

# Bot Framework Composer Training

2 days (14 hours)

## Presentation

Bot Framework Composer is a visual open source tool developed by Microsoft to design, test and deploy complex chatbots without writing code. Thanks to its intuitive interface, it lets you create dynamic dialogs connected to data sources.

Our Bot Framework Composer training course will enable you to master the design of data-driven chatbots, integrated into your business systems or in a cloud environment. You'll learn how to connect bots to APIs, automate tasks, structure dialogs and secure exchanges.

You'll learn how to create, automate, connect and supervise bots adapted to your business needs, with real-life examples such as SQL database queries, action triggers and Microsoft Teams integration.

At the end of the course, you'll be able to build a complete bot, from the definition of user paths to secure deployment in a production environment. You'll be able to integrate it into your data stack and maintain and upgrade it.

Like all our training courses, this one is based on the latest [stable version v2.1.2 of Bot Framework Composer](#), and favors an operational, use-case oriented approach.

## Objectives

- Master the fundamental concepts of Bot Framework Composer
- Design bots connected to data sources
- Automate business tasks and scenarios via bots
- Deploy and supervise a bot in a secure environment
- Apply best practices in maintenance, security and governance

## Target audience

- Data Analysts and Data Engineers
- No-code / low-code developers
- Digital managers or data project managers

## Prerequisites

- Basic knowledge of data manipulation
- Experience in cloud environments

## Our Bot Framework Composer course

### Understanding the uses and architecture of chatbots

- Overview of the business and data uses of chatbots
- Positioning Bot Framework Composer in the Microsoft ecosystem
- Key concepts: intents, utterances, triggers, dialogs
- Overall bot architecture and essential components
- Data-driven use cases (reporting, automation, integration)
- Workshop: Install Composer and create your first simple bot

### Mastering Composer's interface and functional blocks

- Getting to grips with the Composer visual interface
- Creating dialogs: prompts, conditions, dynamic responses
- Managing state, variables and logical expressions
- Handling errors and conditional responses
- Using adaptive dialogs to create rich conversations
- Workshop: Creating a complex conversational scenario with dialog navigation

### Integrating data sources into a chatbot

- Connecting to REST APIs, SQL databases and JSON files
- Using personalized actions to query data
- Extraction and dynamic display of information in conversation
- Securing access with OAuth or Azure AD
- Keeping user data in the dialog
- Workshop: Creating a bot capable of retrieving data from an API

### Automating tasks with data-driven bots

- Creating user-driven automated workflows

- Executing processes (sending emails, triggering scripts, analysis)
- Chain of events in a dynamic dialog
- Interaction with data tools (Power BI, Azure Functions)
- Return of formatted results to the user
- Workshop: Automating a user-triggered report via chatbot

## Deploying a bot in a production environment

- Deployment on Azure Bot Services or Teams
- Network configuration, endpoints and Azure resources
- Monitoring with App Insights: logs, metrics, errors
- Testing, versioning and rollback strategies
- Preparing a bot for multi-environment use (DEV/QA/PROD)
- Workshop: Deploying a bot on Azure with log collection

## Securing, maintaining and upgrading bots

- Good governance practices (access rights, audits)
- RGPD compliance and personal data storage
- Maintenance plan: user feedback, errors, continuous improvement
- Documentation, versioning and bot modularization
- Monitoring bot performance via telemetry
- Workshop: Security audit and compliance of an existing bot

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples and

and group work sessions.

## Validation

At the end of the session, a multiple-choice questionnaire is used to check that skills have been correctly acquired.

## Certification

A certificate will be awarded to each trainee who completes the training course.