



ACADEMIA **Starter**

Curso básico de programação OutSystems, para iniciantes!
Com prática e fundamentos de Modelagem, Lógica, Interface!

LANÇAMENTO: 22 de Agosto

Módulo Desenvolvimento Básico

- + de 20 horas***
- + 6 meses de acesso**
- + 3 meses de suporte**
- + Certificado Starter**

*8 horas acesso imediato + 12 horas liberadas nas próximas semanas

Desenvolvimento Básico - Dairon Balensiefer

- O que é um App
- Diferenças entre tipos
- Modelagem de Dados
- Tabelas, Atributos
- Relacionamentos
- Regras de Delete
- Lógica e Ações
- Variáveis e Listas
- Interface
- Telas, Botões, Listas
- Construindo um App





ACADEMIA

R A F A O U T S Y S T E M S

EXPERT

Do básico ao avançado, para você que quer se tornar um Profissional OutSystems, mesmo sendo iniciante, com aulas do ZERO ao avançado.

LANÇAMENTO: 22 de Agosto

Módulo Básico da Academia Starter*

- + 20 módulos Expert (120 horas)
- + 52 novas aulas (uma por semana)
 - + 1 ano de acesso e suporte
- + 1 Simulado com 100 perguntas
 - + 1 Voucher de Certificação
- + Indicação de Alunos + Kit LinkedIn
- + Pacote adicional de 8 exercícios

*8 horas acesso imediato + 12 horas liberadas nas próximas semanas

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Aplicação Reactive em OutSystems - Lucas Soares

- App de Exemplo
- Conceitos do REACT
- Relação do HTML e React
- Eventos de tela OnInitialize, OnReady, OnRender
- Carregando Dados de API
- Carregando dados por demanda
- Funções dentro de aggregates
- Teste de carregamento de dados e navegação em telas reativas
- Como usar as sessions ou o site properties



The collage consists of six images illustrating the OutSystems development environment and its resulting web application:

- Top Left:** A screenshot of the OutSystems Designer interface showing a "Cadastro Imóvel" (Create Property) screen. The screen includes fields for CEP, Tipo de Imóvel (House), Logradouro, Número, Complemento, Bairro, and Cidade. It also has sections for "Dados do imóvel" and "Outras informações".
- Top Right:** A screenshot of the OutSystems Designer interface showing the "Cadastrar Imóvel" screen with a red box highlighting the "ImóveisDetail" aggregate.
- Middle Left:** A screenshot of the OutSystems Designer interface showing the "Empty" screen, which is the starting point of the application.
- Middle Right:** A screenshot of the OutSystems Designer interface showing the "ImóveisDetail" screen, which displays a complex flowchart diagram.
- Bottom Left:** A screenshot of the browser showing the "Cadastrar Imóvel" screen, identical to the one in the top-left screenshot.
- Bottom Right:** A screenshot of the browser showing the "ImóveisDetail" screen, displaying a list of properties.

Aplicativo SevenChat Rede Social - Caio Santana

- App de Exemplo
- Mockup do Projeto
- Boas práticas em Mobile
- Boas práticas em modelagem
- Boas práticas de segurança (server-side vs client-side)
- Criação de interface e CSS
- Funcionalidade de post, seguidores e curtidas
- Notificações (in-app)
- Plug-in de câmera
- Compressão de imagem
- Uso de emulador Android



The collage illustrates the development workflow for the SevenChat application. It shows the transition from conceptual design (mobile mockup) through to the actual implementation and configuration of various components and features using the Mendix platform.

