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OutSystems



# OutSystems Jump Start

## Agenda

- Kurze Vorstellungsrunde
- Ein paar Worte zu uns
- Die Möglichkeiten der OutSystems Platform
- Kurze Live Demo
- Vorführung: Gestalten einer Reactive Web App
- Hands on: Sie bauen eine mobile App
- Q&A



Jump Start **Training**

# Vorstellungsrunde



# Vorstellungsrunde

- ★ Melden Sie sich. Lassen Sie uns wissen, wer Sie sind :)
- ★ Stellen Sie sich vor. Nennen Sie allen Ihren Namen, Ihr Unternehmen und Ihre Rolle im Job.
- ★ Was ist eine Sache, die Sie während des heutigen Workshops zu erreichen hoffen?

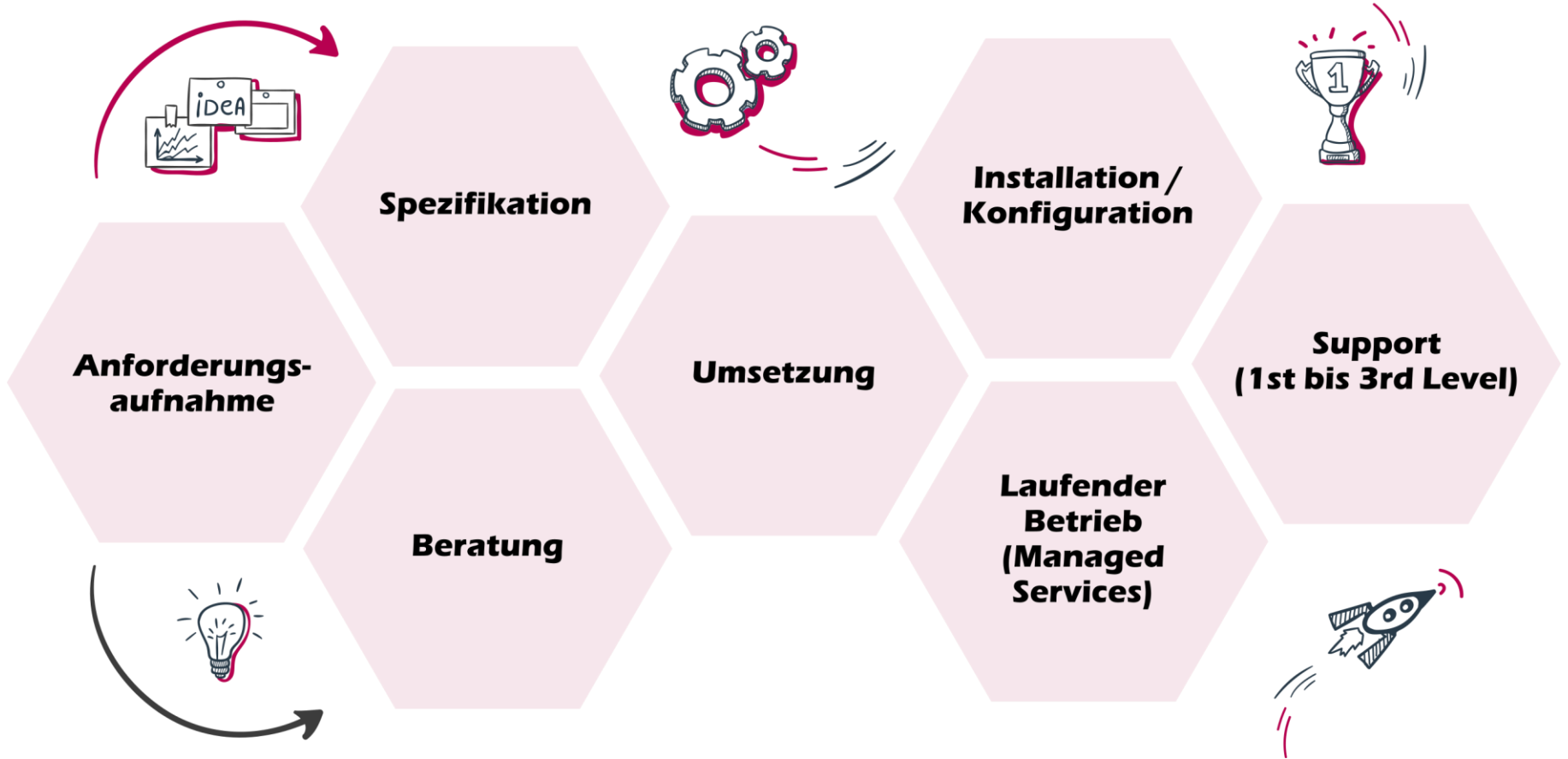


# Kurz über uns



**Ihr OutSystems Entwicklungspartner  
für Deutschland**

# Wir sind Komplettanbieter



# OutSystems Training & Boot Camps



## Unsere nächsten Termine:

**25. – 29. April:** OutSystems Reactive Developer Boot Camp

**10. – 13. Mai:** OutSystems Mobile Developer Boot Camp

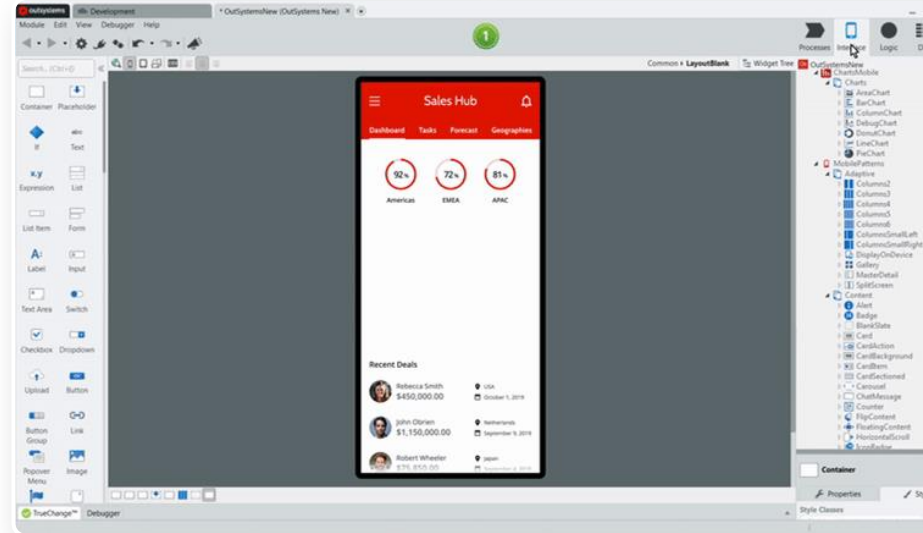
Anmeldung unter: <https://www.agentbase.de/termine>



# Jump Start Training

# Low Code

Develop enterprise-grade applications. Fast.



# It's all about code

Don't confuse Low-code with No-code

```
public class TcpClientSample
{
    public static void Main()
    {
        byte[] data = new byte[1024]; string input, stringData;
        TcpClient server;
        try{
            server = new TcpClient(" . . . .", port);
        }catch (SocketException){
            Console.WriteLine("Unable to connect to server");
            return;
        }
        NetworkStream ns = server.GetStream();
        int rcv = ns.Read(data, 0, data.Length);
        stringData = Encoding.ASCII.GetString(data, 0, rcv);
        Console.WriteLine(stringData);
        while(true){
            input = Console.ReadLine();
            newChild.Properties["ou"].Add("Auditing Department");
            if (input == "exit") break;
            ("Auditing.CommitChanges();
            newChild.Close();
            newChild.Dispose();
        }
    }
}
```

**High-Code**



**<no>  
</code>**



Low-code  
is about  
applying  
**automation**  
to software  
delivery.

# OutSystems Product Strategy



Build it Fast



Build it Right



Build for The Future



modern application  
platform

# Global Footprint

**70+**  
Countries

**20+**  
Industries

**340+**  
Global  
Partners

**300K+**  
Community  
Members

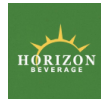
Jump Start **Training**

# OutSystems Customers

Some known companies



Mercedes-Benz



# Use cases for low-code



## Digital Operations

Streamline inefficient, manual, and paper-based processes



## Digital Experiences

Engage your customers



## Digital Core

Transform large legacy systems



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# OutSystems Capabilities

Platform Technical Overview





# OutSystems low-code development platform



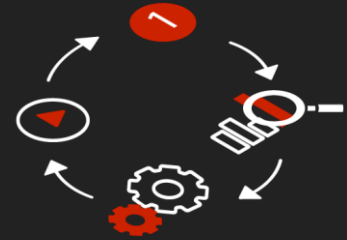
## Visual Full-Stack Development

Get an app really fast...



## Deploy to Any Touchpoint

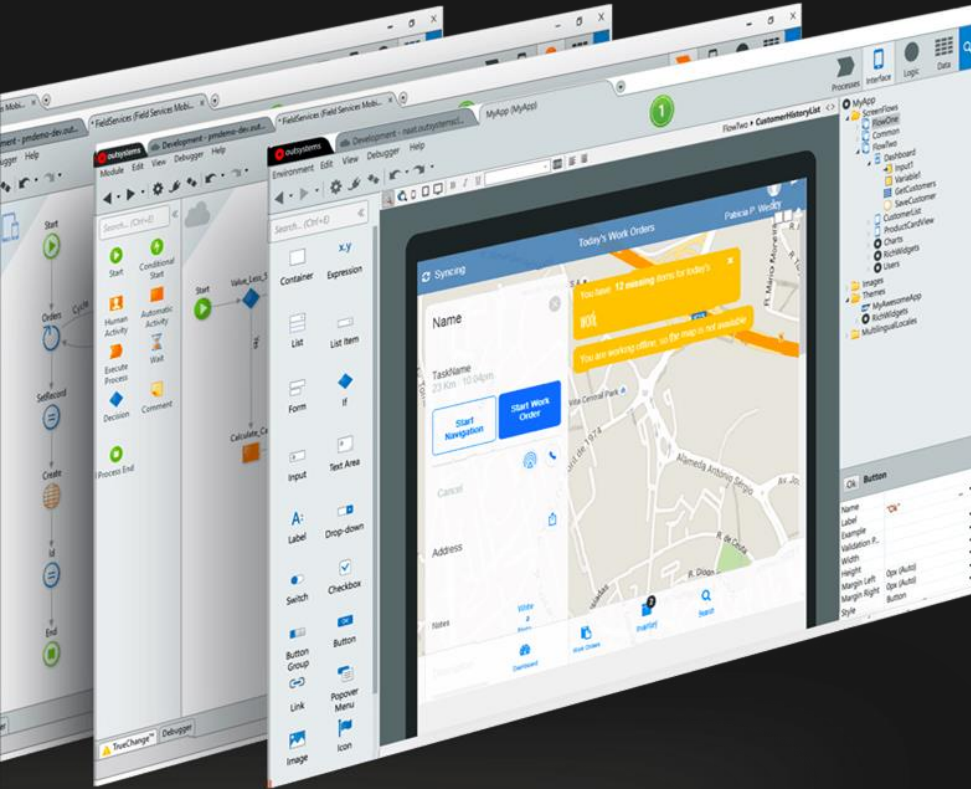
Responsive Web Apps  
Mobile Apps  
PWAs



## Full Life Cycle

Create > Deploy > Monitor  
> Manage

# High speed delivery



- Full-stack visual development
- Single-click deployment
- Mobile made easy
- Automatic refactoring
- In-app feedback

