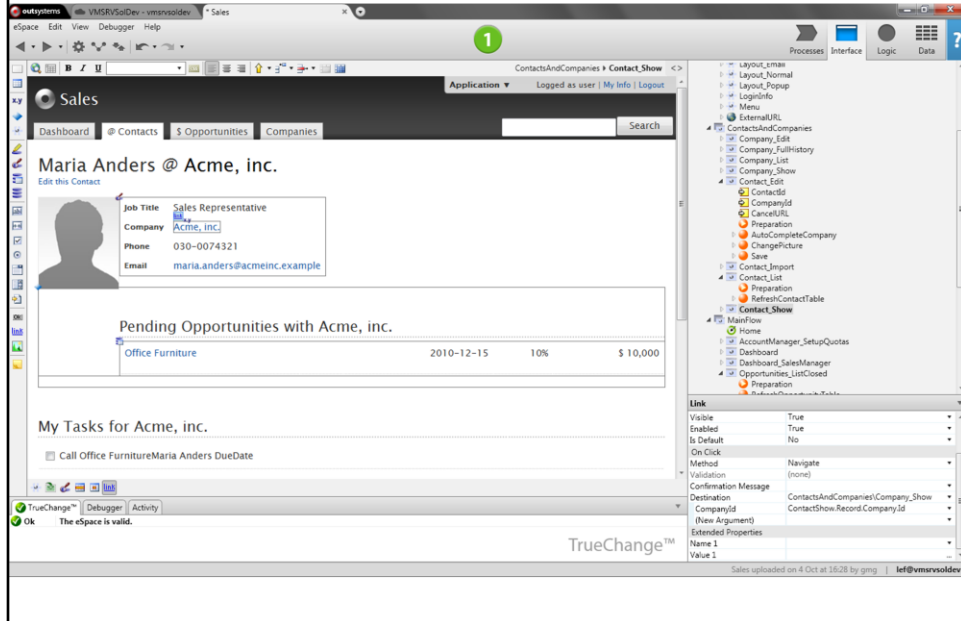


We use the DSL to specify the database model. It is a plain relational database with tables, relations, constraints.

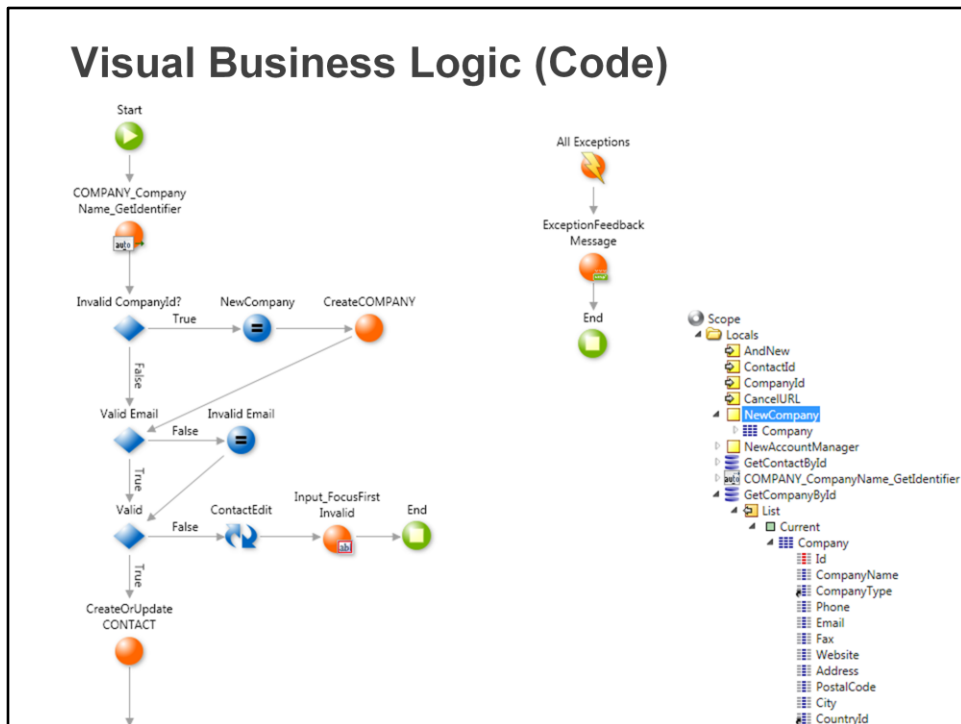
It is not the most abstract way of describing your model, but it is a traditional one. And the key idea is to make it part of the application definition.

