



REACTIVE WEB DEVELOPER PROGRAM

OutSystems Training Guide

Basic & Advanced Curriculum

A structured, two-week path from low-code fundamentals to production-ready Reactive Web architecture, delivered by AWT's certified OutSystems experts.

2

WEEKS

10

TRAINING DAYS

20

MODULES

72+

HOURS

ABOUT THIS PROGRAM

A Hands-On Path to OutSystems Mastery

Delivered by AWT's certified OutSystems trainers, with 12+ years of industry experience and 1000+ professionals trained, this program takes developers from low-code fundamentals to production-ready Reactive Web architecture across two intensive, hands-on weeks.

BASIC TRACK

Week 1 • Foundations

14 modules covering data modelling, reactive UI, validation, relationships, debugging and security.

ADVANCED TRACK

Week 2 • Architecture

6 modules covering actions, APIs, the 3-Layer Canvas, and a full capstone build.

20

TOTAL MODULES

10

TRAINING DAYS

72+

CONTACT HOURS

100%

HANDS-ON LABS

PART 1 · WEEK 1

Basic Track

Foundations of low-code development in OutSystems, Days 1 to 5.

14 MODULES

20+ HOURS

BASIC TRACK · DAY 1

Getting Started with OutSystems

Platform fundamentals, the reactive model, and your first hands-on build.



Day 1 · 4 hrs

Low-Code & No-Code, and the OutSystems Platform

- Low-code vs. no-code vs. traditional development
- Visual modelling, auto-generated code, one-click publish

HANDS-ON Explore the platform and map each module of this course to a capability.



Day 1 · 4 hrs

Reactive Web Apps & Modular Programming

- Client-side rendering with instant UI updates
- Modules as the unit of reuse and team ownership

HANDS-ON Create a first Reactive Web App module and inspect its structure.



Day 1 · 4 hrs

Client and Server Concepts

- Server: data access, business rules, security
- Client: UI rendering, local state, client actions

BASIC TRACK · DAY 1

Modelling & Querying Data

Core development tools, entities, and your first Aggregates.



Day 1 · 4 hrs

OutSystems Tools: Service Studio, Service Center & LifeTime

- Service Studio: visual IDE, one-click publish
- Service Center & LifeTime: monitoring and governance

HANDS-ON Install Service Studio and walk through each tool's dashboard.



Day 1 · 2 hrs

Modeling Data: Entities & Static Entities

- Entities model the relational schema visually
- Static Entities for fixed, reusable lookup data

HANDS-ON Model a small domain using regular and static entities.



Day 1 · 2 hrs

Aggregates: Querying Data

- Visual query builder: filters, sorts, joins
- The recommended default before custom SQL

HANDS-ON Build an Aggregate that lists and filters your entities.

Building & Validating Screens

Reactive UI patterns, layered form validation, and relationship modelling.



Day 2 · 4 hrs

Reactive UI Development: Widgets, Forms & Screens

- Widget library: containers, lists, forms, inputs
- The List + Detail screen pattern

HANDS-ON Build a screen wiring a list to a detail/edit form.



Day 2 · 4 hrs

Form Validation: Rules, JavaScript & Regex

- Built-in rules, custom JavaScript, and Regex
- Layered client- and server-side validation

HANDS-ON Add layered validation to the form built earlier.



Day 3 · 4 hrs

Data Relationships & Data Model Integrity

- Modelling 1:1, 1:M and M:N relationships
- Keys and indexing for integrity and speed

HANDS-ON Extend the data model and enforce referential integrity.

BASIC TRACK · DAY 3

Data Integrity & Diagnostics

Advanced queries, debugging and role-based security.



Day 3 · 4 hrs

Advanced Aggregates & Custom SQL

- Advanced Aggregate techniques and sub-queries
- Custom SELECT / DML SQL queries

HANDS-ON Query multiple sources with Aggregates and custom SQL.