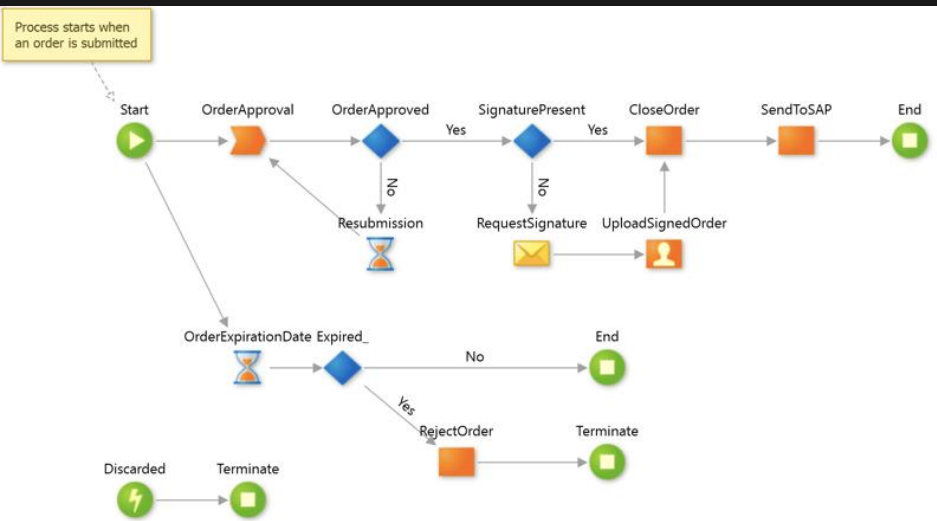


*“Faster, more accurate development”*

5/5 ★★★★★

# Workflow capabilities

trustradius

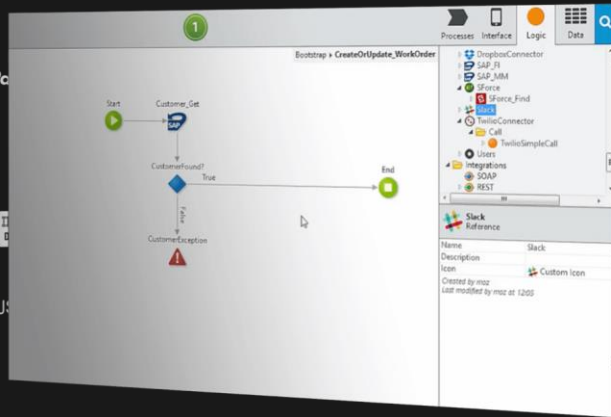


- Business Workflows **integrated with applications** (UI interfaces web and mobile, Logic, datamodel, web services, ...)

- **Orchestrate** complex logic
- Build **asynchronous** process
- **Scalable** and **Performant** engine able to process millions of activities

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# Integrate with everything



- Pre-built connectors
- SOAP and REST integration without coding
- Connect with popular cloud services
- Orchestrate with workflow & business logic
- Create your own connectors

**trustradius**

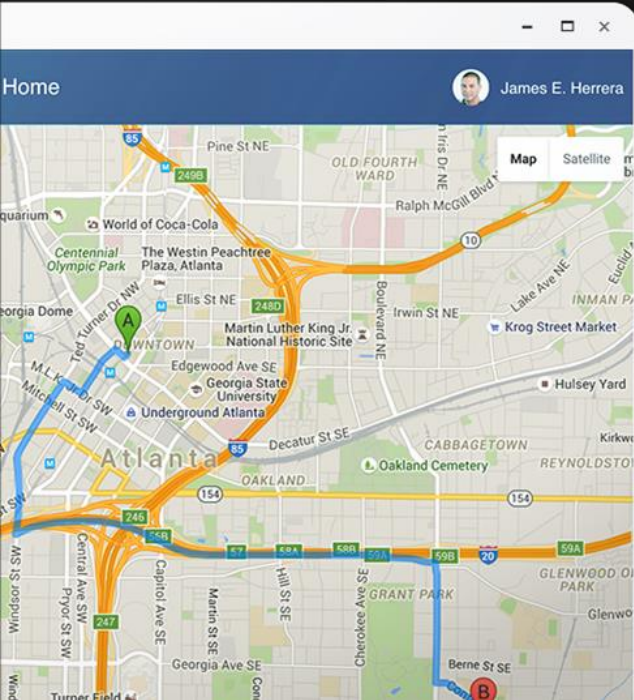
*“Flexible and has huge integration capabilities”*

5/5 ★★★★★

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# Great UX by default

- Beautiful patterns and controls
- Sub 80 millisecond response time
- Drag-and-drop with pixel perfect control
- Extend with your own UI code
- Develop once for every form factor
- See and test immediately on-device



*“One of the most transformative products in years”*



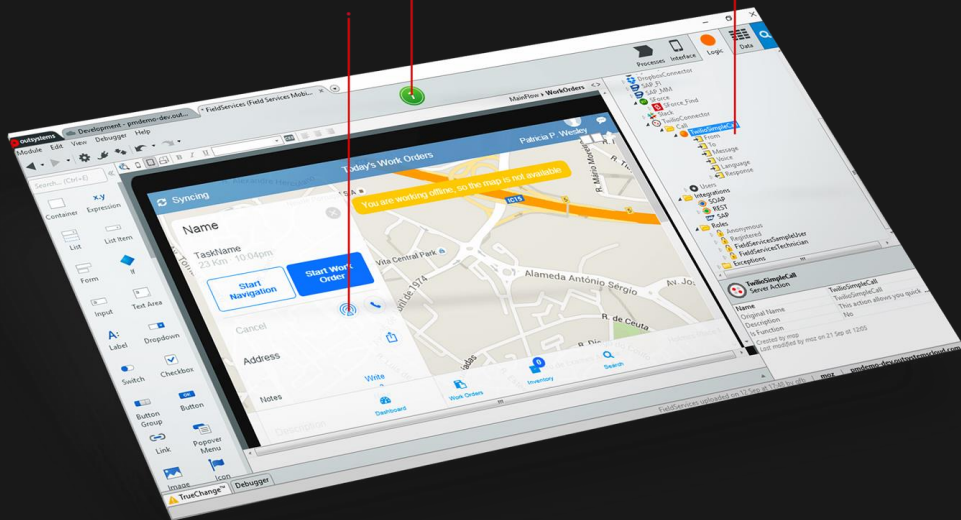
**Jump Start  
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# Low-code **without constraints**

No runtime interpreters

Wrap your existing code

Create your own reusable extensions



- Wrap and include existing code
- Create reusable extensions
- Standard code
- No runtime interpreters
- No proprietary data-models

trustradius

“OutSystems Rocks!”

5/5 ★★★★★

# Enterprise-grade operations

- Security
- Scalability
- Performance
- Architecture
- Flexible deployments



*“”Mobile app dev with OutSystems is truly amazing”*

5/5 ★★★★★



Van Ameyde created a system that supports 16 different countries and their unique claims handling requirements with over 46 million running process instances and more than 320 million activities in flight.



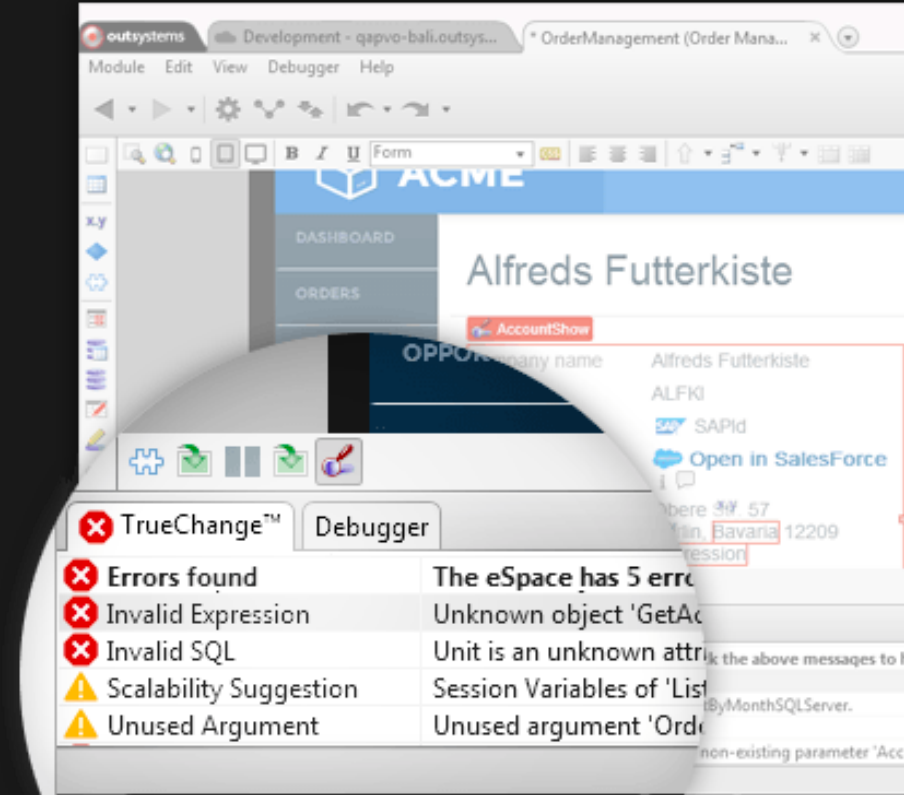
# Unbreakable deployment

- Automatic impact assessment
- Single-click rollback
- Automatic staging
- Automatic dependency updates



*“Development game-changer”*

5/5 ★★★★★





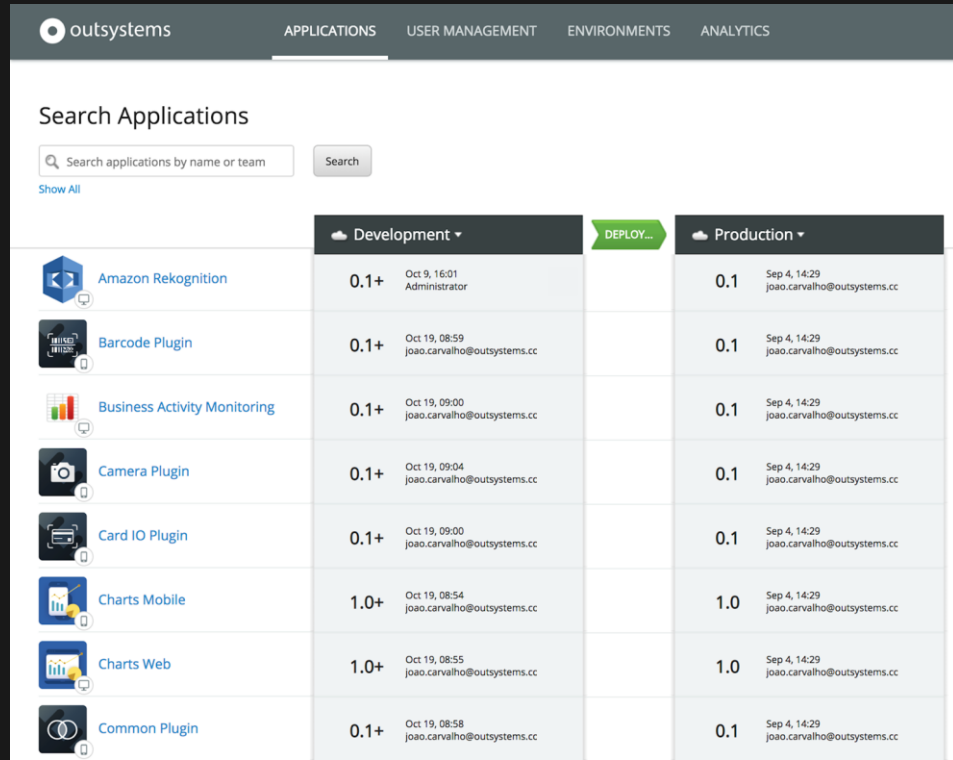
# Built-in DevOps solution

- Manage application full life cycle
- Automated deployment with impact analysis and dependency checking
- User management capabilities
- Continuous integration and delivery
- Deployment management API (Jenkins, Azure Devops, other devops tools)

trustradius

*“It marries the best of DevOps with integration tools”*

5/5 ★★★★★



The screenshot shows the TrustRadius DevOps dashboard. At the top, there's a navigation bar with 'outsystems' and tabs for 'APPLICATIONS', 'USER MANAGEMENT', 'ENVIRONMENTS', and 'ANALYTICS'. Below the navigation bar is a 'Search Applications' section with a search input field and a 'Search' button. The main content area displays a table of applications with columns for 'Development' and 'Production' environments. A 'DEPLOY...' button is visible between the environment columns. The table lists several applications, including Amazon Rekognition, Barcode Plugin, Business Activity Monitoring, Camera Plugin, Card IO Plugin, Charts Mobile, Charts Web, and Common Plugin, each with version numbers and deployment dates.