Multi-Tenant - Renato Nascimento

- Sistema para pequenos e grandes negócios
- Empresas distintas “Concorrentes”?
- Uso para diversos usuários
- Dados separados
- Dados juntos mas isolados
- Manutenção simplificada
- Criar e aplicar lógica
- Multi-tenant
- Site Properties
- Timers, eSpaces



The collage consists of five screenshots:

- Diagram:** A conceptual diagram showing three tenants: FishParadise (green), TropicalJoy (pink), and GoldenFishBowl (orange). Each tenant has its own database icon and is connected to shared services like OnLineShop, Billing, and Users.
- Service Center:** A screenshot of the Service Center interface showing a "Module Users" section with a "Create" button and a "Recent Stores" list.
- Request List:** A screenshot of a "Request List" screen showing a table with columns: Tenant Name, User Name, Module, Product, Description, and Status.
- Process Flow:** A screenshot of a process flow editor showing a "GetRequestList" step followed by a "For Each" loop. Inside the loop, there's a "GetRequestList" step, a "Current.RequestList" variable, and a "UpdateRequest" step.
- Request Management:** Two side-by-side screenshots of a "Request List" screen. The left one shows a pending request from "User 1" for product "12345". The right one shows a pending request from "User 2" for product "23456".

Arquitetura na Prática - Renato Nascimento

- Pilares da Arquitetura
- Modelo de 3 Camadas
- Comunicação entre Módulos
- Regras de Arquitetura
- Conceitos de Arquitetura
- Montar a base da arquitetura
- Telas
- Temas
- Identidade Visual
- Entidades



The collage consists of seven screenshots from a video presentation:

- Modelo 3 camadas 3 Regrínhas**: A diagram titled "Modelo 3 camadas 3 Regrínhas" showing three layers: UI (top), Core Business (middle), and Library (bottom). Red arrows indicate no lateral references between layers, no references to the outside, and no circular references within the layer.
- Caso de Suporte List**: A screenshot of a software interface titled "Caso de Suporte List" showing a list of support cases with columns for Description, Prioritado, Produto Name, and Preço.
- Traduzindo conceitos**: A screenshot titled "Traduzindo conceitos" showing a sticky note with text about translating concepts into practical organization.
- Resultado**: A screenshot titled "Resultado" showing a grid of roles (Professor, Aluno, Supervisor, Docente) and concepts (Conceptos III, Conceptos Core, Interdisciplinar).
- Discovery**: A screenshot titled "Discovery" showing a tool interface with sections for Outsystems, API Platform, Tools, Learn, Community, and Support.
- Suporte Total**: A screenshot titled "Suporte Total" showing a software interface for managing support requests, with tabs for Develop, Modules, Dependencies, and a central ticket view.

SQL From Zero to Hero - Renato Nascimento

- Armazenamento de dados complexos
- Linguagem SQL
- Conceitos Básicos de Entities
- Conceitos Básicos de Atributos
- Tipos de Entities
- Tipos de Atributos
- Entities Properties
- Identidade de um registro
- Chave primária ou única
- Ações de Entities “Create, Update, Get, Delete”

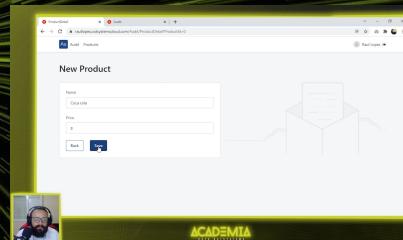
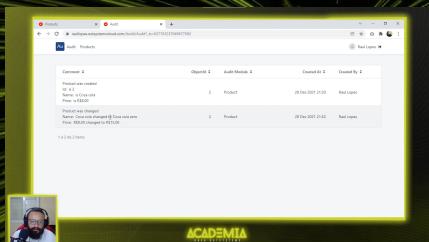
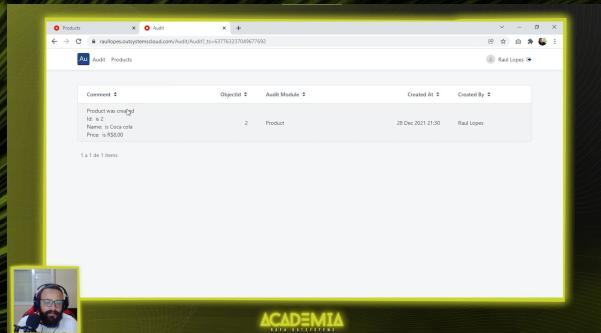
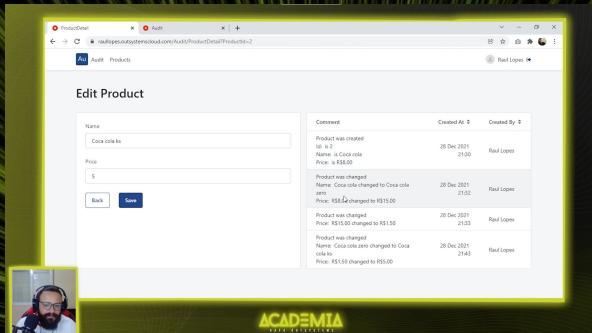