It has the nice side effect of strong typing all your table identifiers and avoiding obvious mistakes like comparing product identifiers with user identifiers.

Visual User Interface Editor



The next layer we have is the User Interface, it is basically a Drag-and-Drop editor for Web and Mobile Web pages without messing with HTML or JavaScript



And to glue the user interface and the database layers, we code using flowcharts.

These flowcharts puts some of the code details one click away and tries to focus you on the intention of each step

Most of our programmers end up using the node labels as micro comments

In this layer you have elements that represent assignments, ifs, executing other actions.

To query the database you use strong typed queries, or even write your own SQL directly.

Visual Process Workflow Editor



And finally we model process workflows that contain human activity, database event driven waits, notifications, automatic activities, making long running process modeling a normal challenge.

Why Visual?

- Describe Dependencies/Sequences/Parallelism
- Easy to capture and memorize
- Easy to spot complexity
- Simplify Knowledge Transfer

Why visual, you may ask...

Because it is a human way to describe most coding artifacts

Because it is easy to capture and memorize visual patterns

Because it is easy to spot complexity pressuring developers to make it simple

And in the end, it leads to make it easier to understand code, reducing the cost to add new developers to an existing project.

Why All-In-One?

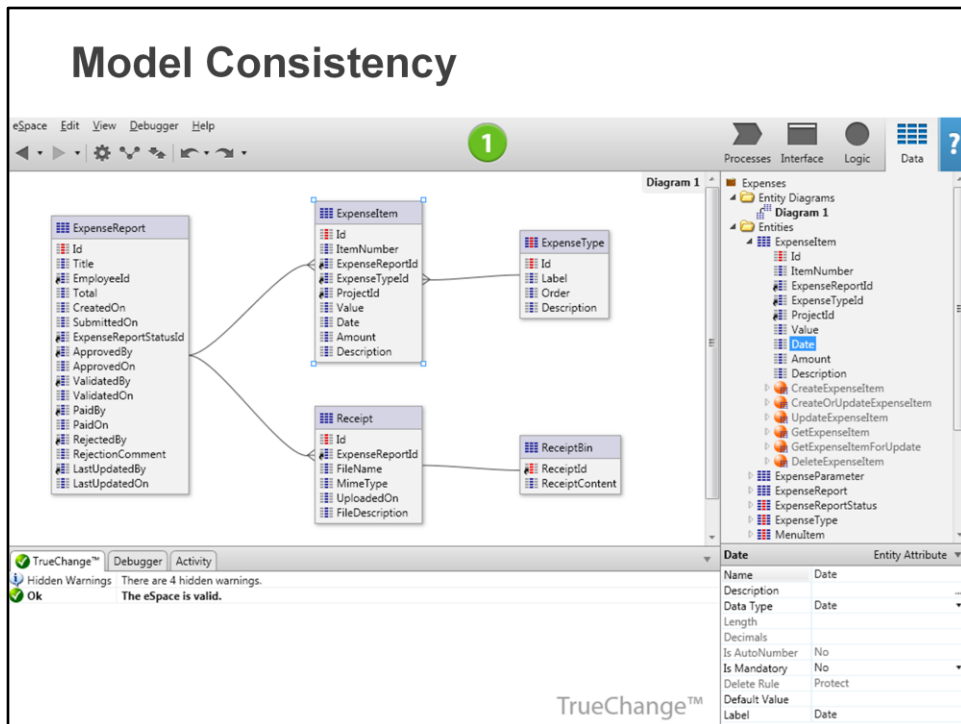
- Minimize context switch
- Model Consistency
- Decrease “Technical Debt”

And what do we get for having an complete / all-in-one language?