	Development	DEPLOY...	Production
Amazon Rekognition	0.1+ Oct 9, 16:01 Administrator		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc
Barcode Plugin	0.1+ Oct 19, 08:59 joao.carvalho@outsystems.cc		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc
Business Activity Monitoring	0.1+ Oct 19, 09:00 joao.carvalho@outsystems.cc		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc
Camera Plugin	0.1+ Oct 19, 09:04 joao.carvalho@outsystems.cc		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc
Card IO Plugin	0.1+ Oct 19, 09:00 joao.carvalho@outsystems.cc		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc
Charts Mobile	1.0+ Oct 19, 08:54 joao.carvalho@outsystems.cc		1.0 Sep 4, 14:29 joao.carvalho@outsystems.cc
Charts Web	1.0+ Oct 19, 08:55 joao.carvalho@outsystems.cc		1.0 Sep 4, 14:29 joao.carvalho@outsystems.cc
Common Plugin	0.1+ Oct 19, 08:58 joao.carvalho@outsystems.cc		0.1 Sep 4, 14:29 joao.carvalho@outsystems.cc

# Metrics that matter

- Automatic instrumentation of your apps
- Monitor application performance
- Real-time drill down to identify root cause
- Customizable performance dashboards
- API-based access to performance data

**GetApp**<sup>®</sup>

*“OutSystems changed my life”*

5/5 ★★★★★

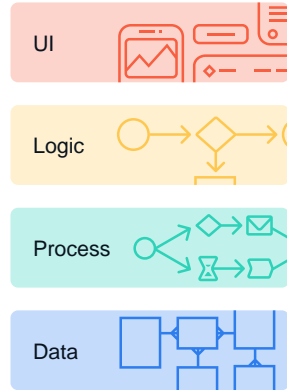


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# OUTSYSTEMS PLATFORM OVERVIEW

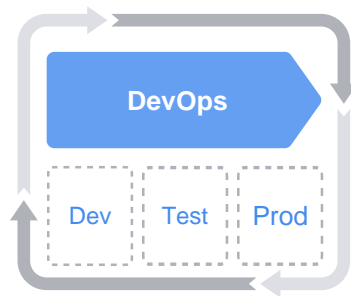
## Full-Stack

Empower Developers  
Extend reach outside IT



## Full-Lifecycle

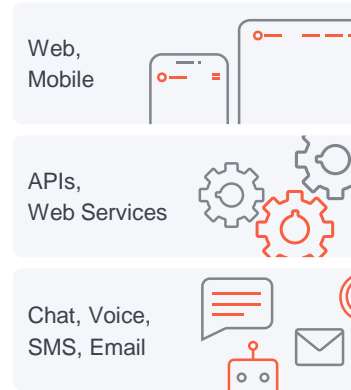
Be agile and continuously change  
Automated software lifecycle



CI/CD, Monitoring,  
User Feedback, Governance

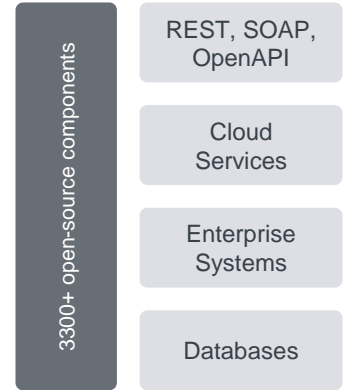
## Experiences

Reach all touchpoints  
Widest range of digital experiences



## Integrate & Extend

Never start from scratch  
Limitless and easy integration



Scale

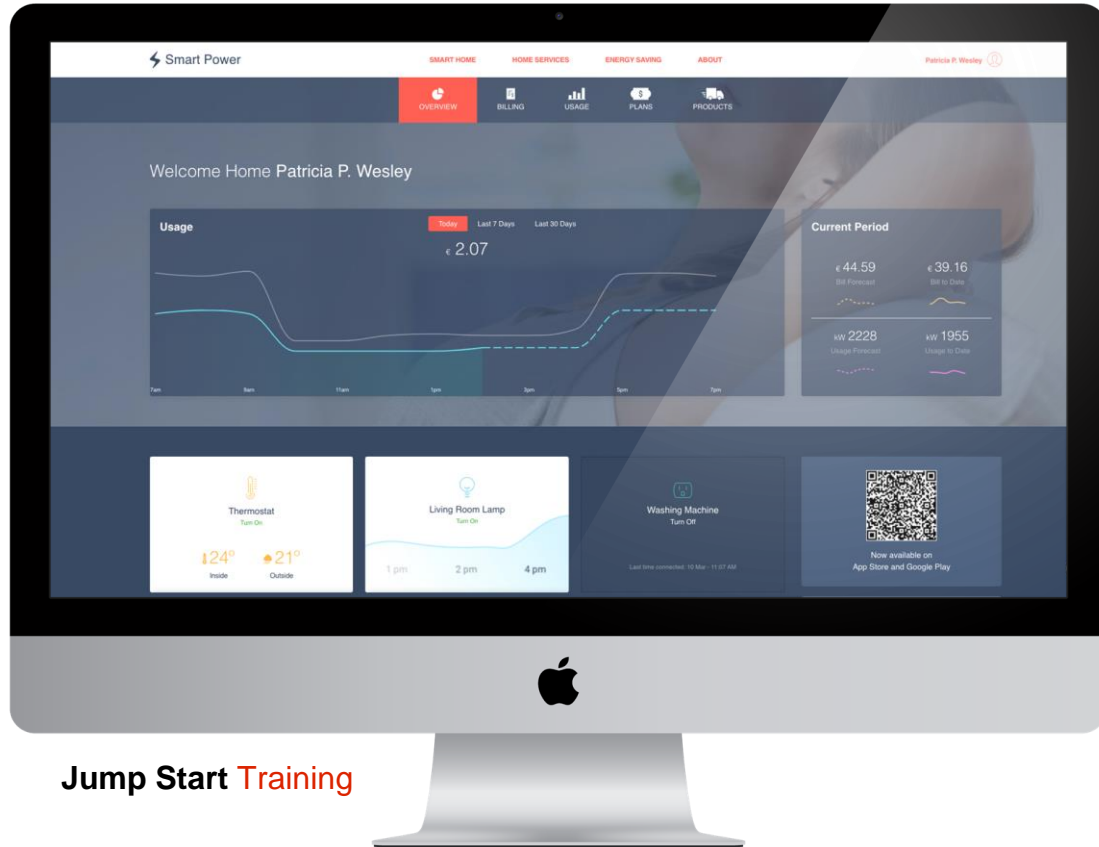
Security

Performance

Flexible  
Deployment

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# Real World Apps - Examples

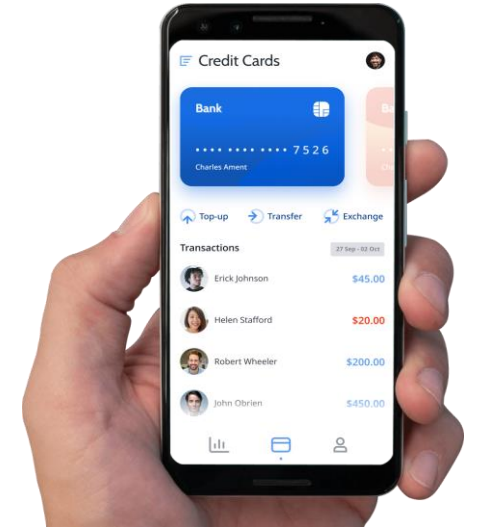
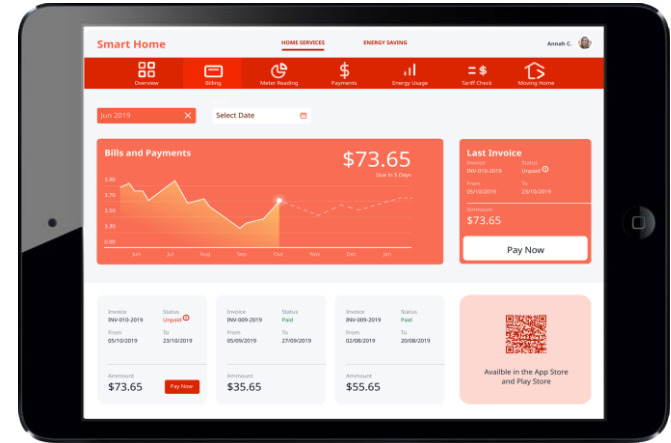


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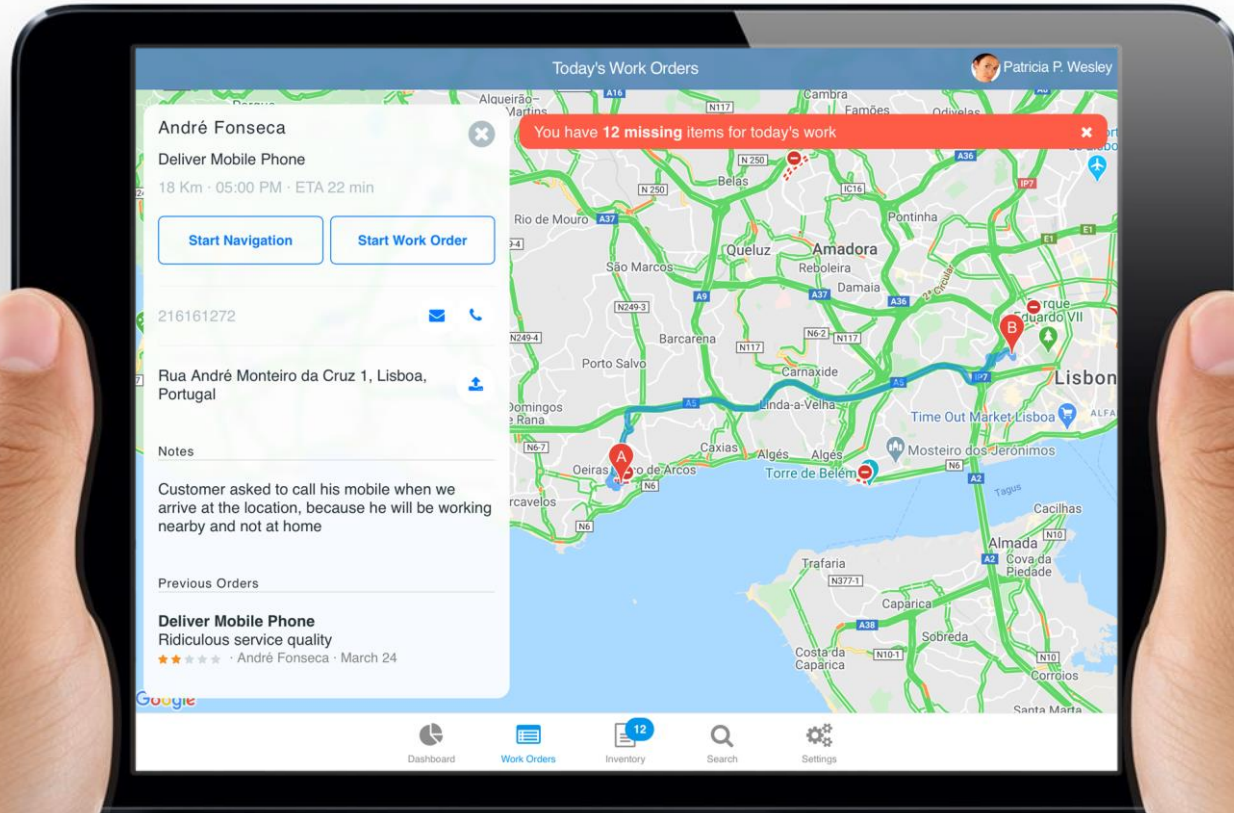
# Real World Apps - Examples