The collage consists of six screenshots from the Data Systems Forge development environment:

- Dashboard:** Shows a dashboard with three cards: 30 Total Entities, 30 Text, and 30 Text. Below the cards are three charts: Bar Chart, Line Chart, and Pie Chart.
- Entities:** A list of entities including Account, AddressMovement, Customer, Id, Name, Surname, Nickname, UserId, and Phone. It also lists attributes like CreateCustomer, CreateOrUpdateCustomer, UpdateCustomer, GetCustomer, GetCustomerInfo, and UpdateCustomer.
- Identifier:** A section titled "Identificador" explaining what it is, how it's used, and its characteristics.
- Entity Properties:** A section titled "Entity Properties" listing properties such as Is Multi-valent, Is Persistent, Is Audited, Identifier, Label (plural), Identifier, Label Attribute, and Is Active Attribute.
- Attributes:** A section titled "Attributes" listing attributes with their descriptions, labels, data types, lengths, and default values.
- Publishing:** A screenshot of the "Publishing" interface showing a process flow for "DemoTransaction". The flow starts with "Start", followed by "Run Server Action", "Aggregate", "For Each", "Record List To Database", "Run Server Action", "Security Warnings", "Optimizing", "Database Execution", "Success", and ends with "Run Server Action".

Auditória e Logs de Histórico - Raul Lopes

- Criando o componente
- Modelagem de dados
- Ações de Lógica
- Gerenciar informações
- Gerar logs de eventos
- Auditar
- Criação de Blocks
- Ações Reutilizáveis
- Testes de Entidades



Depuração/Debug na prática - Marlon Venâncio

- App de Exemplo
 - Depuração na prática
 - Depurando Variáveis, Listas, Site Properties, Client Variables e outros
 - Debug Watches
 - Depurando ações e parâmetros de saída e de entrada



The game will be starting at Wednesday, 09 Feb 2022
Current Prize: US\$11.039.534,00

Export To Excel

Feb 2022

Export To Excel

Download

In Use Locals Widgets Session Site Watches

GuestList

ExcelAttributes

Name false
DocumentId true
BirthDate false
Role true
Debt false

RoundSix_Core uploaded at 17:58 | marlon.silva

In Use Locals Widgets Client Site Watches

Guests

Count

Id 2
Name "Leonardo Da Vinci"
DocumentId 7596465130
BirthDate #1998-8-30#
Role "Artist"
Debt 45000
Picture Binary Data (0 bytes)
(Not evaluated)

RoundSix_Web uploaded at 14:57 | marlon.silva

MainFlow x Guests x GetValue

Start

GetGuestList

End

Client.ProvideValue

MainFlow x Guests x GetSPDData

Threads (Background) (User)

Client.ProvideValue

GetSPDData

GetSPDData

GetSPDData

MainFlow x Guests x On After Fetch

RoundSix Web uploaded at 10:43 | marlon.silva@outlook.com | marlon.silva@outsystemscloud.com