The obvious one is that we minimize the use of different tools, and the related context switch between them

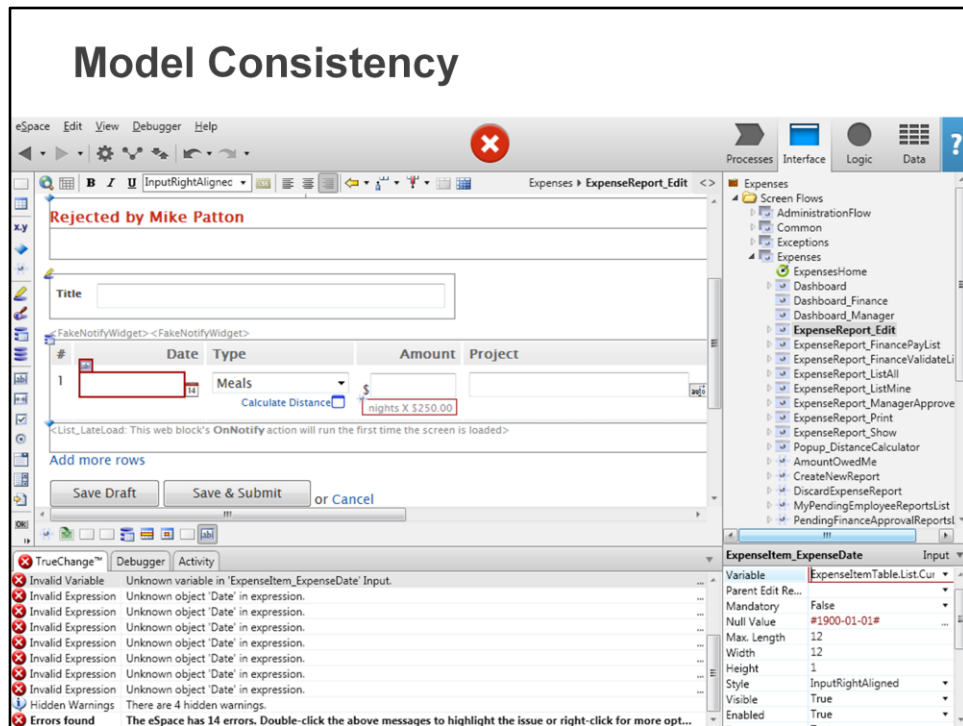
But we also ensure model consistency and coherence across all application layers

It also reduces the “Technical Debt” by reducing the cost of change.



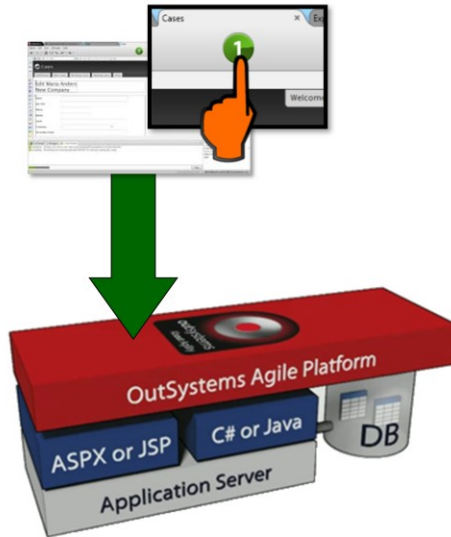
Let me give you an example of model consistency:

when we are at the database view and delete a table column...



We get immediate feedback of all the impact in the presentation and logic layers. You don't even have to compile your application.