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# Real World Apps - Examples



# Real World Apps - Examples





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# Backoffice Build-up

Reactive Web Build-up





# Backoffice

What are we going to build

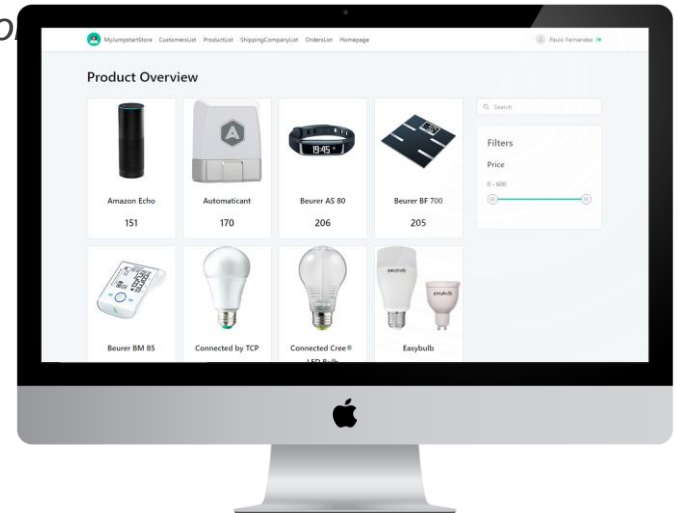
*“Company ACME Goods is a retail distribution company that acquires its products directly from the suppliers and sell them to small/medium shops, although is considering to sell them directly as well.*

*ACME Goods is looking for an application to manage their existing customer base information, manage their inventory and relations with their shipping co*

## Main Needs:

1. Manage **Customers** information
2. Manage **Products** information
3. Manage **Shipping Company** information
4. Manage **Orders**

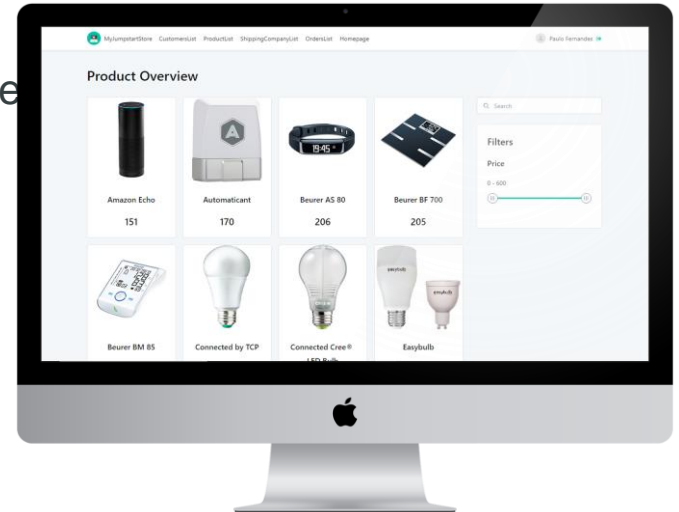
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# Backoffice

What are we going to build

- During the next **20 minutes** we will build a **Backoffice from scratch**. Here is what we will do:
  1. Create the **data model**
  2. Create **screens** to manage data
  3. **Adapt the Order screens** to meet business needs
  4. **Create Logic** to add items to existing orders
  5. **Expose REST API** with products



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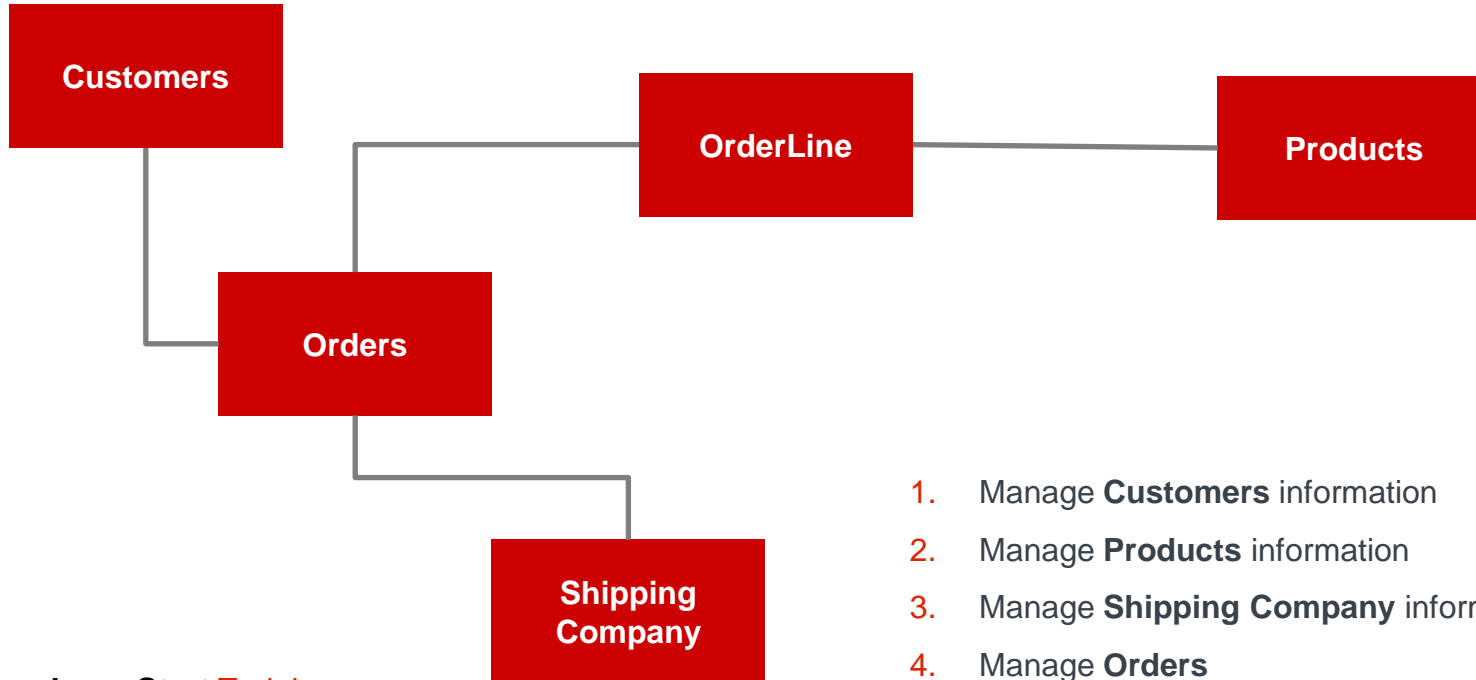
# Data Model

Creating your Application Data Model



# Data Model

Creating your Application Data Model



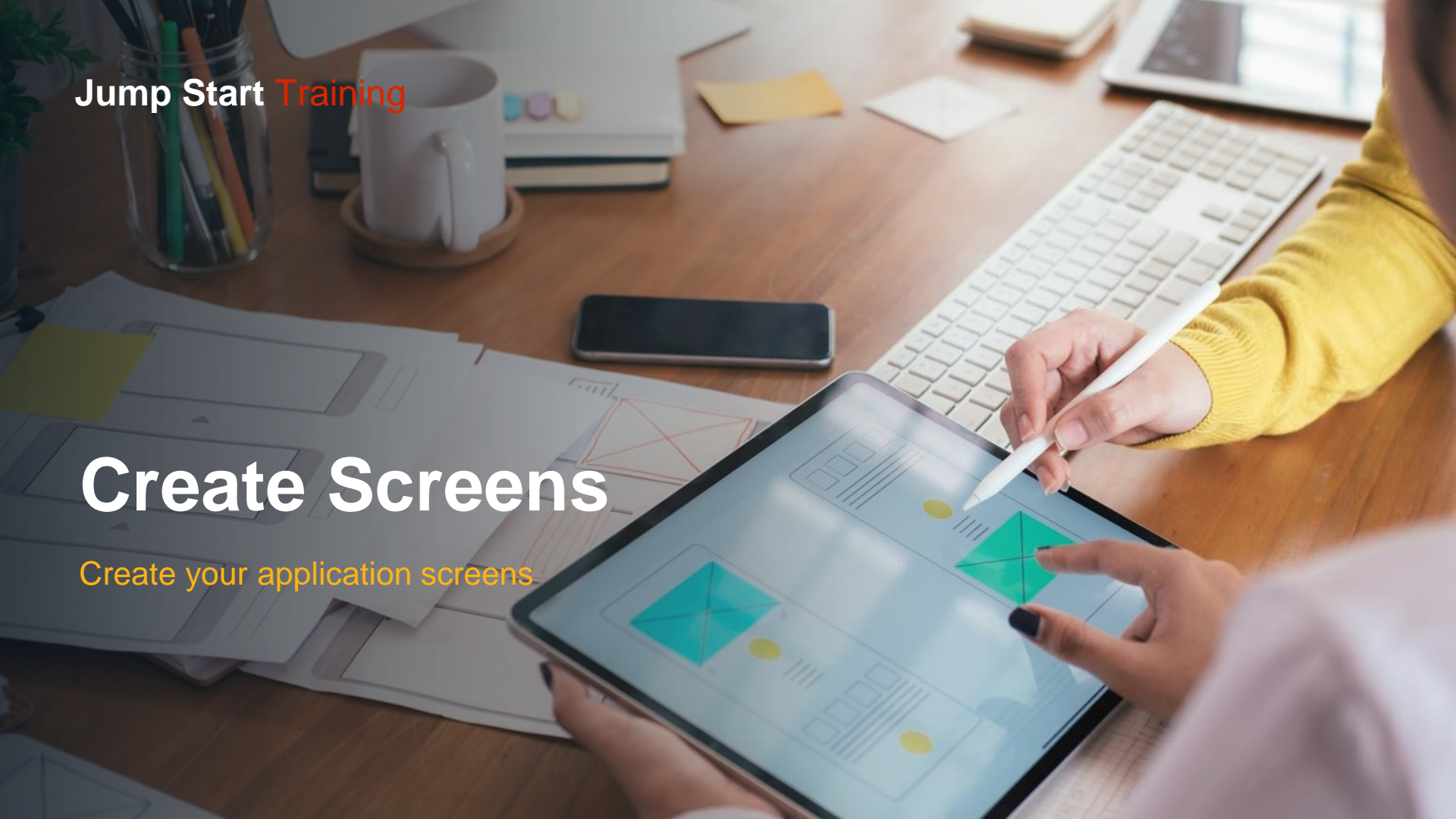
1. Manage **C**ustomers information
2. Manage **P**roducts information
3. Manage **S**hipping Company information
4. Manage **O**rders