Criando um Jogo na prática - Marlon Venâncio

- Criar App do Jogo
- Estruturas de dados
- Laços de repetição
- Instalar e utilizar componentes da OutSystems Forge
- CSS em OutSystems
- Manipulação de Listas



The collage consists of five screenshots:

- Top Left:** A screenshot of the OutSystems Forge interface showing a game board for a word search puzzle. The board has letters A, E, I, O, U, and several empty squares. Below the board is a text input field for "Enviar Letra".
- Top Right:** A screenshot of a "Word List" screen showing a table with columns "Name" and "Subject". Items include "Banana" (Frutas), "Abacate" (Frutas), "Abacai" (Frutas), "Cibe" (Frutas), "Álaco" (Objetos), "Abajur" (Objetos), "Abre-Latas" (Objetos), and "Aquearino" (Objetos). Each row has a delete icon.
- Middle Left:** A screenshot of the OutSystems Designer interface showing a process flow diagram. It includes nodes like "Lembrete", "Woodwards_Coll", "Lembrete_Coll", "Coll", "Imprimir!", "SetDataFlow", and "Woodwards_Coll". A video feed of Marlon is visible in the bottom-left corner of the interface.
- Middle Right:** A screenshot of a "New Word" form. It has fields for "Name" (with "Banana" typed in), "Subject" (set to "Frutas"), and a dropdown menu for "Routes". To the right is a 3D wireframe model of a cube.
- Bottom:** A screenshot of the OutSystems Designer interface focusing on a "LetterBlock" component. The "LetterBlock" Web Block Style Sheet is open, showing CSS code for styling the letter grid. The code includes rules for ".LetterBlock", ".LetterCell", and ".LetterContent".

Timers (Batchs) em OutSystems - Renato Nascimento

- O que são Timers
- Quando utilizar
- Como funcionam
- Como testar timers
- Tipos de agendamento de timers
- Como monitorar envios e erros;
- Disparo manual e agendado
- Disparo via código
- Disparo via Service Center
- Aplicação de Exemplo



The screenshot displays several windows from the OutSystems Platform:

- Timer Configuration Window:** Shows a "Schedule Timer" dialog for "Timer_TestInsertTabela". It specifies "Occur: Holiday of Month" and "Time: Second - Tuesday - Of Every Month" at "00:00".
- Timer Log:** A table showing timer execution history. One entry is highlighted: "2022-09-05 22:40:34 TestTimers.Timer_Calculationpoints 0s SGRUP_UATP".
- Timer Editor:** A screenshot of the timer editor interface.
- Process Flow Diagram:** A process flow diagram titled "Timer_TestInsertTabela". It starts with a "Start" node, followed by a "GetNames" action, a "GetNamesList" action, and a "Cycle" node. The cycle loop contains a "WakeTimer_Calculationpoints" action. A decision diamond follows, leading to a "True" path with a "GetNames" action and a "False" path with a "Complete" action.
- Logs and Reports:** Several windows showing timer logs, recent items, and behavior reports.

Interações REST - Renato Nascimento

- Conceito básico REST
- Significado dos Verbos HTTP
- Requisições, com e sem body
- Respostas da API
- Como interpretar os Status HTTP
- Ferramentas de teste Rest (Postman)
- REST no OutSystems
- Consumo de API Rest
- Análises e ajustes da API no Service Center
- Customização de Request
- Autenticação de API
- Criação de API



Verbs

Nome	Finalidade	Body?
GET	Obter um ou mais recursos	✗
POST	Inserir novo recurso	✓
PUT	Atualizar um recurso	✓
DELETE	Remover um recurso	✗

Autenticação

- Proteção contra acesso indevido
- Valida credenciais

Request

Customizando o request

É possível customizar o request para além dos parâmetros

OnBeforeRequest

- Executado antes de cada requisição de qualquer método
- Util para autenticação customizada, benchmarks, assinar um request e outros

OnAfterResponse

- Executado após receber a resposta e antes de seguir para o próximo item
- Util para logs, benchmarks e tratamento de Status HTTP