“1-Click Publish”



Plus, the all-in-one approach also allow us to simplify the deployment and staging operations.

As the model is complete, with a single click, we grab the application model, compile it to a “standard” application and deploy it.

And you have a fully ready and upgraded version of the application you are working on.

Why use a compiler?

- Optimize queries & code using dataflow analysis
- Strong static type validation
- Minimum runtime errors
- Runtime Scalability

Why do we use a compiler instead of a runtime interpreter?

There are a lot of reasons to use a compiler.
These are the most relevant ones.

Are you talking about toy apps?



Let me make a pause here and explain how to scale the development from small toy applications

Some Customers

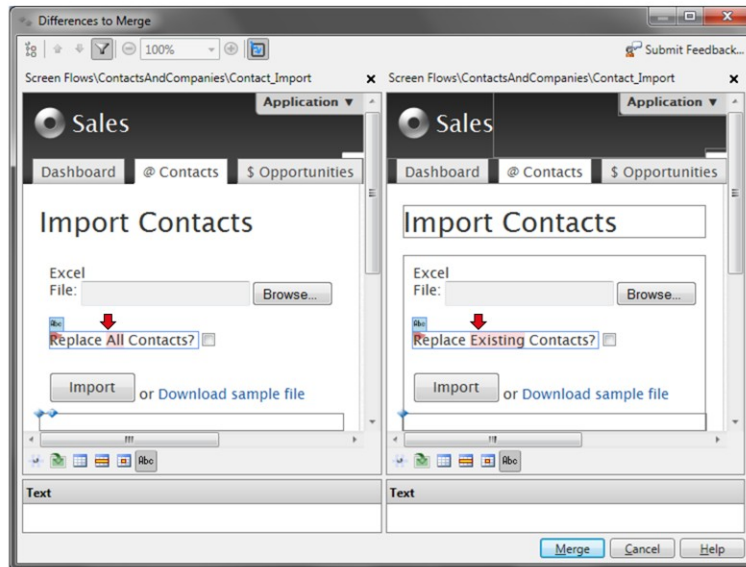


A collage of logos for various companies, including Brisa, Movares, e-on, Schenker, B/S/H, RWE, and others, representing the company's diverse customer base.

Some of our customers have built their entire core systems using the Agile Platform, It includes billing systems, trading systems, and even high traffic public web-sites.

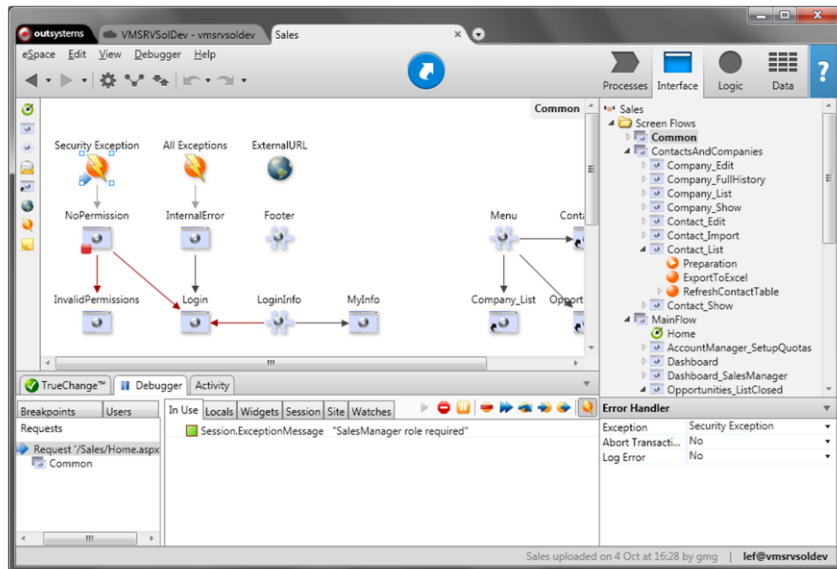
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Visual Diff & Merge