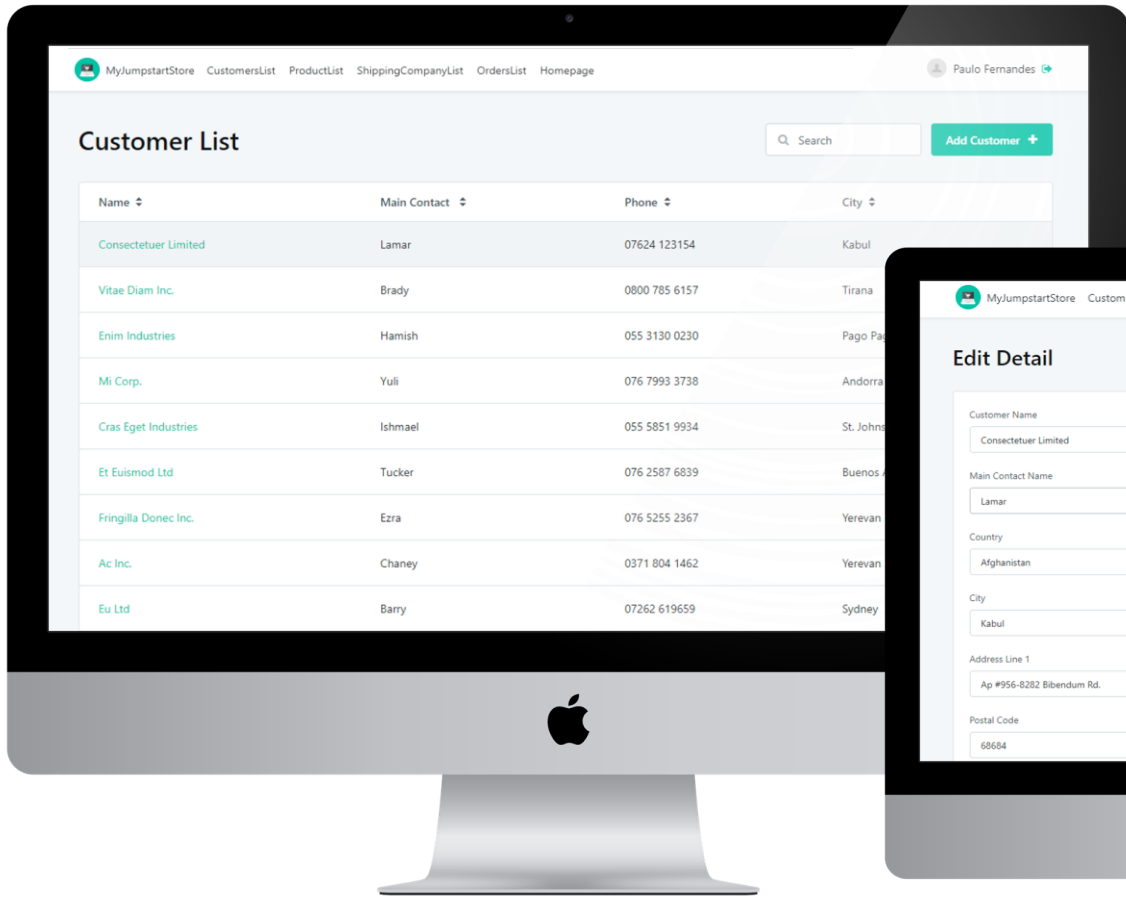


Jump Start Training

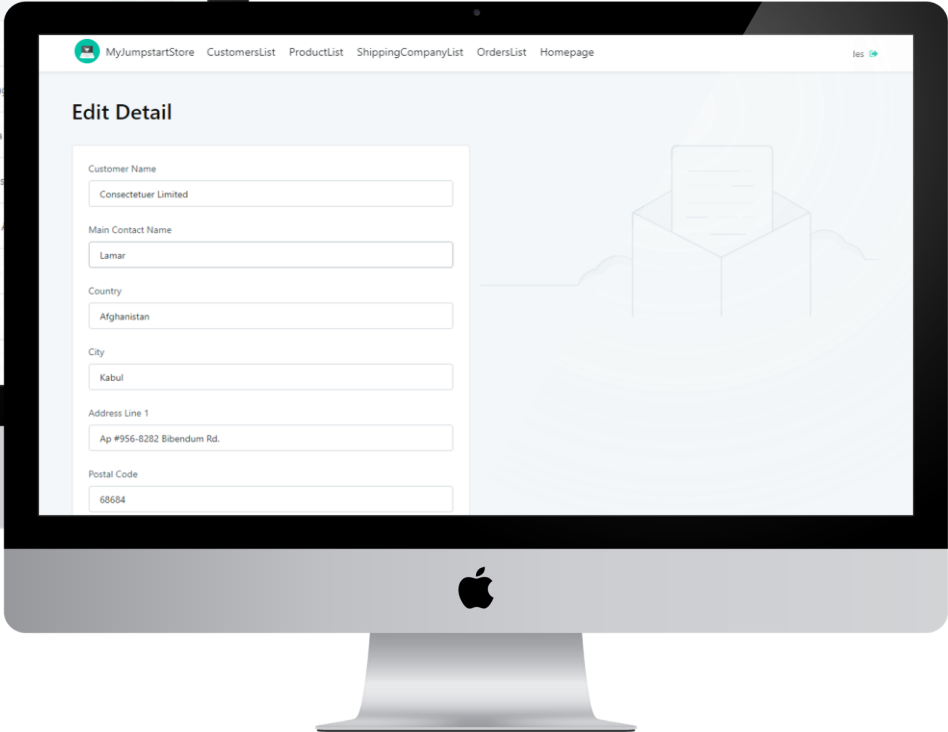
# Create Screens

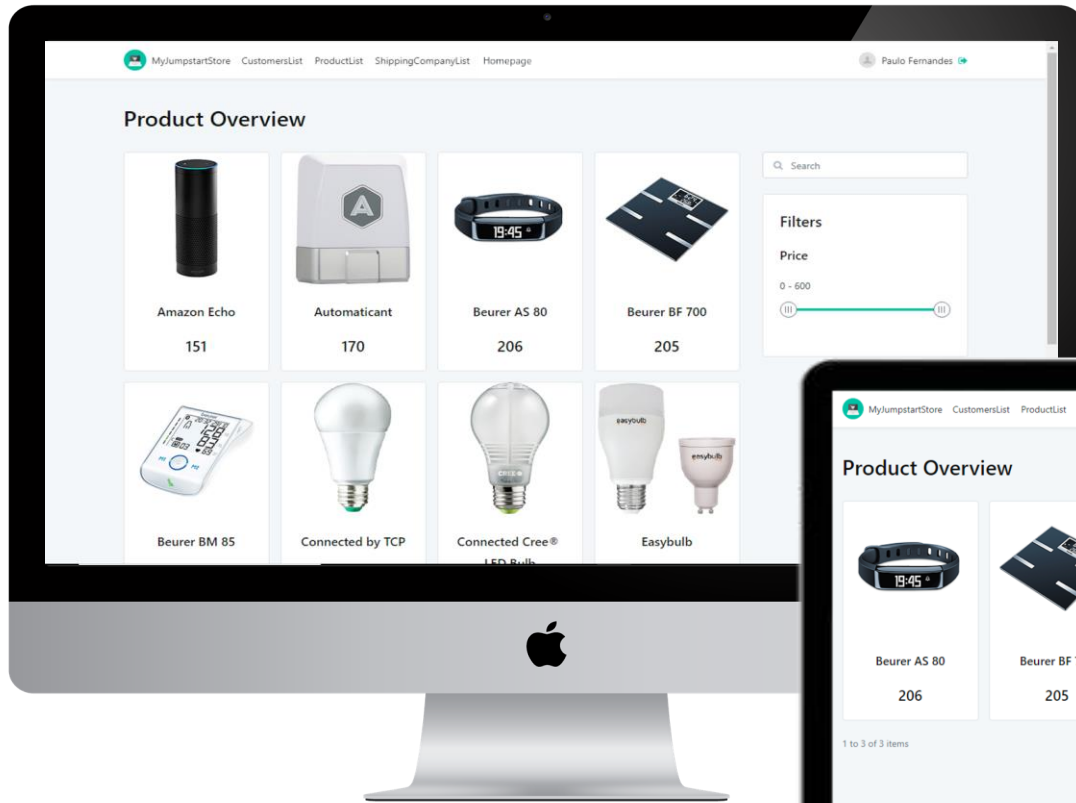
Create your application screens



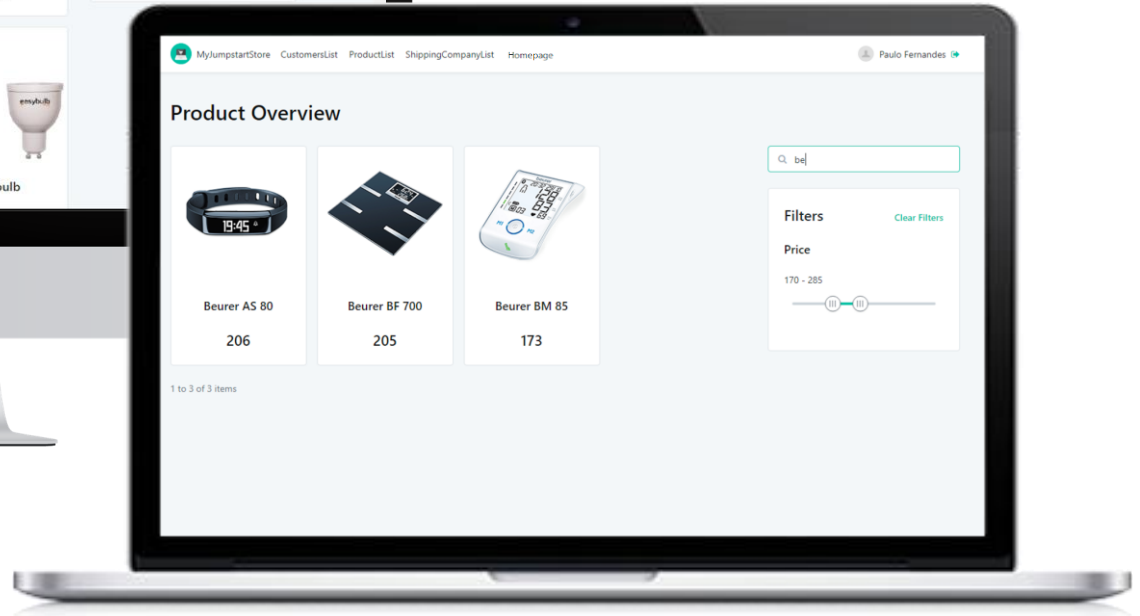


Customer List and Detail Screens  
Shipping Company List and Detail  
Screens





Home Page Screen



Jump Start Training

# Adapt Order Screens

Adapt the screens to meet your needs





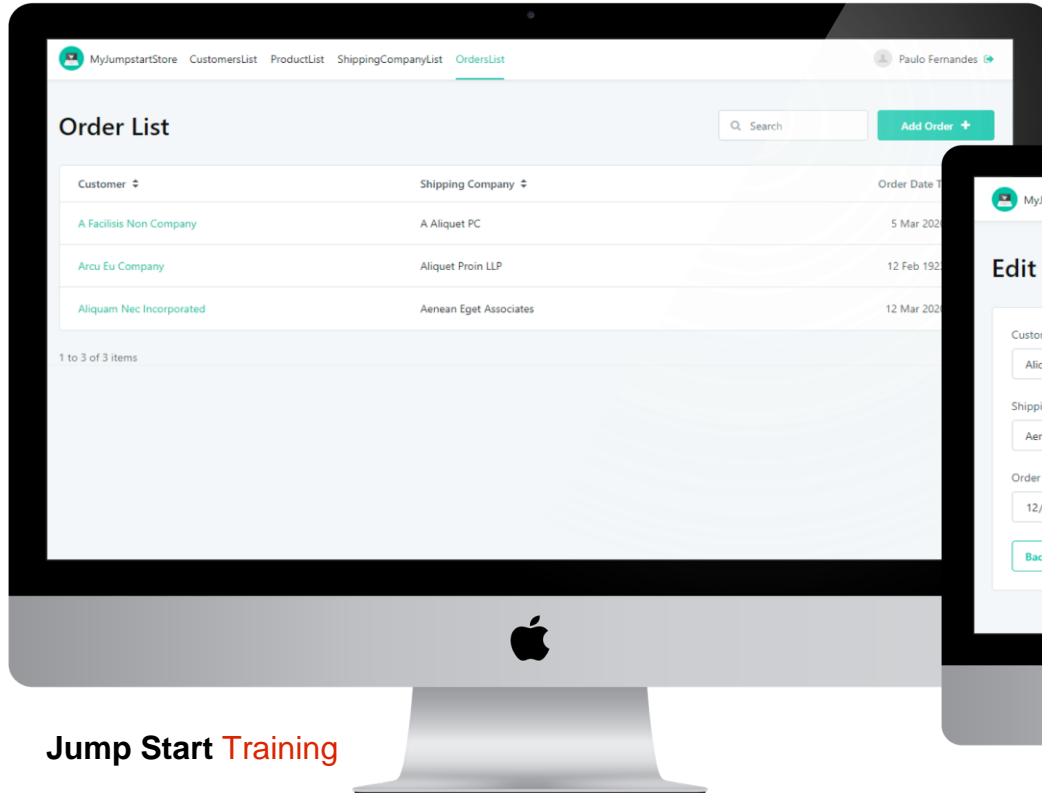
# Adapt Order Screens

Meet your needs

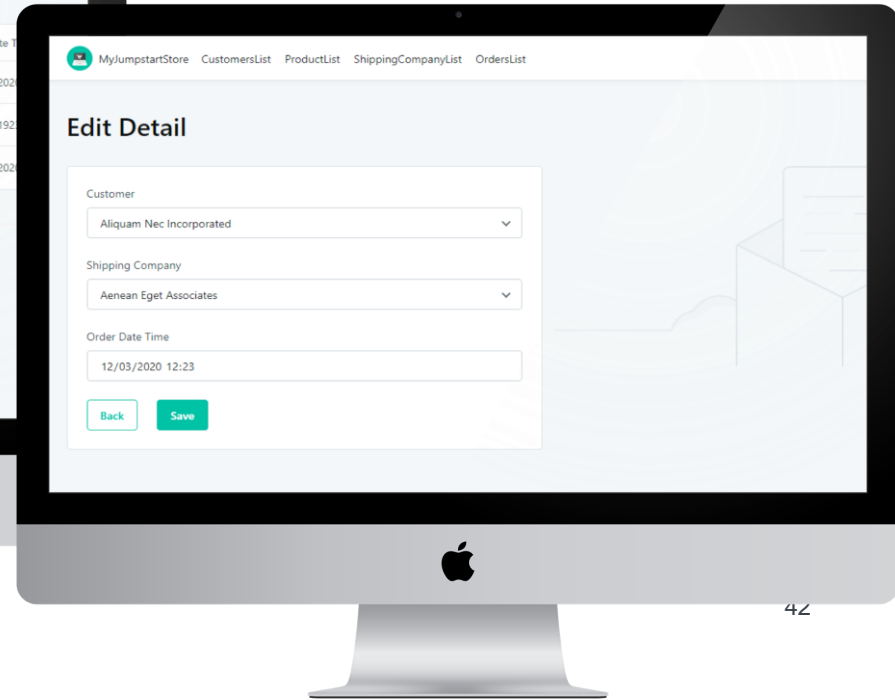