Integração c/ Bases de Dados Externas - Renato Nascimento

- Integration Studio
- Como criar uma conta gratuita na Amazon AWS
- Criando a conexão
- Configuração da extensão
- Mapeamento de dados enumerados
- Como lidar com imprevistos
- Técnicas de otimização
- Lidando com alterações na estrutura da tabela externa



Eventos em OutSystems (Event-Driven) - Renato Nascimento

- O que são eventos
- Eventos de sistema
- Ciclo de vida
- Disparo de eventos
- Como lidar com os eventos
- Casos de uso de eventos
- Boas práticas
- Evento de Block
- Eventos na obtenção de dados
- Demonstração do uso de eventos
- Eventos customizados



The collage consists of six screenshots from the OutSystems Platform:

- Top Left:** A screenshot of the "Eventos de sistema" (System Events) section in the ACADEMIA OutSystems Academy. It shows categories like Tela (OnInitialize, OnReady, OnRender, OnDestroy), Block (Todos os de tela +, OnParametersChanged), and Data (OnAfterFetch). A diagram illustrates the system event flow: Initialize → DOM loading → Ready → Render → Render. Events like GetContacts, GetPermissions, and GetConnectivity are shown occurring between these stages.
- Top Right:** A screenshot of the "Evento de sistema" (System Event) section. It highlights the **OnInitialize** event. It describes it as occurring after verifying user permissions and before navigating to the screen. It includes a note about using it to reset variables. Three cases of use are listed: "Sempre" (Always) with a green checkmark icon, "Evite" (Avoid) with a shield icon, and "Nunca" (Never) with a red circle with a slash icon. A note states that access to the screen happens before the event, so it's best to use it after the screen has been rendered.
- Middle Left:** A screenshot of the OutSystems Studio interface showing a "Product List" screen. It displays a list of products with columns for Name, Description, and Price. The interface includes various toolbars and a sidebar for navigation.
- Middle Right:** A screenshot of the "Eventos Customizados" (Custom Events) section. It shows a diagram of a flowchart with three parallel steps (1, 2, 3) followed by a final step. It lists characteristics of custom events: defined in blocks, triggered by external events, captured by the UI, and triggered by a user interaction. It also shows a screenshot of the "Events" tab in the studio, which lists various events like "OnPageLoad", "OnPageUnload", and "OnPageShow".
- Bottom Left:** A screenshot of a browser window titled "Renato Nascimento" showing a "New Product" form. The form has fields for "Name" and "Description". Below the form, a developer console shows several log entries related to events, such as "Event:ModelLine_Prod-731117175693 content = 1234567890" and "Event:ModelLine_Prod-731117175693 content = 1234567890".
- Bottom Right:** A screenshot of the "Eventos Customizados" section again, showing the same flowchart and characteristics as the middle right screenshot. It also shows the developer console with event logs.

Importação de HTML - Raul Lopes

- Componentes do site
- Importação de CSS
- Importação de JavaScript
- Importação de Imagens
- Importação de Fontes
- Declaração de tags HTML
- Estilização
- Inspeção de HTML
- Criação do App Exemplo
- Customização dos produtos de forma dinâmica
- Customização de inputs



The screenshot shows the Uiflow interface with a restaurant landing page. The header includes "RESTO", "WELCOME", "SPECIALITES", "MENU", "RESERVATION", "EVENTS", and "CONTACT". The sidebar on the right lists "Product", "Specialties", "Events", and "Contact". A central image shows a bowl of olives and a small dish of oil.

The screenshot shows the "Theme" section of the Uiflow interface. It displays a CSS code editor with rules for ".nt100", ".pb0", and media queries for screens up to 768px. The code includes padding, margin, and display properties.