That means you need to solve the collaboration challenges, including classic version control changes and merges

Visual Debugger



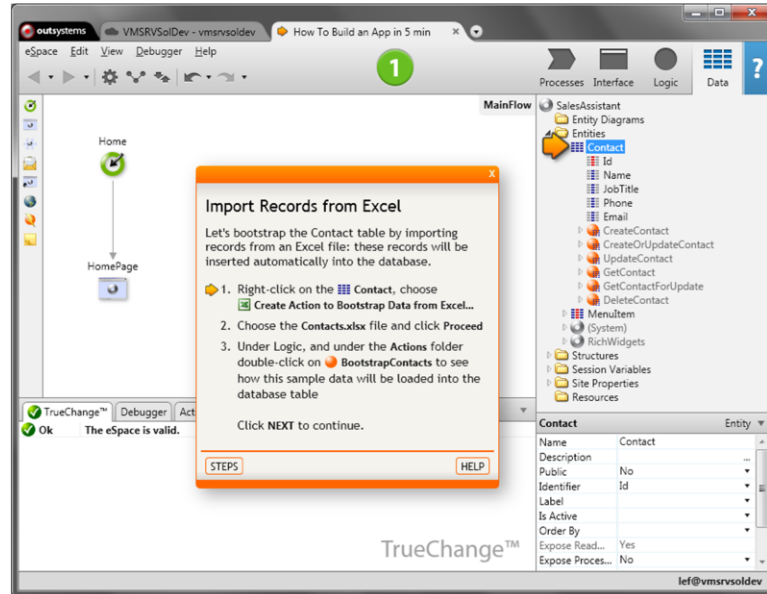
You need to have a good debugger to dig into complex code

Speed-up Learning



But above all, you need to make your developers comfortable in their learning process

Embedded Tutorials



We use embedded tutorials to teach newcomers the language basics

Never start with a blank page

CRM Apps



Sales



Campaigns



Cases



Mobile Sales

Web Sites and Portal Apps



E-Commerce



Customer Portal



Website

Intranet and Human Resource Apps



Documents



Directory



Expenses



Vacations



Time Sheets

We show them good examples of user interface design, usability, and simplicity

They will be able to code by example from early stages using a set of open source applications

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max items in Combo box?

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New max items in Combo box? 0

by [Frits Fredericks](#) on 2011-10-07 13:06

Hi everybody,

Does somebody know how many items a combobox can handle? I have 700 articles which i select from a SQL query.

Thank you in advance

27 Posts

Certifications

Joined 1 year ago

Last seen 4 hours ago

New Re : max items in Combo box? 0

by [Ricardo Araújo](#) on 2011-10-07 13:50

DONT do that !!!!! Don't even think about it. :)

Frits,

Before you continue that question please [read this presentation on UIs](#)

The right answers in on page 14. "For a Finitive and large domain, use autocomplete".