Day 3 · 4 hrs

Debugging, Monitoring & Logging

- Step-through debugging in Service Studio
- Logs and performance monitoring in Service Center



Day 3 · 4 hrs

Role-Based Security

- Roles for authentication and authorization
- Handling security exceptions gracefully

HANDS-ON Grant roles and verify authorization across screens.

Components & Application State

Reusable Blocks, screen lifecycle, and client-side configuration.



Day 4 · 4 hrs

Blocks, Block Events & Screen Lifecycle

- Reusable Blocks for shared UI and logic
- Block Events and the Screen Lifecycle

HANDS-ON Create a Block and trigger/handle its events.



Day 5 · 4 hrs

Client Variables, Site Properties & Local Storage

- Session-scoped state with Client Variables
- Environment config via Site Properties, Local Storage



Milestone

Week 1 Wrap-Up

- 14 modules and every Basic Track fundamental covered
- Ready for asynchronous logic, APIs and architecture

PART 2 · WEEK 2

Advanced Track

Architecture, integration, and full-stack delivery, Days 1 to 5.

6 MODULES

20+ HOURS

Actions, Scale & Integration

Asynchronous logic, large-dataset UX, and external REST APIs.



Day 1 · 4 hrs

Actions: Async, Server & Service Actions

- Server Actions vs. Service Actions vs. Client Actions
- Non-blocking screen data with Async Data Actions



Day 1 · 4 hrs

Pagination & Sorting

- Paging controls for large datasets
- Column- and control-driven sorting

HANDS-ON Add working pagination and sorting to a data-heavy list.



Day 2 · 4 hrs

API Integration & REST APIs

- REST fundamentals: methods, endpoints, payloads
- Consuming and mapping external REST APIs

HANDS-ON Integrate a sample external REST API onto a screen.

Architecture & Capstone Delivery

The 3-Layer Canvas, governed module design, and a full end-to-end build.



Day 3 · 4 hrs

Architecture Design: the 3-Layer Canvas (3LC)

- End-User, Core and Foundation layers
- Identifying and resolving module violations



Day 3 · 4 hrs

Architecture Canvas & Module Naming

- Visualising layers and sublayers
- Naming conventions across a portfolio

HANDS-ON Design and name the module structure for a sample app.



Days 4-5

Project Execution: Applying the Full Stack

- Requirements to data model to screens to integration
- Build, test and publish a complete Reactive Web App

HANDS-ON Capstone: design, build and publish an end-to-end app.

BY THE END OF THIS PROGRAM

Skills You Will Walk Away **With**

Every participant progresses from a first Reactive Web App to a capstone build that mirrors a real project.



Model & Query Data

Design relational data models and query them visually and with custom SQL.



Build Reactive UI

Ship validated, reusable Reactive Web screens using Blocks and widgets.



Secure & Diagnose

Apply role-based security and debug/monitor applications in production.



Integrate Systems

Consume external REST APIs and map data across systems.



Design Architecture

Structure governable, multi-module applications with the 3-Layer Canvas.



Deliver End-to-End

Take a project from requirements to a published, working application.

DELIVERED BY AWT

Why Train With Anav Webtech

A certified OutSystems partner with a decade-long track record in enterprise low-code delivery.



OUTSYSTEMS PARTNER

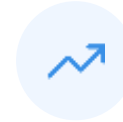
Certified Expertise

- OutSystems Certified Partner
- ISO 9001:2015 & 27001:2013 certified



Proven Trainers

- 16+ years IT, 10+ years OutSystems experience
- 1000+ professionals trained, 900+ certified



Enterprise Track Record

- 30+ satisfied clients across 5 geographies
- 60+ team members, 50+ certified resources

A trusted OutSystems training partner, from first module to production deployment.



LET'S BUILD YOUR TEAM'S CAPABILITY

Ready to Get Started?

Reach out to schedule this training for your team, or to discuss a custom OutSystems learning path.



www.anavwebtech.com



Drashti.jain@anavwebtech.com



+91 9755842611



76/1 SHAKTI NAGAR, BHEL, BHOPAL, MADHYA PRADESH — 462024, INDIA