The screenshot shows the "Import Image" dialog in the Uiflow interface. A file selection window is open, showing various image files like "bento.jpg", "bento.jpg_2", "bento.jpg_3", "bento.jpg_4", "bento.jpg_5", "img_02x", and "RESTO logo".

The screenshot shows the code editor in the Uiflow interface. It contains several lines of HTML and JavaScript code related to product declarations, including "RESTO", "Specialties", and "Events". The code uses "data-type" attributes to define product types like "Specialties" and "Events".

Listas em Memória - Raul Lopes

- App de Exemplo
- Uso de Client Variables
- JSON Serialize e JSON Deserialize
- Criação de listas em tela
- Uso de eventos do sistema
- Client actions do sistema para manipulação de listas
- Informações em sessão
- Carrinho de compras
- Adicionar Produtos
- Remover
- Atualizar e Esvaziar



The screenshots illustrate the development and deployment of a web application using memory lists. The top row shows the final user-facing product, while the bottom row shows the developer environment with code and validation messages.

Top Row Screenshots:

- Left: A browser window showing a shopping cart with three items: T shirt (\$10.00), Jeans (\$200.00), and Jacket (\$40.00).
- Right: A screenshot of the application's interface showing a 'Cart' module with a list of items.

Middle Row Screenshots:

- Left: A screenshot of the application's interface showing a 'Products' module, displaying a list of products.
- Right: Another screenshot of the application's interface showing a 'Cart' module with a list of items.

Bottom Row Screenshots:

- Left: A screenshot of the application's interface showing a 'Cart' module with a warning message about validating data before saving.
- Right: A screenshot of the application's interface showing a 'Cart' module with a list of items.

Integration Studio C# - Thiago Neto

- Configuração Integration Studio
- Extensão de validação de CPF
- Alterar extensão
- Consumir extensão
- Versionamento da extensão
- Monitoramento de execução da extensão
- Acesso ao código fonte de nossa extensão criada
- Integração c/ tecnologia (.NET)



The collage of screenshots illustrates the workflow in Integration Studio:

- Top Left: Application Test window showing the "validation CPF" module.
- Top Right: Modules tab in the Application Test window.
- Middle Left: Code editor displaying C# code for the validation CPF module.
- Middle Center: Project Explorer and Task List panes.
- Middle Right: Project Explorer and Task List panes.
- Bottom Center: Project Explorer and Task List panes, showing a successful build message.

OutSystems UI - Componentes Visuais - Lucas Soares

- App de Exemplo
- Introdução OutSystems UI
- React e Mobile
- Componentes UI disponíveis
- Configurando Temas
- Combinar componentes
- Customização de classes dos componentes
- Trabalhando com formulários
- Trabalhando com o componente HTML
- Configurando um WebBlocks



Segurança: Regras e Permissões - Lucas Soares

- App de Exemplo
- Regras de perfil de acesso
- Tabelas de relacionamentos de usuários e perfil
- Regras de acesso para usuários
- Perfil de acesso para usuários
- Maximizando validação de login
- Camadas Core e UI
- Aplicação para gerenciamento de usuários
- App Users Nativo
- Permissões de Usuário



The collage consists of six screenshots:

- Top Left:** A screenshot of the "Aplicação Regras e Permissões" (Access Rules and Permissions) interface in a browser. It shows a "Modules" section where a module named "APP_Core" is being created, set to "Receive Web App".
- Top Right:** A screenshot of the "APF_Acesso" (Access Control) application in a browser. It shows a BPMN-style process diagram for "Command & Logins" with various nodes like "Start", "Inflowing", "Logout", and "Logout Message".
- Middle Left:** A screenshot of the "APF_Acesso" application showing a "Manage Downloads" screen with a file named "APP_Core.zip".
- Middle Right:** A screenshot of the "APF_Acesso" application showing a process diagram with a "User Authentication" node highlighted.
- Bottom Left:** A screenshot of the "APF_Acesso" application showing a user detail form for "Luciana Araújo". The "Permissions" section includes checkboxes for "Is Admin", "Is Manager", and "Is Employee".
- Bottom Right:** A screenshot of the "APF_Acesso" application showing a "Users" list page with several user entries.

