

Building AI-Powered Assistants with Oracle Digital Assistant

Course Duration: 24 Hours

Course code: D1107928GC10

1. Course Overview

This course provides learners with the knowledge and hands-on skills to design, build, and deploy AI-powered conversational assistants using Oracle Digital Assistant (ODA). Participants will learn the fundamentals of digital assistants, including intents, entities, dialogue flows, and skills, along with advanced concepts like multi-turn conversations, custom components, integration with enterprise applications, and analytics for monitoring performance. By the end of the course, learners will be able to create intelligent chatbots and virtual assistants that deliver personalized, contextual, and natural conversations across multiple channels.

2. What you'll learn?

By the end of this course, you should be able to:

- Describe Oracle Digital Assistant architecture and components
- Build and configure skills, intents, and entities
- Design dialogue flows for multi-turn conversations
- Integrate custom components and backend services
- Connect ODA to enterprise systems (e.g., ERP, HCM, CX)
- Deploy assistants across multiple channels (web, mobile, Slack, MS Teams, etc.)
- Configure multi-language support and personalization
- Monitor usage with analytics and apply improvements
- Implement security and governance for enterprise-grade assistants

3. Target Audience

- AI Developers and Application Developers
- Oracle Cloud Platform users
- Integration and Middleware specialists
- Solution Architects designing conversational AI solutions

4. Pre-Requisites

Familiarity with:

- Oracle Cloud Infrastructure (OCI) basics
- JSON and REST APIs
- Basic programming (JavaScript/Node.js preferred)
- AI/ML fundamentals (helpful but not mandatory)

5. Course content

Module 1: Course Overview

- Welcome to Digital Assistant
- Course Overview
- Course Speakers and Contributors
- Target Audience: Who should attend?
- Prerequisites for the course
- Digital Assistant certification exam objectives
- Course outline walk-through
- Hands-on lab overview
- How to get the most out of this course
- Ratings and feedback process

Module 2: Introduction to Conversational AI and Oracle Digital Assistant

- What is Conversational AI?
- Linguistic model concepts in Conversational AI
- Overview of Oracle Digital Assistant (ODA)

Module 3: Conversation Design

- Fundamentals of conversation design
- What makes a great conversation?
- The conversational project timeline
- Human skills required for conversational projects
- Conversation design focus areas

- Conversation design challenges

Module 4: Designing and Building Intents and Entities

- Introduction to Natural Language Processing (NLP)
- Intent design and partitioning strategies
- Designing intents with NLP
- Utterance design methods
- Manual vs crowdsourced utterance creation
- Testing and improving the NLP model
- Introduction to entities
- Entity types, properties, and extraction methods
- Real-world entity extraction challenges
- Best practices for designing entities

Module 5: Dialog Flows, Custom Components, and Backend Services

- Introduction to dialog flows
- Using the Visual Flow Designer
- Dialog flow components and their usage
- Key design considerations for dialog flows
- Testing dialog flows effectively
- Best practices for dialog flow design
- Introduction to answer intents in dialog flows
- Implementing and customizing answer intents
- Introduction to custom components
- Using the Bots Node SDK
- Role of Large Language Models (LLMs) in digital assistants
- Using LLM building blocks within dialog flows

Module 6: Digital Assistants and Channels

- Digital Assistant basics and structure
- Routing in digital assistants

- Configuration and conversation testing
- Overview of available user channels
- Web channel fundamentals
- Web messenger customization
- Resource bundles for localization
- Creating multilingual digital assistants
- Advanced configuration for multilingual setups