Cheers,

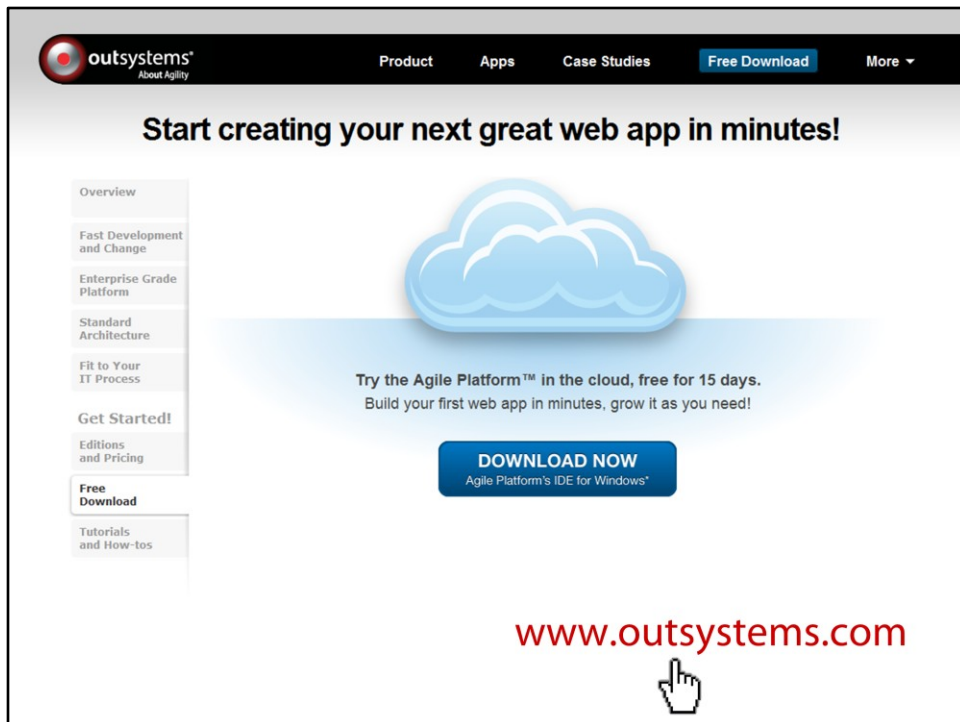
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250 Posts

Certifications

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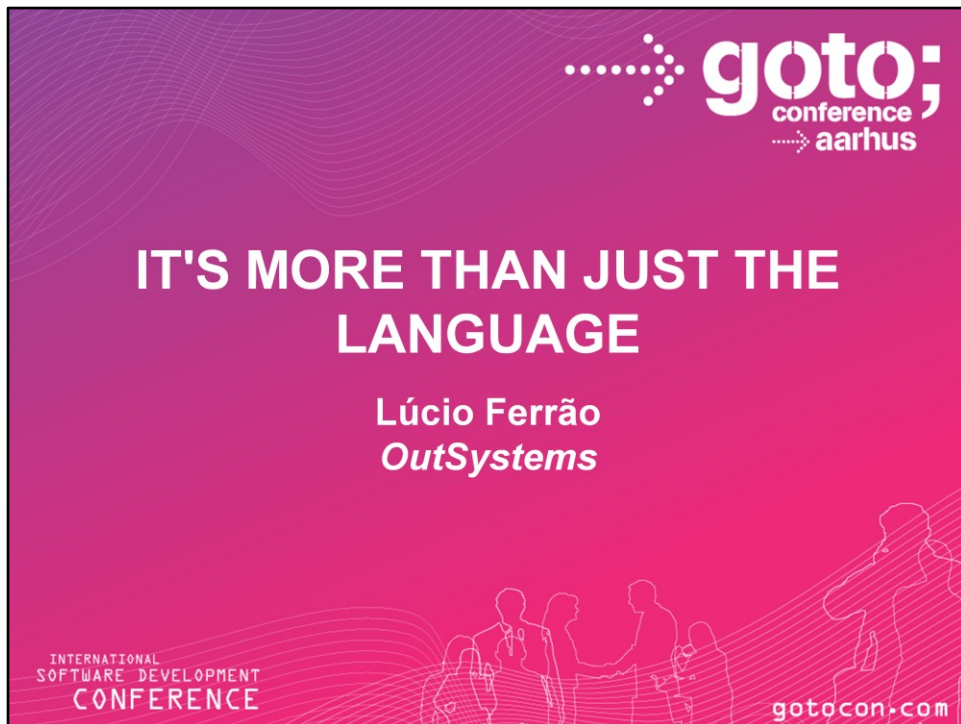
And when everything else fails, you can use the online community



That's what I had to show today, I'm very proud of this platform, and I invite you to try it for yourself using our website.

There is a free version you can use if you install on your PC.

Hope you like it.



Thank you for your attention