Orquestração de Processos BPT - Lucas Soares

- App de Exemplo
- Conhecendo o BPT
- Componentes do BPT
- Como criar um processo
- Tratamento de Timeout
- Light Process Execution
- Monitorando Processos
- Atividade humana no fluxo do processo
- Conhecendo o TaskBox
- Callback de Eventos



The collage consists of six screenshots from the OutSystems Platform, each highlighting a different aspect of Business Process Transformation (BPT):

- Screenshot 1:** A screenshot of the "Edit Job Position" dialog. It shows fields for Title ("Abordante de Marketing"), Description ("Uma descrição"), Company ("Soares Tecnologia"), and Date Publish ("05/11/2021"). A tooltip provides instructions for publishing the job. A yellow box highlights the "Publish" button.
- Screenshot 2:** A screenshot of the "Contact" screen showing a form with fields for "Access Key", "Created By", "Create At", "Updated By", and "Updated At". A red box highlights the "Access Key" field.
- Screenshot 3:** A screenshot of the "MyBPT Tree" interface, showing a tree structure of process components. A red box highlights the "Components" node.
- Screenshot 4:** A screenshot of the "Process MeuPrimeiroProcesso" details page. It shows the process definition and monitoring statistics. A red box highlights the "Processes" tab in the navigation bar.
- Screenshot 5:** A screenshot of the "Process MeuPrimeiroProcesso" monitoring page, displaying real-time data for the process instances. A red box highlights the "Monitoring" tab in the navigation bar.
- Screenshot 6:** A screenshot of the "TaskBox" interface, showing a task list with items like "Meu Primeiro Processo" and "Meu Primeiro Processo". A red box highlights the "TaskBox" interface.

Service Center MetaDados - Caio Santana

- Introdução à interface (principais áreas da ferramenta, como pesquisar, etc)
- Exploração da área Factory
- Exploração da área Monitoring
- Site Properties
- Timers
- Publicação de aplicações, módulos e suas diferenças
- Configuração e monitoramento de logs de integração (REST)
- Monitoração de logs de e-mails



The collage consists of five windows from the Service Center MetaDados application:

- Error Log:** Shows a log entry for a failed login attempt. The entry details: Application: portal, Module: User, Message: 'Login failed for test; Invalid password or IP address failure: 2', Source: '192.168.1.10' (IP address), and Target: '192.168.1.10' (IP address). The timestamp is 2021-10-10 10:29:46.
- Integrations Log:** Displays a log entry for a successful REST API call. The entry details: Application: portal, Module: REST API, Type: Action, Action: 'User', Method: 'POST', URL: 'http://localhost:8080/api/v1/users', Response: '200 OK', and Duration: 1 ms. The timestamp is 2021-10-10 10:29:46.
- Monitoring:** A dashboard showing various metrics and charts. One chart shows 'End-user accesses in the last hour' with a value of 1000.
- Administration:** A section titled 'Service Center Administração' listing configuration items: Ambiente principal, Configuração de e-mail, Conexões a bancos de dados externos, and Regras de SEO.
- MetaDados:** A diagram illustrating the data model. It shows entities like 'User', 'Group', 'Role', and 'Group_Rule'. Relationships include 'User' being associated with 'Group' and 'Role', and 'Role' being associated with 'Group_Rule'.

Migração App Traditional para Reactive - Caio Santana

- Apps de Exemplo
- Táticas de transição big-bang vs. transição faseada
- Boas práticas em arquitetura Reactive
- Boas práticas de segurança (server-side vs. client-side)
- Widgets do OutSystems UI
- Integração de sessão de usuário entre módulos Traditional Web e Reactive (tática faseada)
- Utilização do Chrome DevTools (“inspecionar elemento”) para recriar a interface em Reactive

