

OutSystems Training (5 Days /40 Hours)

COURSE DESCRIPTION

This 5-day (40 hours) OutSystems training program provides a comprehensive introduction to the OutSystems low-code platform. Participants will gain hands-on experience in platform architecture, administration, monitoring, application development, testing, deployment, and best practices.

AUDIENCE PROFILE

This course is designed for software developers, IT administrators, solution architects, and technical professionals who are looking to build, manage, and deploy applications using the OutSystems platform.

PREREQUISITES

Basic knowledge of programming concepts, databases, and web technologies is recommended. Prior experience in application development will be beneficial but not mandatory.

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Understand the principles of low-code development and OutSystems architecture.
- Perform administration and monitoring tasks using Service Center.
- Build, test, and deploy applications in OutSystems.
- Apply security, performance, and scalability best practices.
- Integrate applications with external systems and services.
- Develop business workflows and real-world use cases using OutSystems.

TOC DURATION

The training is conducted over 5 days (40 hours total). Each module is structured to balance theory, demonstrations, and hands-on exercises to ensure practical learning.

Module 1: Getting Started with OutSystems

Learning Objectives:

- Understand low-code principles and OutSystems platform value.
- Navigate the OutSystems ecosystem and core tools.
- Outline the key learning goals and competencies to be developed through this training.

Topics:

1. Introduction to Low-Code Development
2. Explore the principles behind low-code development and its benefits.
3. Overview of OutSystems Platform
4. Key Features & Benefits
5. OutSystems Ecosystem (Service Studio, Service Center, LifeTime)

Exercise: Create an OutSystems account and explore Service Studio.

Module 2: OutSystems Architecture Basics

Learning Objectives:

- Understand how OutSystems is structured at the application and platform level.
- Learn the environment and deployment concepts.

Topics:

1. Familiarize with the OutSystems environment, tools, and architecture.
2. Navigating Service Studio and gain proficiency in using Service Studio, the primary IDE for OutSystems.
3. Application Layers (Frontend, Logic, Data, Integration)
4. Service Studio vs Service Center vs LifeTime
5. Deployment Architecture (Dev, Test, Prod Environments)

Exercise: Diagram a simple OutSystems application architecture.

Module 3: Administration Essentials

Learning Objectives:

- Manage users, roles, and security.
- Perform basic application administration tasks.

Topics:

1. User Roles & Permissions: Understand how to manage user roles and access controls.
2. Managing Applications and Modules
3. Handling Dependencies and References
4. Basic Security Settings

Exercise: *Create users with different roles and assign permissions.*

Module 4: Monitoring & Platform Management

Learning Objectives:

- Monitor and maintain applications and environments.
- Use Service Center effectively for monitoring and platform tasks.

Topics:

1. Introduction to Monitoring in OutSystems
2. Performance Monitoring (APIs, Logs, Error Tracking)
3. Service Center Basics (Back-end Interface)
4. Managing Environments and Deployments
5. Health & Availability Monitoring

Exercise: *Use Service Center to monitor an app and analyze logs.*

Module 5: Development Lifecycle

Learning Objectives:

- Build apps in OutSystems from scratch.
- Understand testing and deployment flows.

Topics:

1. Setting Up Development Environment
2. Build Responsive Interfaces of creating UI designs that are both functional and appealing.
3. Creating Your First App: Step-by-step guide to building a basic application using OutSystems.
4. Working with Data Models & Learn to create and manage data entities within OutSystems.
5. Understand how to implement business logic using process flows.
6. Integrations (APIs, External Systems): Discover methods to connect and consume data from external databases.
7. Testing Basics – Debugging, Unit Testing, Validation

Deployment Flow – Dev → Test → Production: Understand the deployment process and how to publish applications.

Exercise: Build a simple application and deploy it to test environment.

Module 6: Backend & Service Center Interface

Learning Objectives:

- Manage applications and components via Service Center.
- Perform basic troubleshooting and maintenance tasks.

Topics:

1. Introduction to Service Center
2. Managing Applications & Components
3. Error Logs, Monitoring, and Reporting
4. Using Service Center for Platform Maintenance

Exercise: Publish an app and review logs in Service Center.

Module 7: Practical Use Cases

Learning Objectives:

- Apply OutSystems knowledge to real-world business scenarios.
- Build small applications and workflows.

Topics:

1. Employee Management App
2. Customer Support Ticketing System
3. Automating Business Workflows
4. Integration with External Services (REST APIs)

Exercise: Build a simple ticketing system with basic workflow and integration.

Module 8: Best Practices

Learning Objectives:

- Apply performance, security and best practices.
- Learn how to maintain scalable and reusable apps.

Topics:

1. Coding Standards & Naming Conventions
2. Optimizing Performance & Scalability
3. Designing for Reusability (Modules, Libraries)
4. Security Best Practices: : Learn best practices for implementing security in OutSystems applications.
5. Maintaining Clean Architecture

Exercise: Review and follow best practices.