- We want to enable users to add order lines (items) to existing orders.
- To do this we need to adapt the Order List and Detail screens to meet our needs.

# Adapt Order Screens

## Current Screens



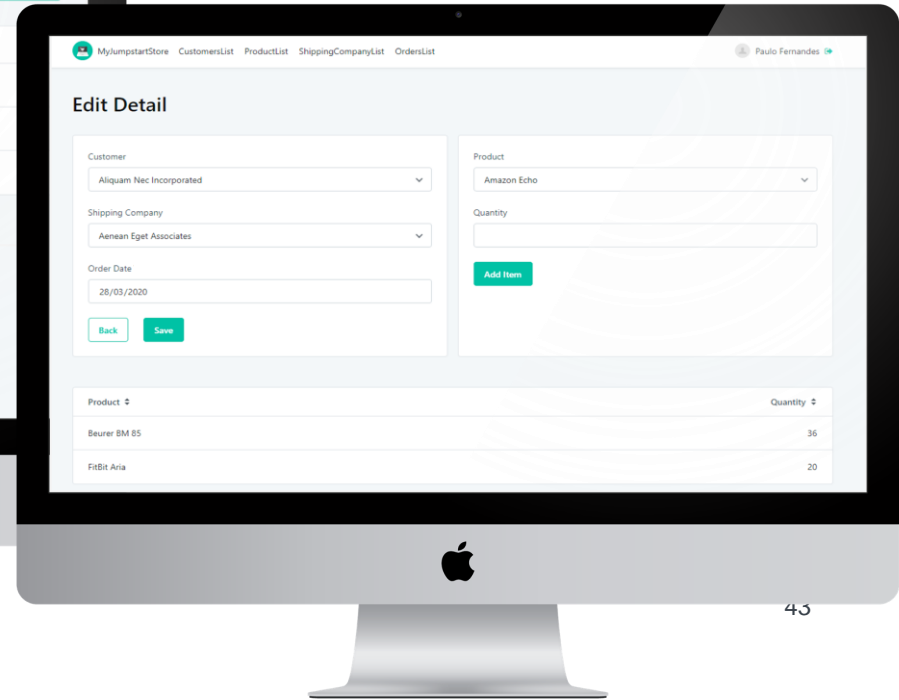
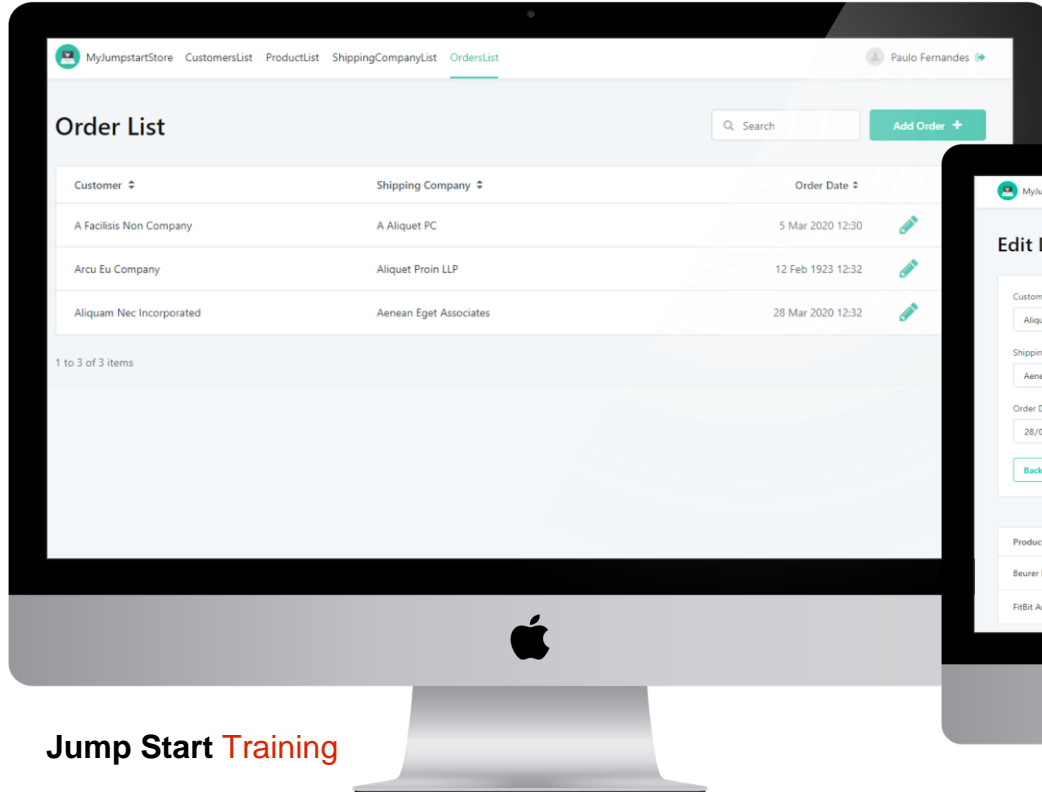
This is how the Order List and Detail Screens look like.



# Adapt Order Screens

## Final Screens

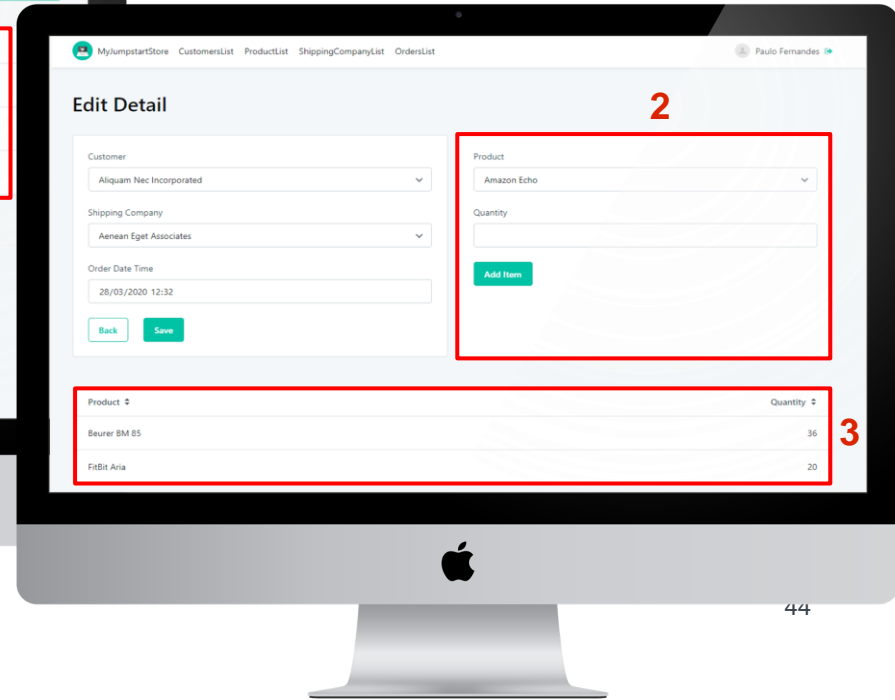
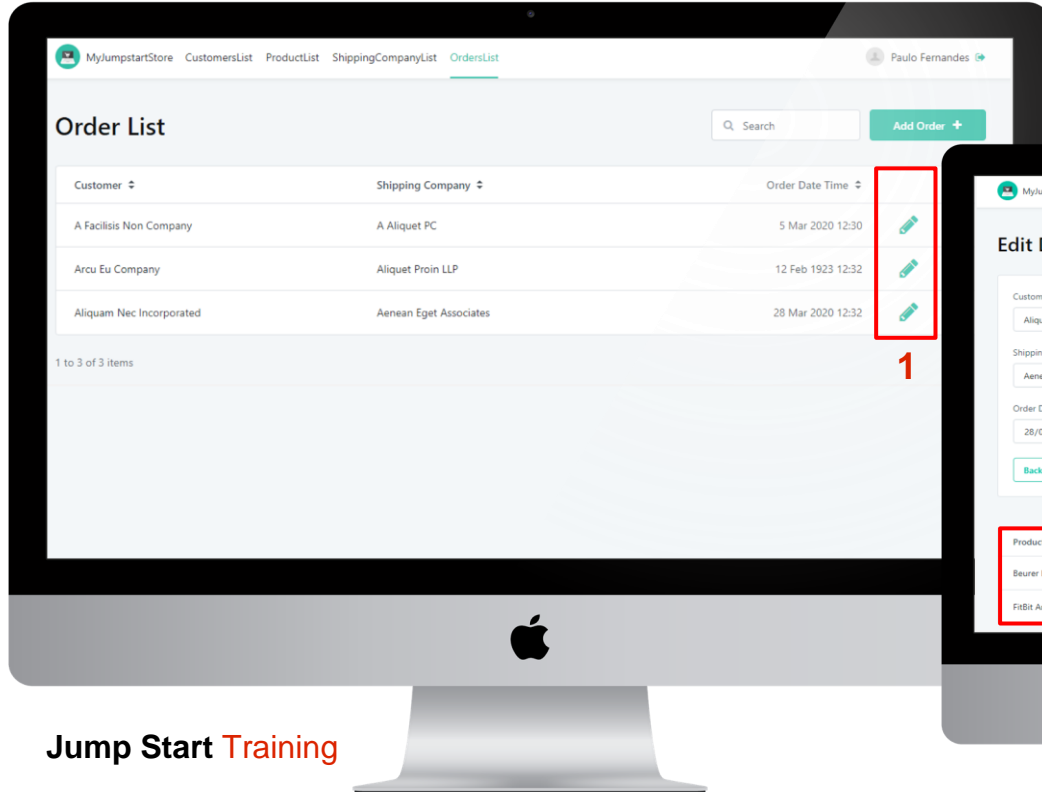
And here is how the same screens will look like in the end of this section.



# Adapt Order Screens

## Final Screens

Following changes will be added in the next steps.



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# Create Logic

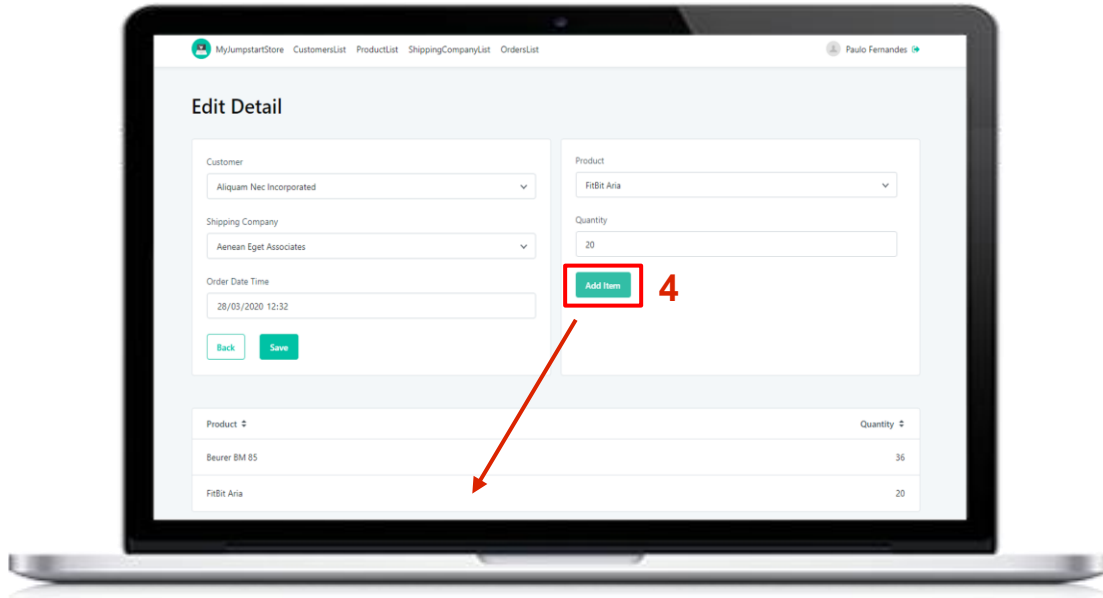
Adding items to existing Orders



# Create Logic

## Adding items to existing Orders

- Let's create the missing logic to allow users to add items to existing orders.
- When clicking “Add Item” a new item is added based on the Product and Quantity selected.







# Integration

Expose REST API with your products



## Products

[ API DEFINITION URL: <https://paulo-a-fernandes.outsystemscloud.com/MyJumpstartStore/rest/Products/swagger.json> ]

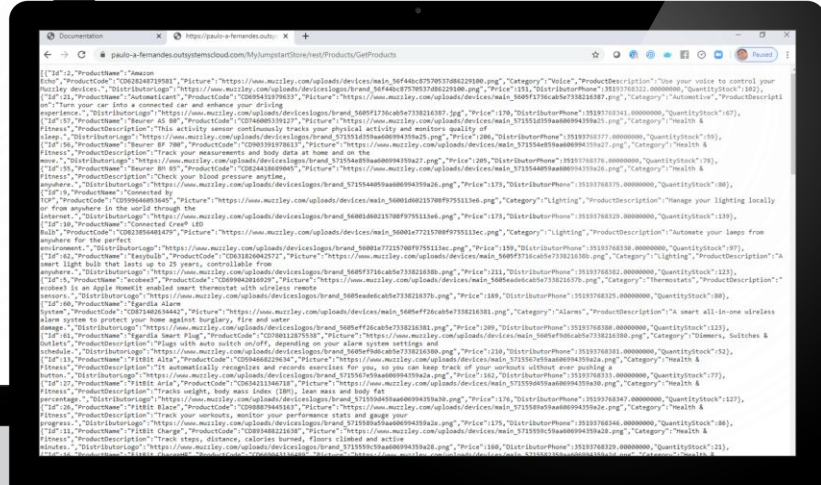
GET /GetProducts List Operations | Expand Operations

Request URL

<https://paulo-a-fernandes.outsystemscloud.com/MyJumpstartStore/rest/Products/GetProducts>

Response Messages

HTTP Status Code	Description	Content-Type	Data Type ( Model Example )
200		application/json	<pre>[   {     "Id": 1234567891234567,     "ProductName": "string",     "ProductCode": "string",     "Picture": "string",     "Category": "string",     "ProductDescription": "string",     "DistributorLogo": "string",     "Price": 0,     "DistributorPhone": 0.1,   } ]</pre>



A man with a beard and a plaid shirt, wearing a backpack and headphones, is holding a smartphone. The background is blurred, suggesting an indoor setting.

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# Jumpstart Mobile Exercise

Build a mobile app in one hour

# Download Jump Start Online Materials

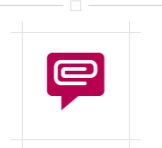
Download all

1. From a browser, navigate to

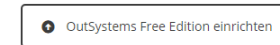
<https://www.agentbase.de/aktionen/materialien-zum-outsystems-intensiv-workshop/>

2. If not completed beforehand:  
setup your environment

EINRICHTUNG DER OUTSYSTEMS UMGEBUNG



LEITFADEN ALS PDF DATEI HERUNTERLADEN



3. Download the materials  
(PDFs + Resources folder)

ÜBUNGSAUFGABE



ÜBUNG: BUILD A  
MOBILE APP

RESSOURCEN



PRODUKT-KATALOG (EXCEL-  
DATEI)



ONLINE SHOPPING ICON

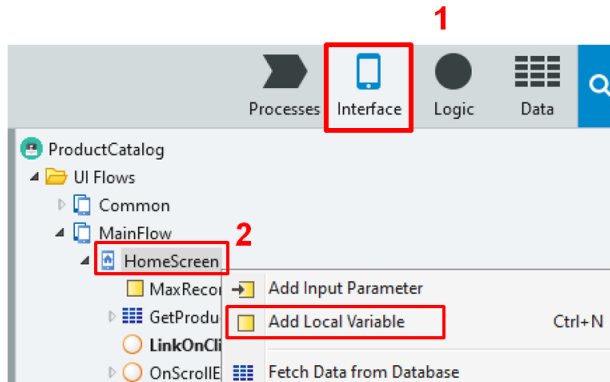
# Hints / Errata

Section 5

B

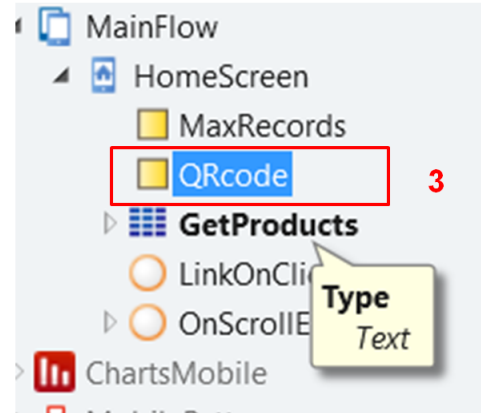
7. Add Local Variable

QRCode Variable



We need to store the QR code scan results into a variable, so that we could use the variable to filter the list results.

1. To add local variables, Click on the **Interface** tab
  2. right click the **HomeScreen** screen > **Add Local Variable**
- Jump Start Training**



3. Name the variable as **QRcode**. Make sure its Data Type is **Text**.

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**Next Steps...**

[Learn more!](#)



# Your Success Program

Our Community is available 24/7 :



[Learn](#)



[Forums](#)

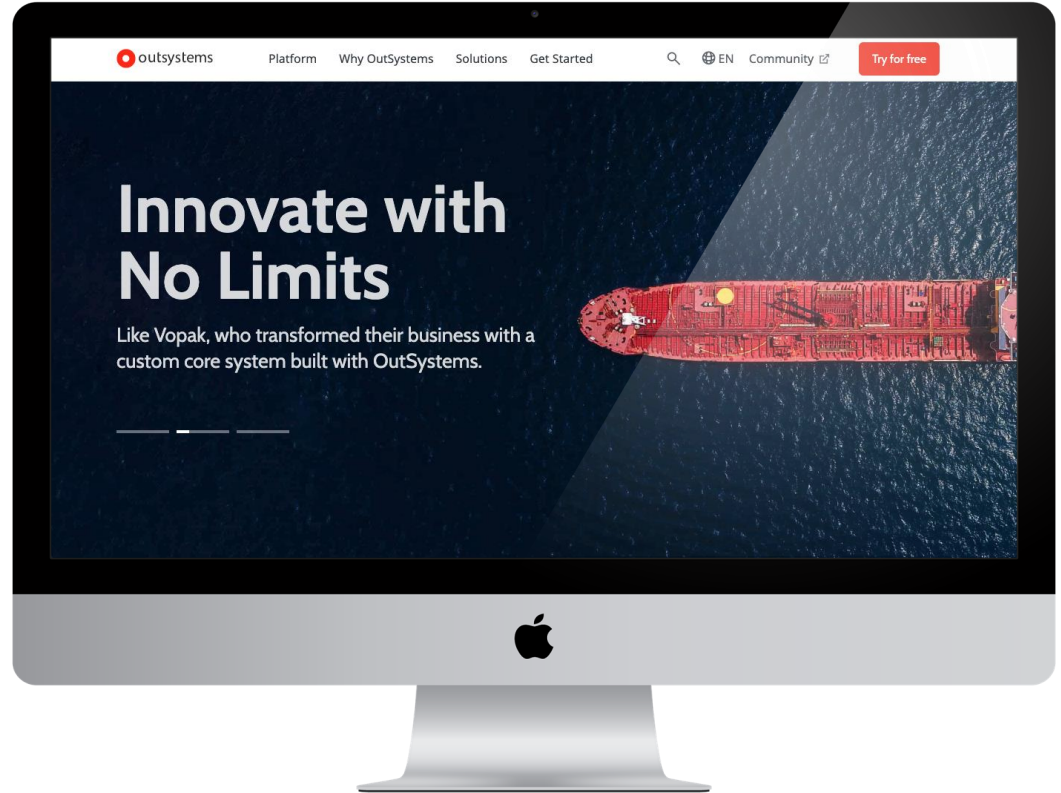


[Knowledge Base](#)



[Forge](#)

**Jump Start** **Training**





# Learn

outsystems + Community Platform Learn Community Support

OutSystems.com Sign up Log in


English

## Training

Welcome to OutSystems University! Learn to build apps. Make new friends. Graduate without any crippling debts!

### Learn to Build with OutSystems

Learn OutSystems your way. Follow a path or take a course. View webinars or read docs. And, don't put too much pressure on yourself. Remember, Frodo took three whole movies to get to Mordor, but it was worth it.




### Guided Paths

If you're just starting with OutSystems, these guided paths help you learn our IDE and build responsive web and mobile apps with our tools.

Let us be the Dumbledore to your Harry, the Faria to your Dantes, the little floating fairy thing to your Link. You get it.

- Mobile Developer
- Reactive Web Developer
- Traditional Web Developer
- Front-end Developer
- Tech Lead
- Tester



Jump Start **Training**



# Forums

outsystems · Community Platform Learn Community Support Partner Center

Community · Forums

## Community Forums

Search the Forums SEARCH

NEW POST

RECENT ACTIVITY MOST POPULAR UNANSWERED MY ACTIVITY

**Reactive Web: The Next Generation of Web Apps**  
News and Announcements  
143 REPLIES  
232  
Jorge Martins replied 1 day ago

**Contribute to the 2020 Developer Survey Today**  
News and Announcements  
85 REPLIES  
104  
Thiago Mari replied 6 days ago

**Improve your Forge documentation and win prizes**  
News and Announcements  
66 REPLIES  
40  
Prajakta Roshankhede replied on 7th Jan.

**Mini Treinamento OutSystems em Português (Iniciativa Dig...**  
News and Announcements  
62 REPLIES  
109  
Roger Diogo replied 13 days ago

**Progressive Web Apps - Early access now open to everyone**  
Early Access Features  
55 REPLIES  
31  
Roy van de Kerkhof replied 7 hours ago

**check from one entity's screen if another entity's attribute ...**  
Development questions and troubleshooting  
39 REPLIES  
23  
Eduardo Jauch replied on 2019-08-08

### Next Events

#### Training

- 6 Apr Developing OutSyste...  
Remote, Netherlands
- 13 Apr Advanced Developer ...  
Lisbon, Portugal
- 14 Apr Mobile for OutSystem...  
Remote, Netherlands
- 20 Apr Developing OutSyste...  
Remote, Australia
- 20 Apr Developing OutSyste...  
Helsinki, Finland

#### Last Month's Top Posters

- Nuno Miguel Verda... 1st
- Kilian Hekhuls 2nd
- Nordin Ahdi 3rd

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# Knowledge Base

The screenshot shows the OutSystems Knowledge Base page for the 'OutSystems Evaluation Guide'. The page has a dark red header with the OutSystems logo and navigation links: Platform, Why OutSystems, Solutions, and Get Started. On the right side of the header, there are links for search, language (EN), and Community, along with a 'Try for free' button. The main content area features the title 'OutSystems Evaluation Guide' in large white text, followed by a sub-headline: 'This condensed guide answers the most common questions asked by teams considering OutSystems.' Below this is a search bar with the placeholder text 'Search for a question or topic...'. The page is divided into two columns. The left column contains a table of contents with the following items: Overview (selected), Why OutSystems?, Developing with OutSystems, Lifecycle Management, Getting Started With OutSystems, Architecture, Deploying OutSystems, Mobile, and Integration. The right column is titled 'Why OutSystems?' and contains a paragraph: 'OutSystems, the #1 platform for low-code rapid application development with advanced capabilities for enterprise mobile and web apps. Explore why it will help you and your company solve your app problems today.' Below the paragraph are 'Featured Articles' with three links: 'It began with a vision', 'The two major IT pressure points today', and 'How OutSystems solves the problem'.

outsystems Platform Why OutSystems Solutions Get Started Search EN Community Try for free

## OutSystems Evaluation Guide

This condensed guide answers the most common questions asked by teams considering OutSystems.

Search for a question or topic...

- Overview
- Why OutSystems?
- Developing with OutSystems
- Lifecycle Management
- Getting Started With OutSystems
- Architecture
- Deploying OutSystems
- Mobile
- Integration

### Why OutSystems?

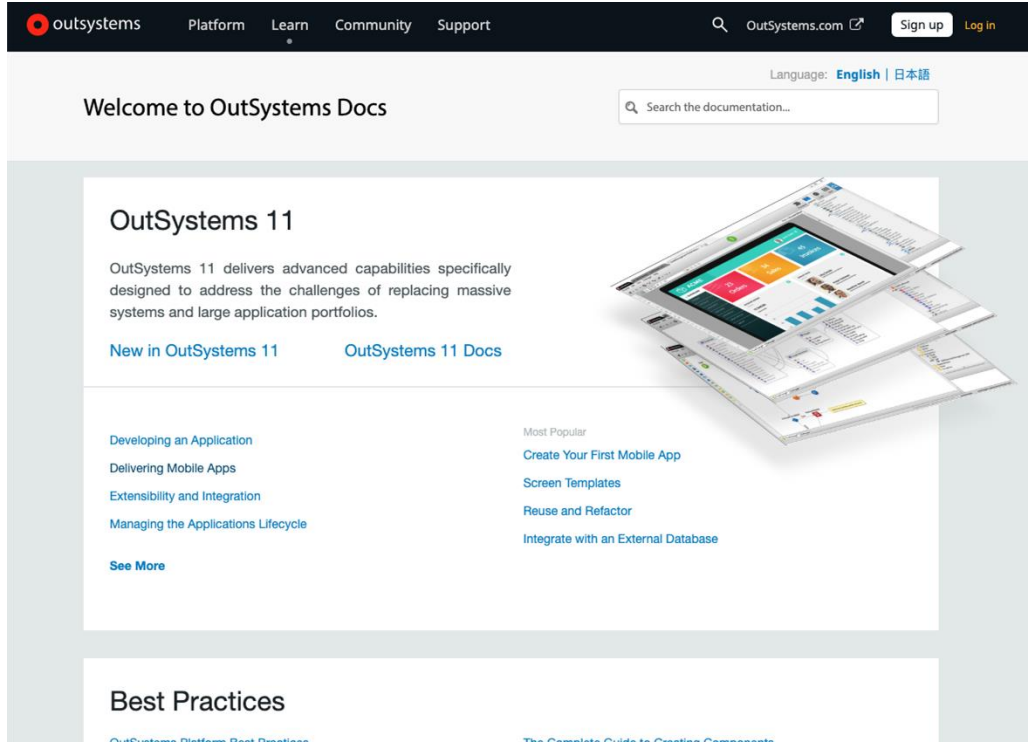
OutSystems, the #1 platform for low-code rapid application development with advanced capabilities for enterprise mobile and web apps. Explore why it will help you and your company solve your app problems today.

Featured Articles:

- [It began with a vision](#)
- [The two major IT pressure points today](#)
- [How OutSystems solves the problem](#)

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# Lots of articles and how-to's



The screenshot shows the OutSystems documentation website. The top navigation bar includes 'outsystems', 'Platform', 'Learn', 'Community', and 'Support'. A search bar is present with the text 'Search the documentation...'. The main content area is titled 'Welcome to OutSystems Docs' and features a section for 'OutSystems 11'. This section includes a description: 'OutSystems 11 delivers advanced capabilities specifically designed to address the challenges of replacing massive systems and large application portfolios.' Below this, there are links for 'New in OutSystems 11' and 'OutSystems 11 Docs'. A central image shows several overlapping tablets displaying various dashboards and charts. To the left of the image, there is a list of articles under the heading 'Developing an Application': 'Delivering Mobile Apps', 'Extensibility and Integration', and 'Managing the Applications Lifecycle'. To the right, under 'Most Popular', there are links for 'Create Your First Mobile App', 'Screen Templates', 'Reuse and Refactor', and 'Integrate with an External Database'. At the bottom, there is a 'Best Practices' section with a link to 'OutSystems Platform Best Practices'.

- Developing with OutSystems
- Lifecycle Management
- Getting Started With OutSystems
- Architecture
- Deploying OutSystems
- Mobile
- Integration
- Security
- Scalability
- Performance

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# Forge

The screenshot displays the OutSystems Forge website. At the top, a dark navigation bar contains the OutSystems logo, menu items for Community, Platform, Learn, Community, and Support, a search bar with 'OutSystems.com' and a link icon, and buttons for 'Sign up' and 'Log in'. Below the navigation bar, the main content area features a 'Forge' section with a description: 'The OutSystems Forge is a repository of reusable, open code modules, connectors, and UI components to help speed up app delivery time.' It includes a link to 'Check our FAQs for more information.' and a prompt to 'Submit an idea!' if a component is not found. Three statistics are shown: 3219 Available Apps, +101 in the last 30 days, and 2775 Downloads in the last 7 days. A button 'Login to Create New Component' is also present. A search bar with the placeholder 'Search in Forge...' and a red 'SEARCH' button is located below. The 'Featured' section highlights 'OutSystems.AI Chatbot' by 'OutSystems.AI Team' with a 5-star rating and 10 reviews. Other featured components include 'OutSystems UI' (5 stars, 78 reviews) and 'OutSystems Workato Connector' (5 stars, 1 review). At the bottom, a navigation bar lists categories: 'All Apps' (underlined), Applications, Components, UI & Widgets, Libraries, Mobile Plugins, and Samples & How-tos.

Community » Forge

## Forge

The OutSystems Forge is a repository of reusable, open code modules, connectors, and UI components to help speed up app delivery time.

[Check our FAQs for more information.](#)

Not finding the component you need? [Submit an idea!](#)

3219 Available Apps

+101 In the last 30 days

2775 Downloads in the last 7 days

[Login to Create New Component](#)

Search in Forge... [SEARCH](#) [Advanced Search](#)

Featured

### OutSystems.AI Chatbot

by OutSystems.AI Team

★★★★★ 10

Use OutSystems.AI Chatbot to allow your users to interact with your services via a chat interface.

### OutSystems.AI Chatbot

★★★★★ 10

### OutSystems UI

★★★★★ 78

### OutSystems Workato Connector

★★★★★ 1

[All Apps](#) Applications Components UI & Widgets Libraries Mobile Plugins Samples & How-tos

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# So bleiben Sie auf dem Laufenden

- agentbase Low-Code Newsletter abonnieren:  
<https://www.agentbase.de/newsletter>
- agentbase Termine im Überblick (Online-Trainings, Boot Camps und weitere Events):  
<https://www.agentbase.de/termine>
- Video-Reihe: Low-Code Talk „Gespräch auf Augenhöhe“  
<https://www.agentbase.de/low-code-talk>

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**Q & A**



# Ihr Feedback ist uns wichtig!

**Bitte beantworten Sie unseren Feedback-Bogen:**

<https://www.agentbase.de/fragebogen-outsystems-intensivkurs/>



# Vielen Dank für Ihre Aufmerksamkeit!



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